

Appendix H: Eagle Pass Mine Environmental Impact Statement Documents



United States
Environmental Protection
Agency

Region 6
1445 Ross Avenue
Dallas, TX 75202

May 1995

RECORD OF DECISION

**EAGLE PASS MINE
MAVERICK COUNTY, TEXAS**



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

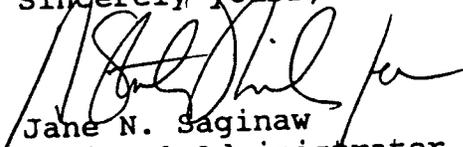
MAY 12 1995

TO INTERESTED AGENCIES, OFFICIALS, PUBLIC GROUPS AND INDIVIDUALS:

The U.S. Environmental Protection Agency (EPA) has completed its environmental review of Dos Republicas Resources Company, Inc.'s (DRRC) proposed Eagle Pass Mine in Maverick County, Texas. The enclosed Record of Decision (ROD), which is the final step in the environmental impact statement process, presents the factors considered by the EPA in reaching its decision on DRRC's application for a new source National Pollutant Discharge Elimination System (NPDES) permit from the EPA for wastewater discharges from its mining operation.

Based on the EPA's conclusions that the discharge is projected to meet all NPDES and Clean Water Act requirements and that other potentially significant adverse impacts from the project are subject to regulatory controls and/or mitigation measures which reduce impacts to acceptable levels, the EPA's final decision is to issue the NPDES permit for the Eagle Pass Mine.

Sincerely yours,

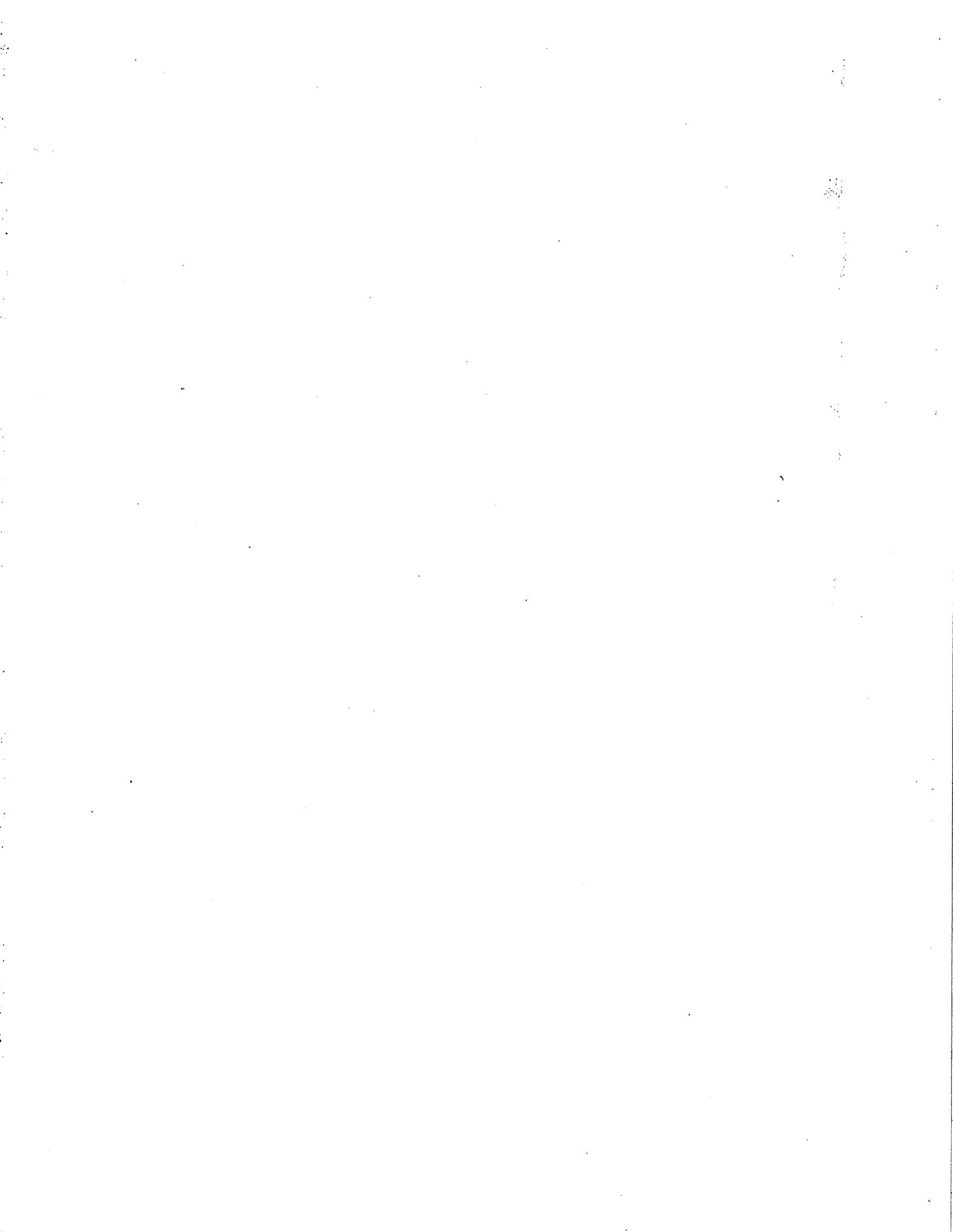


Jane N. Saginaw
Regional Administrator

Enclosure



Recycled/Recyclable
Printed with Soy/Canola Ink on paper
contains at least 50% recycled fiber

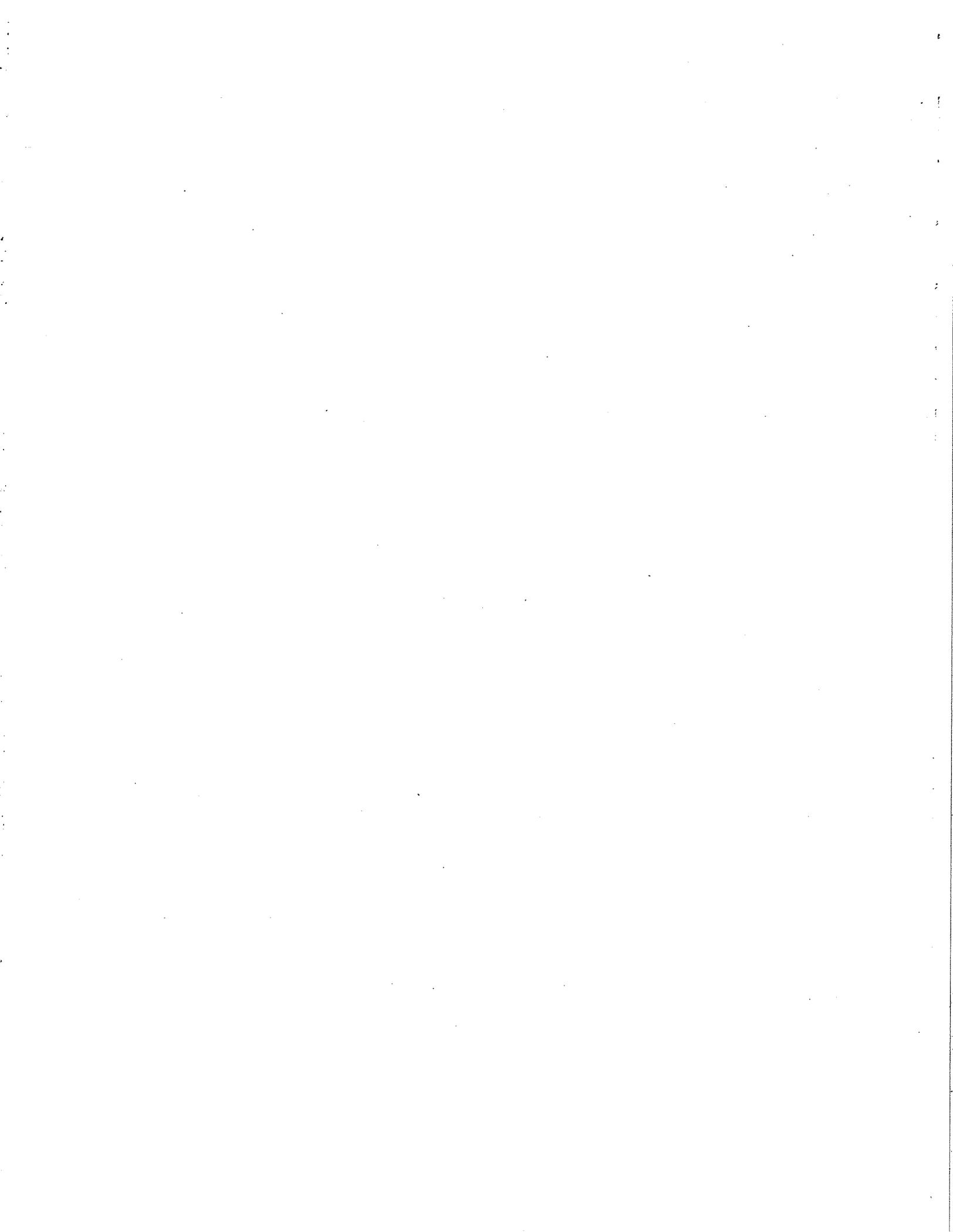


CONTENTS

	<u>Page</u>
1. Introduction	1- 1
2. Factors considered in EPA's decision	2- 1
A. NEPA compliance	2- 1
A1. Procedural requirements	2- 2
A2. Evaluation of all reasonable alternatives	2- 5
A3. Piece-meal approval	2- 6
A4. Abbreviated Final EIS	2- 7
B. Endangered Species Act compliance	2- 7
B1. Substantive and procedural mandates	2- 7
B2. Consultation on this project	2- 8
Table 1. Texas ocelot/jaguarundi profile	2-11
B3. EPA's findings and conclusions	2-13
a. Use of the mining area by endangered cats	2-13
b. Impacts to habitat without mitigation	2-15
c. Effects of habitat loss on endangered cats	2-16
d. Mitigation measures minimizing takes	2-18
e. Conservation recommendations	2-23
B4. Responses to comments on the FEIS	2-24
C. Carbón I/II power plants	2-28
C1. Transborder impacts	2-28
C2. Transportation of coal by truck	2-29
C3. Responses to comments on the FEIS	2-30
D. Other resources	2-31
D1. Water resources	2-31
D2. Air environment	2-35
D3. Biological environment	2-39
D4. Cultural resources	2-42
D5. Socio-economics	2-43
D6. Public health	2-46
E. Consultations and coordination	2-47
3. EPA's decision	3- 1

References

- Appendix A. Comment letters on the FEIS
Appendix B. Supplemental information from DRRC



1. INTRODUCTION

Dos Republicas Resources Company, Inc. (DRRC) applied to the U.S. Environmental Protection Agency (EPA) for a National Pollutant Discharge Elimination System (NPDES) permit, for wastewater discharges from its proposed coal mine near Eagle Pass, Texas. EPA's decision on the NPDES permit for the Eagle Pass Coal Mine is a major Federal action which will significantly affect the quality of the human environment. Pursuant to its responsibilities under the National Environmental Policy Act of 1969 (NEPA), EPA prepared an Environmental Impact Statement (EIS) to evaluate the potential environmental consequences of its Federal permit action.

The Draft EIS (DEIS) and Final EIS (FEIS) were released to the public in June 1994 and January 1995, respectively. EPA has considered all the information gathered in its NEPA review for this NPDES permit action, including the EIS analyses, comments received on the DEIS and FEIS (including comments at the EIS scoping meeting and at a public hearing on the DEIS and draft NPDES permit), and other information provided by interested parties during the EIS process. EPA has assessed the significance of the project's predicted individual and cumulative impacts in light of applicable Federal and State regulatory statutes, programs, regulations and permits.

This Record of Decision (ROD), prepared in accordance with the regulations of the Council on Environmental Quality (40 CFR Part 1505) and EPA (40 CFR Part 6) for "Implementing the Procedural Provisions of the National Environmental Policy Act", is the final step in the EIS decision making process. Under separate cover, EPA is issuing a "final permit decision", which further explains the conditions of the final NPDES permit and responds to DRRC comments.

Part 2 of this ROD presents the factors considered by EPA in reaching its decision on the NPDES permit; EPA's final decision is set forth in Part 3.

Included within Part 2 are summaries of and EPA's responses to the comments received on the FEIS and draft NPDES permit. Letters which provided substantive comments are listed below; a copy of each letter is presented in Appendix A of this ROD.

Agencies and organizations

U.S. Department of Interior
Texas Historical Commission
The Sierra Club, Lone Star Chapter
Marston & Marston for DRRC

Individuals

Theodosia Coppock (4 letters)
Ladye Herring
Rosa O'Donnell (2 letters)
Dan Riskind
E. K. Taylor

FEIS comment letters which were considered, but which did not require individual responses in this Record of Decision were received from the Texas Office of State-Federal Relations, Texas Natural Resources Conservation Commission and Middle Rio Grande Development Council. In addition, EPA received about 100 letters from individuals across the United States opposing EPA's issuance of the NPDES permit because of the Carbón I/II power plants' air quality impacts to Big Bend National Park. These letters were apparently prompted by an article regarding the Eagle Pass Mine in the "National Parks Conservation Association Magazine", November/December 1994.

To address specific environmental concerns, DRRC provided two letters representing its formal position: the first supplements the NPDES permit application to provide commitments to mitigation of impacts to riparian habitat; and the second addresses transporting coal to Mexico by truck. These issues are discussed in Part 2 and the letters are included in Appendix B of this ROD.

2. FACTORS CONSIDERED IN EPA'S DECISIONA. NEPA COMPLIANCE

The Sierra Club and U.S. Department of the Interior (DOI) stated that EPA failed to comply with NEPA.

The Sierra Club considered the data in the DEIS and FEIS insufficient to adequately assess impacts and develop appropriate mitigation and restoration plans. The Sierra Club also commented that the FEIS failed to comply with NEPA requirements regarding analysis of alternatives, that the project was illegally piece-mealed, and that there was improper notification of the DEIS and FEIS. The Sierra Club stated the FEIS did a poor job in informing decision-makers of the project's impacts and recommended the EIS process be reinitiated.

The DOI stated that the DEIS: did not provide a sufficiently broad scope to include all reasonable alternatives; did not fully comply with accepted methods for analyzing and reporting on incomplete or unavailable information; and failed to fully obtain the comments of the general public (i.e., there was improper notification). The DOI also stated that EPA improperly issued the FEIS as an "abbreviated final" in violation of NEPA regulations.

EPA's responses to the above comments are divided as follows:

- Section A1 presents EPA's procedural basis for NEPA compliance;
- Sections A2 through A4 present EPA's responses to the remaining comments identified above.

A1. Procedural requirements

The Sierra Club stated that, without additional information, reasoned choices cannot be made to avoid, mitigate or minimize various impacts. The DOI stated EPA did not comply with 40 CFR 1502.22 and specifically identified the transborder air quality emissions and endangered species discussions as analyses based on incomplete or unavailable information.

EPA recognizes that the standards for dealing with insufficient data and attendant uncertainties, set forth at 40 CFR §1502.22, apply "to the fullest extent possible" under NEPA §102. However, as explained in Part 2B of this ROD, ESA §7 imposes legal constraints on a Federal agency's authority to obtain unavailable data in formal consultation and, therefore, renders it less than "possible" for an agency to comply with the CEQ standard in considering impacts on threatened and endangered species.

EPA's obligation to obtain new data under 40 CFR § 1502.22 applies only to "information relevant to reasonably foreseeable significant adverse impacts [which] is essential to a reasoned choice among alternatives". Although there are gaps in the available information on current use of the project site by endangered species and on air pollution emanating from the Carbón I/II power plants in Mexico, the missing information is not essential to a reasoned choice among the alternatives available to EPA. Factors on which EPA bases this conclusion are described below.

- EPA's choice of permit alternatives is limited. Even though the EIS evaluated reasonable alternatives, including those not within EPA's jurisdiction (see Section A2), existing law limits the alternatives EPA has considered in making its decision on the NPDES permit. Pursuant to *NDRC v. USEPA* [859 F.2d 156 (D.C. Cir 1988)], EPA used information generated in the NEPA process only in deciding whether to issue or deny

the permit or to impose more stringent effluent limitations than would otherwise be required by the Clean Water Act.

- Additional information relevant to a "take" of endangered species is not essential. The U.S. Fish and Wildlife Service's (FWS) Biological Opinion suggested a site survey seeking additional evidence of habitat usage by endangered ocelots and/or jaguarundi was necessary to determine whether or not DRRC's mining activities would result in a take of those species. New data generated by such a study might provide additional evidence on the issue of "usage", but EPA does not find it essential to a decision on "take". If additional surveys showed ocelots and/or jaguarundi currently use the riparian brush habitat adjacent to Elm Creek, it would provide additional support for EPA's conclusions. If, on the other hand, no endangered felids were detected by the survey, the sighting reports and other information on which EPA based the "take" conclusions will still support those conclusions. As explained in Part 2B of this ROD, EPA concludes a take is likely to occur in or after year 7 of mine operation in the absence of mitigation. Had DRRC not committed to implementing a plan for avoiding and minimizing that take, EPA would probably have denied the NPDES permit.
- Additional information relevant to mitigation is not essential. EPA recognizes that DRRC's mitigation plan is experimental (see DEIS, Section 5.4.4) and there is no guarantee the replacement brush corridor will be adequate for use by endangered felids. Based on the best available scientific and commercial data, however, EPA judges that DRRC's efforts to establish that replacement corridor will be successful. As DRRC's efforts progress, field experience should provide a more certain basis for a conclusion on that issue. DRRC will provide annual reports to EPA regarding mitigation success (see Section B3). If the information indicates DRRC's efforts are not working, EPA will take appropriate measures including reinitiation of consultation under ESA §7 and 50 CFR Part 402.

- Additional information on Carbón I/II impacts is not essential. EPA relies on existing information for its determination that air pollution impacts from Carbón I/II are unacceptable. EPA has concluded that additional information, such as results of air quality modeling conducted by the National Park Service, would further confirm this determination. If, on the other hand, additional information found the impacts acceptable, that would not cause EPA to change its permit decision.
- Information linking EPA's permit decision to Carbón I/II impacts is not missing. A related issue to the air impacts of Carbón I/II was whether EPA's permit decision on the Eagle Pass Mine has a causal link to those impacts. Based on the information obtained and set forth in Section 5.9.7 of the DEIS, EPA has concluded that no such link exists: the unacceptable impacts to air quality from Carbón I/II (and any other impacts of those facilities, or from expansion of those facilities) will occur regardless of what permit decision EPA made.
- Changes in plans. The Sierra Club and Mr. Riskind raised concerns about changes in DRRC's plans and the effect this had on EPA's NEPA analyses. EPA recognizes applicants commonly modify their plans before and after a permit application is filed and before and after a permit is issued. Indeed, certain changes in applicant plans to achieve environmental benefits are a necessary and appropriate outcome of the NEPA process. EPA's decision is based on the plans evaluated in the DEIS and FEIS and on Appendix B of this ROD. As noted in Section C2, once the permit is effective, DRRC's flexibility will be limited since significant changes may require reinitiation of ESA consultation and/or preparation of a supplemental EIS.
- Notification. The Sierra Club and DOI indicated that EPA failed to provide proper notification and distribution of the DEIS and FEIS to all those who might be impacted by EPA's decision on the DRRC NPDES permit. DOI cited 40 CFR 1503.1 on this subject and indicated that the deficiency

in notice was indicated by "relatively few comments from the Big Bend area of Texas" and other impacted areas.

EPA provided all notifications required in the cited regulation. Further, EPA complied with Subpart D of its regulations for implementing NEPA, including publication of the availability of the DEIS and FEIS in the *Federal Register*, a publication of national circulation.

A2. Evaluation of all reasonable alternatives

EPA agrees with DOI that 40 CFR 1502.14 requires NEPA analyses to address all reasonable alternatives. Since DOI's letter did not identify any particular reasonable alternative, EPA concludes the letter meant EPA should have looked for additional ways to avoid or mitigate project impacts. The Sierra Club also commented that the FEIS must review and evaluate all available alternatives and should have investigated alternatives which DRRC rejected as economically unjustified.

The "reasonable alternatives" EPA has evaluated fall into the following categories, each of which has been dealt with adequately in the NEPA process.

- Mine/no mine alternatives. Strip mining is an intensive land use. The only way to completely avoid all potential significant impacts from a large strip mine in a sensitive environment is to not mine. For EPA, the choices between mining and non-mining are in the form of approving or denying the NPDES permit. Therefore, both reasonable alternatives have been evaluated.
- Reclaim/not reclaim alternatives. Federal law requires reclamation of a surface coal mine, including re-establishing "as good as or better" land productivity. EPA's reasonable alternatives included not only the

reclamation required by mining laws but also the FWS recommendations that the habitat along Elm Creek be restored to "something close" to its existing condition.

- Mitigation measures. Where potentially significant impacts have been identified, EPA has evaluated alternatives to reduce or offset the impacts. For example, the unacceptable loss of riparian habitat has been avoided through DRRC's commitment to replace the existing habitat during and after mining (Appendix B). EPA is not aware of any mitigation alternative reasonably available to DRRC which was not considered in the NEPA process and finds no specifics on such alternatives in the Sierra Club or DOI comment letters.
- Carbón I/II alternatives. EPA could identify no permitting alternative which can mitigate the unacceptable impacts of the Carbón I/II power plant complex in Mexico. As discussed above, no causal link has been identified between EPA's permitting decision on the Eagle Pass Mine and the control of pollution in Mexico.

A3. Piece-meal approval

Sierra Club argued that EPA illegally segmented (piece-mealed) its decision on the DRRC NPDES permit because the FEIS only considered the first five years of the project and failed to require "imperative information".

Although EPA's NPDES Permit expires in 5 years, EPA's NEPA process has considered reasonably foreseeable impacts during the entire life of the project, which is 19 years, and indeed went beyond that timeframe to consider restoration impacts after mining ceases. If the NEPA analysis had only a five-year perspective, the issue of lost riparian habitat in the 7th year of the project would not arise.

A4. Abbreviated Final EIS

Citing 40 CFR 1503.4(c), DOI stated that an abbreviated final EIS for the Eagle Pass Coal Mine is not authorized by NEPA, because the FEIS made significant modifications and updates to the DEIS. The Sierra Club made the opposite objection, that EPA essentially resubmitted the DEIS as the FEIS.

The Final EIS changed minor parts of the DEIS and portions of the DEIS were rewritten, but EPA disagrees that the format of the FEIS was simply "errata sheets" as described in 40 CFR 1503.4(c). The FEIS presented new and revised information, was fully integrated with the DEIS, and both documents provide a complete evaluation of EPA's proposed action. The public has been afforded full access to EPA's entire NEPA documentation, and no other commentors identified concerns with this approach, initiated in 1977 to save the government printing and mailing costs and resources.

B. ENDANGERED SPECIES ACT COMPLIANCEB1. Substantive and procedural mandates

Section 7 of the Endangered Species Act (ESA) and Federal regulations codified at 50 CFR Part 402 reflect and establish the policies of the United States of America on the obligations of all Federal agencies in conserving listed threatened and endangered species and protecting their habitat in the course of undertaking, funding, or authorizing activities which may affect those species. Reduced to its fundamentals, ESA §7 requires that Federal agencies "insure" their actions are: (1) not likely to result in the adverse modification of designated critical habitat of any listed threatened or endangered species (2) not likely to jeopardize the continued existence of such listed species and (3) taken in a manner minimizing "takes" of such species. ESA also limits the means Federal agencies may use to comply with these substantive obligations, commanding them "to utilize their

authorities". It does not add to the authorities agencies otherwise possess under the statutes they administer.

In addition, ESA imposes procedural requirements on Federal action agencies, i.e., that they reach conclusions on the three issues (above) "in consultation with and with the assistance of" either the National Marine Fisheries Service of the Department of Commerce or the United States Fish and Wildlife Service of the Department of the Interior. There is a statutory time limit on the duration of formal consultations, however, and both consulting and consultant agencies must rely on the "best scientific and commercial data available" in reaching their conclusions. When such data are scarce, it may thus be impossible as a practical matter to reach necessary conclusions to a reasonable degree of scientific certainty and the Federal government must then simply exercise its best judgment on the basis of limited information.

ESA also allows consulting agencies, with the consent of affected permit applicants, to engage in "informal consultation" with the appropriate consultant agency. Informal consultation is a useful procedural tool allowing the parties to rule out the need for formal consultation through a finding that the action at issue is "unlikely to adversely affect" a listed species or critical habitat or by narrowing the issues to be addressed in a subsequent formal consultation. On occasion, it may also provide a period in which additional data may be generated, thus making such data "available" during a subsequent formal consultation.

B2. Consultation on this project

EPA Region 6 (with assistance from DRRC, its designated "nonfederal representative") has engaged in both informal and formal consultation with FWS on whether and how its proposed permitting action might affect two listed endangered species, the ocelot and jaguarundi (see DEIS Section 6.1 and

Appendix D; and FEIS Part II.D and Appendix F). Available data suggest these two endangered felids might be present in the project area, but neither has ever been captured (alive or dead) for scientific identification and observation in that area. Before EPA commenced informal consultation with FWS, DRRC contracted with Hicks & Co. (Hicks), which in turn subcontracted with Dr. Michael Tewes, to perform a research trapping study investigating the manner, if any, in which ocelots actually use the vicinity of the proposed mine. Dr. Tewes, one of the foremost biological experts on ocelots, was apparently the only individual in the United States, other than FWS employees, who possessed a license from FWS to trap them. As designed by Dr. Tewes, this research survey was to consist of 9,000 trap nights. In essence, trapping was to begin at the site and expand to cover a ten mile radius.

Trapping began on September 29, 1993. Although disturbance of traps by feral pigs proved a problem, a wide variety of animals (but no ocelots or jaguarundi) were successfully trapped during 3,066 trap nights. On November 11, 1993, trapping was suspended until conclusion of hunting season to address concerns for researcher safety. As it turned out, however, trapping never resumed. DRRC terminated its contract with Hicks and Dr. Tewes was unwilling to perform the study except as a subcontractor to Hicks.

On December 22, 1993, EPA initiated informal consultation with FWS without the benefit of new data a completed trapping survey might have generated. FWS almost immediately requested that EPA commence formal consultation, because it had already concluded at least one jaguarundi used the area. During the course of the subsequent formal consultation (which commenced on June 8, 1994), FWS requested changes to DRRC's mitigation plan, but did not request additional data or resumption of the trapping survey until it provided EPA a draft biological opinion (BO) on October 21, 1994. Although its incidental take statement concluded that implementing a brush habitat replacement plan (developed by DRRC) would minimize takes of endangered cats which might be present, the draft BO also suggested FWS could not determine whether or not ocelots or jaguarundi actually use the proposed mine area, particularly as home range, without additional trapping efforts.

On November 4, 1994, EPA informed FWS of its view that ESA §7 did not permit equivocation in a BO and requested that FWS clarify its incidental take statement. FWS' final BO, issued on November 23, 1994, did not resolve the ambiguities of the draft BO. Although the final BO found DRRC's mitigation plan a reasonable and prudent measure minimizing the possibility that a take will occur, FWS' opinions remained obscure on the issues of whether ocelot and/or jaguarundi use riparian brush along Elm Creek as a dispersal corridor or home range and whether the unmitigated destruction of that brush during mining would result in a take. In addition, the final BO injected another ambiguity in this matter. Whereas both draft and final BOs concluded it unlikely the project would result in jeopardy, the final BO also stated "the Service cannot say that the loss of a single individual would not be likely to jeopardize the continued existence of those populations [of ocelot and jaguarundi in South Texas]." To EPA, this statement renders FWS' no jeopardy conclusion less than facially consistent.

EPA is nevertheless now required to act, despite the absence of a reasonably clear BO from FWS. EPA has deferred to some FWS opinions, but has also supplemented those opinions with its own conclusions as a matter of necessity. In reaching its own conclusions on ESA issues, EPA has relied on the best available information, including information set forth in the DEIS and FEIS, FWS' BO, DRRC's mitigation plan, the FWS recovery plan for ocelot and jaguarundi, and other documents generated during the consultation with FWS (see information summarized in Table 1). To evaluate ESA issues, EPA has largely relied on methods set forth in its "Framework for Ecological Risk Assessment," produced by the Risk Assessment Forum in 1992. EPA's conclusions are based on professional judgments using the best available information.

TABLE 1. TEXAS OCELOT/JAGUARUNDI PROFILE

Brief description. Ocelot: bobcat-sized (about 20-25 lbs) spotted cat, with tail; in south Texas, occupies thick brush habitat. Jaguarundi: housecat-sized dark cat believed to occupy similar habitat in south Texas. Both are U.S. and Texas endangered species, but little is known about the jaguarundi, so the ocelot is used as its surrogate. Information below is from the Recovery Plan (see Harwell and Siminski, 1990), and pertains to ocelots, unless otherwise stated.

Characteristics

Identification and study. Much learned from radio-collared ocelots at Laguna Atascosa NWR (LANWR) near Brownsville; 163 nights of trapping per capture. Track and scat characteristics overlap with the common bobcat. "There are few inferential or diagnostic techniques that can be relied upon to identify their presence" (Tewes & Hicks, 1993). Unknown whether population is growing, stable or declining (FWS, 1994). No jaguarundis have been captured or photographed in Texas, though two confirmed road kills have occurred since 1969; jaguarundis have been trapped in Mexico, but only after 7,000 trap nights (FWS, 1994a). Studies continue.

Nature. Secretive (Tewes/Hicks, 1993); active from sunset to shortly after sunrise. Readily enter water (Tewes, cited in FWS, 1994).

Reproduction and young. Dens in dense brush. Two years usual age of first conception. Estrus lasts 7-10 days; multiple estrus in captivity. Gestation about 80 days; birthing usually September to or through November, or somewhat earlier or later. Litters of one or two common; litters of four known. Nursing up to six months; subadult ranges may overlap parents.

Ecology

Location. Primary resident population in Brownsville area along the Gulf coast (about 30 ocelots at Laguna Atascosa NWR) and the Rio Grande; secondary population west of Corpus Christi. Ocelots documented less than 100 miles both north and east of Eagle Pass (Tewes & Hicks, 1993); numerous sightings in the Eagle Pass area (TPWD, 1994). Despite frequent sighting reports (Tewes believes most are house cats), FWS believes the jaguarundi may be nearly extirpated in the U.S., even in the lower Rio Grande Valley (FWS, 1994).

Habitat types. May persist in partly-cleared forests, second growth woodland, and abandoned cultivated areas that have reverted to brush. Like dense brush and have been found in four habitat types: mesquite-grajeno parks; mesquite-blackbrush; live oak woods/parks; and Rio Grande riparian. Remaining habitat with >75% vegetative cover is about 49,400 acres. In northern Mexico, jaguarundis use areas resembling the project site, preferring woody communities and areas of bunch and tall grasses.

Adequate cover is dense and brushy, especially between ground level and 1.5 meters, with 75%+ canopy cover of the shrub layer (optimum is 95% cover) (Tewes, cited in FWS, 1994). Lower stratum most important for foraging, denning, and social interactions; dense vertical cover may provide niche segregation from bobcat and coyote competitors/antagonists (Tewes & Hicks, 1993). Den sites occasionally include bunch grass stands (e.g., sacaton, cordgrass) and whitebrush communities, especially on old river channels (Tewes & Hicks, 1993).

For travel and dispersal, use vegetated (cover may be <75%) drainage corridors or irrigation canals; cover used includes woody whitebrush, hogplum and sacaton. Ocelots will go far out of their way to follow a corridor of dense vegetation (Tewes, quoted in Carroll, 1994). Will seldom cross an open field, even at night, so travel corridors are often along brushy fence lines (Tewes, cited in FWS, 1994).

Home range. Principally an intensively used core of several hundred acres of >75% covered habitat, plus perhaps several thousand acres of adjacent land with some cover. There are about 30 ocelots on Laguna Atascosa's NWR 8,280 acres of high quality thornscrub habitat, or 276 acres per ocelot, and the NWR may be at or near its carrying capacity. Two private easements, one of 400 acres and one of 200 acres, usually harbor several ocelots because they typically make intensive use of only a small part of their home range (Carroll, 1994). Eight collared ocelots utilized small portions of two 175-acre tracts of >75% cover habitat, with the remaining 90% of their home ranges being less covered (Tewes, as cited in FWS, 1994). Only dispersing individuals are likely to go more than 10 miles beyond their home range. Males range farther than females; adult males exclude other adult males from their ranges, and adult females may exclude other females, although male and female ranges often overlap.

TABLE 1, CONTINUED

Prey base. Vegetation structure rather than prey base is the limiting factor for the species (FWS, 1994a). Laack (1995) states that ocelots appear to be generalists, mostly preying on small mammals and birds. Prey base at LANWR was surveyed (many mice).

Threats

Motor vehicles. Of nine dead ocelots recovered (before 1991), six were due to motor vehicle injuries. Two more road kills by March, 1992 (FWS, 1994). Annual ocelot mortality in South Texas is 29%, with motor vehicle injuries accounting for three out of four mortalities (Tewes, in FWS, 1994).

Diseases. No special ocelot problems discovered to date at LANWR; afflicted by same problems as other cats (Laack, 1995). Bobcats, raccoons, and feral house cats all carry feline distemper, and could conceivably pass it to ocelots (FWS, 1994), though such animals coexist with ocelots at the LANWR (Laack, 1995).

Sensitivity to human activities. Ocelots tolerated a drilling operation which required heavy utilization by 18-wheel trucks on a ranch (Tewes, 1993, as cited in SWCA, 1994a). At a different site, a denning female moved her den 1000 yards or more as the result of human presence and brush clearing with a machete, whereas in other areas ocelots do not move from dense habitat while trucks pass by every 30 minutes only 100-200 yards away, and at the LANWR they sometimes nap close to the parking lot (Tewes, cited in FWS, 1994).

Predation; competition. Unknown; predators potentially include man, dogs, coyotes, bobcats, feral swine. Predator control has added to decline (FWS, 1994). Occasional hunter and trapper takes reported for years; trapper survey received 87 positive responses (no documented takes in Maverick County). Bobcats and coyotes are suspected competitors and antagonists (Tewes & Hicks, 1993).

Habitat alteration. Overgrazing resulted in thornscrub communities replacing grass in many areas. Subsequent agricultural brush clearing has replaced most thornscrub and contributed to depressed populations (FWS, 1994). Riparian habitat affected (negatively where brush cleared) by drainage, flood control and dam projects; road right-of-way clearing destroys brush, as do rural and urban housing development (FWS, 1994).

B3. EPA's findings and conclusionsa. Use of the mining area by endangered cats

Radio collar tracking in south Texas demonstrates ocelots prefer dense brush habitat containing at least 75% vegetative cover within the shrub layer. For residence, an adult ocelot apparently needs several hundred acres of adequate habitat. (See Table 1 for acreage and specific vegetative types known to be used by ocelots.) Ocelots will go far out of their way to follow a corridor of dense vegetation (Tewes, quoted in Carrol, 1994). For travel, nearly continuous cover is required; an ocelot will seldom cross an open field, even at night, but will instead follow brushy fence lines. As stated in the FWS recovery plan, corridors are necessary for survival and vital to recovery of the species; habitat fragmentation currently threatens species survival.

The dense brush along Elm Creek provides cover, alignment and other characteristics rendering it potential optimal and suboptimal habitat for ocelots. Surveys by DRRC (SWCA, 1994) indicate the mine site contains nearly 400 acres of dense brush EPA considers suitable for residence. A partial survey of Elm Creek from the Rio Grande to the project site found nearly continuous cover (with some gaps) and examination of aerial photographs shows that dense riparian brush habitat extends 25-30 miles north along Elm Creek, totalling as much as 1500 acres (SWCA, 1994). From review of aerial photos, it appears to EPA that brush along the Maverick County Canal could also serve as a corridor to the site. It appears plausible that cats could travel from the northern reaches of the Elm Creek drainage east to the Nueces River drainage. Consequently, the habitat itself appears to have high potential value for travel and dispersion of ocelots.

Ocelots have been physically documented within 100 miles of Eagle Pass both to the southeast (Webb County) and to the north (Edwards County). Based on analysis of several visual sightings in Maverick County, the Texas Parks

and Wildlife Department (TPWD) believes ocelots probably occur in the area of the proposed mine (TPWD, 1994). EPA agrees. Moreover, the nature and location of the optimal and suboptimal heavy brush habitat along Elm Creek in the mining area renders it probable those ocelots use that habitat as a travel corridor. It is possible, but not likely, that ocelots also use the heavy brush along Elm Creek as home range. Although DRRRC's trapping study was incomplete and hampered by feral pigs, Dr. Tewes failed to capture an ocelot in 3,066 trap nights. In an area known as ocelot home range (Laguna Atascosa NWR), his similar efforts resulted in a captured ocelot for every 163 trap nights (44 captures in 7,180 total nights). EPA believes Dr. Tewes' lack of similar success in 3,066 trap nights in the proposed mining area most likely occurred because there are no ocelots using it as home range.

Because so little is known about the jaguarundi, the ocelot is generally used as its surrogate. Conclusions regarding ocelots may thus generally be extended to jaguarundi. EPA's conclusion on ocelot use of the Elm Creek riparian habitat as a travel corridor thus supports its conclusion that jaguarundi also use it. In addition, there have been several sightings of jaguarundi in the project area. While jaguarundi can be easily confused with feral domestic cats, two sightings were by trained biologists, reducing the chance of error. Two other sightings, involving an adult and two kittens, suggest jaguarundi use the area as home range. EPA thus agrees with FWS' earlier conclusion that "this habitat is currently occupied by at least one jaguarundi". Given the limited amount of suitable habitat (392 acres of >75% cover), however, EPA judges it unlikely that portions of the mining site are used as portions of home range by more than two adult jaguarundi (one male and one female, perhaps, with overlapping home ranges).

FWS's biological opinion suggests resident ocelot and jaguarundi may currently use open rangeland in the proposed mining area to supplement the limited amount of optimal and suboptimal brush habitat along Elm Creek. It is unlikely that any endangered cats using the riparian brush habitat depend on that open rangeland as a prey base (personal communication Linda Laack, LANWR,

1994). At most, it is of secondary importance to any cats' ability to use the proposed mining area as home range.

b. Impacts to habitat without mitigation

Without mitigation, habitats on areas directly impacted by strip mining will be totally destroyed. Approximately 1350 acres of open brush rangeland which is inadequate as ocelot habitat will be destroyed by mining operations in the first five years and similar destruction will continue over the 19 year life of the mine. A nearly continuous corridor of original riparian vegetation (the stem plus the northeast branch of the "Y" shaped Elm Creek drainage) will remain until year 6. Ultimately, however, mining will destroy 284 acres of that dense brush habitat, effectively removing approximately three linear miles of dense riparian brush.

Such clearing of dense thornscrub brush and fragmentation of dispersal corridors is a major cause for species decline in south Texas (see Table 1). Moreover, protecting such habitat "either in a single block or continuous blocks connected by corridors that allow sufficient movement for gene flow and recolonization" is a key objective of the Recovery Plan for the ocelot and jaguarundi. Permanent unmitigated destruction of the heavy brush habitat along Elm Creek will thus represent a setback to potential recovery efforts. Even if no ocelot or jaguarundi currently use that brush, which EPA doubts, it will not be available as home range or dispersal cover for expanded populations in the future.

Nevertheless, ESA §7 and the implementing Federal regulations provide no clear or direct authority for EPA to require that DRRC protect this habitat just because it is valuable to the cats and its preservation would assist Federal recovery efforts. Although the law on habitat protection under ESA is still developing, EPA Region 6 believes it may require such protection only to insure "critical habitat" is not destroyed or adversely affected, insure

jeopardy is unlikely, or minimize takes, i.e., actual death or injury to protected cats, resulting from habitat destruction. FWS has not designated the brush corridor along Elm Creek as "critical habitat." Thus, the primary decisions EPA must now make are whether unmitigated destruction of about 300 acres of riparian brush habitat will be likely to result in jeopardy or takes of protected cats and, if so, how jeopardy can be avoided and/or takes minimized.

c. Effects of habitat loss on endangered cats

Loss of the 284 acres of dense brush habitat at the mine site will result in displacement of any cats now using it as home range. Ocelots have been known to move their dens in response to perceived threats (brush clearing with a machete) and it thus appears likely resident cats will disperse before DRRC's brush clearing operations progresses to the point that an adult cat suffers actual death or injury from those operations or subsequent mining operations. Displaced cats will probably take up residence in similar brush habitat that is presumed to remain along Elm Creek outside the mining area.

The exact distance each cat moves will probably be affected by a number of factors, including the degree to which they tolerate stress induced by mining operations, the density of cat populations in the remaining brush habitat along Elm Creek, and possible preferences based on subtle differences between portions of that habitat. Field observations by Tewes suggest any cats now residing in those areas will probably adjust their own home ranges. If brush clearing activities occur during denning season (September through November) when kittens might be present, a take could result.

Unmitigated loss of the Elm Creek riparian brush habitat will pose a greater problem for cats which would otherwise use it as a dispersal corridor. Potential corridors near Eagle Pass are not abundant and loss of the Elm Creek brush corridor would severely restrict or even eliminate cat travel from upper portions of Elm Creek to or from the Rio Grande (including

the Maverick County Canal). At worst, such cats will be unable or unwilling to transit the area at all, possibly leading to fragmented and potentially inbred populations on both sides of the break.

Cats attempting to traverse the mine site will have to detour through less vegetated areas where they will be exposed to increased dangers. Vehicle traffic is a major cause of ocelot mortality in south Texas and many of these deaths appear related to dispersal. Most mine traffic onsite will occur in the daytime and be slow (20 mph speed limit). Some mining operations will occur 24 hours per day, however, and there will be increased high speed traffic on Highway 1588 to and from the mine at night, when ocelot and/or jaguarundi are most likely to be traversing the area.

EPA agrees with FWS that the probability of a take is unquantifiable. Based on the best available information, however, EPA concludes that, in the absence of mitigation, during the life of the mine at least one individual ocelot and/or jaguarundi will be injured or killed, most likely in a nighttime collision with a motor vehicle. After mining ceases, related traffic increases will drop, but the Elm Creek brush corridor would still have a large gap. Without mitigation, mining related takes of dispersing cats might thus continue to occur, though at a lesser rate.

EPA concludes that the project would be unlikely to jeopardize the continued existence of either endangered species, regardless of whether loss of home range at the mine site results in any change in the local distribution of cats. The site contains no habitat designated as critical habitat and no habitat which EPA judges essential to continued survival of the cats. The mine will not impact existing known concentrations of the species in south Texas and Mexico, which includes protected habitat in Laguna Atascosa NWR and in other protected refuges along the lower Rio Grande and elsewhere in south Texas (e.g., Santa Ana NWR and the Yturria Ranch).

d. Mitigation measures minimizing takes

To minimize and avoid takes which will otherwise occur as a result of DRRC's proposed mining operation, DRRC has committed to implementation of the mitigation measures described below in a letter supplementing its permit application. EPA regards DRRC's commitment to implement those measures material to its decision to issue DRRC's NPDES permit, i.e., had DRRC not been willing to implement them EPA would probably have denied the permit. In some instances, these mitigation measures go beyond the known needs of endangered cats to address more general concerns on loss of wildlife habitat and ecosystem density.

For the most part, these measures track the "reasonable and prudent measures" FWS identified in the incidental take statement of its final BO, but they differ in some respects. For example, EPA does not believe DRRC may be required to perform additional trapping studies under the circumstances of this matter, as explained in Bill Cox's November 4, 1994 letter to Rogelio Perez. EPA encourages DRRC to perform such studies, which might provide data useful to future conservation efforts. EPA is not, however, requiring DRRC to perform the studies to obtain an NPDES permit.

1. Replacement of a continuous brush corridor. Prior to mining through the existing Elm Creek riparian corridor, DRRC will establish and maintain a continuous brush habitat corridor at least 100 feet wide within Reaches 2 and 3 of the existing Elm Creek dense brush habitat delineated by Tewes (Tewes/Hicks, 1993), until either the upland bypass corridor or Elm Creek's restored Reach 1 and new Reach 3 meet the corridor criteria outlined in Mitigation Measure #3, below. Note that the commitment to a 100-foot-wide Elm Creek corridor refers to 100 feet of vegetation, in addition to the unvegetated Elm Creek channel.

DRRC will make the access road in mining areas A and D an eastern barrier to all construction activities and will construct a berm between the road and the existing continuous brush corridor located along Reaches 2 and 3 of Elm

Creek. Until an acceptable alternate corridor is established the berm will be maintained and any vegetative clearing done between the berm and existing Elm Creek Reaches 2 and 3, or within 1000 feet of them (e.g., removal of the prominent westward bend of Elm Creek Reach 2 in upper Area A), will be done in daylight hours only.

2. Final Elm Creek channel. As discussed in FWS Term and Condition #4, EPA expects that restoration will provide two riparian corridors: one is the corridor recreated by the channel and vegetation to be established along restored Reach 1 and new Reach 3 beginning in year 6; the other is the corridor which will be restored in the approximate original Elm Creek location along restored Reaches 2 and 3, after mining is completed.

EPA further expects that these corridors will have ecological functions comparable to the existing corridor(s) and that these functions will be naturally sustainable, not only to benefit the endangered cats, but to support EPA's overall objective that riparian habitat be restored in support of diverse native wildlife. EPA's judgment is that this objective will require that long-term hydrologic processes within the riparian corridor be, to the extent practicable, reasonably similar to the natural processes. Therefore, in designing the corridors, EPA expects DRRC to consider the existing geomorphology, soil conditions and hydrologic regime of the natural dense riparian brush corridor and to pay particular attention to the magnitude, timing, duration, frequency and variability of overbank flows.

EPA recognizes that DRRC's ability to meet this objective may be constrained by requirements for the design of a reconstructed channel imposed by other agencies (RCT, COE), because such regulations may favor a more efficient channel than has been provided by nature. Therefore, EPA will not specify a particular channel configuration as a mitigation measure. Rather, EPA expects DRRC to work with RCT, COE, FWS and the Texas Parks and Wildlife Department (TPWD) so that no matter what the final design is, DRRC will

restore hydrologic processes necessary to sustain optimal and sub-optimal ocelot habitat in both corridors or, if necessary, in at least one corridor.

3. Alternative and restored corridor criteria. The specific corridor performance criteria given here are taken directly from DRRC's mitigation plan specifications. EPA may consider other information, including analyses by FWS, in determining whether corridor restoration has been accomplished. No corridor shall count as restored or recreated until the following criteria are met.

In order for the upland bypass or Elm Creek restored Reach 1 and new Reach 3 to qualify as corridors, vegetation volume will average at least 0.492 cubic meters per square meter in the first two meters above the ground (no segment more than 250 feet long may have a vegetation volume of less than 0.36).

For the upland bypass, the fenced habitat will be 300 feet wide and continuous except for at most fifteen, 50-foot-wide unvegetated gaps for ranch equipment and livestock. Minimum average cover will be at least 66% for trees, shrubs and perennial grasses more than 0.6 m tall over a strip at least 100 feet wide within the 300-foot corridor (no segment in this strip more than 250 feet long will have less than 50% cover).

For Elm Creek restored Reach 1 and new Reach 3, the habitat will be 100 feet wide (usually 50 feet on each side of the unvegetated channel) and continuous except for a maximum of six unvegetated gaps no more than 200 feet wide each to accommodate equipment and vehicle movement. Upon completion of mining, vehicle crossings will be reduced in width and number to the minimum necessary to maintain the pre-project level of ranch operations and any gaps will be allowed to revegetate naturally up to the edge of ranch roads.

EPA's summary of measured existing vegetation densities is contained in Table 5-3a of the FEIS. EPA believes that the methods used by DRRC to measure vegetation density and volume are reproduceable and valid and should be relied on for future vegetation comparisons.

4. Minimization of motor vehicle injuries. Culverts will be placed underneath all road crossings of Elm Creek restored Reach 1, and new Reach 3, with fine-mesh fencing placed parallel to the crossing areas to divert cats away from the roadways and through the culverts. Subject to approval of the appropriate government landowner, DRRC will also provide for a culvert and fine-mesh fence crossing under Highway 1588 where it crosses Elm Creek at the south end of the site.

5. Reporting. DRRC will provide EPA, FWS and TPWD with two copies each of the following revegetation reports.

<u>Report Title</u>	<u>Due Date</u>
Experimental Design	Two months following NPDES permit issuance
Quarterly Status Reports on Vegetation Experiments	Quarterly following completion of experimental design report
Annual Reports on Vegetation Experiments	Annually following completion of experimental design report
Final Report on Vegetation Experiments	Within 5 years following NPDES permit issuance
Annual Reports on Revegetation Progress and Monitoring	December 1996 and continuing for 20 years
Site Visits by FWS, TPWD, and/or EPA	On request

DRRC will provide a copy of all such reports and all other monitoring reports required by any regulatory agency for public review at the Eagle Pass

Public Library. As stated in SWCA (1994a) a minimum of 500 individual trees and 400 pads of vegetation will be salvaged as an experiment on the effectiveness of plant transplants.

6. Habitat management plans. A Habitat Management Plan (HMP) consistent with the previous terms and conditions will be developed by DRRC in writing and implemented for the existing Elm Creek dense brush corridor, the upland bypass corridor, and the recreated Elm Creek brush corridor. The HMP will address the following activities: management of habitats before, during and after mining; monitoring beyond surveys to include annual report; mining activities; roads, culverts, fencing, buffers, etc.; and recreation of corridors. Coordination with TPWD and FWS is encouraged. The HMP will be provided to EPA, FWS and TPWD prior to disturbance of existing habitat.

7. Additional protective measures. All workers will be informed of endangered or threatened species (both Federally listed and State listed) which potentially occur in Maverick County. A Threatened and Endangered Species (TES) Plan will be devised by DRRC to handle the possibility of encountering endangered or threatened species on the mine site, and all workers will be made aware of this plan by DRRC. If DRRC or anyone else associated with this project locates a dead, injured, or sick ocelot or jaguarundi, initial notification will be made to the nearest FWS law enforcement office. Care should be taken in handling sick or injured specimens to ensure effective treatment, and in handling dead specimens to preserve biological materials in the best possible state for later analysis of cause of death. In conjunction with the care of sick or injured endangered species or preservation of biological materials from a dead animal, the finder has the responsibility of ensuring that evidence intrinsic to the specimen is not unnecessarily disturbed.

8. Timing of habitat impacts. No riparian corridor habitat will be destroyed between September 1 and November 30, unless immediately prior to

such destruction, DRRC has undertaken a high resolution ground survey of that habitat to determine that the disturbed area contains no dependent kittens.

e. Conservation recommendations

EPA encourages but does not require DRRC to undertake the following conservation measures, which will further increase the value of the proposed mitigation.

1. A photographic inventory of the Elm Creek dense brush corridor, both of areas to be mined and of the 108 acres that will not be disturbed, should be made prior to the initiation of project construction. Throughout the life of the project, direct comparisons should be made to the 108 acres of undisturbed dense brush habitat. Baseline transects should also be photo-documented.
2. DRRC should attempt to secure agreements with landowners for the maintenance of the restored riparian corridor habitat in perpetuity.
3. DRRC should continue to research ocelot and jaguarundi usage of the project area, including completion of the ocelot survey that was already begun prior to mining.
4. DRRC should restore as much as possible of the project site to existing habitat types, instead of to pasture. This will increase the value of the site to wildlife.
5. DRRC should restore vegetation so that dominant plant species in at least the final restored Reach 1/new Reach 3 corridor include mesquite (*Prosopis glandulosa*), cedar elm (*Ulmus crassifolia*), whitebrush (*Aloysia gratissima*) and alkali sacaton grass (*Sporobolus aeroides*).
6. DRRC should assess the importance of drinking water to wildlife currently found at the site and include water supplies in its final site design.

B4. Responses to comments on the FEIS

The following comments and responses generally refer to those parts of DEIS Section 5.4 and FEIS Part III which discuss impacts to endangered and threatened species, or which relate to the plans for mitigation of such impacts. EPA's responses to these comments are embodied in the analysis on endangered and threatened species presented above. Specific responses to particular comments are as follows.

Biological opinion. DOI objected to EPA's criticisms of the FWS biological opinion, in part because deficiencies in the opinion were said to stem back to "the fact that EPA and the applicant did not fulfill their obligation to provide site-specific data". The Sierra Club believed that the biological opinion was inadequate because if a cat were killed due to the mining activity, but DRRC had adhered to the specified mitigation measures, that would be allowed as an "incidental take" even though a take of ocelot or jaguarundi would jeopardize the existence of either species. Both the Sierra Club and DOI saw a need to reinitiate Section 7 consultation.

EPA's response with respect to the FWS Biological Opinion is in the form of EPA's Findings and Conclusions and is presented in the previous parts of this Section B. Neither EPA nor DRRC was obligated to generate new site specific data in this matter.

Incomplete ocelot survey. Both the Sierra Club and DOI argued that EPA should see that the ocelot survey is completed, as specified in the FWS list of reasonable and prudent measures. The Sierra Club states that if the survey will not be available before site disturbance, Section 7 consultation needs to be reinitiated.

As indicated in Bill Cox's November 4, 1994 letter to Rogelio Perez, EPA does not believe ESA §7 and FWS's consultation regulations permit FWS to designate a future study a reasonable and prudent measure in a biological

opinion without explaining how the study will itself minimize takes. In some circumstances, for instance, a study might prove useful for monitoring the success of reasonable and prudent measures and could thus be regarded as part of those measures. Here, however, FWS does not claim the study will itself minimize takes or serve to show whether DRRC's mitigation efforts are successful. It instead claims a study might show whether or not endangered cats use the project area as home range. That, however, is a finding which ESA §7 required FWS to formulate in its biological opinion on the basis of currently available information. Although it could have requested generation of this new data during consultation in accordance with 50 C.F.R. 402.14(f), FWS' currently expressed desire to use data not now available to render a decision in the future appears to demand continuation of consultation beyond the limited time frame ESA §7 affords.

Moreover, the trapping study FWS and the commentators seek is not necessary to determine whether endangered cats presently use the area of the proposed mining operation as home range. As indicated elsewhere in this ROD, existing data are sufficient to conclude jaguarundi probably use the area as home range, but ocelots probably do not. Because the two species have similar habits, however, there is no reason to believe ocelots using the site as home range will have any more difficulty adjusting that range locally than jaguarundi. Indeed, ocelot observations in other areas provide the data on which EPA bases its conclusion that jaguarundi using the mine site as home range will adjust their territories to avoid the disturbances caused by mining operations. As explained in Section A1, additional information showing that ocelots also use the area as home range would thus make no difference to EPA's decision here.

Adequacy of ocelot habitat. The Sierra Club commented that the FEIS was inaccurate because it stated: "potential habitat areas are too small to support the cats; and that a lack of suitable habitat north and south of the site make the site's use as a part of a movement corridor unlikely". This quote, taken out of context, was introduced as a statement made by DRRC and

was part of EPA's summary of DRRC's mitigation plan and addendum thereto (p. III-14 of the FEIS, paragraph 2). Since the opinions stated in DRRC's mitigation plan were not EPA's own, the FEIS cannot be considered inaccurate when it accurately quotes an outside source of information. As is evident from the DEIS and FEIS, EPA disagrees with DRRC on this point; see Sections 5.4.3 and 5.4.4 of the DEIS and Parts III.A and III.B of the FEIS, errata and page revisions, respectively. In any event, EPA's current views on this issue are reflected by this ROD.

Other species. The Sierra Club stated that EPA failed to obtain more information on other threatened species and failed to require protection of these species; and asked about impacts from wastewater discharges on the endangered Rio Grande darter and other species that depend on Elm Creek and the Rio Grande. EPA's response as to information needs is given in Section A1. EPA has addressed all Federally-listed threatened and endangered species identified by the FWS as potentially occurring in the project area. State-listed threatened and endangered species are identified and mining impacts are discussed in the DEIS. EPA recognizes that there will be a temporary, localized loss of wildlife that depends on the existing Elm Creek riparian corridor as habitat. However, when replacement riparian habitat is available, EPA expects that these species will re-establish. Additional information on the Rio Grande darter is provided on page 2-28. EPA depends on state agencies to provide for adequate protection of those species. To that end, EPA is requiring that the Texas Parks and Wildlife Department receive reporting documents from the mining company (see Mitigation Measures 5 and 6 in Section B3d above). EPA also notes that DRRC's consultants have obtained the requisite State permit which allows for handling and relocating of State listed species encountered at the site.

Regarding wastewater discharges, the NPDES permit reflects EPA's determination as to what pollutants are likely to be present in the wastewater discharges; in turn, this reflects the agency's extensive experience with NPDES permits for coal mines, and specific studies of mine effluents.

Water quality standards have been set by the State of Texas to protect aquatic resources. The State of Texas has certified that these standards will not be violated by DRRC discharges if EPA's NPDES permit limits are met.

The following comments and responses generally refer to those parts of DEIS Section 5.4 and FEIS Part III which concern the plan for mitigating impacts to endangered and threatened species.

Adequacy of mitigation plan. The Sierra Club stated that the mitigation and restoration plans in the DEIS/FEIS were totally inadequate. Specific criticisms included the failure to recognize the importance of trees; hydrologic changes to the Elm Creek drainage which may lead to insufficient water supply for the bunch grasses which make up the "dominant" wooded/sacaton riparian plant community and cannot survive without subsurface moisture; and uncertainties because restoration of the habitat may take decades. These concerns and the lack of data on use of the corridor were said to make the mitigation plan one that cannot be rationally relied upon.

EPA does not agree. The plan is designed to mitigate impacts from the mine on the dense brush corridor along Elm Creek, important to jaguarundi and ocelots. EPA is not positive what the Sierra Club meant by the "dominant" wooded/sacaton riparian plant community; apparently it meant simply that this mixed community currently exists along Elm Creek. Within that community, however, sacaton bunch grasses are important due to their similarity to habitats used by ocelots in other locations, but are not dominant in any usual biological sense of the word. The mitigation plan emphasizes vegetation densities in the first two meters above the ground because they appear most important for ocelot habitat. Trees will be young when planted and, although not critical to the creation of a dense brush understory, they are an important part of the restoration plan. In addition, a number of pads of vegetation, many including trees of various sizes, will be transplanted from the existing corridors to the new corridors, although some of the largest trees may not survive the move.

Like the Sierra Club, EPA is concerned with the long-term sustainability of the mitigation, because of the complexity and maturity of the existing habitat and because the restoration methods are unproven. EPA's mitigation measures discussed in Part B3d are designed to provide safeguards for the short-term and long-term success of DRRC's mitigation plan.

Mitigation of impacts to species other than the ocelot and jaguarundi.
The Sierra Club commented that the FEIS failed to include a requirement that will adequately protect threatened and other important species (particularly endangered species other than the ocelot and jaguarundi).

EPA has reviewed all potentially present Federally-listed threatened or endangered species in the DEIS and has found that the only species which the project may affect are the ocelot or jaguarundi. EPA has no information to change that position. The Sierra Club specifically mentioned the Rio Grande darter. The Rio Grande darter is listed as a threatened species by the Texas Parks and Wildlife Department. The darter's range in Texas is the Devil's and Pecos Rivers and San Felipe Creek. These clear, flowing streams are northwest of the project site and in fact, empty into the Amistad Reservoir. Impoundments and declining stream flows are reasons for the darter's current status. The species is not known to occur in the project area and accordingly, no effects from mining are predicted.

C. CARBÓN I/II POWER PLANTS

C1. Transborder impacts

As evaluated in Section 5.9 of the DEIS, EPA recognizes that coal from the Eagle Pass Mine will be burned at the Carbón I/II power plants in Mexico, where it will contribute to severe degradation of air quality and visibility at Big Bend National Park in Texas. EPA is aware that other adverse impacts result from the Carbón I/II project and that the project could be expanded in

the future. EPA is aware of significant public concern in the U.S. about the transborder environmental impacts of the Carbón I/II facilities (see page 1-2 of ROD).

In DEIS Section 5.9.7, EPA summarized impact issues which would support approval of the DRRC permit; and positions which would support denial. EPA concluded that permit denial would be an essentially symbolic act, without substantive effect on the transborder impacts. While permit denial would signal to Mexico the U.S. displeasure about projects like Carbón I/II and the priority which the U.S. places on the control of transborder environmental problems, the impacts of the project would continue to occur regardless of where the coal originates. Indeed, even with denial of the Eagle Pass permit, U.S. coal (from other mines) could be used at the Mexican project.

Denial of the Eagle Pass permit by EPA would not force or even necessarily encourage the owners of Carbón I/II to make investments needed to solve its pollution problems or cause the Government of Mexico to make financial or regulatory decisions which would mitigate the problems. EPA is committed to take any effective action it can to reduce air pollution and other impacts from these facilities and will continue to pursue solutions to this problem through diplomatic channels.

C2. Transportation of coal by truck

EPA understands from recent press reports that DRRC may use trucks to transport coal to Mexico, instead of rail transport as analyzed in the DEIS and FEIS. EPA is concerned that truck transport could have potential significant adverse environmental impacts that were not evaluated in the NEPA analysis. Therefore, in response to inquiries by EPA, DRRC addressed this alternative in the form of a letter; see Appendix B. While this letter refers to the concept of trucking as "pure speculation", EPA believes the letter was worded with an intent to leave open the possibility of such trucking.

DRRC's formal NPDES application commits to transport of coal by rail and by no other method. If trucks are used for coal transport without additional NEPA analysis, EPA will immediately move to terminate (or revoke and reissue) the NPDES permit.

C3. Responses to comments on the FEIS

These comments and responses generally refer to DEIS Section 5.9.

Air quality impacts of the Carbón plants. The Sierra Club stated the EIS did not adequately assess cumulative impacts and, since EPA identified the indirect impacts associated with Carbón I & II, it should have thoroughly evaluated those impacts; permit issuance would contribute to those impacts.

As indicated in Section A1, EPA has determined that impacts from the power plant complex in Mexico are unacceptable, but that EPA's NPDES permit decision will not affect changes to the operation, emissions or impacts from Carbón I and II. This subject was clearly evaluated in the FEIS and no comments on the FEIS explained how further study of these impacts could be essential to EPA's reasoned choices among its permitting alternatives.

Ash-related pollution. The Sierra Club criticized EPA because the FEIS did not include nor evaluate information provided by Dr. Salvador Contreras Balderas (in his comments on the DEIS) regarding ash-related water pollution due to the Carbón plants.

EPA appreciates the information provided by Dr. Salvador Contreras Balderas, including his testimony at the public hearing in Eagle Pass. However, the issue of ash-related water pollution in Mexico is outside the scope of EPA's decision on the DRRC NPDES permit.

D. OTHER RESOURCES

In addition to the issues discussed in Sections B and C above, EPA's final NPDES permit decision has weighed other predicted impacts of DRRC's mine project against the impacts of permit denial and no mining. These impacts, and monitoring and mitigation commitments which bear on their significance, are summarized in Tables 1-1 and 1-2 of the FEIS, respectively. EPA also has considered the comments (see Appendix A) on other technical aspects of the FEIS. EPA's responses to these comments and questions are summarized as follows.

D1. Water resources

These comments and responses refer generally to Section 5.2 of the DEIS. The specific comments below represent the Sierra Club's basis for its more general comment that the FEIS failed to adequately assess impacts to ground and surface water quality/quantity in the Elm Creek and Rio Grande watersheds.

Wastewater characteristics. The Sierra Club stated that EPA failed to determine what the pollutants in the wastewater discharges will be and what impacts these pollutants will have on the aquatic community, including the endangered and sensitive Rio Grande darter.

EPA's determination of pollutants in the wastewater is based on extensive experience at coal mines throughout the United States. The NPDES permit addresses all pollutants which are expected to occur in the effluent at levels which, if untreated, could cause violation of state water quality standards or more stringent, technology based standards. Effluent limits, which apply after treatment, will ensure that discharges do not cause State water quality standards to be exceeded. State water quality standards are protective of aquatic life. Impacts of pollutants on water quality will be minor in Elm Creek and non-existent on the Rio Grande.

Availability of water supplies. The Sierra Club stated that DRRRC changed its application and requires 1200 acre-feet per year (AFY); this includes 300 AFY for dust suppression; 800 AFY for irrigation; 100 AFY for area landowners. Further, the Sierra Club asserted EPA failed to require proof that the 1200 acre-feet per year of water required by the mine are available, and asked what will happen if this water is not available. The Sierra Club cited a letter as evidence of water shortages in the area; however, no such letter was attached to the materials submitted by the Sierra Club.

The Sierra Club raised questions about the adequacy of replacement water supplies, e.g., whether 100 AFY will be enough for the 125,000 gallons per day required by the ranch north of the mine site as well as the other landowners. Ms. Coppock commented that there have been shortages of Rio Grande water supplies for Eagle Pass, to the point of rationing, which is contrary to statements in the EIS. Subsequent to the previous comment, Ms. Coppock raised the issue that DRRRC might not receive authorization to mine through Lateral 21.

EPA does not require applicants to obtain all other permits (such as water rights permits) nor to complete all private property transactions (such as purchase of water rights) as a condition for approval of an NPDES permit. In Texas, water rights transfers and exchanges are viable. If DRRRC fails to acquire water rights or if use of these rights is affected by drought, then the mine will almost certainly find it necessary to transport water from other sources or shut down to avoid violation of one or more permits. For example, DRRRC has committed to not mining through the existing Elm Creek corridor until replacement habitat for endangered cats is established along a replacement corridor. If drought interrupts irrigation of the habitat so that establishment of the replacement corridor is delayed, then mining through the existing corridor also will be delayed. EPA reviewed the EIS and verified that relevant hydrologic predictions assumed continued seepage from Lateral 21; the NPDES permit reflects technology-based requirements for coal mines and would not change whether or not Lateral 21 remains, is mined through or is restored.

Flooding impacts. The Sierra Club stated EPA failed to address impacts due to flooding within the permit area and on downstream homeowners, including how the loss of wetlands would increase flooding in the area.

EPA's discussion of flooding impacts at page 5-14 of the DEIS indicated that the net effect of the project could be a slight long-term increase in flooding potential downstream of the project and a decrease in flooding and recharge within the site compared to pre-mining conditions. This would be due to a reconstructed Elm Creek channel that, at least initially, could be more efficient than the pre-mine channel. TNRCC predicted that downstream flooding would not be increased during the life of the mine because of the buffering effect of the sediment ponds, which would act to release water at a slightly lower rate; the net effect on streamflows within the mine area was predicted to be negligible (TNRCC Order issuing Permit No. 03511, Appendix H of the FEIS). RCT's (1993a) evaluation of the probable cumulative hydrologic impacts of the mine indicated only "slight" changes in the quantity of surface water available to downstream users and "insignificant" attenuation of storm runoff and increases in sustained flows, due to the sedimentation ponds.

Key to these predictions of limited impacts was: the 152 square miles of drainage area upstream of the project; the potential runoff from this area is very large; and the additional contributions from the mine site are relatively small. Changes in mine-site conditions, including changes to channel efficiency, wetlands and floodplains, will have a small impact on total runoff. As noted on pages 5-38 and 5-39 of the DEIS, the mining company will design the permanent channel reconstruction to meet Texas Railroad Commission and Corps of Engineers requirements; the latter are likely to call for meanders and other naturalistic features which will result in channel characteristics more like current conditions than if an entirely artificial flood conveyance channel were constructed.

See also the finding of the Texas Natural Resources Conservation Commission (p. 9 of FEIS Appendix H) that the project will not increase downstream flooding impacts.

Ground water data and impacts. Ms. Coppock stated that EPA had insufficient data to reach a determination of the presence or absence of water on the project site and raised several specific points in support of the conclusion that ground water at the mine site is connected to ground water north of the site. She commented that the area north of mine site, along with spring-fed wetlands within and adjacent to the mine boundary, could be dewatered by the mining operation. Further, data limits prohibited EPA from accurately determining the quantity of pit pumpage and the volume of discharge subject to the NPDES permit. Ms. Coppock asked for FEIS corrections to be made in light of the Texas Railroad Commission order approving DRRC's mining permit and stated that the agreement referred to in the FEIS to establish a ground water monitoring well outside RCT jurisdiction has been abrogated so that the protection provided by this agreement also no longer exists.

EPA recognizes from the available data the possibility of impacts on ground water resources to the north of the mine permit area (see FEIS, p. II-5). Additional information submitted to RCT and EPA supports this possibility, while other facts (e.g., springs at an elevation higher than the valley floor) support DRRC's view that there is no hydrologic connection between the properties. Predictions about impacts on ground water are difficult to make even with excellent data. A firm prediction of impacts to fractured aquifers is inconclusive with the information at hand.

Nonetheless, EPA's evaluation of this impact recognized the RCT permit requires extensive monitoring of this impact and mitigation if an impact occurs. Specifically, RCT requires monitoring of 8 new wells to be drilled as near as possible to Ms. Coppock's fenceline on the property of DRRC at locations acceptable to Ms. Coppock. Monitoring also is required of four additional new wells north of the mine plan area, four existing monitoring wells on mine property, all water wells on mine property within two miles of Ms. Coppock's ranch, and four wells on the ranch, plus any other ranch wells within 1/2 mile of the common ranch-mine boundary. Water levels in all the wells are to be measured monthly. General water-quality parameters are to be

monitored in each well monthly for one year following permit issuance, and quarterly thereafter; trace elements are to be monitored at each well initially, and annually thereafter.

Further, the RCT permit requires DRRC to supply water if it does affect the commentor's resource. Within ninety days of permit issuance, DRRC is required to provide documentation to RCT that it has secured rights to water of comparable quality to potentially affected wells in a minimum quantity of 115 acre feet per year. Upon a finding by RCT that impacts to Ms. Coppock's water quantity or quality have occurred, DRRC is required to immediately begin installation of a delivery system to provide the alternate supply of water. Ms. Coppock or her successor in interest is a third-party beneficiary of any agreement under which DRRC obtains rights to water until mining has ceased and the reclamation performance bond is released (see FEIS Appendix E).

DRRC has advised EPA that the agreement for a ground water monitoring well outside RCT jurisdiction has not been abrogated.

Hydrologic regime. The Sierra Club stated that the FEIS failed to assess impacts to the hydrological regime of the Elm Creek drainage. The letter did not expound upon this comment except for a reference to hydrologic changes which may impact mitigation. This latter comment is addressed in Section B3e.

D2. Air environment

These comments and responses refer generally to Section 5.3 of the DEIS. The following comments are the underlying argument behind the Sierra Club's more general conclusion that EIS air quality assessments were incomplete and inadequate.

Crystalline silica. The Sierra Club and Ms. O'Donnell were concerned about the health impacts associated with crystalline silica in dust from the

mine. A single, questioned data point shows 4.57% by weight crystalline silica in the coal. EPA's evaluation recognized that TNRCC evaluates the potential for health effects due to air emissions that meet all other regulatory requirements. This evaluation is in addition to the evaluation of whether an applicant will meet the enforceable standards imposed by State and Federal regulations. The evaluation is based on health effects screening levels derived by dividing the Occupational Safety and Health Administration's standards for adult 8-hour workplace exposure by 100. The screening approach is considered conservative and protective of children or elderly, who may be more sensitive to the emissions and/or exposed to them over a full 24-hour day.

As set forth in TNRCC's evaluation, the effects screening level (ESL) for respirable coal dust is $20 \text{ ug/m}^3/\text{hr}$. The effects screening level for respirable silica is $1 \text{ ug/m}^3/\text{hr}$. Thus, if the coal dust had more than 5% by weight silica, and all of it were converted by mining processes to respirable silica (that is, silica 4 microns or less in diameter), the silica ESL would require controls that lower concentrations of coal dust to below $20 \text{ ug/m}^3/\text{hr}$. For example, 10% by weight silica in the coal would allow only $10 \text{ ug/m}^3/\text{hr}$ coal dust at the receptor. (The assumption that all of the silica content of the coal would become respirable silica is a worst-case assumption.)

TNRCC required DRRC to provide analysis of a coal sample for silica content. DRRC had disposed of cores from the exploratory holes and was able to provide only one sample, from the central area of the proposed mine. Submittal of a single sample is considered adequate for ordinary reviews (Jones, 1995). The sample analysis showed 4.57% crystalline silica by weight, so the coal dust ESL of $20 \text{ ug/m}^3/\text{hr}$ was presumed to encompass any silica effects on health. Also, refer to the discussion below which expands on the concern that another sample could have exceeded the 5% factor and the impact of different meteorological conditions.

Overall dust levels. The Sierra Club stated that the FEIS failed to assess impacts related to coal dust dispersal. The Sierra Club and Ms. O'Donnell were concerned that ground-level particulates would exceed public health standards because in an area near two homes, coal dust particulates were modeled at $19.6 \text{ ug/m}^3/\text{hr}$, which is just barely lower than the ESL of $20 \text{ ug/m}^3/\text{hr}$. Mr. Riskind questioned EPA's conclusion that emissions of 60 tons of dust is considered only a nuisance (Mr. Riskind's letter does not state a time period for the emissions; review of the modeling inputs indicates that Mr. Riskind meant the sum of the maximum tons per year emissions rates from all mine sources.)

TNRCC required DRRC to model coal dust concentrations at the mine boundaries and nearby areas. This modeling was reviewed by TNRCC staff, both as to the adequacy of the modeling itself and as to the health implications of the modeling results. The latter review was done independently by an in-house toxicologist. TNRCC staff (Earl Jones) indicated that the modeling was very conservative in that: 1) emissions from the crusher, by far the largest source, have been calculated using obsolete factors for the amount of dust created per ton of coal processed (the current factors are less than 1/2 the value of the factors used in the model); 2) the crusher was modeled as if it will not be enclosed, when in fact it will be, with a resulting 80% reduction in emissions; and 3) emission rates used were for the PM_{15} and smaller fraction (particles 15 microns in diameter and smaller), which includes particles larger than those considered respirable (respirable coal dust is considered to be 10 microns and less; respirable silica is considered to be 4 microns and less).

The highest concentrations indicated by modeling were $22.9 \text{ ug/m}^3/\text{hr}$ for an uninhabited hill due north of the mine property line and $16.5 \text{ ug/m}^3/\text{hr}$ at ground level at the nearest inhabited residence off the mine property (Jones, 1995). If correction were made only for the fact that 1/3 of the particles modeled are not respirable coal dust (the particles in the range $>\text{PM}_{10}$ to PM_{15}) the corresponding values would be 15.3 and $11.0 \text{ ug/m}^3/\text{hr}$.

EPA recognizes that there is some uncertainty in the ESL modeling, due to the possibility of higher levels of silica in the coal than indicated by the single sample analyzed, and due to the use of meteorological data not specific to the site. As explained above, however, EPA finds both TNRCC screening levels and modeling (of whether coal dust emissions from the mine will approach those screening levels) conservative. EPA is also aware that monitoring of 24-hour PM_{10} at intervals of no more than 6 days at 5 locations is required by the RCT permit, with reporting of the data also to TNRCC; and that the TNRCC draft permit required monitoring at the discretion of the Executive Director of TNRCC. Data to assess the accuracy of the modeling will be available. Further, the TNRCC draft permit prohibits visible emissions (as determined by a trained observer) or the creation of a nuisance by the mine. Upon consideration of all available information, experience at other mines, and the specified control technologies, EPA finds that the mine's dust emissions do not constitute an unacceptable adverse impact.

Monitoring. Mr. Taylor expressed concern that the acceptable dust level established for the monitoring station near his property line is higher than for properties outside the mining area and should be reduced to the same level as for the other properties.

Mr. Taylor appeared to confuse modeling results with the ESL criteria. As stated above, the highest modeled concentration of coal dust at an occupied residence outside the mine boundary is $16.5 \text{ ug/m}^3/\text{hr}$, below the ESL of $20 \text{ ug/m}^3/\text{hr}$. At the intersection of Lateral 21 and the mine property line, modeled concentrations were somewhat higher, $19.6 \text{ ug/m}^3/\text{hr}$. The modeled concentration of coal dust at a residence generally decreases as the distance from the mine to that residence increases. Thus, Mr. Taylor's residence may have had higher modeled concentrations than neighbors farther downwind, but the ESL to which the modeling results were compared is the same for all and at no residence does the modeling indicate the ESL will be exceeded.

Permitting. Letters from Ms. Herring and Ms. O'Donnell were critical of the air quality permitting process of the Texas Natural Resources Conservation Commission (TNRCC) and, by implication, EPA's reliance on that process for determining certain environmental impacts.

TNRCC staff must issue a recommendation that the draft permit be issued before a public hearing is held. TNRCC staff issues such a recommendation only when it is convinced, on the basis of its review of the data and modeling, that no regulatory standards will be violated and that public health will be protected. The process often proceeds iteratively, with additional emissions controls included in later rounds of modeling, until compliance with the requirements is demonstrated. If a public hearing is requested, a Hearing Examiner will chair the hearing with the purpose of receiving evidence and/or public comments which would indicate that the draft permit is inadequate. If the Hearing Examiner finds such evidence, the draft permit may be modified. The decision of the Hearing Examiner may be appealed. The permit is issued by the TNRCC after its review of the Hearing Examiner's findings.

As noted in the section on consultation, this process was ongoing at the time of the writing of this ROD, with the Hearing Examiner not yet having issued her findings. In the absence of any specific data from commentators, EPA has no reason to second-guess TNRCC.

D3. Biological environment

These comments and responses generally refer to those parts of DEIS Section 5.4 which refer to biological conditions other than endangered and threatened species.

Biological baseline. The Sierra Club stated there were inadequate historical biological data for Maverick County in general and for the extremely important Elm Creek Corridor in particular and that, absent this

data, it was impossible to produce "the required restoration plan that will restore the natural resources in the permit area to their pre-mine conditions".

Refer to Section A1 for EPA's general response with respect to limitations in data. EPA finds that extensive information about conditions in the Elm Creek corridor is available and that DRRC's approach to retain reference areas for ongoing study is a sound scientific approach to ensure that necessary data will be available for restoration planning. As discussed in Section A1, EPA would probably have denied the permit if it believed mitigation would fail, resulting in an unacceptable environmental impact. In this case, however, DRRC has committed to retaining the main riparian corridor until there is reasonable assurance of mitigation success. Therefore, EPA finds no fatal flaw in the mitigation plan as it now stands and has decided that additional baseline data are not needed for decision-making purposes.

Data on birdlife. The Sierra Club commented that the FEIS stated that there are 57 different species of birds in Elm Creek (Part III.A, errata for p. 5-27), yet DRRC's biological consultant observed 90; the Sierra Club then argued that surveys of migratory and resident birds are either incomplete or have never been attempted so that EPA must require "proper" surveys of these birds.

Refer to Section A1 for EPA's general response with respect to limitations in data. This specific comment on birdlife indicated that EPA and the Sierra Club have fundamentally different concepts about such data limitations. EPA finds the data more than adequate to demonstrate the value of the mine site for a wide variety of birds, including many migratory birds, as evidenced by the 57 bird species observed on the site during the Gomez and Lindsay (1992) wildlife survey and the 90 species casually observed by DRRC's consultant both on and in the vicinity of the project site. These data are one reason EPA mitigation measures include requirements beyond those necessary to minimize takes of endangered species. The Sierra Club did not indicate what about

EPA's decision could change if more data were available, or provide any standard as to when "enough" data would be available.

Further, mitigation is best performed when habitats are protected and restored; identifying every species within a habitat is neither possible nor necessary when mitigation is ecosystem based rather than species based. In mitigation measure 2, for instance, DRRC is to essentially re-establish current natural functions of the Elm Creek riparian habitat, not just provide a corridor for cats' passage. There is no reason to believe that more complete bird counts would change EPA's decision, i.e., identification of a 91st (or 192nd) species would not cause EPA to abandon an ecological perspective on mitigation, nor to abandon the requirements for mitigation altogether.

Migratory bird protection. The Sierra Club stated "requiring DRRC to obtain a Migratory Bird Treaty Act permit is inadequate" because it is not possible to avoid, mitigate or minimize impacts in the absence of survey data identifying the species impacted.

In response, EPA's FEIS clearly states DRRC's obligations under the Act (see p. III-7). DRRC committed to conducting a nesting bird survey if migratory birds could be impacted and to either moving the nests if nesting birds are present or accomplishing land clearing during non-nesting periods (Kost, 1994a). Unlike the Endangered Species Act, the Migratory Bird Treaty Act does not give EPA statutory responsibility; responsibility for enforcing compliance with the Act belongs to FWS. EPA finds no reason to believe that DRRC will not adhere to requirements of the act, i.e., to obtain an MBTA permit and to avoid activities damaging to nesting species.

Use of riparian corridor. The Sierra Club commented that the FEIS failed to assess impacts to resident and transient wildlife, including species which use the Elm Creek riparian corridor and other possible connecting corridors on both sides of the border. EPA disagrees: assessment and protection of this corridor is a principal component of the DEIS, FEIS and Record of Decision.

Wetlands. The Sierra Club stated there are important wetland resources on the mine site, including some that meet the Federal definition of wetlands, that have yet to be adequately evaluated; without such assessment, impacts cannot be adequately evaluated, and the possibility exists that wetland resources will be destroyed. Ms. Coppock identified several spring-fed wetlands which could be adversely impacted by the mine.

Proper procedures have been followed in concluding that no wetlands subject to Federal regulation occur within the five-year mine area and procedures exist to protect any nearby wetlands (see p. II-13 of the FEIS). The springs identified by Ms. Coppock are at substantially higher elevation than any ground water below the valley floor and not a continuation of the same water table; the springs are likely a result of perched ground water that is not in close hydrologic communication with ground water in the mine area.

D4. Cultural resources

Comments and responses generally refer to DEIS Section 5.5.

The Sierra Club stated that: 1) the Programmatic Agreement (PA) allows EPA to make its decision on the proposed NPDES permit before completion of all cultural resource investigations; 2) the EIS will not include all recorded and unrecorded sites determined to be eligible to the National Register; and 3) EPA had not consulted with the Sierra Club as an interested party as written in the PA included in the Final EIS.

These issues concern the timing of certain activities in the Section 106 process. In response to comments 1 and 2, the nature of a surface coal mine operation, particularly regarding land leasing or acquisition, is that cultural resources survey work on the entire project cannot be completed within the 18 to 24 month time-frame for an EIS. To resolve this issue and satisfy Section 106 requirements prior to the agency's permit decision, EPA

complied with the National Historic Preservation Act through the execution of a PA. 36 CFR Part 800.13 of the regulations of the Advisory Council on Historic Preservation governing the Section 106 process specifically provide for this situation (i.e., a large or complex project requiring numerous individual requests for comments when the effects of historic properties cannot be fully determined prior to approval).

In response to item 3, the only "interested parties" mentioned in the PA are Native Americans. However, the Final EIS recognized the Sierra Club's participation in the Section 106 process as an interested party in the Coordination Section (see EPA letter to the Advisory Council, dated November 14, 1994, in FEIS Appendix D). After receipt of the executed PA on February 2, 1995, the EPA initiated consultation with the interested parties, including the Sierra Club.

The Texas Historical Commission (THC) expressed concern that two archeological sites may have been overlooked in DRRRC sponsored surveys to date. DRRRC's consultants have reviewed the existing Archeological Investigation Reports for the area in question and determined that the areas in fact were surveyed and found absent of any reportable archeological sites.

D5. Socio-economics

Comments and responses generally refer to DEIS Section 5.7.

Impacts on local residents. Ms. O'Donnell commented on adverse impacts from the mining operation on local homes and lifestyle and asked that the mine buy out local property owners. Ms. O'Donnell and Mr. Taylor stated that the FEIS erroneously listed some properties as being within the mine permit area, including Mr. Taylor's. Mr. Taylor further commented that he does not want his property included in any permits issued to the mine.

EPA agrees that adverse impacts will occur to local residents and that not all property owners within the proposed mining area have leased or sold their land to the mine. EPA understands that DRRC has been negotiating with remaining home owners in the vicinity of the first five-year permit area to acquire their property for fair market value. The EPA does not have the authority to dictate the results of these negotiations. EPA's role is restricted to evaluating the probable impact of the mine's activities on these properties and considering this impact in its evaluation of the proposed project. These impacts are discussed in the DEIS (Section 5.7.5) and FEIS (see particularly Part II.C.5 and response to comment 19-2, Appendix C). While many impacts are adverse, particularly in the immediate vicinity of the mine, there are also positive impacts to area residents and EPA has weighed both.

The landowner list was an attachment to comment letter 18 which stated that the list came from DRRC's RCT application. According to DRRC, the landowners cited by Ms. O'Donnell and E.K. Taylor (Juan Antonio Valdez, Francisco Acosta, and E.K. Taylor) do have property within the mine permit area. It is true that this land has not been sold or leased to the mine, because RCT regulations only require the mine to lease or own those properties which will be disturbed by mining and these lands will not be disturbed (Kost, 1995). The NPDES permit will not apply to these property owners but to the actions of the mine.

Water system hookups. Ms. Herring commented that, for Lateral 21 water supplies adversely impacted by mining, DRRC should pay to connect these residents to the water line extended to serve the mine.

Since homes which rely on water from Lateral 21 are hydrologically upstream from the mine, it is not expected that their water supply will be impacted by mining. However, if this water supply is impacted, DRRC will

provide affected residents with hookups for the line extended to serve the mine. DRRC also agreed to let other residents in the vicinity of the line hook in without reimbursing the company for the costs of extending the line from the city system (DEIS p. 5-19); these residents, however, will incur other costs to hookup. At the time of the ROD, there were no specific plans or contracts regarding such water service, but the City has agreed in writing to extend the line (Kost, 1995).

Economic impact of the mine on area residents. Mr. Riskind asked whether the Peso devaluation or other potential changes in the economy would result in pressure to institute tax abatements or other measures to keep the mine viable which could adversely effect area residents.

Changes in the economy could result in pressure on County officials to make tax abatements or other economic incentives available to the company in order to keep the mine in operation. However, at the time of the ROD there were no plans to do so.

Mine employment. Ms. O'Donnell commented that mine employment and earnings may vary from what is presented in the FEIS as the company had recently said it may employ only 50 persons in the first year, double that in the second year and eventually increase the number to 350. EPA's discussions with DRRC indicated that the company spokesman was misquoted in the article cited by Ms. O'Donnell and that the estimates provided in the EIS are the best current estimates about mine employment (Kost, 1995).

In any case, as reported in the DEIS and FEIS, EPA independently evaluated the employment issue and the information provided in the DEIS is considered reliable. Some confusion may have resulted because employment projections included both construction workers and mine workers. For example, as is shown in DEIS Table 5-6, total mine employment is projected at 170 in year one and 155 in year two, with an eventual total employment of about 275 (see DEIS Table 5-6). But, in year one, employment for mining only is expected to be about 70 employees and in year two about 115 employees. As discussed in the

DEIS (pp. 5-51 through 5-54) and FEIS (pp. II-7 to II-8), the actual number of workers may vary from the numbers presented above depending on numerous circumstances, including the amount of coal mined and the specifics of the mining operation.

D6. Public health

These comments and responses generally refer to DEIS Section 5.8. The comments go beyond impacts to public health, but are discussed here since health impacts are included within the comments.

Adverse impacts. Mr. Riskind commented that there were no guarantees that residents near the mine won't be adversely impacted by dust, noise, blasting, or reduced home values. EPA agrees, as discussed in the DEIS (Section 5.7.5) and FEIS (see particularly Part II.C.5 and response to comment 19-2, Appendix C). Performance standards for noise, dust and blasting are designed to protect the public's health and safety but do not prevent all impacts.

Political influence. Ms. O'Donnell believed that approvals of the Eagle Pass Mine by regulatory agencies reflected political influence and were at the expense of public health and safety. EPA's decision on the NPDES permit is based on a thorough and careful evaluation of all environmental concerns.

Environmental compliance. Mr. Riskind commented that DRRC will not operate the mine and the companies which will operate the mine (North American Coal, i.e., NAC and the lessor CONSOL) have a questionable environmental compliance history. EPA understands that while NAC is considering operating the mine, a final decision has not yet been made (Kost, 1995). No specific violations on the part of NAC were cited by Mr. Riskind. EPA consulted with the Inspections and Enforcement Section of the Federal Office of Surface Mining. They have had no environmental compliance problems with mines operated by NAC and in general have found them to make a conscientious effort to be in compliance (Lett, 1995). CONSOL will have no role in the operation

of the mine. Regardless of who operates the mine, EPA relies on the conditions of its permit and those of other permitting agencies to achieve environmental compliance.

E. CONSULTATIONS AND COORDINATION

As discussed in the DEIS and FEIS, EPA's NPDES permit action and EIS review process included consultations with and input from Federal and State agencies pursuant to applicable environmental laws. These consultations included the following.

- Formal consultation with the U.S. Fish and Wildlife Service (FWS), pursuant to Section 7 of the Endangered Species Act. Refer to Section B of this Record of Decision.
- Formal consultation with the State Historic Preservation Officer (SHPO) and with the U.S. Advisory Council on Historic Preservation (ACHP) in accordance with Section 106 of the National Historic Preservation Act. Refer to Section D4 of this Record of Decision.
- Informal consultation with the U.S. Corps of Engineers regarding jurisdictional waters of the U.S. and wetlands.
- Informal consultation with the Texas Railroad Commission regarding the mine permit.
- Informal consultation with the Texas Natural Resources Conservation Commission (TNRCC) regarding the Texas wastewater discharge and air quality permits.

Since the FEIS was issued, new information relating to the status of the TNRCC air quality permit has become available.

- The TNRCC held a public hearing on the DRRC's application for an air quality permit on February 2 and 3, 1995. The Hearing Examiner has not yet rendered a decision. If the Hearing Examiner recommends issuance of the permit, TNRCC will review that recommendation and make a final decision.
- TNRCC also reviewed the FEIS for compliance with the General Conformity rule in accordance with 40 CFR Part 93 and Chapter 101.30 of the TNRCC General Rules (Wheeler, 1995). The General Conformity rules require that both direct and indirect air emissions be considered. The TNRCC concluded that this rule did not apply to the proposed Eagle Pass Mine since both Maverick County and Big Bend National Park are attainment areas for all six criteria air pollutants of the National Ambient Air Quality Standard (NAAQS) and notification of the Federal land manager in Big Bend National Park is not required. Further, TNRCC pointed out that while notification in this case was not required, EPA did provide notice.

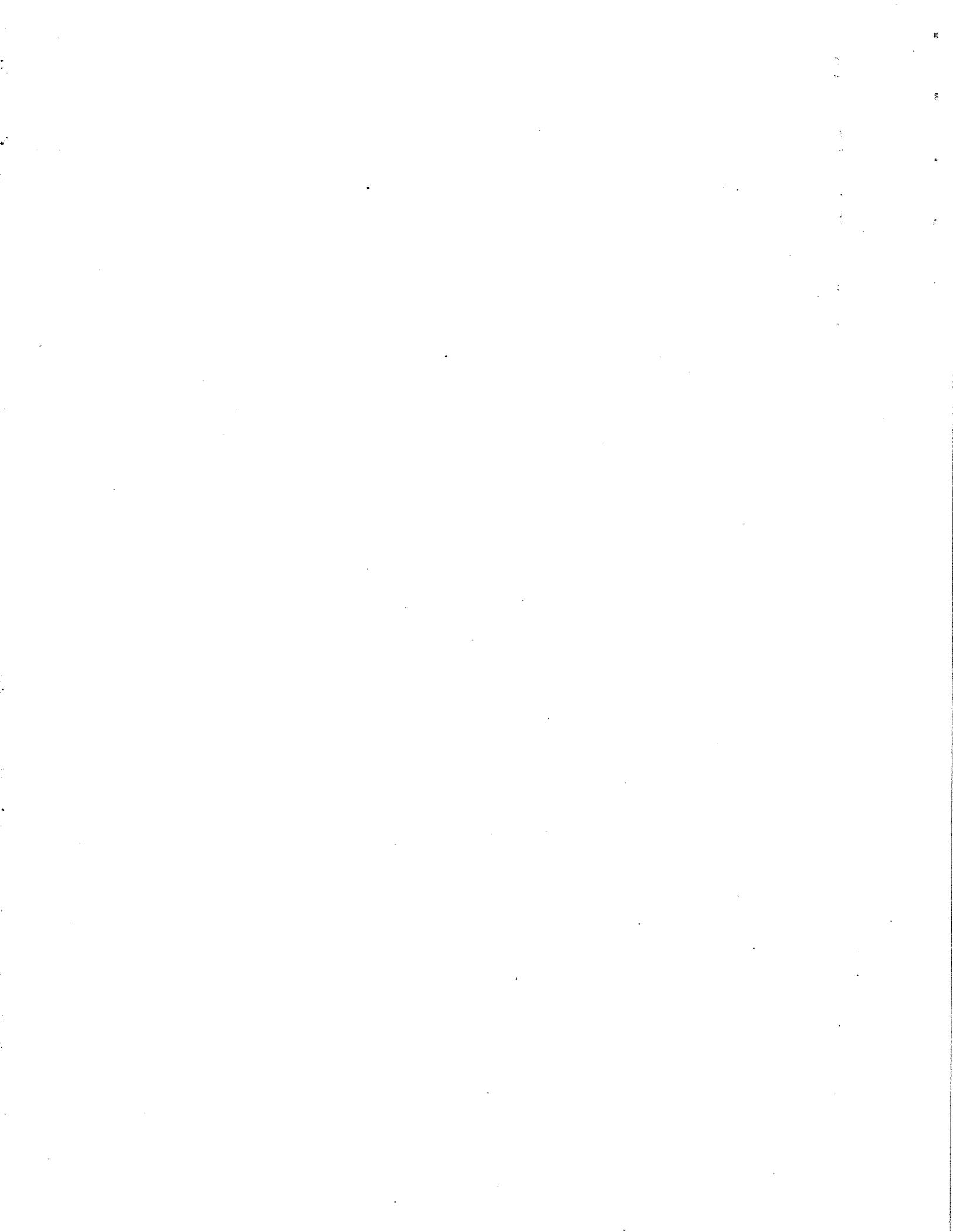
By the time of the ROD, EPA completed all consultations necessary to reach its decision with respect to the DRRC permit application.

3. EPA'S DECISION

EPA's decision is to issue the final NPDES permit to DRRC for the operation of its Eagle Pass coal mine. The discharge is projected to meet all NPDES and Clean Water Act requirements and other potential significant adverse impacts from the project are subject to regulatory controls and/or mitigation measures which reduce impacts to acceptable levels.

For EPA, the decision to issue the permit reflects a determination that the project provides substantial benefits and that the principle adverse impacts are subject to control through regulation and/or substantial mitigation. Specifically: 1) water-quality effects are subject to strict control through the NPDES permit limits, monitoring requirements, and the "reopener" provision in the permit; 2) the projected take of endangered cats will be minimized through implementation of mitigation measures to which the applicant has committed; 3) all health effects and most other adverse impacts are subject to regulatory control and mitigation and others are within acceptable limits; 4) the project has economic benefits; and 5) severe adverse impacts from use of the coal in Mexican power plants are not subject to influence by the permitting decision.

Under separate cover, EPA is issuing a "final permit decision", which further explains the conditions of the final NPDES permit and responds to DRRC comments.



REFERENCES

- Carroll, G., 1994. Cat on the spot. National Wildlife Magazine. June/July 1994, pp. 34-37.
- Gomez, R., Sr. and H. L. Lindsay, 1992. Fish and wildlife resources for the Eagle Pass Mine Project area. Prepared for Marston and Marston, Inc., and Dos Republicas Resources Company, Inc., San Antonio TX, April 14, 1992.
- Gonzales, R., 1995. Personal communication. Roberto Gonzales, General Manager, Public Works Dept., Eagle Pass TX.
- Harwell, G., and D. P. Siminski, 1990. Listed cats of Texas and Arizona; recovery plan (with emphasis on the ocelot). Prepared by Gary Harwell and D. Peter Siminski, Arizona-Sonora Desert Museum, Tucson AZ, for U.S. Fish and Wildlife Service, Albuquerque NM.
- Jones, E., 1995. Personal communication. Earl Jones, Permits Engineer, Office of Air Quality, Texas Natural Resources Conservation Commission, Austin TX.
- Kost, L., 1995. Personal communication. Lisa Kost, Marston and Marston, Inc., St. Louis MO.
- _____, 1994a. Letter from Lisa Kost, Marston and Marston, Inc., St. Louis MO, to Lee Wilson, Lee Wilson and Associates, Santa Fe NM, September 13, 1994.
- Laack, L., 1995. Personal communication. Linda Laack, Laguna Atascosa NWR, TX.
- _____, 1994. Personal communication. Linda Laack, Laguna Atascosa NWR, TX.
- Lett, M., 1995. Personal communication. Mike Lett, Chief, Inspections and Enforcement Section, Office of Surface Mining, Tulsa OK.

RCT, 1993a. Dos Republicas Resources Company, Inc. Eagle Pass Mine permit application docket no. C3-0025-SC-00-A: staff technical analysis. Railroad Commission of Texas, Austin TX, July 5, 1993.

SWCA, 1994a. Biological assessment, Dos Republicas Resources Company proposed Eagle Pass Coal Mine. Submitted to U.S. Environmental Protection Agency, on behalf of Dos Republicas Resources Company, by SWCA, Inc., Austin TX, June 1994.

SWCA, 1994b. Biological assessment addendum, Dos Republicas Resources Company proposed Eagle Pass Coal Mine. Prepared by SWCA, Inc., Austin TX, on behalf of DRRC, San Antonio TX, for EPA Region 6, Dallas TX, August 26, 1994.

Tewes, M. E., various. Various reports by Tewes and others; and reports in association with the Caesar Kleberg Wildlife Research Institute, Texas A&M University, Kingsville TX.

Tewes/Hicks, 1993. An assessment of potential habitat for ocelots on the proposed Dos Republicas Resources Co., Inc.'s Eagle Pass mine site. Prepared by Michael E. Tewes, Kingsville TX, and Hicks & Company, Austin TX, for Marston & Marston, Inc., St. Louis MO, August, 1993.

TPWD, 1994. A report on endangered felines in Maverick County and their occurrence at the Eagle Pass Mine site. Prepared by Roy Frye, Habitat Assessment Branch, Resource Protection Division, Texas Parks and Wildlife Department, Austin TX.

FWS, 1994. Consultation letter (Biological Opinion) from Johnny French, U.S. Fish and Wildlife Service, Corpus Christi TX, to Jane Saginaw, U.S. Environmental Protection Agency, Region 6, Dallas TX, November 23, 1994.

_____, 1994a. Minutes of meeting between U.S. Fish and Wildlife Service, Texas Parks and Wildlife Department, Hicks and Company, Dos Republicas Resources, Inc., SWCA, Inc., and Caesar-Kleberg Wildlife Research Institute.

Wheeler, S., 1995. Letter from Sidney Wheeler, Intergovernmental Relations Division, Texas Natural Resources Conservation Committee, Austin TX, to Mr. T. C. Adams, Office of State-Federal Relations, Austin TX, February 22, 1995.

Appendix A. Comment letters on the FEIS

Letters are provided as follows:

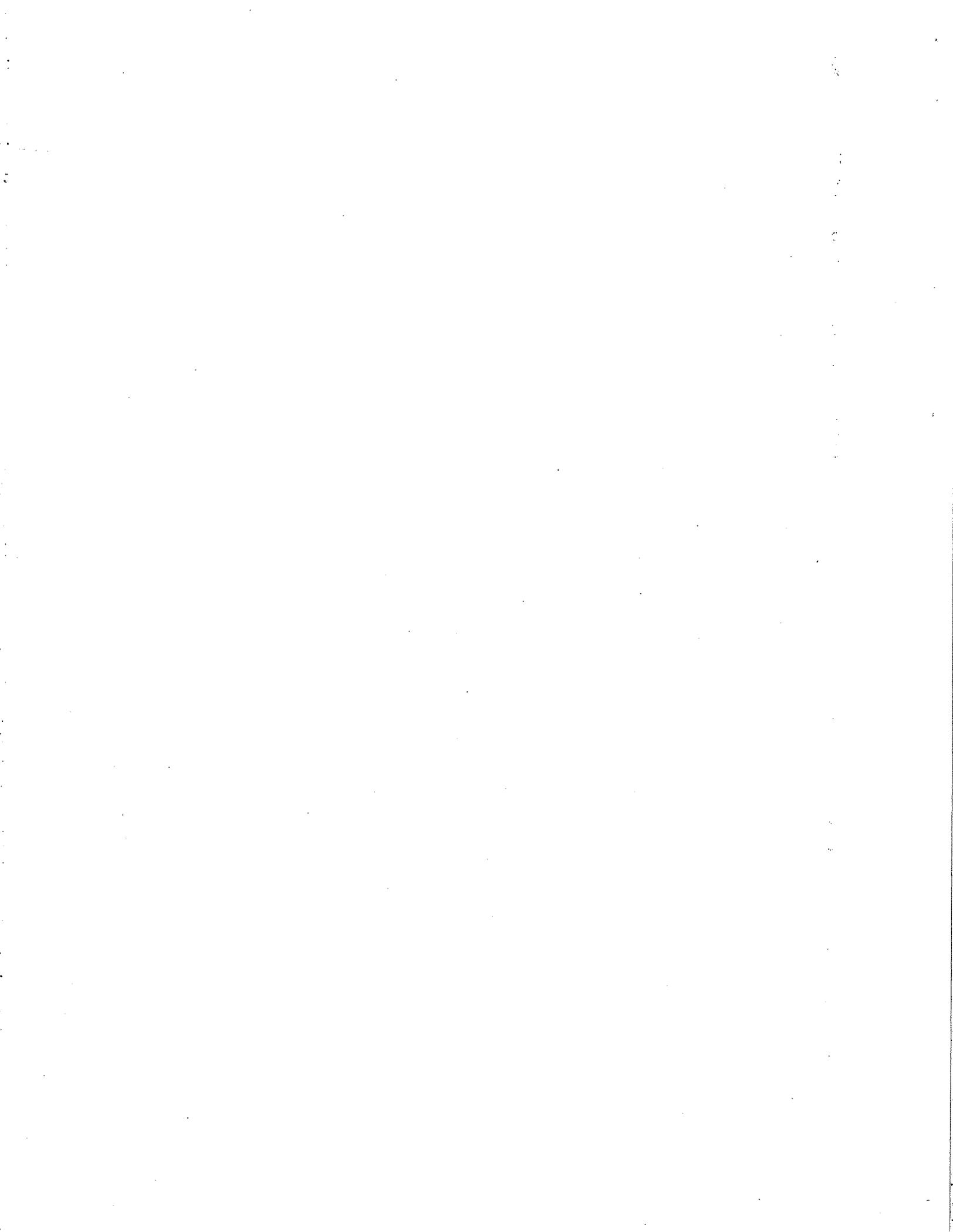
Agencies and organizations

U.S. Department of Interior
Texas Historical Commission
Sierra Club, Lone Star Chapter
Marston & Marston for DRRC

Individuals

Theodosia Coppock (4 letters)
Ladye Herring
Rosa O'Donnell (2 letters)
Dan Riskind
E. K. Taylor

Technical attachments to letters were reviewed by EPA, but are not copied here.



MAR 7 1995



United States Department of the Interior

OFFICE OF THE SECRETARY
Washington, D.C. 20240

MAR 2 1995

Mr. Norm Thomas
Chief, Federal Activities Branch
U. S. Environmental Protection Agency (6E-F)
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733

Dear Mr. Thomas:

The Department of the Interior has reviewed the final environmental impact statement (FEIS) for the Eagle Pass Mine, Maverick County, Texas, and offers the following comments. The Environmental Protection Agency (EPA) is to be commended for recognizing that the proposed project would cause potential adverse impacts to United States park, wildlife, and other resources under our jurisdiction. For example, the FEIS reiterates that the information now available to EPA is sufficient to determine that severe impacts occur in the United States, due to visibility impairment caused by sulfur dioxide emissions by the power plants where coal from the proposed mine is expected to be used for power generation. Furthermore, EPA believes that, based on the evidence now available, the air quality impacts from the Carbon I/II power plants are unacceptable. Similarly, the FEIS recognizes that the project is likely to adversely affect certain endangered species and other wildlife.

Our three main concerns, however, with the draft environmental impact statement (DEIS) were that: (1) it did not provide a sufficiently broad scope to include all reasonable alternatives (40 CFR 1502.14); (2) it did not fully comply with accepted methods for analyzing and reporting on incomplete or unavailable information (40 CFR 1502.22); and (3) it failed to fully obtain the comments of the general public [40 CFR 1503.1(a)(2) and (4)]. We continue to believe that the FEIS suffers from these same deficiencies; and, in addition, the FEIS has been structured as an "abbreviated final" which, in our opinion, is not in keeping with the National Environmental Policy Act (NEPA) regulations [(40 CFR 1503.4(c))]. The following points will further explain our concerns.

- EPA has tried to address the first deficiency above with an updated discussion in Part II.C.1 of the FEIS. The FEIS states that: "Thus, while applicable regulations require EPA to explore and evaluate reasonable alternatives, including those not within its jurisdiction, the only choices actually available to EPA are to issue the NPDES permit (with various conditions), or to deny the permit." The FEIS cites no contrary regulations that permit any

Federal agency to narrow the scope of an EIS so that the only alternatives it presents are those involving issuance of a permit. The whole purpose for identifying significant environmental impacts and developing all reasonable alternatives that would avoid or mitigate them is to promote opportunities to protect or enhance the human environment, whether or not the EIS-preparing agency has the authority to carry out those alternatives.

- Under the second deficiency above, we continue to note that incomplete and unavailable information particularly with regard to transborder air quality emissions and endangered species is being used to support the narrow EIS scope. As an example the FEIS says that the biological opinion did "... not resolve EPA's previous concerns and, indeed, creates some additional ambiguity." Furthermore, the FEIS continues, "It appears [to EPA] that the USFWS is unwilling or unable to provide a complete biological opinion in this matter because there is no currently available site-specific 'scientific data regarding the possible use of the project site as habitat.'" The FEIS unfairly omits from this discussion of the biological opinion the fact that EPA and the applicant did not fulfill their obligation to provide the missing site-specific scientific data. Since these data are also missing from the FEIS, and concern species of national significance, the FEIS does not fulfill the procedural mandates of NEPA. The EPA should see that the ocelot survey designed to provide the missing data is completed and, if circumstances warrant, the results of an updated biological opinion based upon any significant new information should be prepared.
- Under the third deficiency above, we are aware that, despite the vast scope of the unacceptable air quality impacts the FEIS described, there were relatively few comments from the Big Bend area of Texas and other areas of the Southwest which the FEIS predicted would experience the project's secondary effects. Because relatively few of the agencies, elected officials, members of academia, and the general public in this area were alerted to these impacts, we believe that this has prevented individuals and organizations with significant concerns and information regarding the project's effects on natural ecosystems from having those concerns addressed in the EIS.
- The fourth deficiency above is important in that an "abbreviated final" is only authorized by the NEPA regulations when the agency is making factual corrections and/or explaining why comments do not warrant further agency response. Clearly, the FEIS is also making significant modifications and updates to the DEIS; and, therefore, EPA

Mr. Norm Thomas

3

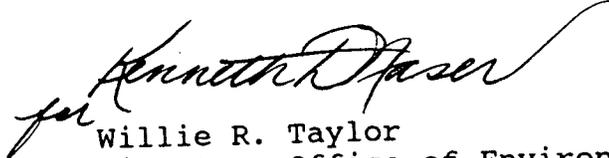
should have prepared a complete final document for circulation.

We remain extremely concerned about potential adverse impacts to Big Bend National Park and other resources under our jurisdiction from the proposed project and Carbon I/II power plants in Mexico where coal produced from the proposed mine is expected to be used. Since we have a special obligation to protect these resources, we urge EPA to take whatever appropriate actions are necessary to ensure that any adverse impacts to these resources are mitigated or minimized. We believe that there are possibly other avenues such as through the activities of the Border Environment Cooperation Commission and the Integrated Environmental Plan for the Mexican--U.S. Border Area for these concerns to be expressed and addressed.

We believe that EPA is committed to seeking a solution to the Carbon I/II air pollution problems at the Big Bend National Park as well as other significant transborder impacts. We strongly urge that EPA consider postponing the permit decision until the results of the air quality modeling conducted by the National Park Service are released to the public and the impact to the park is fully analyzed. We also recommend that EPA adopt a broader, more conventional interpretation of the scope of the EIS, and that it consider producing a supplemental EIS. If EPA is determined to proceed with its decision based on this FEIS, we recommend that our concerns be published and addressed in the Record of Decision.

Thank you for extending the comment period to March 3, 1995. If we can be of further assistance in this matter, please contact Floyd Nudi for fish and wildlife issues at 505-766-2914 and Jan Schmitt for park air quality issues at 505-988-6858.

Sincerely,


for

Willie R. Taylor
Director, Office of Environmental
Policy and Compliance

JAN 27 1995



CURTIS TUNNELL
EXECUTIVE DIRECTOR

TEXAS HISTORICAL COMMISSION

P.O. BOX 12276 AUSTIN, TEXAS 78711-2276 (TELEPHONE) 512-463-6096 (FAX) 512-463-6095 (RELAY TX) 1-800-735-2989 (TDD)

DEPARTMENT OF ANTIQUITIES PROTECTION

January 21, 1995

Mr. Norm Thomas
Chief, Federal Activities Branch (6E-F)
Environmental Protection Agency, Region 6
1445 Ross Avenue
Dallas, TX 75202-2733

Re: Final Environmental Impact Statement for the proposed Eagle Pass Mine, Maverick County, Texas (EPA, F2)

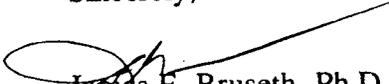
Dear Mr. Thomas:

Thank you for the opportunity to comment on the final Environmental Impact Statement (FEIS) for Dos Republicas Resources Company, Inc.'s (DDRC) proposed Eagle Pass Mine in Maverick County, Texas. We agree with the language in the FEIS concerning the treatment of cultural resources in the proposed life-of-mine area, and look forward to continuing consultation with EPA and the other signatories to the Programmatic Agreement (PA) for the undertaking.

We note on p. C-16 of the public comments by the Department of Interior that two possible archeological sites (in the vicinity of Area Y and 450 meters southwest of Area Z) may have been overlooked in the DDRC sponsored archeological surveys of the proposed mine. We recommend that these areas be thoroughly examined by a professional archeologist prior to any mining activities to determine if archeological sites are present, and if present, whether the sites warrant further consideration under the PA.

Please contact Dr. Timothy K. Perttula of our staff at 512-463-5866 if we may be of further assistance.

Sincerely,


James E. Bruseth, Ph.D.
Deputy State Historic Preservation Officer


Timothy K. Perttula, Ph.D.
Assistant Director for Antiquities Review

TKP/JEB/tp

cc: Melvin B. Hodgkiss, RCT
Claudia Nissley, ACHP

SIERRA CLUB



FEB 23 1995

LONE STAR CHAPTER

P.O. Box 1931
Austin, TX 78767

**LONE STAR CHAPTER OF THE SIERRA CLUB COMMENTS ON
THE FINAL ENVIRONMENTAL IMPACT STATEMENT (NPDES PERMIT)
FOR THE DOS REPUBLICAS, INC. STRIP MINE NEAR EAGLE PASS, TEXAS
February 20, 1995**

The following are the comments of the Lone Star Chapter of the Sierra Club on the final Environmental Impact Statement (FEIS) for the Dos Republicas Resources Co., Inc. (DRRC) strip mine NPDES permit. In order to avoid re-submittal of the Sierra Club's comments on the draft EIS, we request that EPA include them as addendum to these comments because we believe EPA has failed to address our DEIS comments and has basically re-submitted the DEIS with minor changes.

The Sierra Club continues to believe that this FEIS is analytically inadequate and fails to meet National Environmental Policy Act (NEPA) requirements. EPA NPDES permit decision makers are very poorly served by an FEIS that so poorly informs them of the environmental impacts of their pending NPDES decision. We believe EPA must reinitiate the Section 7 Consultation Process prior to concluding the EIS process. Failure to reinitiate Section 7 and the EIS process would require that this FEIS be immediately referred to the President's Council On Environmental Quality for the following reasons:

- * The FEIS is based on flawed and insufficient biological data on both sides of the border;
 - Migratory and resident bird surveys are either incomplete or have never been attempted;
 - The ocelot/jaguarundi trapping survey is incomplete;
 - The FEIS fails to assess impacts to resident, transient, threatened and endangered wildlife;
 - The FEIS fails to assess wildlife use of the Elm Creek riparian corridor and other possible connecting corridors on both sides of the border;
 - The FEIS fails to assess impacts to fish species in Elm Creek and the Rio Grande;
- * The FEIS fails to adequately review and evaluate all available alternatives;

"When we try to pick out anything by itself, we find it hitched to everything else in the universe." *John Muir*

- * Notification and distribution of the DEIS and FEIS did not meet NEPA requirements;
- * This FEIS process allows piece-meal approval;
- * The mitigation and restoration plans are totally inadequate;
- * Failure to comply with Section 106 of the Historic Preservation Act;

- Cultural resource studies are not complete;

- * Wetland evaluations are incomplete;
- * Air quality assessments are incomplete and inadequate;
- * The Biological Opinion is inadequate;
- * Cumulative impacts have not be adequately assessed;
- * The Carbon I, II, III, and IV powerplants have not been adequately addressed;
- * The FEIS fails to adequately assess impacts to ground and surface water quality/quantity in the Elm Creek and Rio Grande watersheds;
- * The FEIS fails to address impacts due to flooding;
- * The FEIS fails to assess impacts to the hydrological regime of the Elm Creek drainage;
- * The FEIS fails to assess impacts related to coal dust dispersal;

DRRC's New "Biological Assessment"

The Sierra Club has not seen a copy Southwest Consultant's "new" biological assessment. The Club has only reviewed the portion of his assessment that was included in the FEIS. From review of that information, the Sierra Club continues to believe that the biological baseline necessary to evaluate the direct and indirect environmental impacts of this project is insufficient. Historic biological baseline for Maverick County continues to be inadequate. Without a sound biological baseline it is impossible to develop a permit that adequately addresses the environmental impacts caused by this proposed strip mine, and it is impossible to produce the required restoration plan that will restore the natural resources in the permit area to their pre-mine conditions.

It is reprehensible that EPA has not required DRRC to

correct deficiencies in these important biological data, given the extreme importance of the Elm Creek resources to the fish and wildlife to this region of the state.

Habitat (Elm Creek, Nueces and Rio Grande Riparian Resources)

EPA's decision not to seek additional biological data regarding the Elm Creek riparian drainage is not rationally defensible. That this corridor is important to wildlife and that a "mitigation plan" will address the impacts is no reason to not attempt to acquire important biological data about the Creek's plant, fish and wildlife communities. That missing information could be the very data needed to avoid, mitigate or preserve a portion or all of the Elm Creek habitat. One must have a baseline, if one is to know whether a future status maintains or enhances or fails to meet that baseline. Without this vital information, EPA NPDES decision makers will be permitting in the dark, vis-a-vis this strip mine.

DRRC's Experimental "Mitigation Plan"

It is disturbing that EPA has chosen not to require adequate biological assessments based on this experimental "mitigation plan"--especially since two highly endangered species could be affected. A mitigation plan that ignores the importance of trees to this riparian plant community is flawed. In addition, there is a very good chance the hydrological regime of the Elm Creek drainage will be adversely affected to the point where there will be no available water for any of the restored corridors. The bunch grasses that make up the dominant wooded/sacaton riparian plant community cannot survive without subsurface moisture.

What if restoration of the "riparian habitat" is not accomplished in two, five, ten, 20, or 50 years (as Texas Parks & Wildlife Department experts have testified)? Since there is a very real possibility that restoration will take 50 years or more, the FEIS must explain this scenario's effect on the strip mine proposal.

These significant deficiencies given the admitted lack of data regarding the endangered ocelot and jaguarundi's use of the Elm Creek corridor (e.g. the incomplete trapping survey) make this mitigation plan one that cannot be rationally relied upon.

Wildlife Impacts (including threatened and endangered species)

Ocelot and Jaguarundi

On November 23, 1994 the U.S. Fish & Wildlife Service released a Biological Opinion on endangered species impacts due to Dos Republicas Resources Company, Inc.'s (DRRC) proposal to construct and operate a coal strip mine near Eagle Pass, Texas.

The Biological Opinion's 6th Term and Condition for Implementation listed under the Reasonable and Prudent Measures requires that the ocelot trapping survey be completed.

DRRC is allegedly planning to begin construction in April of this year, but it has made no attempt to complete this important survey. The Sierra Club strongly believes that for this trapping survey to be successful that it must be completed prior to site disturbance.

The Biological Opinion was premised on a belief that the survey results would be available prior to site disturbance. If this survey is not completed prior to construction, that fact is new information that reveals effects of the agency action that may impact listed species in a manner or to an extent not considered in this biological opinion. Thus, as required by 50 CFR 402.16, reinitiation of the formal Section 7 Consultation is required.

The Sierra Club has asked FWS to either immediately begin this ocelot (jaguarundi) trap survey, prohibiting construction until the survey is completed, or immediately reinitiate the Section 7 Consultation.

The FEIS inaccurately assesses the ocelot's disuse of small habitat tracts. Available data show that the FEIS statement that "potential habitat areas are too small to support the cats; and that a lack of significant areas of suitable habitat north and south of the site make the site's use as a part of a movement corridor unlikely" is outright false. In fact, Dr. Michael Tewes has reported that collared ocelots have established home ranges in areas smaller than 300 acres. Like the black bear, Texas is continually losing optimum ocelot and jaguarundi habitat. Thus, these animals are more often being forced to use less than optimum habitat.

Biological Opinion

The Sierra Club believes that the Biological Opinion is inadequate. FWS states that any taking of a ocelot or jaguarundi would jeopardize the existence of either species. The opinion says that FWS does not believe that a cat will be killed due to this mining project. Yet, the opinion says that if DRRC adheres to the Reasonable and Prudent Measures and a cat is killed by the mining activity, it will be allowed as an "incidental take." If the killing of one cat jeopardizes the existence of either species, then that killing will jeopardize the existence of either species no matter who's measures DRRC procures.

The lack of biological data, the inadequate Biological Opinion, together with reliance on false information, and EPA's reluctance to obtain accurate information regarding these two

highly endangered species produce more proof of the flawed character of this FEIS. The FEIS should not be approved until FWS has completed and released the results of the reinitiated Section 7 Consultation.

Other Threatened or Endangered Species

EPA has failed to obtain more information on the other listed threatened species that will be adversely affected by the strip mine. The FEIS fails to include requirement that will adequately protect threatened and other important species. These additional requirement must be in place and addressed in the FEIS before approval of the NPDES permit.

Birds

This strip mine project will be a year round 20 year operation. Migratory and resident birds will be adversely affected. Yet EPA has failed to require adequate bird surveys. The FEIS says that there are 57 different species in Elm Creek yet the DRRC's biological consultant says they casually observed 90 bird species.

Requiring DRRC to obtain a Migratory Bird Treaty Act permit is inadequate. Without proper bird surveys, EPA will be approving a permit that allows construction and operation of a mine without knowledge of bird species that may be affected. Without this important information, it will be impossible to avoid, mitigate or minimize impacts to migrating or resident birds.

Air Pollution

Coal Dust Dispersal (Particulate Matter Concerns)

DRRC claims that crystalline silica levels in the coal samples tested were 4.5%. However, if they only tested one sample, and there was a two year overlay before the coal sample was sent to the lab. This is inadequate, given the fact that a 5% silica level would require further preventative dust dispersal measures. Again, EPA's willingness to use DRRC's conclusions on important data analysis produces an faulty FEIS. The Sierra Club continues to be concerned that ground-level particulate concentrations will be exceeded and affect public health.

Dust Suppression (Water Use)

Now DRRC claims it will not only use 300 acre feet of water per year for dust suppression, it will need another 800 acre feet per year for irrigation and 100 acre feet per year for area landowners. This is yet another example of DRRC's changing application. EPA fails to require proof that 1200 acre

feet per year of water is even available in this arid region of the state. See the attached letter emphasizing a current water shortage in the area. The availability of this water is a very important part of DRRC's mining operation. What will happen if this water is not available due to drought or other circumstances? The FEIS fails to assess this important issue.

Carbon I and Carbon II Power Plants

It appears that EPA is willing to finalize the EIS prior to receiving the results of the National Park Service's air modeling study on the impacts associated with Carbon I and II powerplants. EPA claims that, since the FEIS states that these powerplants produce unacceptable environmental impacts, no further study is necessary. Since EPA decided to include the indirect impacts associated with the Carbon I & II powerplants in this EIS, it should thoroughly evaluate those impacts. This should include the air modeling study and a pursuit of data on impacts related to acid rain, as well as impacts to: the border, national parks, tourism, and the Chihuahuan and Sonoran desert ecosystems.

It is hard to believe that EPA has opted not to include the important information provided by Dr. Salvador Contreras Balderas regarding ash-related water pollution impacts due to Carbon I and II. This information is extremely important and must be evaluated in order to properly assess Carbon I & II's water pollution impacts to the Rio Grande.

The Sierra Club continues to believe that EPA's granting of an NPDES permit would contribute to the already existing air pollution problem known as Carbon I and II. This FEIS will be the principal analysis available to the EPA officials who must decide whether to issue the permit.

Water Pollution

Surface Water

More studies are needed to determine the wastewater discharge impacts to aquatic and wildlife species that depend on Elm Creek and the Rio Grande (the drinking water source for Eagle Pass). EPA's adding fish species to the FEIS fish list is not good enough! What impacts will the wastewater discharges have on the endangered Rio Grande darter? This fish is sensitive to water contaminants and it is an indicator of clean water. Because of this and the fact that it is an endangered species, EPA must further study the impacts of this wastewater discharge on this fish as well as the other fish in Elm Creek and the Rio Grande. DRRC, Texas Natural Resources Commission and the EPA have failed to determine what the pollutants in the waste water discharges will be and what impacts these pollutants will have on the aquatic community of Elm Creek and the Rio Grande.

Flooding

The FEIS fails to assess impacts due to flooding. In addition, without proper wetland assessments, it is impossible to determine whether this strip mine and its associated loss of wetlands (jurisdictional and nonjurisdictional) will increase flooding in the area. Again, it is inappropriate for the EPA to adopt the DRRC position ignoring this very real flooding threat. Impacts related to flooding of the permit area and downstream property owners are not adequately addressed in the FEIS.

Impacts to Groundwater Resources

The FEIS claims it will alleviate loss of groundwater by providing another undetermined source of water to landowners. How many landowners will 100 acre feet per year accommodate? Will this meet the 125,000 gallon per day use for the ranch north of the area, as well as the other landowners in the area?

Impacts to Cultural Resources

The Sierra Club has received interested party status pursuant to the National Historic Preservation Act. However, we never received a copy of the proposed Programmatic Agreement. EPA has not consulted with the Sierra Club (interested party) as is written in the Programmatic Agreement included in the FEIS.

This Programmatic Agreement should not allow EPA to approve an NPDES permit or finalize an EIS prior to the completion of the required archeological studies. The FEIS continues to ignore important cultural resources that have yet to be adequately investigated.

This FEIS should include the final cultural resource studies and mitigation/avoidance measures that are required to protect cultural resources. The FEIS cannot be considered adequate until all recorded and unrecorded sites have been surveyed in order to determine whether they are eligible for the National Register of Historic Places.

Impact to Wetland Resources

It is totally unacceptable that the wetland resources evaluations not be included in this EIS. The Sierra Club continues to believe that other important wetlands exist on the mining area that meet the federal wetland definition that have not been assessed.

Wetland resources are important independent of its water source. The entire mining site and any areas near the site should be thoroughly evaluated for wetland resources. Again, it is impossible to evaluate impacts to wetlands or to avoid,

mitigate or restore wetland resources without adequate assessment. If EPA does not require further assessment these wetland resources, they could be destroyed without prior knowledge of their existence. EPA should not issue a NPDES permit until additional wetland investigations have been completed, and the FEIS is the proper document in which to explain that fact.

Alternatives

The Sierra Club strongly disagrees with EPA's position that a broad alternative spectrum is unnecessary because the federal interest is not broad. This FEIS must thoroughly address all reasonable alternatives. Relying on DRRC's "not economically feasible" cries is highly inappropriate. There are simply no data presented that would allow a conscientious EPA decision maker to objectively evaluate DRRC's unsupported claims regarding economic feasibility. This FEIS fails to comply with NEPA requirements regarding alternatives analysis.

Conclusion

Because this FEIS only addresses the first five years of this proposed project, and it fails to require imperative information that includes wetland resources, cultural resources, endangered species data, water availability, and other impacts listed in our DEIS comments. Sierra Club strongly believes that this project is being illegally PIECEMEAL or segmented. In addition, it appears that EPA has failed to send proper notification (as required by NEPA) of the DEIS and FEIS to all states and tribes that will be directly or indirectly impacted by either the strip mine or the Carbon I & II powerplants.

It is appalling that EPA would essentially take the DEIS and resubmit it as a FEIS. EPA's position that "uncertainty should not lead to paralysis" shows a shameful willingness to substitute vacuous platitudes for intellectual integrity in the face of shifting political winds. For the reasons expressed above and in our previously submitted DEIS comments, the Sierra Club requests that EPA reinitiate the Section 7 Consultation and complete the EIS process as required by NEPA. In the absences of a diligent analysis of the environmental impacts of the impending NPDES decision, a decision on that permit application should be abated.

February 20, 1995

VIA COURIER SERVICE

Ms. Darlene Coulson
U.S. Environmental Protection Agency
Region 6
1445 Ross Avenue
Dallas, Texas 75202

**RE: DOS REPUBLICAS RESOURCES CO., INC.
EAGLE PASS MINE PROJECT
FINAL ENVIRONMENTAL IMPACT STATEMENT**

Dear Ms. Coulson:

In addition to any comments previously submitted by Dos Republicas Resources Co., Inc. (DRRC) on the Draft Environmental Impact Statement (EIS) which may still apply, DRRC submits the following comment on the Final EIS.

PACE C-16 of the Final EIS, Section 5.5 Cultural Resources contains comments on the Draft EIS submitted by the U.S. Department of the Interior (DOI). Upon review of the existing Archaeological Investigation Reports for this project area [Espey Huston 1981; University of Texas, San Antonio 1994; Archaeology Consultants, Inc. 1994 (2)], the areas questioned by DOI have been surveyed by qualified professional archaeologists and have been determined to be absent any reportable archaeological sites.

DRRC is not aware of any professional archaeologists conducting surveys in the project area other than those noted above and the latest investigations by Archaeology Consultants, Inc. (1994). If an additional report does exist, DRRC would appreciate a copy in order that the results may be compared to those contained in the existing reports.

Sincerely,



Lisa R. Kost
Senior Engineer

LRK/nfl

cc: Mr. Alejandro Salgado
Mrs. Sally G. Tipton
Mr. Martin Rochelle
Mr. Jim Warren

2-17-95

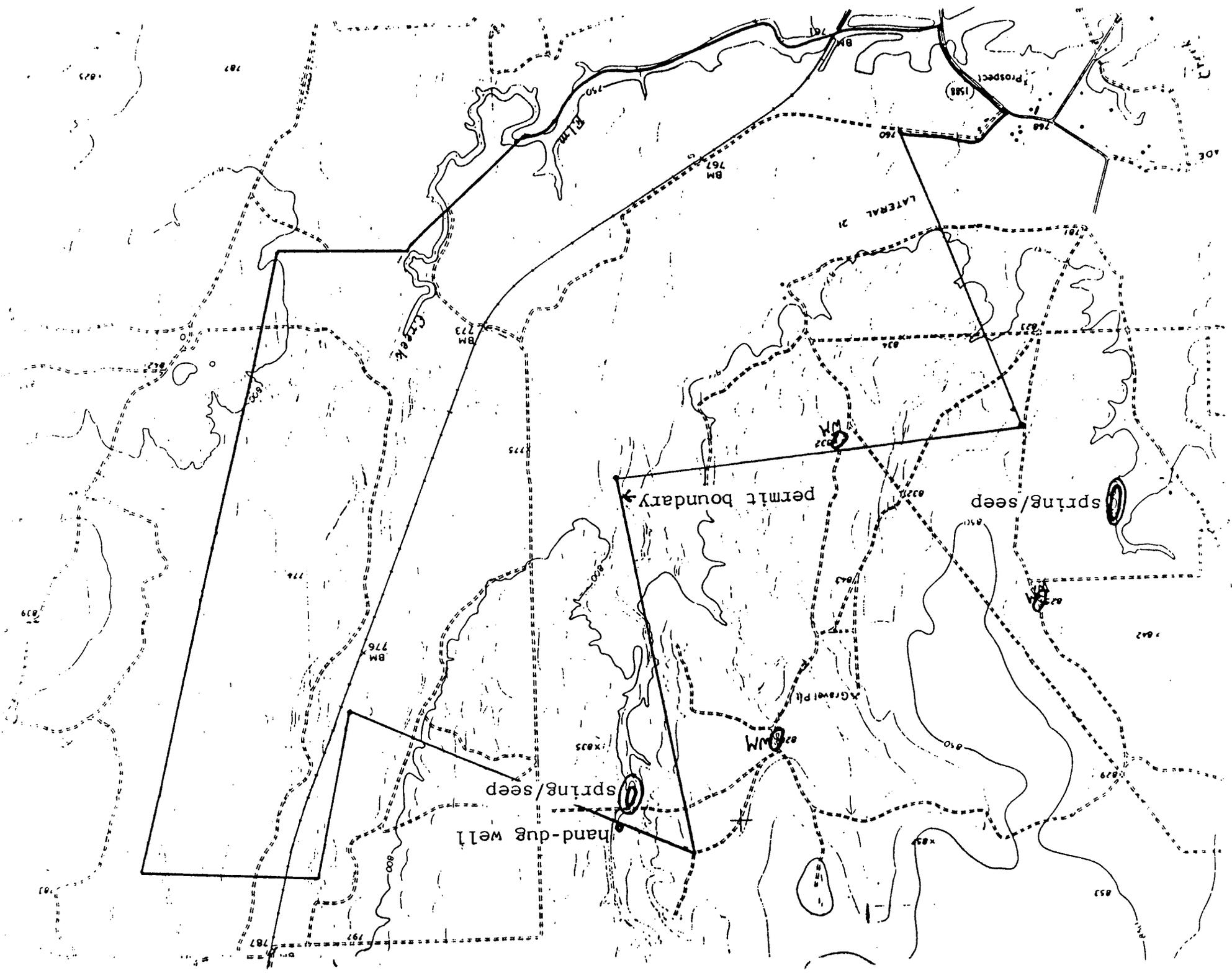
TO: Norm Thomas/Darlene Coulson
EPA, Federal Activities Branch

FROM: Theo Coppock

SUBJECT: Comments on Final Draft EIS, Dos Republicas Resources Co. Inc.
Proposed Eagle Pass Coal Mine

Wetlands/Jurisdictional Waters of the U.S:

Both the First and the Final Drafts of the above captioned EIS appear to omit reference to spring-fed wetlands shown on the enclosed topographic map. The permanent pond created by springs in the Western portion of the enclosed map, visible on aerial photos, is inhabited by fish and is capable of use by migratory birds. Both areas could be subject to impact by dewatering of the mine site, having water sources more shallow than the coal bearing strata. It is believed that the applicant's former hydrologist never visited the Western pond or the hand-dug well at the North of the proposed mine site thereby accounting for their omission.



2-17-95

TO: Norm Thomas/Darlene Coulson
EPA, Federal Activities Branch

FROM: Theo Coppock

SUBJECT: Comments on EIS, Dos Republicas Resources Co., Inc. Proposed
Eagle Pass Coal Mine

EPA draft documents refer to an agreement between Dos Republicas and the City of Eagle Pass to add a ground water monitoring well outside RTC jurisdiction among other DRRC commitments. That agreement was abrogated by the new Eagle Pass Mayor and City Council; it no longer exists. Those protections no longer exist.

EPA's documents have stated that no Rio Grande water shortages for Eagle Pass have ever occurred. That is incorrect. Water rationing due to shortages has occurred in Eagle Pass.

Documentation of both these comments through newspaper articles will follow under separate cover.

THEODOSIA COPPOCK
P. O. Box 17685
San Antonio, Texas 78217

February 19, 1995

Mr. Norm Thomas
Chief, Federal Activities Branch
EPA (6E-F)
1445 Ross Avenue
Dallas, Texas 75202-2733

Subject: Dos Republicas Resources Co. Inc., Proposed Eagle Pass
Mine Site - Groundwater and Discharge Volume

Dear Mr. Thomas:

The Texas Railroad Commission has made Findings of Fact numbered 30, 31, 34 and 35 in its Order Approving Application for Surface Mining and Reclamation Permit of Dos Republicas Resources Co., Inc. as shown in EPA's Final Draft EIS, which should be considered probative when considering the validity of EPA's statements regarding the impact of mining on wells and groundwater. Such statements on pages I-7, II-4, II-5 and C-10 relating to the impact of mining on wells and groundwater should be corrected to correspond to the abovementioned Findings of Fact.

Enclosed for review is a drill hole location map of the above captioned permit area and adjoining lands and a copy of a response to interrogatories relating to groundwater information gained from those drill holes which were furnished to the Texas Railroad Commission in reply to questions posed by the Commissioners at their August 1, 1994 conference. The number of each borehole on the map begins with the year in which it was drilled.

DRRC's response of interrogatories states that, "The earliest (pre-DRRC) exploration drilling projects on the site did not keep records of groundwater encountered." All boreholes drilled in 1979 and 1981 (marked with red dots on Exhibit E, map) were "pre-DRRC." Both DRRC and Texas Railroad Commission Staff have argued that data from these several hundred boreholes on DRRC property confirm that there is no groundwater in the area. In fact, two-thirds of these boreholes simply do not provide any information about water at all. The applicant has misled the Texas Railroad Commission Staff into erroneously believing that all this borehole data confirms the absence of groundwater on the mine site, which it simply does not do.

Additionally, there are at least four water wells located on the applicant's property between the area to be mined and water wells to the North on adjoining property. The applicant provided the Texas Railroad Commission with no meaningful information about these wells. The applicant did not even bother to measure water levels in these wells, notwithstanding the fact that the Texas Railroad Commission Staff hydrologist agreed such information would be useful in evaluating the potential impact of mining on groundwater and specifically testified he would have measured the water level in the applicant's water wells.

DRRC's "plopped" water in its windmill-pumped well nearest property to the north of the applicant's property, and the water in a hand-dug well on DRRC property, DRRC's borehole no. 23, and a testhole on the property line at the northern boundary of the applicant's property confirm the presence of groundwater and continuity of that groundwater between the mine permit boundary and property to the north.

The hydrologic studies done by DRRC and the Texas Railroad Commission Staff (including the Cumulative Hydrologic Impact Assessment) focus on the Elm Creek area and ignore groundwater in other areas, including the saturated upland gravels to the north of the permit area mentioned in the draft EIS on page 5-4 of Table 5.1. EPA states, "No significant shallow groundwater has been identified within the project boundaries," but EPA simply has not been furnished adequate information to make any determination at all of the presence or absence of water. There is no reason to believe that the aquifer to the north is not hydrologically connected to Elm Creek through a saturated zone. An absence of information does not permit one to draw a conclusion of an absence of water.

It also appears that the applicant's former hydrologist did not inform EPA of the spring-fed ponds on DRRC property, further evidence of the saturated shallow gravels. These spring-fed sites are marked on the enclosed map with a blue circle at each of the two sites. The western permanent spring-fed pond is inhabited by fish and is capable of use by migratory birds.

The above information makes it premature for EPA to draw its conclusion that dewatering would not affect any existing use of groundwater by wells or that impacts to off-site wells is unlikely. Texas Railroad Commissioners saw the necessity of permit provisions regarding groundwater as have been provided to EPA, having agreed that an adverse impact to water wells north of the applicant's property is possible.

The absence of groundwater information is also an absence of information from which EPA could accurately determine pit pumpage and the volume of discharge subject to its proposed discharge permit. The Texas Natural Resource Conservation Commission was not provided with the enclosed map and interrogatory response at the time of its discharge permit hearing which preceded the Texas Railroad Commission August 1, 1994 conference, and therefore TNRC's decisions may have been made on incomplete information.

Very truly yours,

Theodosia Coppock

Theodosia Coppock

3-29-95

TO: Darlene Coulson, EPA, Dallas

FROM: Theo Coppock

SUBJECT: Availability of Water from the Rio Grande - Dos Republicas
Proposed Mine Operation, Eagle Pass, Texas

As you requested, following are a copy of the January 24, 1995 letter from the Maverick County Water Control & Improvement District informing water users that the District did not receive a water allocation at all for the first quarter of 1995 and the reason that no water is available, and a March 28, 1995 article from the San Antonio Express-News describing the severity of the water shortage all along the Rio Grande and the low levels of both Amistad and Falcon Reservoirs. It appears that, due to the conditions described in the newspaper article, there will be no second quarter allocation of irrigation water either. Though it is my understanding that it is not unusual for there to be some curtailment of irrigation water, the current conditions are extreme because it is now possible that water will be taken away from agricultural users in order to satisfy municipal and domestic needs, as mentioned in the Express-News story. The article also discusses the impact on the town of Zapata during the drought of the 1980's and the resulting low water level; this would have been at the same time that Eagle Pass experienced water rationing due to the low water levels in the Amistad Reservoir.

These circumstances point to the fact that irrigation water proposed to be used by Dos Republicas for reclamation is not reliably available from the Rio Grande; nor is the Rio Grande a reliable source for industrial use water or water for use to replace ground water lost by the impact of mining on water wells of neighboring landowners whose domestic and livestock water will be affected. The mere possession of water rights does not mean that water will be available for use.

In addition, it was reported at the March meeting of the Maverick County Water Control & Improvement District Board that Dos Republicas has not been able to acquire use of the water rights of all of the permit area lessees as of that date.

Norm Thomas, EPA (6E-F)
1445 Ross Avenue
Dallas, Texas 75202-2733
214-665-2260

RE: Dos Republicas Resources Co. Inc.
Eagle Pass Mine Maverick County

Feb. 19, 1995

Dear Mr. Thomas,

The Final EIS Pg. I-4 mentions that TNRRC Staff had issued a recommendation that the air quality permit be issued long before they even began a hearing and heard all the evidence.

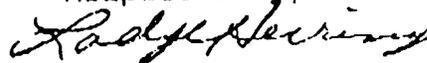
On December 13, 1994 Mrs. Rosa O'Donnell & I attended a TNRRC public hearing in Austin for party status in the Air Quality Permit. I couldn't believe how the Staff tried to get us to make a deal with DRRC to drop going to a hearing. If I had read this part of the EIS before then it wouldn't have been hard to understand why. This is just an example of the hearing process, why do we even have them. Its all decided before hand.

In Appendix E page 10 # 35 last sentence. The applicant has a contract with the city to provide connections to residence along State FM 1588 . Some of the protestant that depend on Lateral 21 for domestic water, live on a county road passed where FM 1588 ends. Some of these are the O'Donnell's, Gamez, Riskinds and other residents. I feel that you should make some conditions to protect them to be able to have city water connected to them at no cost. We havn't seen a contract with the city & DRRC and the city is known for changing their minds.

I feel it hasn't been put down clear anywhere that DRRC will pay to connect the residence to city water all the way to their homes. I would like to know, if the EPA has seen a contract with the City of Eagle Pass and DRRC.

There are so many issue that I feel that hasn't been dealt with but fall on deaf ears. So I will save my time & yours. The political pressure wins out over health and welfare. All we can depend on to care for us is our Heavenly Father.

Respectfully,



Ladye Herring

Feb 21 1995

February 17, 1995
Eagle Pass, Texas

RE: Doe Republican Resources Co., Inc.
Eagle Pass Mine - Maverick County, Texas

Dear Mr. Thomas,

Local, state and Washington politicians are not going to reside near this coal mine we are. We are frustrated that what should be the agencies' primary concern our health and property rights, have instead become a politically influenced project. We have copies of letters sent to EPA Administrator Carol Browner, Interior Secretary Bruce Babbitt and Fish and Wildlife Service Director Mollie Beattie. Their letters have put so much pressure on the regulatory agencies that serious concerns are being ignored.

On February 2-3, 1995, several area residents attended the TNRCC public hearings for an air quality permit. It's a downhill battle as your Final Environmental Impact Statement, pg. I-4, mentions that TNRCC staff has issued a recommendation that the draft air quality permit be issued long before we even began the public hearing.

As it turns out, TNRCC staff has done a very sloppy job.

Out of 2700 acres, four mine areas within the permit area and over a

hundreds of boreholes, only one coal sample was tested for Crystalline-silica. It's ironic that hundreds of holes were drilled to see if the project was economically viable but only one coal sample was tested to evaluate the health of area residents and people living by the railroad tracks. Are you aware there are four schools close to the railroad tracks; Deco-Mines Elementary, Eagle Pass Junior High, Glass Elementary and Robert E. Lee Elementary. These trains will go by these schools at least twice a day (or night) and coal dust will probably settle by the tracks close to the schools and their playgrounds, especially the Eagle Pass Junior High and Glass Elementary which are right next to the railroad tracks.

All figures dealing with coal dust levels and Crystalline-silica barely makes it under the accepted guidelines of TNRCC. The highest predicted coal dust level near E.K. Taylor and Francisco Acosta's houses was $19.6 \mu\text{g}/\text{m}^3$ which is barely lower than the ESL of $20 \mu\text{g}/\text{m}^3$. The Crystalline-silica level from the one coal sample, collected July 10, 1992 and tested around May 5, 1994 and to which we don't have a Chain of Custody report, tested 4.57, out of an acceptable $< 5\%$. The coal in the permit area varies in quality,

and depth, and in the same way
 the active mine site are made. The
 cost was to be blended. The request
 that more sampling be done in all
 four mine areas. If the crystalline
 silica turns out to be higher, it
 could very well change the figures
 in these air modeling. Meteorological
 data generated from San Antonio and
 Del Rio are not representative of the
 meteorological conditions in Maverick
 County, certainly not wind speed and
 65 rainy days. These can also
 alter their figures.

On page C-77 of your final
 EIS, you have listed "E. K. Taylor,
 Juan Antonio Valdez and Francisco
 Cicuta as landowners within the
 permit boundary but these people
have not leased or sold to DRRC.

Much has been said about
 the great number of jobs that will
 be generated by this project. Enclosed
 you will find a newspaper article
 quoting "DRRC representative, Terry
 McCoy, as saying DRRC might
hire 50 people the first year,
maybe double it the second year
 and eventually reach 350 (no year
 is mentioned). Their numbers
 change almost everytime they go
 public.

The fact is that if they do get
 a contract with Mexico, it will be

under Mexican terms. Mexico has already made it public that any contract would be on a fixed price for the 20 year period. Enclosed is a newspaper article in which DRRC mentions it. The reality is that DRRC is talking of jobs that have not yet been created and whose number and salaries might change from year to year depending on their economical profit.

Mr. Thomas, this is our community and we want to see jobs as much as our politicians do. But we want real jobs, and we don't want them at the expense of health risks or environmental problem. The U.S. / Mexican Border already has plenty of problems please don't add more.

The political pressure has been enormous. The TNRCC staff put a lot of pressure on homeowners to drop their request and right to a public hearing. We would have gladly done so if DRRC had given us assurance that they would buy us out so we could look for a home in a cleaner environment away from blasting, coal dust, potential water contamination, loss of wildlife habitat (especially the beautiful birds in our area) and the loss of property value. I am

a housewife, my business is retired,
and our only investment is our
home and our property. We don't
understand why we have to spend
our limited income fighting for
our health and the home that
took us so many years to pay for.
If DRRC wants us out of here, they
know what they have to do.

Respectfully submitted,
Rosa M. O'Donnell
P.O. Box 224
Eagle Pass, Texas 78853
210-773-3081

P.S. The only bright spot at the TNRC
is their entire Public Council.

Mr. Charles Thrack did a wonderful
job at the hearing, enclosed are some
of his comments from pp. 143 and
144 of the transcript of the hearing
held on February 2-3, 1995.

Unfortunately we are aware the
the Public Council might be
dissolved in the near future and
people (like us) who cannot afford
legal representation will be without
any representation.

I would also like to let you
know that my husband and I are
very conservative people.

March 3, 1995
Eagle Pass, Texas

RE: Doe Republicas Resources Co., Inc.
Eagle Pass Mine - Maverick County Texas

Dear Mr. Thomas,

We are aware that public comments on the final EIS were due by February 20, 1995, however, it has just come to our attention that DRRC has again changed their plans. It seems that DRRC does not yet have a contract with the railroad, and at present, they are planning in transporting their coal by truck. They are anticipating between 100 and 300 trucks daily.

There is only one international bridge in Eagle Pass and it is in the downtown area. Although there are plans for a second bridge, its still unknown when and where it will be.

Mr. Thomas, will these trucks be covered going to Mexico and coming back? What impact will it have in the downtown area? What impact will it have in the coal dust emissions at the mine site? and what impact will it have in the final EIS Statement?

We appreciate your attention to this new change of plans.

James E. and Rosa M. O'Donnell
701 Rav 724 Eagle Pass, TX 78853

IAN 2 5 1995

Norm Thomas
Chief of the Federal Activities Branch
EPA (6E-F)
1445 Ross Ave.
Dallas, Texas 75202-2733

Jan. 20, 1995

Re: Eagle Pass Mine-EIS

Dear Mr. Thomas,

The much awaited final EIS on the Eagle Pass mine seemed to have changed very little from the initial draft EIS. Ironically and very convincingly certain information is lacking that is critical to this project. I hope that certain aspects that have been omitted from detail be made aware. Dos Republicas Resource, Co (DRRC) is seeking a NPDES permit for the purpose of strip mining. A glaring oversight is that DRRC is not going to be the operator of this mine and therefore much ado about compliance history connected with a company that has no history is a loop hole. The now known operator will be North American Coal (NAACO) of which does have a checkered environmental history in mining. The lessor being CONSOL also being recently fined for violations at the Burnham Mine near Farmington, NM. make this an issue that was not mentioned and should certainly be of some interest.

The whole issue of jobs and economics of this project white-wash any truth that could be gleamed if only questioned. The most obvious being the recent peso devaluation that now makes buying coal 30-40% more expensive. Will other economic variables such as tax abatements also have an negative effect that would impact Maverick County and make this project not viable. In sum, just what concession will the citizens of Maverick County have to make to ensure that the long term economics of this project remain a constant.

The rather strange turn about by the U.S. Fish and Wildlife Department as witnessed by the letter from Mr. French dated March 13, 1994 to TNRCC and the final biological opinion rendered. Would the fact that DRRRC heavily lobbied both U.S. and State Senators to apply political pressure to both the U.S Fish and Wildlife Departments and well as the Department of the Interior as to have an affect on the final ruling.

In the final analysis area residence are expendable. No guarantee that dust including coal dust will not escape the permit area . How can an estimated 60 tons of dust be discounted as just a nuisance. That noise and blasting will not impact us and alter our tranquil lifestyles. That our own lifestyles will not be directly impacted and the values of our homes lessened. By whose definition would you call these people Good Neighbors.

Shame-Shame, its true you can buy everything with money - effective lobbyist, high profile legal representation, local support, media coverage, and the local politicians that will ensure a project like this will succeed at the expense of our property rights.

Respectfully,



Dan Riskind

xc: Jane Saginaw- Regional Administrator Region 6
Carol Browner- Administrator EPA Washington
President Clinton- Washington
Kathleen McGinty -Director Environmental Policy-White House
Sally Katzen-Office of Information and Regulatory Affairs-OMB
Bruce Babbitt - Dept. of Interior
Molly Beattie - U.S.Fish and Wildlife Service
Robert Uram-Director Surface Mining
Dan Pearson- Executive Director TNRCC
George W. Bush- Governor of Texas
Henry Bonilla- U.S. Congress

Proposed Air Quality Permit No. 21572
Docket No. 94-0680-AIR
February 18, 1995

RE: Application of Doe Republican Resources Co., Inc.
Before the State Natural Resources
Conservation Commission

To: the Honorable Examiner

In the Final Environmental Impact
Statement (Eagle Pass Mine, Maverick County,
Texas), on page C-77 Attachment 778.116 (a),
a list is provided of the landowners within
the permit boundary. My property, which
is properly map tract no 12, is included
in this list, thus including my land
and my home within the proposed mining
permit area.

Doe Republican Resources Co. Inc. does not
have a lease on my property to mine
coal, nor do I have any intention of
negotiating such a lease with them.
Therefore, I respectfully request that any
mining permits issued to Doe Republican
Resources Co., Inc. are not to include my
property, since they do not have the
mining rights to tract #12 and they do
not own the tract.

Also, it has come to my attention that
Doe Republican has proposed a coal dust
monitoring station be located on their land
just east of my property line. This
monitoring station is to have an automatic
acceptable dust level of 19.6. Since this
station will probably be within two
hundred yards of my house, I consider

this dust level to be excessively high and in need of a drastic reduction. Other proposed dust monitor stations that are projected to be located near homes, or other properties, outside of the permit area will reflect a significantly lower figure than 19.6. Therefore, since my property is not to be inside the permit area and my home will be adjacent to the permit area, the acceptable dust level of this monitor should be reduced to the level of all other monitors bordering area homesites.

Any consideration that you can the contents of this correspondence will be greatly appreciated by the undersigned.

Respectfully Submitted,

E. K. Taylor

RT. 2, Box 186

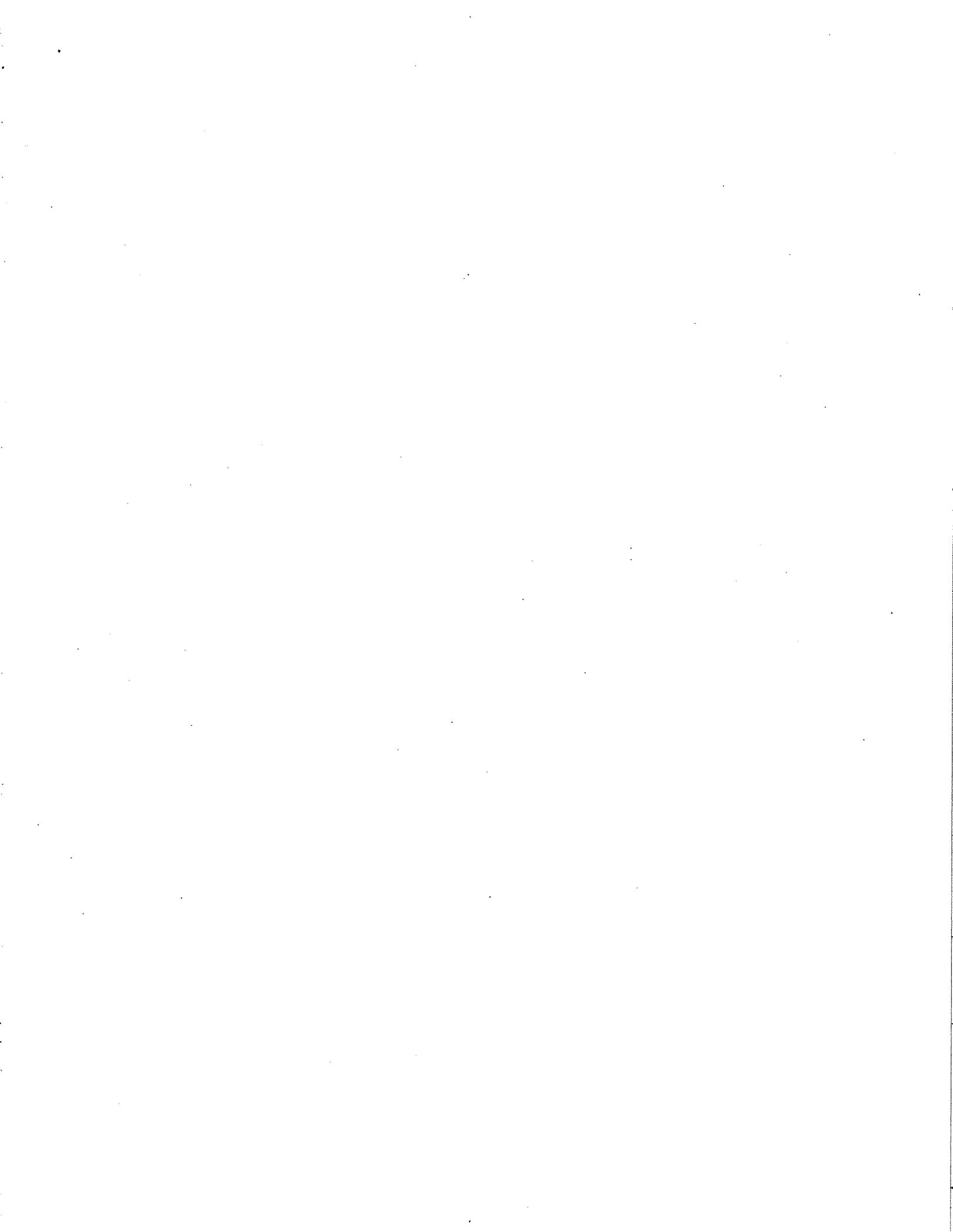
Eagle Pass, Texas

79852

Appendix B. Supplemental information from DRRC

Letter dated March 8, 1995, from Alejandro Salgado O., regarding coal transportation by truck.

Letter dated May 2, 1995, from Donald Marston, regarding commitments to implement mitigation measures.





Dos Republicas Resources Co., Inc.

P. O. Box 200350
5797 Dietrich Rd.
San Antonio, Texas 78220-0350
BUS (210) 661-4251
FAX (210) 661-6060

Rec'd EPA
6E-FF
on 3/9/95

DLomb

Mr. Hector Peña
Environmental Protection Agency
Region 6
1445 Ross Avenue
Dallas, Texas 75202-2733

VIA HAND-DELIVERY

Re: Application of Dos Republicas Resources Co., Inc. for
NPDES Permit No. TX0109011 - EPA Region 6 -
Final Environmental Impact Statement

Dear Mr. Peña:

On behalf of Dos Republicas Resources Co., Inc. ("DRRC"), please accept this letter as our response to a recent newspaper article which suggested that DRRC would utilize trucks to deliver coal from its proposed Eagle Pass Mine to its potential customer in Mexico. Please be assured that DRRC's current plan is to use the existing rail facilities which traverse its property in Maverick County to deliver coal supplies to such customer. This existing rail line runs directly through the project site, and it makes imminent sense for DRRC to utilize such facilities.

The information contained in DRRC's application for an NPDES permit and the information relayed to your agency by DRRC in the Environmental Impact Statement process concerning its plan to use existing rail lines for delivery of coal accurately reflect DRRC's plan. Any other possible mode of delivery of coal is pure speculation at this time, and certainly does not reflect DRRC's current plan or its future intentions with regard to the proposed transport of coal to Mexico. DRRC has investigated several other alternative methods for delivering its coal supplies, and it will continue to conduct such

Mr. Hector Peña

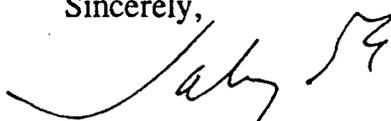
March 8, 1995

Page 2

investigations in the future as a part of its normal business practice. Such analyses are performed to ensure that rail transport remains an economically viable means of delivering its coal.

On behalf of Dos Republicas Resources Co., Inc., please accept my assurances that the information included in our application for an NPDES permit and the information submitted to EPA in response to the Environmental Impact Statement process continue to accurately reflect the company's intentions concerning the possible mode of coal delivery to Mexico. If you or your staff have questions concerning this matter, please feel free to contact me or DRRC's Project Engineer, Lisa Kost, at her office in Dallas (214/448-5489) at your convenience. Thank you for your attention to this matter.

Sincerely,



Alejandro Salgado O.

President

Dos Republicas Resources Co., Inc.

cc: Mr. Pat Rankin
Ms. Lisa Kost
Mr. Tres Tipton
Ms. Sally Tipton
Mr. Martin C. Rochelle



DOS REPUBLICAS RESOURCES Co., INC.

P. O. Box 200350
5797 Dietrich Rd.
San Antonio, Texas 78220-0350
BUS. (210) 661-4251
FAX (210) 661-6060

Rochester #56
Col. Napoles
Mexico, D.F. 03810
BUS. 011-525-669-2034
FAX 011-525-523-6834

May 2, 1995

Mr. Myron O. Knudson, P.E.
Director
Water Management Division
United States Environmental Protection Agency
Region 6
1445 Ross Avenue
Dallas, Texas 75202-2733

VIA OVERNIGHT MAIL

**RE: Application of Dos Republicas Resources Co., Inc. for NPDES
Permit No. TX0109011**

Dear Mr. Knudson:

On behalf of Dos Republicas Resources Co., Inc. ("DRRC"), I hereby submit this supplement to the above-referenced application. With this supplemental application submission, DRRC hereby commits to take the following actions in connection with its proposed coal mining operations in Maverick County, Texas, if the United States Environmental Protection Agency ("EPA") ultimately issues an NPDES wastewater discharge permit to DRRC pursuant to its application:

- 1) As committed to by DRRC in the Biological Assessment, the Addendum to the Biological Assessment, and materials submitted by DRRC to supplement the Biological Assessment (collectively referred to herein as "BA"), DRRC will establish, prior to mining through the existing main Elm Creek riparian brush corridor, the proposed Upland Bypass corridor or the initial recreated Elm Creek corridor. DRRC will maintain a continuous brush habitat corridor at



least 100 feet wide (100 feet of vegetation, in addition to the unvegetated Elm Creek channel) within Reaches 2 and 3 of the existing Elm Creek dense brush habitat, as delineated in the BA, until either the Upland Bypass corridor or Elm Creek's restored Reach 1 and new Reach 3 meet the corridor criteria outlined in the BA.

At the time the brush corridor along the main Elm Creek channel is removed, the fenced Upland Bypass corridor will be 300 feet wide and have a brush density as outlined in the BA. The initial recreated Elm Creek corridor (restored Reach 1 and new Reach 3) will have habitat density as outlined in the BA and be 100 feet wide (50 feet on each side of the unvegetated channel), and be continuous except for a maximum of six unvegetated gaps, each no more than 200 feet wide to allow for crossings of DRRC's equipment and vehicles. This initial recreated Elm Creek corridor will be in place and meet the above specifications before the proposed mining operations come within 1,000 feet of the Upland Bypass corridor.

The access road in mining areas A and D, will be an eastern barrier to all construction activities, and a berm will be constructed between the road and the existing brush corridor located along Elm Creek Reaches 2 and 3 as noted in the BA. Until an acceptable alternate corridor is established, the berm will be maintained and any vegetation clearing between the berm and existing Elm Creek Reaches 2 and 3 or within 1,000 feet of these reaches will be done in daylight hours only.

- 2) Immediately after completion of the proposed mining, DRRC will restore Elm Creek to its approximate original location, leaving the initial recreated Elm Creek brush corridor to remain in place. During reclamation of the project site, a second Elm Creek brush corridor at least 100 feet wide (100 feet of vegetation) will be recreated straddling the restored Elm Creek channel. Reclamation will continue until the second Elm Creek brush corridor's vegetation has a density and conformation as proposed in the BA. DRRC will design and construct such corridors with due consideration to the

existing geomorphology, soil conditions and hydrologic regime of the natural dense riparian brush corridor and will seek to restore hydrologic processes necessary to sustain optimal and suboptimal habitat in both corridors.

Upon completion of mining and reclamation activities, vehicle crossings will be reduced in width and number to the minimum necessary for the surrounding ranch operations. Any gaps will be allowed to revegetate naturally up to the edge of access roads. The fence along the upland bypass corridor will be removed and the landowners may utilize the site as before the project.

- 3) Culverts will be placed beneath all road crossings of restored Elm Creek Reach 1 and new Reach 3, with fine-mesh fencing placed parallel to the crossing areas to divert cats away from the roadways and through the culverts. Subject to approval of the appropriate government landowner or entity with authority to authorize such work, DRRC will also provide for fine-mesh fencing under highway 1588 where it crosses Elm Creek.
- 4) DRRC will provide EPA, United States Fish and Wildlife Service ("FWS"), and Texas Parks and Wildlife Department ("TPWD") with reports concerning its revegetation design, experiments, progress and monitoring, as noted in the BA. DRRC will provide a copy of all such reports for public review at the Eagle Pass public library. As part of revegetation efforts, a minimum of 500 individual trees and 400 pads of vegetation will be salvaged to determine the effectiveness of plant transplants.

DRRC will provide EPA, FWS and TPWD with two copies each of the following revegetation reports.

Report Title

Due Date

Experimental Design

Two months following NPDES permit issuance

Mr. Myron Knudson
May 2, 1995
Page 4 of 6

Quarterly Status Reports on Vegetation Experiments	Quarterly following completion of experimental design report
Annual Reports on Vegetation Experiments	Annually following completion of experimental design report
Final Report on Vegetation Experiments	Within 5 years following NPDES permit issuance
Annual Reports on Revegetation Progress and Monitoring	December 1996 for 20 years
Site Visits by FWS, TPWD, and/or EPA	On request

- 5) A Habitat Management Plan (HMP) consistent with the previous commitments will be developed by DRRC in writing and implemented for the existing Elm Creek dense-brush corridor, the Upland Bypass corridor, and the recreated Elm Creek brush corridors. The HMP will address management of habitats before, during and after mining; monitoring to include annual reporting of mining activities, roads, culverts, fencing, buffers, etc.; and recreation of corridors. The HMP will be submitted to EPA, FWS and TPWD prior to disturbance of the Elm Creek dense-brush habitat.
- 6) All workers will be informed of endangered or threatened species (both Federally listed and State listed) which potentially occur in Maverick County. DRRC will also devise a plan to handle the possibility of encountering endangered or threatened species on the mine site and will ensure that all workers are aware of this plan. If DRRC or anyone else associated with this project locates a dead, injured, or sick ocelot or jaguarundi, initial notification will be made to the nearest FWS law enforcement office.

Mr. Myron Knudson
May 2, 1995
Page 5 of 6

- 7) No brush habitat within the Elm Creek corridor will be cleared between September 1 - November 30, unless immediately prior to such clearing DRRC has completed a ground survey of the habitat to determine that the area to be disturbed contains no dependent kittens (ocelot and jaguarundi).
- 8) The ocelot survey that was underway prior to the Endangered Species Act Section 7 consultation with FWS will be completed. Trapping studies in the Elm Creek corridor will be completed before DRRC's proposed activities clear that habitat.

DRRC will make every reasonable effort to comply with the following Conservation Recommendations:

- A photographic inventory of the Elm Creek dense brush corridor, both of areas to be mined and of the 108 acres that will not be disturbed, will be made prior to the initiation of project construction. Throughout the life of the project, direct comparisons will be made to the 108 acres of undisturbed dense brush habitat. Baseline transects will also be photo-documented.
- DRRC will attempt to secure agreements with landowners for the maintenance of the restored riparian corridor habitat in perpetuity.
- DRRC will restore as much as possible of the project site to existing habitat types.
- DRRC will restore vegetation so that the dominant plant species in at least the final restored Reach 1 and new Reach 3 corridor will include but not be limited to such species as mesquite (*Prosopis glandulosa*), cedar elm (*Ulmus crassifolia*), whitebrush (*Aloysia gratissima*), and alkali sacation grass (*Sporobolus aeroides*).
- DRRC will assess the importance of drinking water to wildlife currently found at the site, and including water supplies in its final site design.

Mr. Myron Knudsen
May 2, 1995
Page 6 of 6

In addition, DRRC will make every reasonable effort to comply with the Conservation Recommendations included in FWS' Final Biological Opinion, dated November 23, 1994.

If you or other EPA staff have questions concerning this supplemental application, or DRRC's commitments to take the foregoing actions if an NPDES permit is issued, please feel free to contact DRRC's Project Engineer, Lisa Kost, at (214) 448-5489. Thank you for your attention to this matter.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,



Donald D. Marston
Vice-President
Dos Republicas Resources Co., Inc.

cc: Mr. Hector Pena
Ms. Darlene Coulson
Mr. Pat Rankin
Mr. Alejandro Salgado
Mr. Kenneth Huebner
Ms. Lisa Kost
Ms. Sally Tipton
Dr. Scott Mills
Mr. Martin Rochelle

Bryan W. Shaw, Ph.D., *Chairman*
Buddy Garcia, *Commissioner*
Carlos Rubinstein, *Commissioner*
Mark R. Vickery, P.G., *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

November 10, 2011

Andres Gonzales-Saravia Coss
Dos Republicas Coal Partnership
5150 North Loop 1604 West
San Antonio, Texas 78249

Re: Dos Republicas Coal Partnership, TPDES Permit No. WQ0003511000
(RN101529493; CN600787782)

Dear Mr. Gonzales:

Enclosed is a copy of the above referenced permit for a wastewater treatment facility issued on behalf of the Commission pursuant to Chapter 26 of the Texas Water Code.

If you are receiving a Texas Pollutant Discharge Elimination System (TPDES) discharge permit and your system is a new facility or an existing facility that has been reporting to the Texas Commission on Environmental Quality (TCEQ), you may comply with self-reporting requirements by submitting discharge monitoring reports (DMR) electronically over the Web through STEERS (see enclosed flyer). Information about the electronic DMR (eDMR) system is available at www.tceq.state.tx.us/goto/eDMR. We encourage electronic reporting. Discharge facilities that do not use the eDMR system will receive paper DMR forms and instructions from the TCEQ Enforcement Division, or from the U.S. Environmental Protection Agency (EPA) if the facility has been submitting DMRs to EPA.

If you are receiving a land application (no discharge) permit and are required to report monitoring results, self-reporting forms and instructions will be forwarded to you by the TCEQ Enforcement Division.

Enclosed is a "Notification of Completion of Wastewater Treatment Facilities" form. Use this form when the facility begins to operate or goes into a new phase. The form notifies the agency when the proposed facility is completed or when it is placed in operation. This notification complies with the special provision incorporated into the permit. When the agency receives this form, the appropriate permit requirements will be activated in the compliance system database so that accurate monitoring and reporting can occur.

Should you have any questions, please contact Melinda Luxemburg, P.E. of the TCEQ's Wastewater Permitting Section at (512) 239-4671 or if by correspondence, include MC 148 in the letterhead address at the bottom of the previous page.

Sincerely,



Bridget C. Bohac
Chief Clerk

BCB/lg

Enclosures

cc: TCEQ, Region 16
Andres Gonzales-Saravia Coss, Dos Republicas Coal Partnership, 5150 North Loop
1604 West, San Antonio, Texas 78249
Joel Trouart, The North American Coal Corporation, 5340 Legacy Drive,
Building 1, Suite 300, Plano, Texas 75024
Lisa O. McCurley, P.E., Hill Country Environmental, Inc., 1613 South Capitol of
Texas Highway, Suite 201, Austin, Texas 78746
Leonard H. Dougal, Attorney, Jackson & Walker L.L.P., 100 Congress Avenue,
Suite 1100, Austin, Texas 78701

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



AN ORDER concerning the application by Dos Republicas Coal Partnership for renewal of TPDES Permit No. WQ0003511000; TCEQ Docket No. 2011-1565-IWD.

On November 2, 2011, the Texas Commission on Environmental Quality (Commission) considered during its open meeting numerous requests for hearing and reconsideration concerning the application by Dos Republicas Coal Partnership (Applicant) for renewal of TPDES Permit No. WQ0003511000. The requests for hearing and reconsideration were evaluated under the requirements in the applicable statutes and Commission rules, including 30 Texas Administrative Code (TAC) Chapter 55. The Commission also considered the responses to the hearing requests and requests for reconsideration filed by the Executive Director, Applicant, and the Office of Public Interest Counsel; the replies of Maverick County, Maverick County Environmental and Public Health Association, and George Baxter; all timely public comment; and the Executive Director's Response to Public Comment.

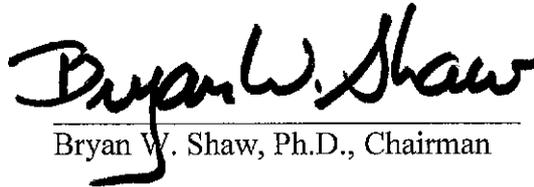
After evaluation of all relevant filings, the Commission denied the hearing requests pursuant to Texas Water Code § 26.028(d). The Commission also adopted the Executive Director's Response to Public Comment and approved the application of the Applicant for renewal of TPDES Permit No. WQ0003511000 in the form as shown in the draft permit prepared by the Executive Director. Finally, the Commission denied the requests for reconsideration.

NOW, THEREFORE, BE IT ORDERED BY THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY that:

1. All hearing requests are hereby DENIED;
2. The application of Dos Republicas Coal Partnership for renewal of TPDES Permit No. WQ0003511000 is approved and the renewal is ISSUED in the form as shown in the draft permit prepared by the Executive Director;
3. The Executive Director's Response to Public Comment is ADOPTED in accordance with 30 TAC Chapter 55;
4. All requests for reconsideration are hereby DENIED; and
5. If any provision, sentence, clause or phrase of this Order is for any reason held to be invalid, the invalidity of any portion shall not affect the validity of the remaining portions of the Order.

Issue date: **NOV 07 2011**

TEXAS COMMISSION ON
ENVIRONMENTAL QUALITY


Bryan W. Shaw, Ph.D., Chairman



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
P. O. Box 13087
Austin, Texas 78711-3087

TCEQ Docket No. 2011-1565-MWD
TPDES PERMIT NO. WQ0003511000
[For TCEQ office use only -
EPA I.D. No. TX0109011]

This is a renewal of TPDES Permit
No. WQ0003511000, issued on
November 16, 2006.

PERMIT TO DISCHARGE WASTES
under provisions of
Section 402 of the Clean Water Act
and Chapter 26 of the Texas Water Code

Dos Republicas Coal Partnership

whose mailing address is

5150 North Loop 1604 West
San Antonio, Texas 78249

is authorized to treat and discharge wastes from the Eagle Pass Mine, a sub-bituminous coal mine (SIC 1221)

located on the northeast side of State Highway 1588, three miles northeast of U.S. Highway 277, and approximately five miles northeast of the City of Eagle Pass, Maverick County, Texas

to unnamed ditches; thence to Elm Creek; thence to the Rio Grande Below Amistad Reservoir in Segment No. 2304 of the Rio Grande Basin

only according to effluent limitations, monitoring requirements and other conditions set forth in this permit, as well as the rules of the Texas Commission on Environmental Quality (TCEQ), the laws of the State of Texas, and other orders of the TCEQ. The issuance of this permit does not grant to the permittee the right to use private or public property for conveyance of wastewater along the discharge route described in this permit. This includes, but is not limited to, property belonging to any individual, partnership, corporation, or other entity. Neither does this permit authorize any invasion of personal rights nor any violation of federal, state, or local laws or regulations. It is the responsibility of the permittee to acquire property rights as may be necessary to use the discharge route.

This permit shall expire at midnight on September 1, 2015.

ISSUED DATE: NOV 07 2011

A handwritten signature in black ink that reads "Bryan W. Shaw".

For the Commission

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Outfall Numbers 001 through 013

1. During the period beginning upon the date of issuance and lasting through the date of expiration, the permittee is authorized to discharge storm water and mine seepage from the active mining area (*1) subject to the following effluent limitations:

Volume: ~~Intermittent~~ and flow variable

Effluent Characteristics	Discharge Limitations		Minimum Self-Monitoring Requirements	
	Daily Average mg/l	Daily Maximum mg/l	Single Grab mg/l	Report Daily Average and Daily Maximum Measurement Frequency
Flow (MGD)	(Report MGD)	(Report MGD)	N/A	1/week (*2)
Total Suspended Solids (TSS)	35	70	70	1/week (*2)
Total Iron	3.0	6.0	6.0	1/week (*2)
Total Manganese	2.0	4.0	4.0	1/week (*2)
Total Selenium	N/A	0.036	0.036	1/month (*2)
				Sample Type
				Estimate
				Grab

(*1) See Other Requirement No. 2.

(*2) When discharge occurs.

2. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 1/week (*2) by grab sample.
3. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.
4. Effluent monitoring samples shall be taken at the following locations: At Outfalls 001 through 013, at the spillway retention pond associated with each outfall (see Other Requirement No. 3), and prior to mixing with any other waters.

DEFINITIONS AND STANDARD PERMIT CONDITIONS

As required by Title 30 Texas Administrative Code (TAC) Chapter 305, certain regulations appear as standard conditions in waste discharge permits. 30 TAC §§305.121 - 305.129 (relating to Permit Characteristics and Conditions) as promulgated under the Texas Water Code (TWC) §§5.103 and 5.105, and the Texas Health and Safety Code (THSC) §§361.017 and 361.024(a), establish the characteristics and standards for waste discharge permits, including sewage sludge, and those sections of 40 Code of Federal Regulations (CFR) Part 122 adopted by reference by the Commission. The following text includes these conditions and incorporates them into this permit. All definitions in Texas Water Code §26.001 and 30 TAC Chapter 305 shall apply to this permit and are incorporated by reference. Some specific definitions of words or phrases used in this permit are as follows:

1. Flow Measurements

- a. Annual average flow - the arithmetic average of all daily flow determinations taken within the preceding 12 consecutive calendar months. The annual average flow determination shall consist of daily flow volume determinations made by a totalizing meter, charted on a chart recorder, and limited to major domestic wastewater discharge facilities with a one million gallons per day or greater permitted flow.
- b. Daily average flow - the arithmetic average of all determinations of the daily flow within a period of one calendar month. The daily average flow determination shall consist of determinations made on at least four separate days. If instantaneous measurements are used to determine the daily flow, the determination shall be the arithmetic average of all instantaneous measurements taken during that month. Daily average flow determination for intermittent discharges shall consist of a minimum of three flow determinations on days of discharge.
- c. Daily maximum flow - the highest total flow for any 24-hour period in a calendar month.
- d. Instantaneous flow - the measured flow during the minimum time required to interpret the flow measuring device.
- e. 2-hour peak flow (domestic wastewater treatment plants) - the maximum flow sustained for a two-hour period during the period of daily discharge. The average of multiple measurements of instantaneous maximum flow within a two-hour period may be used to calculate the 2-hour peak flow.
- f. Maximum 2-hour peak flow (domestic wastewater treatment plants) - the highest 2-hour peak flow for any 24-hour period in a calendar month.

2. Concentration Measurements

- a. Daily average concentration - the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar month, consisting of at least four separate representative measurements.
 - i. For domestic wastewater treatment plants - When four samples are not available in a calendar month, the arithmetic average (weighted by flow) of all values in the previous four consecutive month period consisting of at least four measurements shall be utilized as the daily average concentration.
 - ii. For all other wastewater treatment plants - When four samples are not available in a calendar month, the arithmetic average (weighted by flow) of all values taken during the month shall be utilized as the daily average concentration.
- b. 7-day average concentration - the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar week, Sunday through Saturday.
- c. Daily maximum concentration - the maximum concentration measured on a single day, by the sample type specified in the permit, within a period of one calendar month.
- d. Daily discharge - the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in terms of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the sampling day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the sampling day.

The "daily discharge" determination of concentration made using a composite sample shall be the concentration of the composite sample. When grab samples are used, the "daily discharge" determination of concentration shall be the arithmetic average (weighted by flow value) of all samples collected during that day.

- e. Bacteria concentration (Fecal coliform, *E. coli*, or Enterococci) - the number of colonies of bacteria per 100 milliliters effluent. The daily average bacteria concentration is a geometric mean of the values for the effluent samples collected in a calendar month.

The geometric mean shall be determined by calculating the nth root of the product of all measurements made in a calendar month, where n equals the number of measurements made; or computed as the antilogarithm of the arithmetic mean of the logarithms of all measurements of made in a calendar month. For any measurement of bacteria equaling zero, a substitute value of one shall be made for input into either computation method. If specified, the 7-day average for bacteria is the geometric mean of the values for all effluent samples collected during a calendar week.

- f. Daily average loading (lbs/day) - the arithmetic average of all daily discharge loading calculations during a period of one calendar month. These calculations must be made for each day of the month that a parameter is analyzed. The daily discharge, in terms of mass (lbs/day), is calculated as (Flow, MGD x Concentration, mg/l x 8.34).
 - g. Daily maximum loading (lbs/day) - the highest daily discharge, in terms of mass (lbs/day), within a period of one calendar month.
3. Sample Type
- a. Composite sample - For domestic wastewater, a composite sample is a sample made up of a minimum of three effluent portions collected in a continuous 24-hour period or during the period of daily discharge if less than 24 hours, and combined in volumes proportional to flow, and collected at the intervals required by 30 TAC §319.9 (a). For industrial wastewater, a composite sample is a sample made up of a minimum of three effluent portions collected in a continuous 24-hour period or during the period of daily discharge if less than 24 hours, and combined in volumes proportional to flow, and collected at the intervals required by 30 TAC §319.9 (b).
 - b. Grab sample - an individual sample collected in less than 15 minutes.
4. Treatment Facility (facility) - wastewater facilities used in the conveyance, storage, treatment, recycling, reclamation and/or disposal of domestic sewage, industrial wastes, agricultural wastes, recreational wastes, or other wastes including sludge handling or disposal facilities under the jurisdiction of the Commission.
5. The term "sewage sludge" is defined as solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in 30 TAC Chapter 312. This includes the solids that have not been classified as hazardous waste separated from wastewater by unit processes .
6. Bypass - the intentional diversion of a waste stream from any portion of a treatment facility.

MONITORING AND REPORTING REQUIREMENTS

1. Self-Reporting

Monitoring results shall be provided at the intervals specified in the permit. Unless otherwise specified in this permit or otherwise ordered by the Commission, the permittee shall conduct effluent sampling and reporting in accordance with 30 TAC §§319.4 - 319.12. Unless otherwise specified, a monthly effluent report shall be submitted each month, to the Enforcement Division (MC 224), by the 20th day of the following month for each discharge that is described by this permit whether or not a discharge is made for that month. Monitoring results must be reported on an approved self-report form that is signed and certified as required by Monitoring and Reporting Requirements No. 10.

As provided by state law, the permittee is subject to administrative, civil and criminal penalties, as applicable, for negligently or knowingly violating the Clean Water Act; TCW Chapters 26, 27, and 28; and THSC Chapter 361, including but not limited to knowingly making any false statement, representation, or certification on any report, record, or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance, or falsifying, tampering with or knowingly rendering inaccurate any monitoring device or method required by this permit or violating any other requirement imposed by state or federal regulations.

2. Test Procedures

- a. Unless otherwise specified in this permit, test procedures for the analysis of pollutants shall comply with procedures specified in 30 TAC §§319.11 - 319.12. Measurements, tests, and calculations shall be accurately accomplished in a representative manner.
- b. All laboratory tests submitted to demonstrate compliance with this permit must meet the requirements of 30 TAC Chapter 25, Environmental Testing Laboratory Accreditation and Certification.

3. Records of Results

- a. Monitoring samples and measurements shall be taken at times and in a manner so as to be representative of the monitored activity.

- b. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR Part 503), monitoring and reporting records, including strip charts and records of calibration and maintenance, copies of all records required by this permit, records of all data used to complete the application for this permit, and the certification required by 40 CFR §264.73(b)(9) shall be retained at the facility site, or shall be readily available for review by a TCEQ representative for a period of three years from the date of the record or sample, measurement, report, application or certification. This period shall be extended at the request of the Executive Director.
- c. Records of monitoring activities shall include the following:
 - i. date, time, and place of sample or measurement;
 - ii. identity of individual who collected the sample or made the measurement.
 - iii. date and time of analysis;
 - iv. identity of the individual and laboratory who performed the analysis;
 - v. the technique or method of analysis; and
 - vi. the results of the analysis or measurement and quality assurance/quality control records.

The period during which records are required to be kept shall be automatically extended to the date of the final disposition of any administrative or judicial enforcement action that may be instituted against the permittee.

4. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit using approved analytical methods as specified above, all results of such monitoring shall be included in the calculation and reporting of the values submitted on the approved self-report form. Increased frequency of sampling shall be indicated on the self-report form.

5. Calibration of Instruments

All automatic flow measuring or recording devices and all totalizing meters for measuring flows shall be accurately calibrated by a trained person at plant start-up and as often thereafter as necessary to ensure accuracy, but not less often than annually unless authorized by the Executive Director for a longer period. Such person shall verify in writing that the device is operating properly and giving accurate results. Copies of the verification shall be retained at the facility site and/or shall be readily available for review by a TCEQ representative for a period of three years.

6. Compliance Schedule Reports

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of the permit shall be submitted no later than 14 days following each schedule date to the Regional Office and the Enforcement Division (MC 224).

7. Noncompliance Notification

- a. In accordance with 30 TAC §305.125(9) any noncompliance that may endanger human health or safety, or the environment shall be reported by the permittee to the TCEQ. Report of such information shall be provided orally or by facsimile transmission (FAX) to the Regional Office within 24 hours of becoming aware of the noncompliance. A written submission of such information shall also be provided by the permittee to the Regional Office and the Enforcement Division (MC 224) within five working days of becoming aware of the noncompliance. The written submission shall contain a description of the noncompliance and its cause; the potential danger to human health or safety, or the environment; the period of noncompliance, including exact dates and times; if the noncompliance has not been corrected, the time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance, and to mitigate its adverse effects.
- b. The following violations shall be reported under Monitoring and Reporting Requirement 7.a.:
 - i. Unauthorized discharges as defined in Permit Condition 2(g).
 - ii. Any unanticipated bypass that exceeds any effluent limitation in the permit.
 - iii. Violation of a permitted maximum daily discharge limitation for pollutants listed specifically in the Other Requirements section of an Industrial TPDES permit.
- c. In addition to the above, any effluent violation that deviates from the permitted effluent limitation by more than 40% shall be reported by the permittee in writing to the Regional Office and the Enforcement Division (MC 224) within 5 working days of becoming aware of the noncompliance.

- d. Any noncompliance other than that specified in this section, or any required information not submitted or submitted incorrectly, shall be reported to the Enforcement Division (MC 224) as promptly as possible. For effluent limitation violations, noncompliances shall be reported on the approved self-report form.
8. In accordance with the procedures described in 30 TAC §§35.301 - 35.303 (relating to Water Quality Emergency and Temporary Orders) if the permittee knows in advance of the need for a bypass, it shall submit prior notice by applying for such authorization.
9. Changes in Discharges of Toxic Substances

All existing manufacturing, commercial, mining, and silvicultural permittees shall notify the Regional Office, orally or by facsimile transmission within 24 hours, and both the Regional Office and the Enforcement Division (MC 224) in writing within five (5) working days, after becoming aware of or having reason to believe:

- a. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant listed at 40 CFR Part 122, Appendix D, Tables II and III (excluding Total Phenols) that is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - i. One hundred micrograms per liter (100 µg/L);
 - ii. Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - iii. Five (5) times the maximum concentration value reported for that pollutant in the permit application; or
 - iv. The level established by the TCEQ.
- b. That any activity has occurred or will occur that would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant that is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - i. Five hundred micrograms per liter (500 µg/L);
 - ii. One milligram per liter (1 mg/L) for antimony;
 - iii. Ten (10) times the maximum concentration value reported for that pollutant in the permit application; or
 - iv. The level established by the TCEQ.

10. Signatories to Reports

All reports and other information requested by the Executive Director shall be signed by the person and in the manner required by 30 TAC §305.128 (relating to Signatories to Reports).

11. All Publicly Owned Treatment Works (POTWs) must provide adequate notice to the Executive Director of the following:
 - a. Any new introduction of pollutants into the POTW from an indirect discharger that would be subject to CWA §301 or §306 if it were directly discharging those pollutants;
 - b. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit; and
 - c. For the purpose of this paragraph, adequate notice shall include information on:
 - i. The quality and quantity of effluent introduced into the POTW; and
 - ii. Any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

PERMIT CONDITIONS

I. General

- a. When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in an application or in any report to the Executive Director, it shall promptly submit such facts or information.
- b. This permit is granted on the basis of the information supplied and representations made by the permittee during action on an application, and relying upon the accuracy and completeness of that information and those representations. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked, in whole or in part, in accordance with 30 TAC Chapter 305, Subchapter D, during its term for good cause including, but not limited to, the following:

- i. Violation of any terms or conditions of this permit;
 - ii. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
 - iii. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
 - c. The permittee shall furnish to the Executive Director, upon request and within a reasonable time, any information to determine whether cause exists for amending, revoking, suspending, or terminating the permit. The permittee shall also furnish to the Executive Director, upon request, copies of records required to be kept by the permit.
2. Compliance
 - a. Acceptance of the permit by the person to whom it is issued constitutes acknowledgment and agreement that such person will comply with all the terms and conditions embodied in the permit, and the rules and other orders of the Commission.
 - b. The permittee has a duty to comply with all conditions of the permit. Failure to comply with any permit condition constitutes a violation of the permit and the Texas Water Code or the Texas Health and Safety Code, and is grounds for enforcement action, for permit amendment, revocation, or suspension, or for denial of a permit renewal application or an application for a permit for another facility.
 - c. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.
 - d. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal or other permit violation that has a reasonable likelihood of adversely affecting human health or the environment.
 - e. Authorization from the Commission is required before beginning any change in the permitted facility or activity that may result in noncompliance with any permit requirements.
 - f. A permit may be amended, suspended and reissued, or revoked for cause in accordance with 30 TAC §§305.62 and 305.66 and TWC §7.302. The filing of a request by the permittee for a permit amendment, suspension and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
 - g. There shall be no unauthorized discharge of wastewater or any other waste. For the purpose of this permit, an unauthorized discharge is considered to be any discharge of wastewater into or adjacent to water in the state at any location not permitted as an outfall or otherwise defined in the Other Requirements section of this permit.
 - h. In accordance with 30 TAC §305.535(a), the permittee may allow any bypass to occur from a TPDES permitted facility that does not cause permitted effluent limitations to be exceeded or an unauthorized discharge to occur, but only if the bypass is also for essential maintenance to assure efficient operation.
 - i. The permittee is subject to administrative, civil, and criminal penalties, as applicable, under Texas Water Code §§7.051 - 7.075 (relating to Administrative Penalties), 7.101 - 7.111 (relating to Civil Penalties), and 7.141 - 7.202 (relating to Criminal Offenses and Penalties) for violations including, but not limited to, negligently or knowingly violating the federal CWA §§301, 302, 306, 307, 308, 318, or 405, or any condition or limitation implementing any sections in a permit issued under the CWA § 402, or any requirement imposed in a pretreatment program approved under the CWA §§402 (a)(3) or 402 (b)(8).
3. Inspections and Entry
 - a. Inspection and entry shall be allowed as prescribed in the TWC Chapters 26, 27, and 28, and THSC Chapter 361.
 - b. The members of the Commission and employees and agents of the Commission are entitled to enter any public or private property at any reasonable time for the purpose of inspecting and investigating conditions relating to the quality of water in the state or the compliance with any rule, regulation, permit, or other order of the Commission. Members, employees, or agents of the Commission and Commission contractors are entitled to enter public or private property at any reasonable time to investigate or monitor or, if the responsible party is not responsive or there is an immediate danger to public health or the environment, to remove or remediate a condition related to the quality of water in the state. Members, employees, Commission contractors, or agents acting under this authority who enter private property shall observe the establishment's rules and regulations concerning safety, internal security, and fire protection, and if the property has management in residence, shall notify management or the person then in charge of his presence and shall exhibit proper credentials. If any member, employee, Commission contractor, or agent is refused the right to enter in or on public or private property under this authority, the Executive Director may invoke the remedies authorized in TWC §7.002.

The statement above, that Commission entry shall occur in accordance with an establishment's rules and regulations concerning safety, internal security, and fire protection, is not grounds for denial or restriction of entry to any part of the facility, but merely describes the Commission's duty to observe appropriate rules and regulations during an inspection.

4. Permit Amendment and/or Renewal

- a. The permittee shall give notice to the Executive Director as soon as possible of any planned physical alterations or additions to the permitted facility if such alterations or additions would require a permit amendment or result in a violation of permit requirements. Notice shall also be required under this paragraph when:
 - i. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in accordance with 30 TAC §305.534 (relating to New Sources and New Dischargers); or
 - ii. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations in the permit, nor to notification requirements in Monitoring and Reporting Requirements No. 9;
 - iii. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.
- b. Prior to any facility modifications, additions, or expansions that will increase the plant capacity beyond the permitted flow, the permittee must apply for and obtain proper authorization from the Commission before commencing construction.
- c. The permittee must apply for an amendment or renewal at least 180 days prior to expiration of the existing permit in order to continue a permitted activity after the expiration date of the permit. If an application is submitted prior to the expiration date of the permit, the existing permit shall remain in effect until the application is approved, denied, or returned. If the application is returned or denied, authorization to continue such activity shall terminate upon the effective date of the action. If an application is not submitted prior to the expiration date of the permit, the permit shall expire and authorization to continue such activity shall terminate.
- d. Prior to accepting or generating wastes that are not described in the permit application or that would result in a significant change in the quantity or quality of the existing discharge, the permittee must report the proposed changes to the Commission. The permittee must apply for a permit amendment reflecting any necessary changes in permit conditions, including effluent limitations for pollutants not identified and limited by this permit.
- e. In accordance with the TWC §26.029(b), after a public hearing, notice of which shall be given to the permittee, the Commission may require the permittee, from time to time, for good cause, in accordance with applicable laws, to conform to new or additional conditions.
- f. If any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under CWA §307(a) for a toxic pollutant that is present in the discharge and that standard or prohibition is more stringent than any limitation on the pollutant in this permit, this permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition. The permittee shall comply with effluent standards or prohibitions established under CWA §307(a) for toxic pollutants within the time provided in the regulations that established those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

5. Permit Transfer

- a. Prior to any transfer of this permit, Commission approval must be obtained. The Commission shall be notified in writing of any change in control or ownership of facilities authorized by this permit. Such notification should be sent to the Applications Review and Processing Team (MC 148) of the Water Quality Division.
- b. A permit may be transferred only according to the provisions of 30 TAC §305.64 (relating to Transfer of Permits) and 30 TAC §50.133 (relating to Executive Director Action on Application or WQMP update).

6. Relationship to Hazardous Waste Activities

This permit does not authorize any activity of hazardous waste storage, processing, or disposal that requires a permit or other authorization pursuant to the Texas Health and Safety Code.

7. Relationship to Water Rights

Disposal of treated effluent by any means other than discharge directly to water in the state must be specifically authorized in this permit and may require a permit pursuant to Texas Water Code Chapter 11.

8. Property Rights

A permit does not convey any property rights of any sort, or any exclusive privilege.

9. Permit Enforceability

The conditions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

10. Relationship to Permit Application

The application pursuant to which the permit has been issued is incorporated herein; provided, however, that in the event of a conflict between the provisions of this permit and the application, the provisions of the permit shall control.

11. Notice of Bankruptcy.

- a. Each permittee shall notify the executive director, in writing, immediately following the filing of a voluntary or involuntary petition for bankruptcy under any chapter of Title 11 (Bankruptcy) of the United States Code (11 USC) by or against:
 - i. the permittee;
 - ii. an entity (as that term is defined in 11 USC, §101(15)) controlling the permittee or listing the permit or permittee as property of the estate; or
 - iii. an affiliate (as that term is defined in 11 USC, §101(2)) of the permittee.
- b. This notification must indicate:
 - i. the name of the permittee;
 - ii. the permit number(s);
 - iii. the bankruptcy court in which the petition for bankruptcy was filed; and
 - iv. the date of filing of the petition.

OPERATIONAL REQUIREMENTS

1. The permittee shall at all times ensure that the facility and all of its systems of collection, treatment, and disposal are properly operated and maintained. This includes, but is not limited to, the regular, periodic examination of wastewater solids within the treatment plant by the operator in order to maintain an appropriate quantity and quality of solids inventory as described in the various operator training manuals and according to accepted industry standards for process control. Process control, maintenance, and operations records shall be retained at the facility site, or shall be readily available for review by a TCEQ representative, for a period of three years.
2. Upon request by the Executive Director, the permittee shall take appropriate samples and provide proper analysis in order to demonstrate compliance with Commission rules. Unless otherwise specified in this permit or otherwise ordered by the Commission, the permittee shall comply with all applicable provisions of 30 TAC Chapter 312 concerning sewage sludge use and disposal and 30 TAC §§319.21 - 319.29 concerning the discharge of certain hazardous metals.
3. Domestic wastewater treatment facilities shall comply with the following provisions:
 - a. The permittee shall notify the Municipal Permits Team, Wastewater Permitting Section (MC 148) of the Water Quality Division, in writing, of any facility expansion at least 90 days prior to conducting such activity.
 - b. The permittee shall submit a closure plan for review and approval to the Municipal Permits Team, Wastewater Permitting Section (MC 148) of the Water Quality Division, for any closure activity at least 90 days prior to conducting such activity. Closure is the act of permanently taking a waste management unit or treatment facility out of service and includes the permanent removal from service of any pit, tank, pond, lagoon, surface impoundment and/or other treatment unit regulated by this permit.
4. The permittee is responsible for installing prior to plant start-up, and subsequently maintaining, adequate safeguards to prevent the discharge of untreated or inadequately treated wastes during electrical power failures by means of alternate power sources, standby generators, and/or retention of inadequately treated wastewater.

5. Unless otherwise specified, the permittee shall provide a readily accessible sampling point and, where applicable, an effluent flow measuring device or other acceptable means by which effluent flow may be determined.
6. The permittee shall remit an annual water quality fee to the Commission as required by 30 TAC Chapter 21. Failure to pay the fee may result in revocation of this permit under TWC §7.302(b)(6).

7. Documentation

For all written notifications to the Commission required of the permittee by this permit, the permittee shall keep and make available a copy of each such notification under the same conditions as self-monitoring data are required to be kept and made available. Except for information required for TPDES permit applications, effluent data, including effluent data in permits, draft permits and permit applications, and other information specified as not confidential in 30 TAC §1.5(d), any information submitted pursuant to this permit may be claimed as confidential by the submitter. Any such claim must be asserted in the manner prescribed in the application form or by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, information may be made available to the public without further notice. If the Commission or Executive Director agrees with the designation of confidentiality, the TCEQ will not provide the information for public inspection unless required by the Texas Attorney General or a court pursuant to an open records request. If the Executive Director does not agree with the designation of confidentiality, the person submitting the information will be notified.

8. Facilities that generate domestic wastewater shall comply with the following provisions; domestic wastewater treatment facilities at permitted industrial sites are excluded.
 - a. Whenever flow measurements for any domestic sewage treatment facility reach 75% of the permitted daily average or annual average flow for three consecutive months, the permittee must initiate engineering and financial planning for expansion and/or upgrading of the domestic wastewater treatment and/or collection facilities. Whenever the flow reaches 90% of the permitted daily average or annual average flow for three consecutive months, the permittee shall obtain necessary authorization from the Commission to commence construction of the necessary additional treatment and/or collection facilities. In the case of a domestic wastewater treatment facility that reaches 75% of the permitted daily average or annual average flow for three consecutive months, and the planned population to be served or the quantity of waste produced is not expected to exceed the design limitations of the treatment facility, the permittee shall submit an engineering report supporting this claim to the Executive Director of the Commission.

If in the judgment of the Executive Director the population to be served will not cause permit noncompliance, then the requirement of this section may be waived. To be effective, any waiver must be in writing and signed by the Director of the Enforcement Division (MC 149) of the Commission, and such waiver of these requirements will be reviewed upon expiration of the existing permit; however, any such waiver shall not be interpreted as condoning or excusing any violation of any permit parameter.

- b. The plans and specifications for domestic sewage collection and treatment works associated with any domestic permit must be approved by the Commission, and failure to secure approval before commencing construction of such works or making a discharge is a violation of this permit and each day is an additional violation until approval has been secured.
 - c. Permits for domestic wastewater treatment plants are granted subject to the policy of the Commission to encourage the development of area-wide waste collection, treatment, and disposal systems. The Commission reserves the right to amend any domestic wastewater permit in accordance with applicable procedural requirements to require the system covered by this permit to be integrated into an area-wide system, should such be developed; to require the delivery of the wastes authorized to be collected in, treated by or discharged from said system, to such area-wide system; or to amend this permit in any other particular to effectuate the Commission's policy. Such amendments may be made when the changes required are advisable for water quality control purposes and are feasible on the basis of waste treatment technology, engineering, financial, and related considerations existing at the time the changes are required, exclusive of the loss of investment in or revenues from any then existing or proposed waste collection, treatment or disposal system.
9. Domestic wastewater treatment plants shall be operated and maintained by sewage plant operators holding a valid certificate of competency at the required level as defined in 30 TAC Chapter 30.
10. For Publicly Owned Treatment Works (POTWs), the 30-day average (or monthly average) percent removal for BOD and TSS shall not be less than 85%, unless otherwise authorized by this permit.

11. Facilities that generate industrial solid waste as defined in 30 TAC §335.1 shall comply with these provisions:
- a. Any solid waste, as defined in 30 TAC §335.1 (including but not limited to such wastes as garbage, refuse, sludge from a waste treatment, water supply treatment plant or air pollution control facility, discarded materials, discarded materials to be recycled, whether the waste is solid, liquid, or semisolid), generated by the permittee during the management and treatment of wastewater, must be managed in accordance with all applicable provisions of 30 TAC Chapter 335, relating to Industrial Solid Waste Management.
 - b. Industrial wastewater that is being collected, accumulated, stored, or processed before discharge through any final discharge outfall, specified by this permit, is considered to be industrial solid waste until the wastewater passes through the actual point source discharge and must be managed in accordance with all applicable provisions of 30 TAC Chapter 335.
 - c. The permittee shall provide written notification, pursuant to the requirements of 30 TAC §335.8(b)(1), to the Corrective Action Section (MC 127) of the Remediation Division informing the Commission of any closure activity involving an Industrial Solid Waste Management Unit, at least 90 days prior to conducting such an activity.
 - d. Construction of any industrial solid waste management unit requires the prior written notification of the proposed activity to the Registration and Reporting Section (MC 129) of the Permitting and Remediation Support Division. No person shall dispose of industrial solid waste, including sludge or other solids from wastewater treatment processes, prior to fulfilling the deed recordation requirements of 30 TAC §335.5.
 - e. The term "industrial solid waste management unit" means a landfill, surface impoundment, waste-pile, industrial furnace, incinerator, cement kiln, injection well, container, drum, salt dome waste containment cavern, or any other structure vessel, appurtenance, or other improvement on land used to manage industrial solid waste.
 - f. The permittee shall keep management records for all sludge (or other waste) removed from any wastewater treatment process. These records shall fulfill all applicable requirements of 30 TAC Chapter 335 and must include the following, as it pertains to wastewater treatment and discharge:
 - i. Volume of waste and date(s) generated from treatment process;
 - ii. Volume of waste disposed of on-site or shipped off-site;
 - iii. Date(s) of disposal;
 - iv. Identity of hauler or transporter;
 - v. Location of disposal site; and
 - vi. Method of final disposal.
- The above records shall be maintained on a monthly basis. The records shall be retained at the facility site, or shall be readily available for review by authorized representatives of the TCEQ for at least five years.
12. For industrial facilities to which the requirements of 30 TAC Chapter 335 do not apply, sludge and solid wastes, including tank cleaning and contaminated solids for disposal, shall be disposed of in accordance with THSC Code Chapter 361.

TCEQ Revision 08/2008

OTHER REQUIREMENTS

1. Violations of daily maximum limitations for the following pollutants shall be reported orally or by facsimile to TCEQ Region 16, within 24 hours from the time the permittee becomes aware of the violation followed by a written report within five working days to Texas Commission on Environmental Quality (TCEQ) Region 16 and the Enforcement Division (MC 224).

<u>POLLUTANT</u>	<u>MAL (mg/l)</u>
Iron, total	1.0
Manganese, total	1.0
Selenium, total	0.010

Test methods utilized shall be sensitive enough to demonstrate compliance with the permit effluent limitations. Permit compliance/noncompliance determinations will be based on the effluent limitations contained in this permit with consideration given to the minimum analytical level (MAL) for the parameters specified above.

When an analysis of an effluent sample for any of the parameters listed above indicates no detectable levels above the MAL and the test method detection level is as sensitive as the specified MAL, a value of zero (0) shall be used for that measurement when determining calculations and reporting requirements for the self-reporting form. This applies to determinations of daily maximum concentration, calculations of loading and daily averages, and other reportable results.

When a reported value is zero (0) based on this MAL provision, the permittee shall submit the following statement with the self-reporting form either as a separate attachment to the form or as a statement in the comments section of the form.

"The reported value(s) of zero (0) for _____ [list parameter(s)] _____ on the self-reporting form for [monitoring period date range] _____ is based on the following conditions: 1) the analytical method used had a method detection level as sensitive as the MAL specified in the permit, and 2) the analytical results contained no detectable levels above the specified MAL."

When an analysis of an effluent sample for a parameter indicates no detectable levels and the test method detection level is not as sensitive as the MAL specified in the permit, or an MAL is not specified in the permit for that parameter, the level of detection achieved shall be used for that measurement when determining calculations and reporting requirements for the self-reporting form. A zero (0) may not be used.

2. Active Mining Area:
 - A. The term "active mining area" is defined as the areas, on and beneath land, used or disturbed in activity related to the extraction, removal or recovery of coal from its natural deposits. This term excludes coal preparation plants, coal preparation plant associated areas and post-mining areas.
 - B. All discharges from all retention ponds shall comply with the limitations for hazardous metals as regulated under the TCEQ, Permanent Rule, Title 30 Texas Administrative Code (TAC) Chapter 319, Subchapter B, 319.21 - 319.29, "Hazardous Metals".
 - C. All retention ponds shall be constructed prior to disturbing the natural soils in preparation of any mining activity. Upon initiation of any mining related activity in the watershed of any particular pond, the permittee shall notify the TCEQ, Industrial Permits Team, Wastewater Permitting Section (MC-148) and the Regional Office. A record of the design dimensions, construction information, the pond drainage area and a map, sketch or drawing showing the location of each pond shall be maintained at the site and shall be readily available for inspection by authorized representatives of the permitting authority.

- D. Discharges from the retention ponds shall be monitored in accordance with this permit from the time the natural soils are disturbed until reclamation of the disturbed soils is complete and until the performance bond (Phase Two) issued by the appropriate authority has been released. At least 10 days prior to any such action, the TCEQ, Industrial Permits Team, Wastewater Permitting Section (MC-148) and the Regional Office shall be notified in writing of the permittee's intent to close any retention pond or to discontinue monitoring.
- E. For discharges from "active mining area" ponds that do not contain mine pit water (or water that has contacted acid forming or toxic forming spoil) the following effluent limitations shall apply, and shall replace the effluent limitations listed on page 2 of this permit.

Any discharge caused by a precipitation within any 24-hour period less than or equal to the 10-year, 24-hour precipitation event, or snowmelt of equivalent volume shall comply with the following limitations:

EFFLUENT LIMITATIONS DURING PRECIPITATIONS:

Pollutant or Pollutant Property	<u>Maximum for any 1 Day</u>
Settleable Solids*	0.5 ml/l
pH - within the range of 6.0 to 9.0 at all times.	

* These limits do not apply when the discharge is caused by a precipitation event greater than the 10-year/24-hour precipitation event.

- F. The term "10-year, 24-hour rainfall event" shall mean a rainfall event with the probable recurrence interval of once in ten years as defined by the National Weather Service in Technical Paper No. 40, "Rainfall Frequency Atlas of the United States," May 1961, and subsequent amendments, or equivalent regional or state rainfall probability information developed therefrom.
3. Samples shall be collected at each outfall, when discharge occurs. The sampling location for each outfall is at the spillway of the retention pond associated with that outfall, and prior to mixing with any other waters. The outfalls, associated pond numbers, and discharge routes are as follows:

Permitted Outfall & Pond ID	Facility Pond ID	Discharge Route
001	SP-6	From the spillway on the south side of the pond to Elm Creek;
002	TBD*	From the spillway on the southwest side of the pond to a ditch, thence to Elm Creek;
003	Int Pond 003; SP-2	From the spillway on the southwest corner of the pond into a ditch, thence to Elm Creek;
004	SP-1	From the spillway on the southwest corner of the pond to a ditch, thence to Elm Creek;
005	TBD*	From the spillway on the east side of the pond to a ditch, thence to a culvert, thence to Elm Creek;
006	SP-7	From the spillway on the southwest corner of the pond to a tributary, thence to Elm Creek;
007	SP-5	From the spillway on the southeast corner of the pond to Elm Creek;
008	SP-3	From the spillway on the southeast corner of the pond to Elm Creek;
009	TBD*	From the spillway on the west side of the pond to a ditch, thence to Elm Creek;
010	TBD*	From the spillway on the west side of the pond to a ditch, thence to Elm Creek;

Permitted Outfall & Pond ID	Facility Pond ID	Discharge Route
011	TBD*	From the spillway on the north side of the pond to a series of ditches, thence to Elm Creek;
012	TBD*	From the spillway on the south side of the pond to a ditch, thence to Elm Creek;
013	TBD*	From the spillway on the south side of the pond to a ditch, thence to Elm Creek.

TBD* means "to be determined." The Pond ID will be determined upon final design; revisions will be made pursuant Other Requirement No. 4 of this permit.

4. The permittee shall maintain a map at the mine site which shows the location of all ponds and discharge routes. The map and pond list shall be available to authorized TCEQ personnel. The permittee may revise the pond location map. Upon revision, the permittee shall submit revised maps to the TCEQ Wastewater Permitting Section (MC-148), and to the Region 16 Office.
5. Post Mining Areas:
 - A. The term "Post mining area" is defined as a reclamation area; or the underground workings of an underground coal mine after the extraction, removal, or recovery of coal from its natural deposit has ceased and prior to bond release.
 - B. The term "Reclamation area" is defined as the surface area of a coal mine which has been returned to required contour and on which revegetation (specifically, seeding or planting) work has commenced.
 - C. The term "Bond release" is defined as the time at which the appropriate regulatory authority returns a reclamation or performance bond based upon its determination that reclamation work (including, in the case of underground mines, mine sealing and abandonment procedures) has been satisfactorily completed. Phase Two completion is that point in the reclamation process where the property has been recontoured and replanted but prior to final bond release.
 - D. Discharges from post mining areas are not authorized under this permit. The permittee shall obtain a permit amendment prior to initiation of any discharge from post mining areas.
6. This permit does not authorize the discharge of storm water from construction activities. The permittee shall obtain all necessary permits, including coverage under the Texas Pollutant Discharge Elimination System (TPDES) Construction General Permit No. TXR150000, or most recent construction storm water general permit as applicable, prior to initiating any storm water discharge from construction at the site.
7. The permittee shall provide to the TCEQ Wastewater Permitting Section (MC-148) copies of all surface and groundwater quality monitoring results that it is required to send to the Railroad Commission of Texas (RCT) pursuant to its RCT mining and reclamation permit.
8. This permit does not authorize the disposal of domestic sewage. Domestic sewage shall be routed to a septic tank/drainfield system.
9. The permittee shall notify the TCEQ Region 16 office as each discharge point is developed.
10. The permittee shall notify the Executive Director of the TCEQ at least 90 days prior to conducting any activity of closure of any pit, pond, lagoon, or surface impoundment regulated by this permit.

11. Discharges from the retention ponds shall be monitored in accordance with the requirements of this permit from the time the overburden removal begins until reclamation of the disturbed soils is complete and the performance bond issued by the appropriate authority has been released. At least 10 days prior to such action, the permittee shall notify TCEQ Region 16 office and the TCEQ Wastewater Permitting Section (MC-148) in writing of its intent to close any retention pond or discontinue monitoring.
12. The Attached Effluent Data Table 1 shall be completed with the analytical results for each Outfall 001 through 013, when discharge occurs, and sent to the TCEQ, Wastewater Permitting Section (MC-148), within 90 days following the completion of the fourth discharge sampling event for any of the applicable outfalls. Sample collection and test methods shall be in accordance with the instructions for *Completing the Industrial Wastewater Permit Application Worksheet 2.0 - Pollutant Analyses Requirements*. Based on a technical review of the submitted analytical results, an amendment may be initiated by TCEQ staff to include additional effluent limitations and/or monitoring requirements.
13. Reporting requirements pursuant to 30 TAC Sections 319.1-319.11 and any additional effluent reporting requirements contained in the permit are suspended from the effective date of the permit until facility start-up or discharge, whichever comes first, from the facility areas and applicable outfalls described by this permit. The permittee shall provide written notice to the TCEQ Regional Office (MC R 16) and the Applications Review and Processing Team (MC 148) of the Water Quality Division at least forty-five (45) days prior to facility area start-up or applicable outfall anticipated discharges, whichever occurs first and prior to completion of each additional phase on Notification of Completion Form 20007.
14. The permittee is hereby placed on notice that this permit may be reviewed by the TCEQ after the completion of any new intensive water quality survey on Segment No. 2304 of the Rio Grande Basin and any subsequent updating of the water quality model for Segment No. 2304 in order to determine if the limitations and conditions contained herein are consistent with any such revised model. The permit may be amended, pursuant to 30 TAC Sections 305.62, as a result of such review.

**ATTACHMENT
TABLE 1**

Outfall No.	<input type="checkbox"/> C <input type="checkbox"/> G	Effluent Concentration (mg/l)					
Pollutants		Samp. 1	Samp. 2	Samp. 3	Samp. 4	Average	
BOD (5-day)							
CBOD (5-day)							
Chemical Oxygen Demand							
Total Organic Carbon							
Ammonia Nitrogen							
Total Suspended Solids							
Nitrate Nitrogen							
Total Organic Nitrogen							
Total Phosphorus							
Oil and Grease							
Total Residual Chlorine							
Total Dissolved Solids							
Sulfate							
Chloride							
Fluoride							
Fecal Coliform							
Temperature (°F)							
pH (Standard Units; min/max)							
		Effluent Concentration (µg/l)					MAL (µg/l)
Total Aluminum							30
Total Antimony							30
Total Arsenic							10
Total Barium							10
Total Beryllium							5
Total Cadmium							1
Total Chromium							10
Trivalent Chromium							N/A
Hexavalent Chromium							10
Total Copper							10
Cyanide							20
Total Lead							5
Total Mercury							0.2
Total Nickel							10
Total Selenium							10
Total Silver							2.0
Total Thallium							10
Total Zinc							5

United States
Environmental Protection
Agency

Region 6
1445 Ross Avenue
Dallas, TX 75202

January 1995
906/01-95-001



FINAL ENVIRONMENTAL IMPACT STATEMENT

EAGLE PASS MINE
MAVERICK COUNTY, TEXAS





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

DEC 3 0 1994

TO INTERESTED AGENCIES, OFFICIALS, PUBLIC GROUPS AND INDIVIDUALS:

The U.S. Environmental Protection Agency (EPA) has prepared the enclosed Final Environmental Impact Statement (EIS) on Dos Republicas Resources Company, Inc.'s (DRRC) proposed Eagle Pass Mine in Maverick County, Texas. DRRC has applied for a new source National Pollutant Discharge Elimination System (NPDES) permit from the EPA for wastewater discharges from its mining operation. This Final EIS, in conjunction with the Draft EIS, evaluates the potential environmental impacts of EPA's proposed NPDES permit action.

Since the Draft EIS required minor changes, this Final EIS incorporates the Draft EIS by reference and includes: 1) a revised and updated Summary; 2) revisions and additions to the Draft EIS; 3) EPA's responses to written and oral comments received on the Draft EIS; and 4) EPA's preferred alternative.

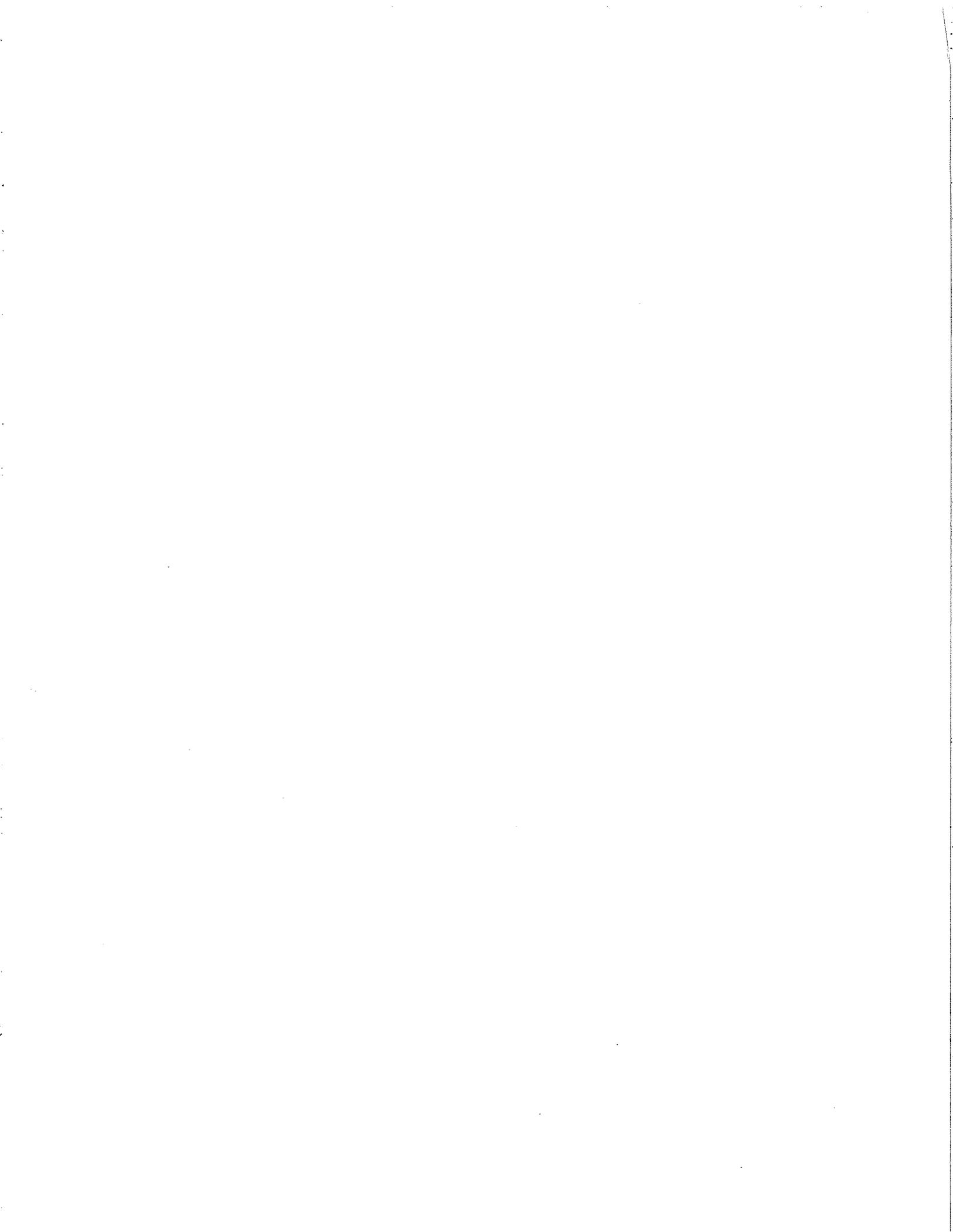
Comments received on the Final EIS will be considered in EPA's final permit decision. Comments on the Final EIS should be submitted to Mr. Norm Thomas, Chief of the Federal Activities Branch, EPA (6E-F), 1445 Ross Avenue, Dallas, Texas 75202-2733; Telephone (214) 665-2260.

Sincerely yours,

A handwritten signature in cursive script that reads "Lynda Carroll".

Lynda Carroll
Acting Regional Administrator

Enclosure



ABSTRACT

FINAL ENVIRONMENTAL IMPACT STATEMENT

EAGLE PASS MINE, TEXAS

RESPONSIBLE AGENCY: U.S. Environmental Protection Agency, Region 6.

ADMINISTRATIVE ACTION: Issuance of a National Pollutant Discharge Elimination System (NPDES) permit to comply with the Clean Water Act, Texas water quality standards and EPA regulations.

EPA CONTACT: Norm Thomas (6E-F)
U.S. Environmental Protection Agency
First Interstate Bank Tower
1445 Ross Avenue
Dallas, Texas 75202-2733

ABSTRACT: This Final EIS, in combination with the Draft EIS, evaluates the individual and cumulative effects of a surface coal mine proposed near Eagle Pass, Texas. Coal would be delivered from the mine, through the cities of Eagle Pass, Texas and Piedras Negras, Mexico, to the Carbón power plants in Mexico, some twenty miles away. Over the nineteen-year mine life, approximately 5900 acres would be disturbed by mining and mine-related activities. The maximum mining depth would be about 120 feet. After mining, the land would be returned to its approximate original contours and reclaimed to conditions productive for wildlife and grazing.

Actual or potential effects of the project include: dust emissions; risks associated with blasting; degradation of surface water quality; alterations in surface water flow and ground water recharge; increased traffic and noise levels; visual and aesthetic changes around the mine and along the rail route; disruption of wildlife habitat (including habitat of endangered species); increased incomes from new jobs, mining leases and royalties; increased tax revenues for local governments; and the potential for improved agricultural productivity after reclamation of the site. Burning of the coal (and other coals) in Mexico will contribute to regional air quality degradation, including reduced visibility at U.S. National Parks and Recreation Areas in the southwest.

COMMENTS ON THE FINAL EIS DUE:

RESPONSIBLE
OFFICIAL:

FEB 20 1995

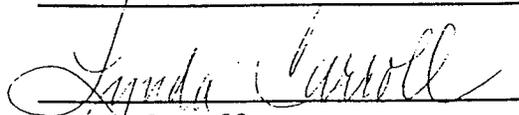

Lynda Carroll
Acting Regional Administrator

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
PART I. <u>SUMMARY OF DRAFT AND FINAL EIS</u>	I - 1
A. Introduction	I - 1
B. Proposed project	I - 2
C. Alternatives	I - 2
D. Environmental impacts, monitoring and mitigation	I - 3
E. Consultation and coordination	I - 3
PART II. <u>CONSULTATION AND COORDINATION</u>	II - 1
A. Public review process	II - 1
B. Comments received on the Draft EIS	II - 2
C. EPA responses to general issues	II - 2
1. Scope of EIS	II - 2
2. Air quality impacts from Carbón I/II	II - 6
3. Endangered species	II - 7
4. Economics	II - 7
5. Mine activities	II - 8
D. Coordination	II -12
PART III. <u>MODIFICATIONS AND CORRECTIONS TO THE DRAFT EIS</u>	III- 1
A. Editorial changes	III- 1
B. Page revisions	III- 6
C. Section revisions	III-13
D. Additional citations	III-30
PART IV. <u>EPA'S PREFERRED ALTERNATIVE</u>	IV - 1
 LIST OF FIGURES	
Figure I-1. Proposed monitoring	I - 5
Figure I-2. Proposed mitigation	I - 6
 LIST OF TABLES	
Table I-1. Summary of environmental consequences	I - 7
Table I-2. Summary of monitoring and mitigation ...	I -12

- APPENDIX A - DRAFT NPDES PERMIT
- APPENDIX B - SUMMARY OF PUBLIC HEARING COMMENTS AND EPA RESPONSES
- APPENDIX C - DRAFT EIS COMMENT LETTERS AND EPA RESPONSES
- APPENDIX D - AGENCY COORDINATION CORRESPONDENCE
- APPENDIX E - SURFACE MINING AND RECLAMATION PERMIT
- APPENDIX F - USFWS' BIOLOGICAL OPINION
- APPENDIX G - PROGRAMMATIC AGREEMENT ON CULTURAL RESOURCES
- APPENDIX H - TNRCC WASTEWATER PERMIT
- APPENDIX I - NALCO DUST-BAN 8801 DATA

PART I
SUMMARY OF DRAFT
AND FINAL EIS



I. SUMMARY

A. INTRODUCTION

Region 6 of the U.S. Environmental Protection Agency (EPA) is considering an application for a new source National Pollutant Discharge Elimination System (NPDES) permit for discharges from the proposed Eagle Pass coal mine in Maverick County, Texas. A draft Environmental Impact Statement (DEIS) was prepared to evaluate the environmental consequences of permit issuance or denial. The DEIS considered not only the initial five-year permit period, but environmental effects throughout the projected nineteen-year life of the mine. The DEIS evaluated both impacts directly related to the mine project and cumulative effects associated with sale of the coal to the Carbón power plants in Mexico. Any permit issued by EPA would be subject to certification by the Texas Natural Resources Conservation Commission.

The DEIS was published in mid-June; the 45-day period for public comment ended August 1, 1994. A public hearing on the DEIS, and on the NPDES permit, was held in Eagle Pass, Texas, on July 20, 1994. This final Environmental Impact Statement (FEIS) summarizes and provides responses to the public comments, and presents EPA's preferred alternative, which is to issue the permit. The FEIS consists of four parts.

- Part I updates the summary of the proposed action, impacts and mitigation measures provided in the DEIS.
- Part II updates the consultation and coordination that has occurred since publication of the DEIS. This section includes a summary of major issues.
- Part III presents changes to the DEIS, including editorial changes, major revisions and new sections.
- Part IV discusses EPA's preferred alternative.

B. PROPOSED PROJECT

The proposed mine would be located about five miles northeast of Eagle Pass, along the valley and adjoining uplands of Elm Creek. Assuming that existing plans are approved and implemented, throughout the nineteen-year mine life four different pits will be active. About 5,900 acres will be disturbed, including 3,611 acres which will be strip-mined and reclaimed through replacement of topsoil and revegetation. Three seams containing sub-bituminous coal will be mined at depths up to 120 feet. Substantial amounts of overburden requiring frequent blasting must be removed by heavy equipment. The removed overburden will be used to fill previous pits.

During full operations, coal production is currently estimated to average about 2.2 million tons/year; for the life of the mine, nearly 40 million tons of sub-bituminous coal will be removed from the site. On-site facilities will include haul roads, power lines, surface water diversions and channels, sedimentation ponds, coal transfer, crushing and loading facilities, a rail siding and other support facilities. Coal will be transported about 20 miles to the Carbón I and II facilities in Mexico, via 35-car unit coal trains (two per day) using the existing railroad line which bisects the site.

Land reclamation will primarily be to pastureland. The area along Elm Creek will be replanted as brush land in order to restore riparian (stream side) wildlife habitat. Mining and reclamation activities will be strictly regulated by permits from the Railroad Commission of Texas (RCT). The project will use about 300 acre-feet per year (AFY) of water for dust control and other industrial purposes, plus an estimated 800 AFY for reclamation and 100 AFY for possible alternate supplies for area landowners. The water will be delivered in an existing irrigation canal. Potable water will be obtained by extending a water main from Eagle Pass; domestic wastewater disposal will utilize an on-site septic tank and lined lagoon.

C. ALTERNATIVES

Apart from working with the applicant and other agencies on mitigation plans, EPA's alternatives are two fold: to approve or deny an NPDES permit for the Eagle Pass Mine. The NPDES permit focusses on drainage from dewatering of ground water and from stormwater runoff produced by the mine. In order to

meet basic water quality standards, mine drainage and stormwater will be retained in sedimentation ponds prior to discharge. Water quality in discharges from the ponds are the specific focus of the NPDES permit and EPA's review.

A draft of the prospective permit is provided in Appendix A and is a standard permit for surface mines where acid drainage is not expected. The permit specifies limits to pollutants known to be a concern at surface mines, including pH, iron and suspended solids; the limits apply to all routine discharges but only the pH limit applies to discharges related to large rainfall events. Discharges must be routinely monitored by the permittee and the results reported to EPA on a regular basis; similar requirements are imposed through the State of Texas discharge permit (see Appendix H). Permit obligations cease only when the area is completely reclaimed and released from further RCT oversight.

D. ENVIRONMENTAL IMPACTS, MONITORING AND MITIGATION

The major environmental impacts of the proposed project, if implemented, were listed on Table 1-1 of the DEIS, while mitigation and monitoring aspects were summarized on Table 1-2 and on Figure 1-1. These tables and figures have been updated and included here (Tables I-1 and I-2, Figure I-1) to reflect comments and ongoing mitigation efforts.

E. CONSULTATION AND COORDINATION

Following publication of the DEIS on June 17, 1994, written comments were received and a public hearing held in Eagle Pass. Responses to key issues are summarized in Part II. Appendix B summarizes the public hearing and EPA's responses, and Appendix C presents the comment letters and EPA's responses. Comments on this Final EIS will be accepted for 30 days from the publication date, after which EPA will issue a Record of Decision.

Preparation of the FEIS has involved extensive coordination with the U.S. Fish and Wildlife Service (USFWS) and the Advisory Council on Historic Preservation (ACHP); this coordination is reflected in Table I-2 and described in Part II.D. Appendix D presents key correspondence regarding coordination efforts

since publication of the DEIS. Section 5.4.5, presented in Part III of this FEIS, has been added to the EIS in order to present new information on mitigation plans which address issues of endangered species. The USFWS has issued a biological opinion on the project; the opinion is presented in Appendix F. Appendix G provides the most recent Programmatic Agreement for protection of cultural resources.

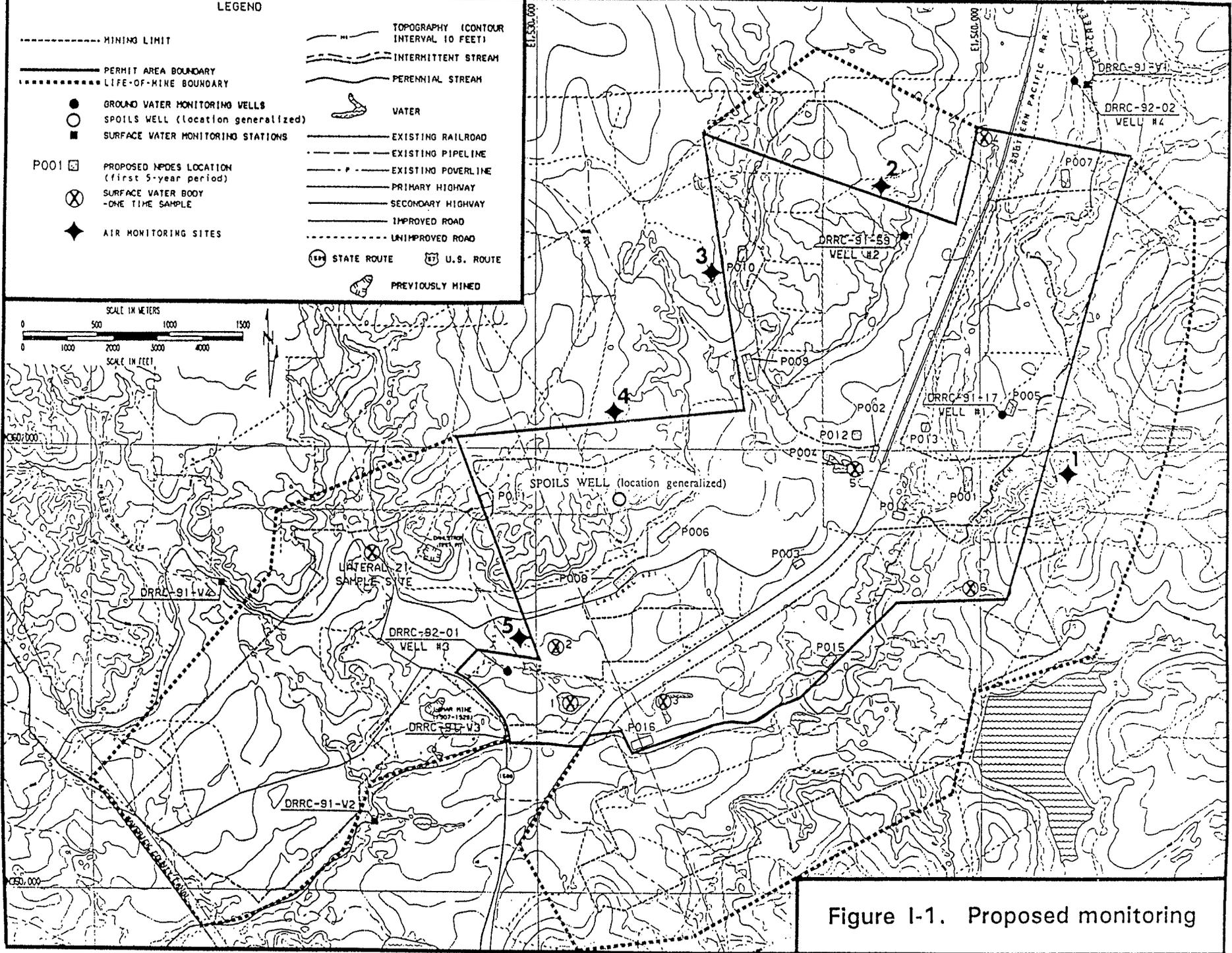
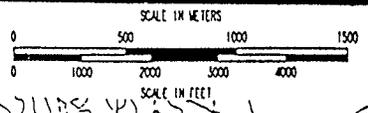
Since the DEIS was published, the following additional actions have been taken by other agencies, independent of EPA's environmental review.

- . The Texas Natural Resources Conservation Commission (TNRCC) approved the Hearing Examiner's order to issue a wastewater discharge permit to DRRC on November 29, 1994 (see Appendix H).
- . TNRCC staff has issued a recommendation that the draft air quality permit be issued for operation of the coal loadout facility, and were scheduled to hold a public hearing on the matter on December 13, 1994.
- . The Railroad Commission of Texas approved the mining permit with six provisions on October 3, 1994 (see Appendix E).

Some agencies will continue to coordinate with the mining company and with EPA throughout the life of the mine. For example, the U.S. Army Corps of Engineers considers wetlands disturbance and mitigation as it occurs during mining. After issuance of any NPDES permit, coordination will continue between EPA and those entities that could assist in mitigating impacts from the Carbon power plants in Mexico.

LEGEND

- MINING LIMIT
- PERMIT AREA BOUNDARY
- LIFE-OF-MINE BOUNDARY
- GROUND WATER MONITORING WELLS
- SPOILS WELL (location generalized)
- SURFACE WATER MONITORING STATIONS
- P001 □ PROPOSED NPDES LOCATION (first 5-year period)
- ⊗ SURFACE WATER BODY -ONE TIME SAMPLE
- ◆ AIR MONITORING SITES
- TOPOGRAPHY (CONTOUR INTERVAL 10 FEET)
- INTERMITTENT STREAM
- PERENNIAL STREAM
- ☞ WATER
- EXISTING RAILROAD
- EXISTING PIPELINE
- EXISTING POWERLINE
- PRIMARY HIGHWAY
- SECONDARY HIGHWAY
- IMPROVED ROAD
- UNIMPROVED ROAD
- Ⓜ STATE ROUTE
- Ⓟ U.S. ROUTE
- ▨ PREVIOUSLY MINED



I-5

Figure I-1. Proposed monitoring

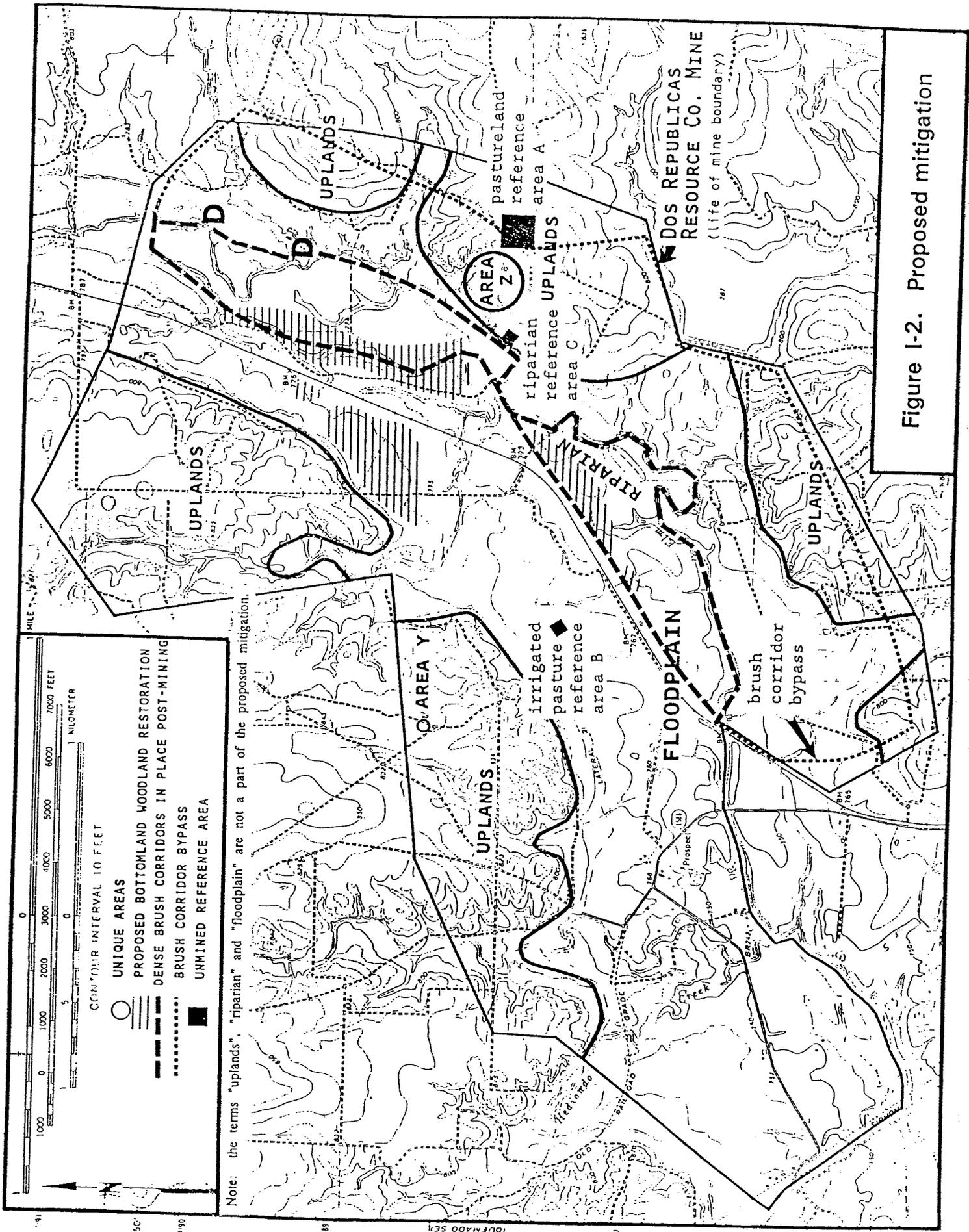


Figure I-2. Proposed mitigation

Table I-1. Summary of environmental consequences

Environmental category	Effect and impact assessment of proposed mine
Physical environment	<p><u>During mining.</u> Elimination of the natural stream channel, flood plain and upland hills, through removal of topsoil and up to 120 feet of overburden and coal, to be replaced by mine pits, topsoil and overburden stockpiles up to 20 feet high, temporary creek diversions, temporary dikes and sedimentation ponds, and roads and buildings. Elimination of stratigraphy and permanent loss of coal, and loss of some topsoil to erosion.</p> <p><u>During reclamation and after.</u> Some sedimentation ponds will remain, replacing existing stock ponds. No permanent overburden stockpile, end lake or high walls will remain. Most settling of soil will occur in the first year after final placement of overburden. Soil structure, permeabilities and textures will be more uniform, potentially improving productivity. Potential reduction in soil salinity if the restored irrigation canal is lined and the floodplain experiences less seepage and evaporation.</p>
Surface water	<p><u>During mining.</u> Replacement of existing stock ponds with sedimentation ponds. Elimination of much of Lateral No. 21 and associated seepage within the permit area. Increased control of surface runoff, from a reduced drainage area. Elimination of the natural channel of Elm Creek and reduced flooding and recharge along the floodplain. Development of artificial streamflows related to pumping of water from pits through ponds. Elimination of most baseflow within the permit area.</p> <p><u>During reclamation and after.</u> Some restoration of pre-mining hydrology, such as permanent stock ponds, and a natural runoff regime at the site. Elm Creek's channel will be rebuilt, at least as to channel length and number of meanders. Baseflow will occur, if only as a result of the direct discharge of excess water return flows from Lateral 21. In the long-term, it is possible that the channel of Elm Creek will not return completely to natural conditions for many decades or centuries; as a result, there could be a slight long-term increase in flooding potential downstream of the project and a decrease in flooding and recharge within the site compared to pre-mining conditions.</p>
Ground water	<p><u>During mining.</u> Physical elimination and/or dewatering of the local alluvial aquifer; the dewatering of the aquifer is not identified as affecting any existing use of ground water by wells.</p> <p><u>During reclamation and after.</u> If Lateral 21 is not fully restored as an unlined canal, the local aquifer would not fully return, though flows in Elm Creek might actually increase because of return flows directly discharged from the canal.</p>
Water quality and use	<p><u>During mining:</u> None of the agencies which have regulatory oversight related to water-quality at the mine (EPA, TNRCC, RCT) have predicted any significant toxic drainage from the site. Although physical changes to site hydrology will be significant at a local level, effects on water quality should be small. For some period of time, runoff from the site may contain slightly increased levels of sediment, and baseflow may be slightly more saline; these effects would be noticeable only in Elm Creek and not in the Rio Grande. Except for reaches impacted by physical elimination of the channel or by decreased baseflow, the project would not be expected to impact the uses of Elm Creek, including its suitability for fisheries or livestock.</p> <p>Water for dust control will come from retiring water rights in the Rio Grande Valley. Potable water will come from extending the City system; residents that hookup to the new water line should benefit from an improved water supply. No wells have been identified which would be impacted. Irrigation rights at the mine site will be used to provide water needed for reclamation.</p> <p><u>During reclamation and after.</u> The quality of water in those parts of Lateral 21 which are not eliminated, and in the canal after it is rebuilt, should not be affected by the project. Based on the data available to EPA, acid drainage and discharge of toxic substances in toxic amounts is not expected.</p>

Table I-1, cont'd

Environmental category	Effect and impact assessment of proposed mine
Air quality	<p><u>During mining.</u> Dust from wind erosion of soil, overburden and coal piles will be an ongoing possibility, though it should be controlled in large part by mitigation measures. TNRCC review of DRRC modeling finds no potential public health threats to populated areas. Vehicle exhausts will be minor sources of carbon monoxide and other emissions. The coal will be wet when loaded onto uncovered unit coal trains, but during times of high wind there could be coal dust blown onto properties along the rail right-of-way.</p> <p><u>During reclamation and after.</u> Soil dust during recontouring activities and prior to complete reclamation. Radioactivity levels would be expected to be typical of pre-mining conditions.</p>
Noise	<p><u>During mining.</u> Heavy equipment and back-up alarms used in mining construction and operation will increase ambient noise levels. Sound level increases due to mining equipment, blasting and coal handling are considered a significant adverse impact on wildlife, and a potentially significant adverse impact on nearby residences, if they remain, and on recreational visitors. Trains transporting the mined coal are significant noise sources; DRRC would load two 35-car trains 250 days per year. Noise impacts of coal transport would be of relatively short duration, but would extend along the entire train route. They would represent limited additional adverse impacts to residences, businesses or institutions located near the tracks.</p> <p><u>During reclamation and after.</u> Noise from regrading operations.</p>
Vegetation and wildlife	<p><u>During mining.</u> Existing vegetation will be removed during the first five-year period on 1550 out of 2700 acres. Most of the riparian area (e.g., Elm Creek) will be removed before the end of the nineteen-year mine life; this is a significant adverse impact.</p> <p>Significant local impacts to wildlife, both short-term and long-term, are an inevitable result of the extensive disturbance to several thousand acres. Land disturbance can cause death to non-mobile organisms, or displacement due to habitat elimination and fragmentation; noise and dust can disturb breeding. Aquatic life will be adversely impacted by reduced baseflows and increased turbidity in Elm Creek above the Maverick County Canal; effects below the property line are not expected to be significant.</p> <p><u>During reclamation and after.</u> Most restored mine areas will be pastureland, which sustains a less diverse wildlife population than the existing brushland. Disturbance of riparian habitat will continue until reclamation (see Table I-2) is complete. Unless riparian corridors are successfully restored the new habitat generally will have reduced value compared to existing habitat.</p>
Endangered species	<p><u>During mining.</u> The potential for short and long-term loss of riparian habitat, with its possible value as a travel corridor for ocelot and jaguarundi, is a special concern. A corridor of optimal and suboptimal ocelot habitat extends the length of Elm Creek in the project area, with an important tributary riparian corridor paralleling the northern half of it: most will be mined through. If the brush habitats along Elm Creek are used by endangered felids, then adverse impacts may occur as a result of mining activities. If the brush habitats are not used, or if the habitats are relatively unimportant to endangered species, then no adverse impacts are expected. Adverse effects could result from increased human presence and traffic; most dead ocelots and jaguarundis recovered to date in Texas have been road-killed specimens. In addition, these cats are quite secretive and could avoid the area because of vehicle noise and other human activity; however, they are known to tolerate some human activity nearby. Ground-dwelling Texas-listed species (reticulate collared lizard, Texas horned lizard, Texas Indigo snake, Texas tortoise) would be impacted; see Table I-2 for mitigation plans.</p> <p><u>During reclamation and after.</u> Continued reduction of riparian habitat until successful reclamation is complete; see Table I-2 for mitigation plans.</p>
Cultural resources	<p><u>During mining.</u> The Programmatic Agreement (PA), which when executed evidences EPA has satisfied its Section 106 responsibilities under the National Historic Preservation Act for this undertaking, stipulates cultural resources will be evaluated for potential significance (i.e., surveyed, tested, determined eligible or ineligible for the <u>National Register of Historic Places</u>, and mitigated if necessary) prior to any adverse impacts from the proposed mining operations. No significant adverse impacts on cultural resources should occur if the PA is followed (see Appendix G).</p>

Table I-1, cont'd

Environmental category	Effect and impact assessment of proposed mine
Land use/productivity	<p>Two interested parties, the Sierra Club Lone Star Chapter and the Kickapoo Tribe, have been included in the Section 106 consultation process as "interested parties". Other interested persons, as follows, are invited to participate in the Section 106 consultation process: 1) the head of a local government when the undertaking may affect historic properties within the local government's jurisdiction; 2) the representative of an Indian tribe in accordance with 36 CFR Part 800.1(c) (2) (iii); 3) owners of affected lands; and 4) other interested persons when jointly determined appropriate by the EPA, the Historic Preservation Officer of Texas, and the Advisory Council on Historic Preservation (see page II-13).</p> <p><u>During reclamation and after.</u> No further impacts expected if mitigation is successful.</p> <p><u>During mining.</u> The short-term impact is to replace grazing with industrial/mining use. Residential, recreational, aesthetic and ecology uses will be adversely affected by mining, blasting, traffic, reduced flow in parts of Elm Creek, and loss of a riparian wildlife corridor. In-migrant households and increased incomes due to the mine could create a demand for new housing and some overall growth, especially north of town between Eagle Pass and the mine.</p> <p><u>During reclamation and after.</u> The project is expected to result in a conversion of much of the existing "grazingland" to "pastureland", which has a productivity rate two to three times that of grazingland but which requires ongoing, long-term maintenance. Reclamation of Elm Creek and its riparian habitat is experimental; see Table I-2 for mitigation plans.</p>
Socioeconomics	<p><u>During mining: Employment and earnings.</u> Under DRRC's most likely scenario, the mine will generate a peak employment of 275 with associated earnings and royalties of \$11.75 million. The total impact, including indirect workers, will be about 795 jobs and \$23.29 million in earnings, of which about 60% will occur in Maverick County - a total of 400 jobs and \$14.27 million in earnings. To the extent that production at the mine varies from the 2.2-2.5 million tons per year estimated by the mine, or mining characteristics vary from those anticipated, the actual number of jobs and the related earnings would also vary.</p> <p><u>Population and public facilities and services.</u> Inmigrant population impacts of the Dos Republicas mine are anticipated to be relatively small, totaling about 280 to 560 persons. The increased demand for public services and facilities will be two percent or less above current levels. Local government officials anticipate no problems due to the mine's demands on services or infrastructure, except possibly for fire protection and emergency vehicle access.</p> <p><u>Taxes.</u> The mine will generate about \$5-10 million per year in taxes; most will accrue to the State and Federal governments. Annual local property taxes on mine assets are estimated at \$500,000; sales taxes due to mine purchases could be roughly \$95,000 for the City and an additional \$47,000 for the County; employee expenditures could generate another \$40,000 - \$60,000 per year. Roll-back taxes on property developed for mining would contribute a significant one-time tax payment to the County, school and hospital taxing districts. Increased land values at the mine site during mining will increase the assessed valuation of taxing jurisdictions; this could temporarily, reduce tax rates for land owners outside the mining area.</p> <p><u>Impacts on land values and property owners in the vicinity of the mine.</u> Property owners leasing to the mine will have increased taxes during mining and reclamation, including the one-time retroactive property tax. Presumably, these costs (and any increased income taxes and loss in grazing revenues) will be offset by lease income and royalty payments, although short-term cash flow problems could occur. For homeowners who sell their properties to the mine, no major adverse economic impacts are anticipated, since the sale should reflect fair market value. Properties adjacent to the mine could be devalued due to real or perceived impacts such as noise, dust or traffic. However, values near the mine site, as well as between the mine and town, could increase if the mine creates a residential demand.</p>

Table I-1, cont'd

Environmental category	Effect and impact assessment of proposed mine
Public health	<p><u>Lifestyle.</u> Beneficial lifestyle impacts include an improvement in the standard of living for people who gain work as a result of the mine and a positive impact on the local business community which may be encouraged to expand or upgrade their businesses or services. Adverse impacts include the impact on the 10 or so families who may relocate as a result of the project; changes in the rural lifestyle due to increased levels of dust and noise and ground vibrations from blasting; and, in town, rail-related increases in traffic delays and noise.</p> <p><u>During reclamation and after.</u> Once mining is completed, there would be a loss of the jobs and earnings associated with the mine. It is unlikely there would be any appreciable impact on public infrastructure or other social systems although the local governments would experience a decrease in tax revenues which could have a small negative impact on the level of service. Reclamation at the mine site will be to rural land uses, but a more urbanized environment is possible because of the proximity to Eagle Pass and because of the improved infrastructure in the area (water service, roads) resulting from the DRRC project.</p> <p><u>During mining.</u> Coal strip mines with adequate regulatory controls (e.g., for air and water quality) do not typically have significant direct health impacts. For example, no water pollutant discharges which could potentially impact public health have been identified. Some increase in dust may result in occasional nuisance but not in a threat to public health. A mine is a potential location for on-site accidents or other emergencies, including fires. Increased vehicle and rail traffic has a statistical probability of leading to an increased risk of accidents in the area. EPA has not identified any aspect of the project which distributes impacts unequally to disadvantage ethnic minorities or the poor.</p> <p><u>During reclamation and after.</u> Continued hazards (e.g., dust, traffic) until reclamation is completed.</p>
Cumulative impacts	<p><u>During mining: coal transportation.</u> Train traffic across the U.S.-Mexico border will approximately double, to about 98,000 rail cars per year. The slow moving trains will cause some increase in: delays to auto traffic at crossings, including possibly emergency vehicles; energy use and air emissions from idling or increased travel distances (there is only one rail overpass); noise and air emissions from the trains; and an increased accident risk at grade crossings.</p> <p><u>The power plants; use of the coal.</u> If the project goes forward, Eagle Pass Coal would become part of the fuel supply for the 2600 MW Carbón I/II power plant complex south of Piedras Negras, Mexico. Other coal would come from mines near the power plant; and could come from other (already existing) U.S. mines. Power from Carbón I/II is used in the national power grid of Mexico, and especially around Monterrey; export to the U.S. is unlikely as demand in Mexico is very high.</p> <p><u>Air emissions.</u> With the possible exception of the Mexican nitrogen oxides ambient standard, EPA estimates that emissions from Carbón I/II meet Mexican standards. However, if located in the U.S., Carbón I and II would fail to meet U.S. emissions standards for sulfur dioxide, nitrogen dioxide and particulates. The uncontrolled sulfur dioxide emissions are a special concern because they are determined to be a significant cause of visibility degradation at locations such as Big Bend National Park. Carbón I/II could reduce visibility at Big Bend by as much as 60% on days with the best visibility, and undermine efforts to protect visibility at Grand Canyon and 15 other Class I areas of the Colorado Plateau. The visibility impact is large enough that neither Carbón I or II could be permitted in the U.S. due to their failure to meet Clean Air Act requirements. Visibility degradation has adverse impacts on recreational enjoyment, and on the economic benefits of tourism.</p> <p>Consumption of much of the PSD increment for the Eagle Pass region could restrict industrial growth on the U.S. side of the border, although the Clean Air Act does provide procedures by which cross border pollutant transports can be excluded in permitting of industrial developments.</p> <p>There are no changes in Mexican law which would eliminate these impacts. For Carbón I/II to meet U.S. standards voluntarily would require installation of sulfur dioxide scrubbers or conversion to natural gas, or other special technology. Reducing emissions to acceptable levels would be expensive (in excess of \$300 million for a scrubber project at Carbón II). At this time, no modeling quantifies the relative air-quality benefits from scrubbers or natural gas conversion, but NPS does anticipate doing such modeling in 1994.</p>

Table I-1, cont'd

Environmental categoryEffect and impact assessment of proposed mine

EPA is committed to seeking a solution to the Carbón I/II air pollution problem that eliminates any significant impairment of visibility at Big Bend and addresses any other significant transborder impacts. However, at this time EPA cannot state when, how or if the problem will be solved.

During reclamation and after. Impacts from Carbón I/II presumably would continue after mining ceases in Eagle Pass, and other coal sources are obtained by the power plant owners.

Table I-2. Summary of monitoring and mitigation commitments

Category	Monitoring and Mitigation Commitments	Regulatory oversight ^{a/}
Physical environment	<p><u>Before and during mining.</u> Native soils baseline inventory and sampling, and storage of topsoil for reuse; temporary erosion control techniques. As required by RCT, no acid-forming sediments or material with significant amounts of toxic substances can be placed within the top four feet of the spoil, where oxidation to acid-forming minerals would be most likely to occur. Topsoil stockpiles are required to be revegetated to prevent significant erosion and for dust control.</p> <p><u>During reclamation and after.</u> After final grading of a mined area, immediate topsoil replacement and revegetation to prevent erosion and provide dust control. Regrading and reclamation to approximate pre-mine contours and land uses, with RCT oversight. Replacement of 20 inches of topsoil and 28 inches of mixed overburden, which must meet RCT physical/chemical standards and SCS productivity standards prior to bond release. Replacement of designated prime farmland soils to pre-mine profiles. Use of standard methods (hay bales, vegetation) to reduce erosion.</p>	<p><u>Federal surface mine permit:</u> Inspects 50% of operating coal mines, randomly, each year.</p> <p><u>Texas surface mine permit:</u> Monthly inspections by RCT, four complete (to inspect all RCT responsibilities) and eight partial per year. Includes inspection of drainageway reconstruction.</p>
Surface water	<p><u>Before and during mining.</u> Runoff from disturbed areas will flow through sedimentation ponds to minimize water quality degradation; discharges must meet TNRCC and EPA (NPDES) permit requirements for pH, suspended solids, iron, selenium (TNRCC) and in some cases, manganese (EPA) and, if warranted, toxic metals. Stream water surrounding the site will be monitored for signs of impact (total dissolved solids, total suspended solids, acidity, pH, total and dissolved iron, total manganese, specific conductance, flow), with RCT oversight.</p> <p><u>During reclamation and after.</u> Jurisdictional waters of the U.S. (i.e., Elm Creek) will be replaced (though not necessarily in pre-mine form), with COE oversight. Watercourses will be restored with naturalistic features, with COE and RCT oversight. The irrigation canal will be replaced. Water quality is monitored until bond release.</p>	<p><u>Federal wastewater/stormwater discharge permit:</u> weekly self-monitoring and quarterly reporting.</p> <p><u>Texas wastewater/stormwater discharge permit:</u> weekly self-monitoring (except monthly for selenium) and monthly reporting.</p> <p><u>Texas surface mine permit:</u> monthly self-monitoring and quarterly reporting for four sites on surrounding streams.</p> <p><u>Section 404 permit:</u> see Endangered species.</p>
Ground water	<p><u>Before and during mining.</u> To ensure that acid or toxic drainage is not occurring, RCT will require a spoils monitoring well (#3 on Figure I-1) within one year after rough backfilling and grading. The initial water sample and annual sample shall be analyzed for aluminum, arsenic, boron, cadmium, chromium, copper, lead, mercury, molybdenum, selenium and zinc; quarterly samples will be analyzed for sulfate, total dissolved solids (TDS), bicarbonate, and total and dissolved iron and manganese and, in the field, water level, pH, electrical conductance, and temperature.</p> <p>From ambient monitoring wells, DRRC will provide quarterly data on water level, sulfate, chloride, TDS, bicarbonate, total and dissolved iron and manganese, pH, conductance and temperature. In its agreement with the City of Eagle Pass, DRRC is to add one ground water monitoring well outside RCT jurisdiction, in addition to the monitoring wells required by RCT.</p>	<p><u>Texas surface mine permit:</u> quarterly self-monitoring and annual reporting for eight DRRC wells and several neighbor's wells.</p>

Table I-2, Cont'd

Category	Monitoring and Mitigation Commitments	Regulatory oversight ^{a/}
Air	<p><u>Before and during mining.</u> Mining activities must meet the fugitive dust standards of a TNRCC permit (under Federal law). State regulations require the mine and the train-loading facility not contribute to an exceedance of any ambient air quality standard, and not produce a nuisance or create a traffic hazard due to visibility impairment. DRRC modeled health effects for its TNRCC permit. Mitigation of dust will include use of sprays, coverings and enclosures, and control of vehicle weight and speed.</p> <p><u>During reclamation and after.</u> Monitoring may continue until bond release.</p>	<p><u>Texas air quality permit:</u> pre-mine modelling to demonstrate that the various air quality standards will be met; sampling during mining operations for 3-hour periods for TSP and 24-hour periods for PM-10, at intervals not to exceed six days; data to be reported to RCT quarterly, and reviewed for adequacy by DRRC annually.</p>
Noise, blasting	<p><u>Before and during mining.</u> Mine pit walls will provide some sound attenuation. RCT blasting regulations are designed to protect people and property outside the permit area, through use of fencing, notification, sirens and pre-blast insurance inspections. Within one mile of Thompson Road, blasting would be limited to 7 a.m. to 6 p.m., Monday through Friday. The City of Eagle Pass has requested that DRRC coordinate railroad car transport traffic, "particularly during evening hours".</p> <p><u>During reclamation and after.</u> No noise monitoring or mitigation necessary.</p>	<p><u>Texas surface mine permit:</u> pre-mine damage inspections are offered to neighbors; during mining, blasting noise will be monitored at least monthly and for every blast within one-half mile of any non-DRRC dwelling or public building.</p>
Vegetation and wildlife	<p><u>Before and during mining.</u> Two upland natural areas (areas Y and Z on Figure I-2) will be protected, as will 74 acres surrounding area Y; small areas of reference vegetation are to be preserved as control sites against which to evaluate reclamation. Most disturbed areas will be reclaimed as pastureland, using predominantly non-native grasses. If DRRC determines that non-game migratory birds may be affected, then either vegetation clearing will have to take place during the non-nesting season, or State and Federal "take" permits (see right hand column) will have to be obtained. The applicant states that if it appears that migratory birds could be impacted by DRRC's project, DRRC's clearing activities will be accomplished during non-nesting periods of the year. As a protection for transient hawks, all power lines will be constructed in accordance with raptor electrocution prevention guidelines. See the following category, Endangered Species, for a description of further monitoring and mitigation issues.</p> <p><u>During reclamation and after.</u> Reconstruction of Lateral 21 may occur, and would benefit aquatic life in Elm Creek to the extent that seepage or direct return flows provide perennial flow in the stream.</p>	<p><u>Texas surface mine permit:</u> pre-mine surveys and during-mining cautions are stipulated, but no tracking is required other than that associated with wetlands and endangered species. Texas Parks and Wildlife personnel may participate in RCT inspections periodically.</p> <p><u>State and Federal Migratory Bird Treaty Act permits:</u> must be obtained from the USFWS and TPWD law enforcement branches if non-game migratory birds, their nests, or their eggs will be destroyed.</p>
Endangered species	<p><u>Before and during mining.</u> Short-term (life-of-mine) mitigation of loss of dense brush habitat, which may be essential to the recovery of the ocelot, will be by protecting existing corridors until they are mined through, and by establishing new, alternative corridors before mine-through. DRRC has committed to maintaining a continuous brush habitat corridor at least 100 feet wide along Elm Creek until vegetation densities in at least one alternate corridor equal or exceed those measured in the existing Elm Creek corridors. Protection of the existing main Elm Creek corridor will be aided by</p>	<p><u>Federal Section 404 permit:</u> pre-mine plans are required for replacement of wetlands (which are associated with endangered species mitigation corridors along Elm Creek); periodic inspections are made by COE of wetlands mitigation actions. Texas Parks and Wildlife personnel may participate in COE inspections.</p>

Table I-2, Cont'd

<u>Category</u>	<u>Monitoring and Mitigation Commitments</u>	<u>Regulatory oversight ^{a/}</u>
Endangered species, <u>continued</u>	<p>constructing a berm located at least 100 feet west of the main creek channel; however, the tributary to this corridor in the north half of the site will be mined through within the first five years. During the initial ten years, an intensive effort will be made to develop new dense brush corridors in advance of mining. Corridors will be created as swathes of vegetation 50 feet wide along each side of temporary diversion ditch D-D' (see Figure I-2 for location). Before Elm Creek is mined through in about year six, DRRC will construct a new temporary channel for the stream to the west of the existing main channel, and vegetate its banks. The design of these corridors (and of subsequent, permanent corridors) is based on maintaining a nearly continuous one-meter high shrub layer, since dense vegetation in this layer is of greatest importance to ocelots and jaguarundis. A continuous bypass corridor for wildlife will also be created in the uplands east of mining by fencing livestock out of a strip of vegetation about 300 feet wide.</p> <p>Existing shrubs and grasses will be transplanted from disturbed areas to the new locations using a front-end loader which will scoop up large pads of vegetation plus several feet of topsoil. This effort will be supplemented by the planting of nursery-grown shrubs and trees to replace existing trees and shrubs with roots too deep for transplanting. Extensive monitoring and experimentation will be used to determine which revegetation methods produce the best results. Results will be reported to the USFWS, and will be evaluated, in part, upon comparison to reference areas of natural vegetation.</p> <p><u>During reclamation and after.</u> At the end of mining, DRRC will construct a new, permanent channel for the stream in its original location, with meanders and other naturalistic features; design will allow for over-bank flooding as needed. After mining, there will be the following dense brush habitat areas: two Elm Creek corridors (one permanent channel, and the brush along the old temporary channel), and the upland bypass corridor. The permanent Elm Creek channel will be the only corridor carrying water on a regular basis, and therefore will be the only corridor legitimately called riparian. DRRC will maintain the corridors for at least ten years after mining ceases and will attempt to purchase permanent habitat easements for all corridors from landowners.</p> <p>During the first five-year RCT permit, DRRC will mitigate for the destruction of 206 acres of RCT-designated lost bottomland woodland habitat, acre for acre (Figure I-2). RCT will judge success of the plantings by comparison to a protected one-acre riparian reference area. Subsequent permits can be expected to contain similar provisions. This mitigation is independent of the corridor mitigation outlined above, but may supplement that mitigation.</p> <p>A relocation plan for ground-dwelling Texas-listed species (reticulate collared lizard, Texas horned lizard, Texas Indigo snake, Texas tortoise) has been recommended by RCT as a component of the mining permit, which would involve a one-time sweep of the area for State-listed species, with instruction for employees in their identification so that any animals sighted in the future could be moved. Annual surveys will also be done by qualified persons prior to initial disturbance within mine areas.</p>	<p><u>Texas surface mine permit:</u> monthly mine inspections by RCT (four complete and eight partial per year) include inspection of drainageway reconstruction and, hence, of work associated with endangered species mitigation corridors. An annual survey and report is required on the presence of endangered species.</p> <p><u>Endangered species coordination:</u> EPA requested formal consultation with the FWS in accordance with Section 7 of the Endangered Species Act; USFWS issued its Biological Opinion on November 23, 1994. The opinion is provided in Appendix F.</p>

71-1

Table I-2, Cont'd

Category	Monitoring and Mitigation Commitments	Regulatory oversight ^{a/}
Cultural resources	<p><u>Before and during mining.</u> Potentially eligible sites must be protected (e.g., access restriction, fencing, monitoring) in accordance with Section 106 of the NHPA. A Programmatic Agreement for protection of cultural resources is included in Appendix G.</p> <p><u>During reclamation and after.</u> Eligible sites will continue to be protected during DRRC's period of responsibility.</p>	<p><u>Federal and State cultural resources coordination:</u> pre-mine surveys required; during-mining tracking to be determined as part of the Programmatic Agreement on Cultural Resources.</p>
Land use, productivity	<p><u>Before and during mining.</u> If evidence of blasting damage occurs in spite of RCT regulations, RCT may specify lower limits on airblast levels. There are no known abandoned underground mines in the first five-year permit area. DRRC must provide RCT more information on shafts and tunnels in future mine areas, and demonstrate that their actions will not cause a safety hazard.</p> <p><u>During reclamation and after.</u> Reclamation will restore all disturbed land to rural uses, primarily as pasture lands and (where permanent easements are purchased by DRRC) to wildlife habitat. In the initial five-year mine plan, reclamation will address 1500 disturbed acres and will include 206 acres of habitat reclamation. Post mine land use changes in subsequent permit areas may be similar.</p> <p>Most pasture will be unirrigated and planted with 60% non-native grasses (bermudagrass and kleingrass) and 40% native grasses, and is intended to produce 2000 to 3500 lbs of livestock forage/acre/year; reference sites will be planted in undisturbed soils (see Figure I-2). Stocking rate goals are about two to three times the current production rate.</p>	<p><u>Texas surface mine permit:</u> self-monitoring, and monthly inspections by RCT, including four complete and eight partial per year; compliance based on productivity; reclamation includes a minimum 10-year period of extended responsibility where consistent productivity must be proven before complete release from liability and performance bond. See Appendix E.</p>
Socioeconomics	<p><u>Before and during mining.</u> DRRC has committed to job training to achieve a high rate of local hires. The mine has made arrangements with the City for the provision of potable water supply to the mine site. Prior to the startup of mine operations, DRRC will meet with local governments, service providers and mine safety officials to make arrangements for emergency procedures, fire protection, medical care and other health and safety issues. The mine has committed to providing emergency medical care at the mine site and to conducting emergency response training with the City, and is working with the City on scheduling coal trains for non-peak hours.</p> <p><u>During reclamation and after.</u> Direct socioeconomic mitigation measures will cease when mining and reclamation are completed.</p>	<p><u>Local agreements:</u> To be determined.</p>
Public health	<p><u>Before and during mining.</u> Air and water quality regulations must be met; the regulations are designed to protect public health. RCT requires a certified expert supervise all aspects of blasting, posting of blasting schedules and warning sirens. DRRC has agreed to establish an on-site clinic. Both the City of Eagle Pass and Maverick County have established emergency response programs.</p> <p><u>During reclamation and after.</u> No further monitoring or mitigation will occur.</p>	<p>Refer to sections on water, air, noise/blasting, and socioeconomics for discussions of permits and tracking of public health issues related to those topics.</p>

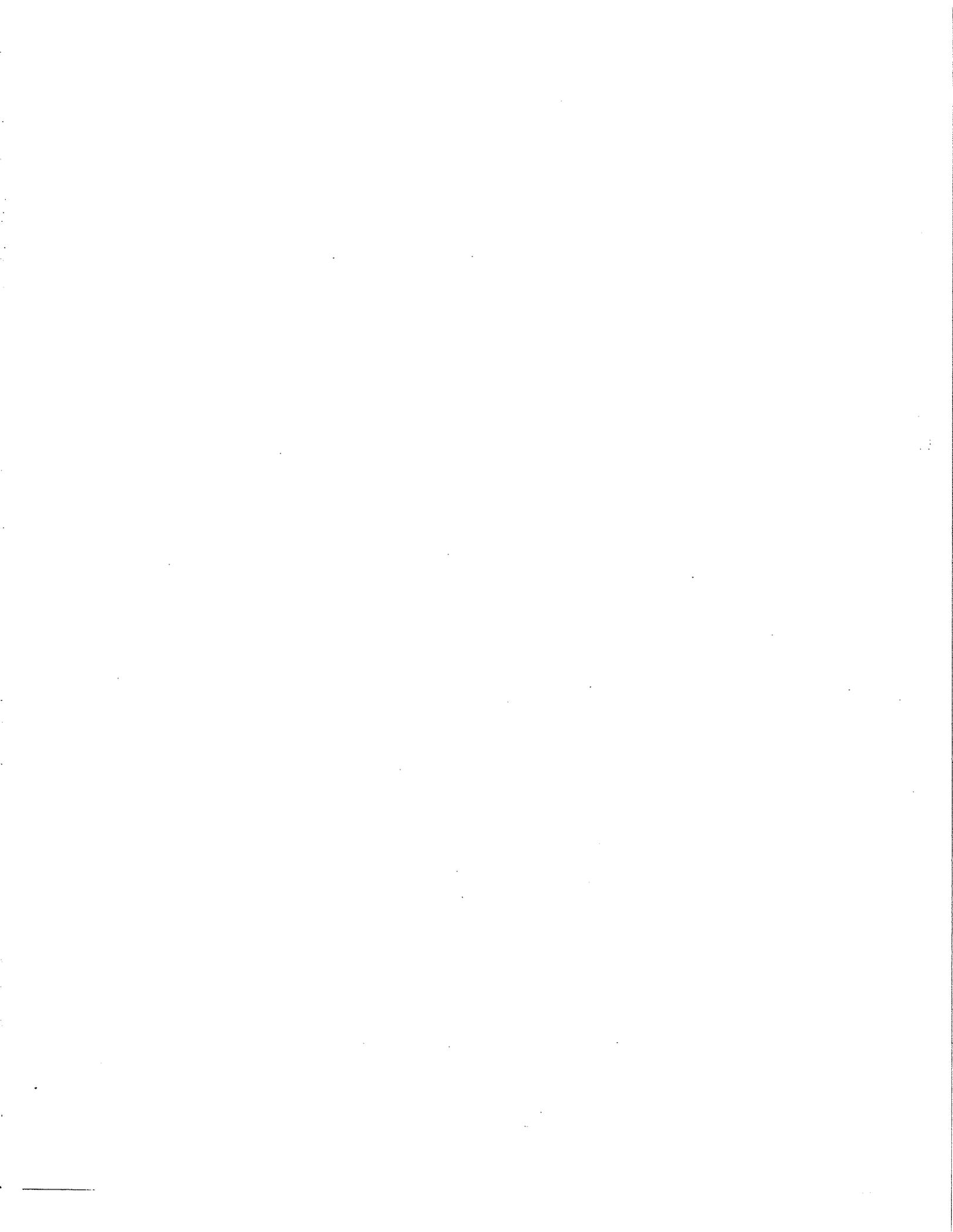
Table I-2, Cont'd

Category	Monitoring and Mitigation Commitments	Regulatory oversight ^{a/}
Cumulative impacts	<p><u>Before and during mining.</u> DRRC and Eagle Pass are cooperating to time train traffic to minimize interference with road traffic in rush hours. EPA is searching for ways to effectively mitigate air pollution impacts from Carbon I/II.</p> <p><u>During reclamation and after.</u> If air emissions from Carbon I/II are reduced, those benefits presumably would continue through the life of the power plant complex.</p>	<p><u>Local agreements:</u> to be determined.</p> <p><u>Binational work group:</u> cumulative air quality impacts will continue to be studied and discussed as part of binational negotiations; EPA and NPS are performing supporting studies.</p>
^{a./} Permits, coordinations:	Surface mining	<ul style="list-style-type: none"> • <u>Federal:</u> Office of Surface Mining's Permanent Program Regulations, under the Surface Mining Control and Reclamation Act (SMCRA). • <u>Texas:</u> Railroad Commission of Texas (RCT) Coal Mining Regulations; the specific five-year permit for the Eagle Pass Mine is referenced as RCT Docket No. C3-0025-SC-00-A; see Appendix E.
	Wastewater	<ul style="list-style-type: none"> • <u>Federal:</u> U.S. Environmental Protection Agency, NPDES permit TX0109011; see Appendix A. • <u>Texas:</u> Texas Natural Resources Conservation Commission, Permit No. 03511; see Appendix H.
	Air quality	<ul style="list-style-type: none"> • <u>Texas:</u> Permit pending before Texas Natural Resources Conservation Commission; includes requirements under Federal regulations (40 CFR 60.250 subpart Y).
	Section 404	<ul style="list-style-type: none"> • <u>Federal:</u> U.S. Army Corps of Engineers permit relating to construction (dredge/fill) in a water of the U.S.; specifically per Nationwide 21 (surface coal mining) of the COE regulations, under Section 404 of the Clean Water Act.
	Wildlife	<ul style="list-style-type: none"> • <u>State and Federal Migratory Bird Treaty Act permits:</u> must be obtained from the USFWS and TPWD law-enforcement branches if non-game migratory birds, their nests, or their eggs will be destroyed.
	Endangered species	<ul style="list-style-type: none"> • <u>Federal:</u> Section 7 of the Endangered Species Act requires that all Federal agencies consult with the U.S. Fish and Wildlife Service (FWS) to ensure that actions authorized, funded or carried out by such agencies do not jeopardize the continued existence of any Federally-listed threatened or endangered species or adversely modify or destroy critical habitat of such species. The USFWS' biological opinion is provided as Appendix F.
	Cultural resources	<ul style="list-style-type: none"> • <u>Federal:</u> coordination with the Advisory Council on Historic Preservation is required under Section 106 of the National Historic Preservation Act. The Programmatic Agreement is provided in Appendix G. • <u>Texas:</u> coordination with the State Historic Preservation Officer (SHPO) is required under Section 106 of the National Historic Preservation Act.
	Local issues	<ul style="list-style-type: none"> • <u>Local agreements:</u> direct contractual agreements involving City of Eagle Pass and/or Maverick County, and DRRC.
	Binational issues	<ul style="list-style-type: none"> • <u>Binational work group:</u> formed by U.S. and Mexican governments in order to address air quality issues, including visibility problems in vicinity of Big Bend National Park.

I-16

PART II

CONSULTATION AND COORDINATION



II. CONSULTATION AND COORDINATION

A. PUBLIC REVIEW PROCESS

EPA Region 6 published a Notice of Intent (NOI) to prepare an EIS, in the Federal Register on December 10, 1993. Scoping for issues was conducted through that NOI and through two meetings held in Eagle Pass on January 18, 1994.

The Notice of Availability of the DEIS appeared in the Federal Register dated June 17, 1994. The notice announced a 45-day public review period ending August 1, 1994. Review of the DEIS was solicited from Federal, State and local agencies, groups and individuals. The reviewing agencies included those with specific authorities under the Endangered Species Act and under the National Historic Preservation Act. Approximately 300 copies of the DEIS were distributed to reviewing agencies and to interested members of the public.

The Public Hearing to receive comments on the proposed NPDES permit and on the DEIS was held at 7:00 p.m. on Wednesday, July 20, 1994, at St. Joseph's Parish Hall, St. Joseph Church, 800 N. Comal, Eagle Pass, Texas. In addition to the announcement of the meeting in the above-referenced Federal Register, the public was notified by advertisement in the Eagle Pass News-Guide, a paper in general circulation in the area, and by use of the EPA's EIS mailing list. Twenty-six people spoke at the Public Hearing. Additional persons spoke at an informal question and answer session held earlier that day, 2:30 P.M., at the Hall.

During the public review period on the DEIS, sixteen letters were received from individuals and organizations; in addition, the Eagle Pass Chamber of Commerce collected approximately 2,200 letters in support of the project, plus a petition with about 1,200 signatures. Nine State and Federal agencies also submitted written comments. Each of these letters was reviewed to identify comments which required a response in the Final EIS. Comments which presented new data, questioned facts and/or analyses, or commented on issues bearing directly on the DEIS, have been evaluated. As appropriate, changes or additions to the text of the DEIS have been incorporated into this Final EIS (see Part III).

Most comments received at the hearing and in the letters expressed people's opinions regarding the issues raised by the DEIS or were simply in favor of or in opposition to the project, and did not require changes or modifications to the DEIS.

B. COMMENTS RECEIVED ON THE DRAFT EIS

Appendix B contains a summary of comments received during the public hearings as well as EPA's responses. Appendix C contains all written comments received by EPA on the DEIS as well as EPA's responses, with the exception of the letters of support collected by the Eagle Pass Chamber of Commerce. For those letters, four representative examples are provided, along with the last page of the petition.

C. EPA RESPONSES TO GENERAL ISSUES

Certain issues were raised in more than one letter and/or hearing comment and, further, raised concerns about whether the EIS was sufficiently unbiased, complete and up-to-date. In this Part II.C, EPA provides an overall response to these general issues, as follows.

- Issues about the alternatives which EPA should consider in the EIS; the relationship of the EIS to the RCT and other permits; EPA's reliance on information provided by DRRG; and the extent to which EPA needs to resolve uncertainties are grouped with the general subject "Scope of EIS". Part II.C.1 provides EPA's overall response to these issues of EIS scope.
- Issues raised concerning air quality impacts from the Carbón I/II power plants are discussed in Part II.C.2.
- Issues raised concerning project effects on the endangered ocelot and jaguarundi are discussed in Part II.C.3.
- Issues raised concerning the projection of jobs and economic benefits from the Eagle Pass mine are discussed in Part II.C.4.
- Issues raised concerning the effect of the mine on neighboring properties, especially impacts from blasting and dust, are discussed in Part II.C.5.

Specific responses to oral and written comments (see Appendices B and C, respectively) may refer back to this Part II.C.

II.C.1. Scope of EIS

The Department of Interior, Sierra Club and some other commentators were strong in their opinion that the EIS had focussed on narrow alternatives and impacts, especially regarding endangered species and the Carbón I/II coal mine. EPA considers these to be comments on the "scope" or overall content and approach of the Draft EIS. A more complete list of these scoping issues includes:

- . whether the EIS should consider a broader range of alternatives, such as different mining plans which would mitigate impacts, and energy alternatives or control strategies in Mexico which would avoid additional air pollution from Carbón I/II;
- . the relationship between the NEPA review process being conducted by EPA, and regulatory reviews conducted by other agencies, especially the Railroad Commission of Texas (RCT);
- . the extent to which EPA's EIS can properly rely on and directly use information provided by the applicant, Dos Republicas Resources Company, Inc.; and
- . whether the EIS can provide an adequate basis for decision-making if there are significant uncertainties regarding existing and predicted environmental conditions.

EPA understands that those who read an EIS may not be fully aware of the complex relationship between the NEPA process and the decisions which EPA will make with respect to DRRC's NPDES permit. The following discussions explain this relationship in light of the above issues.

Alternatives. Much of what Federal agencies do pursuant to the National Environmental Policy Act (NEPA) concerns actions on Federal lands, or projects paid for by Federal funds. In such cases, because the Federal interest is comprehensive, a broad spectrum of alternatives can be analyzed effectively. In contrast, in this case, where the Federal interest is narrow, the only EPA action subject to NEPA is the decision on the NPDES permit which has been applied for by DRRC. Thus, while applicable regulations require EPA to explore and evaluate reasonable alternatives, including those not within its jurisdiction, the only choices actually available to EPA are to issue the NPDES permit (with various conditions), or to deny the permit. EPA has no authority, nor any indirect legislative mandate or policy, to make decisions which go beyond these two alternatives, nor authority which would allow it to interfere with the internal planning and decision-making of the bodies it regulates.

In making its decision, EPA's NEPA analysis must determine whether predicted impacts will be acceptable; this allows the agency to meaningfully consider alternative mitigation plans that an applicant might implement. In this case, when the DEIS was issued, EPA made the threshold decision that permit issuance is likely to adversely affect endangered species and EPA initiated formal consultation with the USFWS, thus, decisions about the acceptability of potential impacts to ocelots and jaguarundi are now subject both to NEPA and to Section 7 of the Endangered Species Act. Consultation with the U.S. Fish and Wildlife Service has been completed. For a discussion of DRRC's alternatives for mitigating impacts to endangered species and the Service's biological opinion refer to Part III.C and Appendix F, respectively.

Alternatives related to fuel sources or pollution controls for the Carbón I and II plants were also raised in the comments on the DEIS. However, EPA has no authority to force the Carbón I and II plants to select a different fuel source or to install scrubbers or other control equipment. EPA's scope is limited to evaluating the impacts related to the proposed action. In that context, the question posed for the DRRC permit is whether permit approval or denial would secure an improvement in the situation at the Carbón plants.

These discussions of mitigation (and other) alternatives provide needed input to EPA's determinations about whether issuance of the NPDES permit would have unacceptable environmental impacts. However, ultimately the decision facing the agency is to issue or deny the permit for the operations which are proposed by the Applicant, and it is the impacts from that choice which are properly the EIS focus.

Relationship to other regulatory processes. DRRC must obtain numerous regulatory approvals before it can operate the Eagle Pass Mine. These other regulatory reviews have three important relationships to the NEPA process: they provide a primary source of information regarding environmental impacts; they provide a basis for EPA to rely on other agency actions to establish limits on foreseeable impacts; and in some cases, these additional regulatory reviews require affirmative coordination and participation by EPA.

For this particular EIS, EPA relied extensively on materials generated as part of the mining permit regulatory process which is under the jurisdiction of the Railroad Commission of Texas (RCT). These materials included DRRC submittals, analyses by RCT staff, and inputs from intervening parties. EPA's reliance on these materials is for the sole purpose of decision-making on the NPDES permit. EPA's independent consideration of mine plan information is in no way an attempt to duplicate the RCT regulatory process, nor to second guess decisions of that agency.

In addition to making use of information from the RCT process, EPA relies on RCT's authority and jurisdiction to assure that impacts which are subject to regulatory control will, in fact, be subject to such control; impact predictions are made accordingly.

Both the above points are illustrated by the possible impact of DRRC's mine on water wells on a nearby property, an impact which is directly under RCT jurisdiction. EPA utilized information from the RCT files as one basis for evaluating the impact; and has relied upon RCT regulations and authority in concluding that should this impact occur, it will be mitigated satisfactorily.

Regulatory reviews which require affirmative coordination and participation by EPA are discussed in Part II.D.

Reliance on applicant material. With respect to all issues, including major alternatives as well as design details, EPA places the burden of providing basic information and analyses upon the applicant. Restrictions in the Federal budget as well as considerations of equity require that those who may benefit from a project pay the major costs of assuring environmental compliance. EPA then uses its professional expertise, and the expertise of its consultants, to perform an independent review of all significant documents provided by the applicant. Such reviews normally involve consideration of data obtained from many sources, including other Federal agencies, State agencies, local governments, academic institutions, citizen groups, and individual members of the public.

To the extent that EPA determines that any information provided by the applicant is accurate and sufficient it will rely upon that information in preparing the EIS. The presentation of information from an applicant's document in the DEIS (or this Final EIS) indicates that EPA has performed an independent review of the data and either accepts it as valid or clearly states EPA's reservations about the information.

The DEIS contains many sections where the independent review did not result in initial acceptance of DRRC documents. Examples include: impacts to surface and ground water quantity; impacts to endangered species; estimates of job and economic benefits. In such cases, EPA obtained information from other sources, performed its own studies and/or requested that the applicant perform additional studies. This process continued until EPA was satisfied that the technical content of the EIS was accurate.

If accuracy was determined through reliance on DRRC documents, such documents were used or cited in the DEIS; if accuracy required reliance on the independent information, then that information is cited in the DEIS. The EIS process provides a mechanism through which the information presented is reviewed by other groups and individuals as well. The same practice has been followed in the FEIS.

Note that this process does not necessarily result in conclusions which differ from the applicant's, nor do EPA's findings override those of an appropriate regulatory agency. In the case of ground water impacts, EPA was advised of an opinion that DRRC's submittals to the RCT were inadequate. EPA sought and obtained additional information from the applicant, and also reviewed additional information submitted by the applicant and Intervenors to the RCT. EPA's independent review concluded that information sufficient for NEPA purposes was available and concurred with the applicant that impacts to off-site wells are unlikely; but recognized RCT's determination that such an impact is possible and deferred to RCT's regulatory authority for the ultimate determination of that impact, and for the enforcement of any necessary monitoring and mitigation measures. See the Findings of Fact (#30-36) and the Permit Provisions in RCT's Final Order, Appendix E.

Dealing with uncertainty. EPA recognizes that the information available for predicting the impacts of the DRRC project is incomplete, and that as a result there is uncertainty in the impact predictions which are made. However, limitations in information, and the presence of uncertainty, occurs for all decisions facing EPA, such as decisions made regarding appropriate standards for environmental protection. It is EPA's view that uncertainty should not lead to paralysis, either as to environmental protection or economic development. Rather, reasonable efforts should be made to reduce uncertainties; and decisions should be made which properly take the uncertainties into account.

For NEPA, this approach means that EPA does ask the applicant to provide information - including information beyond that required by other regulatory programs - and does perform its own studies to investigate key issues, in order to reduce uncertainties that are critical to decision-making. Further, impact analyses typically take a 'worst-case' approach, i.e., the EIS will assume that adverse impacts will occur unless there is strong evidence to the contrary.

II.C.2. Air quality impacts from Carbón I/II

Some comments on the DEIS asked EPA to update its air-quality modeling of impacts from Carbón I/II; to expand the impact analysis, such as by quantifying impacts to tourism in Big Bend National Park and by providing more detail on acid rain; to use the EIS to assess alternatives for solving the pollution problems caused by Carbón I/II; and to secure specific funding to address the problem. In addition to specific responses to these comments (see especially Appendix C, letters 4 and 16), EPA provides the following general discussion of air quality impacts from Carbón I/II.

Modeling update. At this time, EPA and the National Park Service are completing additional SO₂ and visibility modeling that should more accurately estimate Carbón I/II impacts at Big Bend. This modeling utilizes the most technically advanced version of MESOPUFF, including the meteorological processor CALMET which accounts for terrain effects. The modeling incorporates emissions from Carbón I/II and from Texas sources emitting more than 100 grams/second SO₂; it does not incorporate any other contributions from Mexico because emissions data are not available (Yarbrough, 1994). The modeling is undergoing internal review at EPA and is not yet available for public release.

Expanded impact analysis. The discussions in the DEIS make it clear that EPA believes that Carbón I/II have unacceptable adverse air quality impacts in the United States. Therefore, except as to the visibility modeling discussed above, EPA has determined that it would not be cost-effective to invest its limited NEPA resources into additional studies of Carbón I/II, e.g., to quantify tourism and/or acid rain impacts.

Alternatives. The subject of EIS alternatives is discussed in Part II.C.1.

Funding. The EPA is not aware of any firm funding sources currently available for providing scrubbers to Carbón I/II, other than possibly through a specific World Bank loan to Mexico. The EPA is cognizant of the funds now available through a Border Environment Cooperation Commission (BECC), but these monies are specifically targeted for water supply, municipal wastewater treatment and solid waste projects along the border. As a matter of information, the EPA has offered to fund a feasibility study regarding use of a dry sorbent injection technique called ADVACATE at Carbón I/II, but this offer has not yet been accepted by Mexico.

II.C.3. Endangered species

Adequacy of biological assessment and mitigation plan. Many comments were received concerning EPA's assessment of threatened and endangered species issues, and on the applicant's proposed mitigation measures. Since the DEIS was written, DRRRC has developed new information and has modified its mitigation plans. For this reason, EPA has added to the EIS a new Section 5.4.5, which summarizes all information submitted by DRRRC. Section 5.4.5 responds to comments which asked for the EIS to contain the latest and most complete information regarding ocelots and jaguarundi at the mine site. Section 5.4.5 is provided in Part III.C of this FEIS.

In Section 5.4.4 of the DEIS, EPA presented its biological assessment of the DRRRC project, based on the information then available; EPA reached the conclusion that the project is likely to adversely affect ocelots and/or jaguarundi, and formally initiated consultation with the U.S. Fish and Wildlife Service, under Section 7 of the Endangered Species Act. Appendix F contains the USFWS' biological opinion.

Additional responses regarding endangered species issues are presented in Part II.C.1 (alternatives) and II.D (timing and sequence of EPA's actions).

Part II.C.4. Economics

Several people raised the point that the area has high unemployment and supported the mine since it would bring jobs and added income to the community. However, other people raised the concern that the job numbers cited in the DEIS were inflated and therefore the related economic benefits also were inflated, thus overstating the benefits associated with the project.

EPA was concerned about the variability in the numbers presented by DRRC for their mining operation, so EPA independently evaluated employment prospects at the mine (see DEIS, page 5-51 through 5-54). EPA concluded that DRRC's projections are in line with other coal mining operations, which indicate a typical range of 80 workers per million tons of coal mined (DRRC's low end) to 100 workers per million tons (DRRC's high end). EPA's research also indicated that the actual employment numbers will depend on numerous circumstances, including the amount of coal mined and the specifics of the mining operation (for example, the type of mining equipment and operations).

The lignite mine survey cited by several commentors and discussed in the DEIS (p. 5-52) indicates an average of only 61 employees per million tons. However, as discussed in the DEIS (p.5-52), these numbers may not be representative for the Eagle Pass Mine where the requirements for overburden removal and restoration could be relatively large, and the mine operation is relatively small. Another factor that will increase the work force requirement in comparison to the lignite mines, is the fact that the sub-bituminous coal mined at the proposed Eagle Pass Mine will need to be blended prior to shipping (Donald Marston, 1994a).

Part II.C.5. Mine activities

Numerous comments focused on the possible impacts of the mine activities on the immediate vicinity of the mine. Most of the possible impacts identified are subject to extensive regulation under the Surface Mining Control and Reclamation Act (SMCRA), requiring both mitigation of the impacts to within regulatory limits, and monitoring to insure that the mitigation is accomplished. The regulatory limits are set at levels that are protective of public health and safety, and are intended to prevent significant damage to private property.

Blasting. Several commentors expressed concern with possible damage to buildings as a result of blasting at the mine. The DEIS notes that regulatory requirements are intended to prevent this impact. The regulatory approach to preventing damage is based on limiting ground vibrations and airblast to levels that will not cause damage to properly constructed buildings. DRRC may show compliance by direct monitoring of vibrations at a building, using a seismograph, or by a standardized calculation. Detailed records of each blast must be retained for RCT or public inspection for at least three years.

RCT regulations also require that the mine operator inform all residents or owners of dwellings or other structures located within $\frac{1}{2}$ mile of the blasting site that they may obtain a pre-blast survey of their property without cost. This notification must be in writing and must occur at least 30 days before the beginning of blasting. Those desiring such a survey must make a written request to the operator or the RCT. If requested 10 days in advance of the planned start of the blasting, the survey must be accomplished before the blasting begins. The pre-blast survey establishes the condition of the property prior to any blasting.

RCT investigates complaints about blasting damage. This typically includes placement of a seismograph at an affected property, to determine if the blasting complies with the regulations; the mine operator is not informed when the seismograph is installed. If blasting is not in compliance with the regulations, the RCT may issue a notice of violation; continued violations can result in fines or an order to cease operations. Periodically, RCT also uses a seismograph to independently monitor blasting impacts, even in the absence of local complaints.

If an owner believes that blasting has damaged property, the pre-blast survey provides evidence of the original condition for use in negotiations with the operator or in a lawsuit. The liability insurance the operator is required to carry under SMCRA must include coverage for property damage claims. EPA's review of environmental assessments for surface coal mines in Oklahoma indicated that blasting damage, if it should occur, would be expected to be minor (e.g., small cracks). EPA has no information to indicate that any minor blasting damage would impact an owners' insurance coverage.

Dust impacts. In response to many concerns that the DEIS predicts some nuisance dust at neighboring properties, it is important to know that the dust in question would be primarily soil materials from wind erosion and/or equipment traffic; EPA regrets if the DEIS gave the false impression that the mine would create a blanket of black coal dust around the site.

Dust emissions are a principal subject of the TNRCC air quality permit. As part of the permitting process, DRRC has modeled potential dust emissions from mine sources, including removal of the overburden, hauling of the coal, and the coal-handling facilities. The model calculates pollutant concentrations based on topographic and meteorological data, and projected emissions rates from mine sources, as mitigated by proposed control measures. The calculated concentrations must be within standards protective of public health before a permit will be issued. TNRCC staff have completed review of the modeling and issued a recommendation that the draft permit be issued; a public hearing on the draft permit was scheduled for December 13, 1994 (Jones, 1994).

Because wind direction data are not available for the Eagle Pass area, data from Del Rio were used in the modeling. The prevailing wind direction in Del Rio is from the southeast. The modeling assumes that only water will be applied to haul roads for dust control, but that a dust-control agent will be mixed with the water applied throughout the coal-handling circuit. The modeling evaluated compliance with particulate standards (total suspended particulates [TSP] and particulate matter 10 microns and smaller [PM-10]) and evaluated the health effects of specific compounds from the list of compounds having health effects screening levels (in this case, metals and coal dust). The modeling indicated that particulate levels at the property boundaries would be well below the standards. The evaluation of health effects indicated a 10% exceedance of the health effects screening level for coal dust on top of

a hill immediately north of the property line; because that area is uninhabited rangeland, additional emissions controls were not required (Jones, 1994). The health effects screening levels are developed to be conservative, by dividing allowed occupational exposure levels by 100.

As described in the DEIS, pp. 5-22 and 5-23, extensive monitoring is required, so as to ensure that modeling was correct and the mitigation proposed is effective. In addition to specific performance standards for the protection of public health, TNRCC regulations do provide some recourse against nuisance dust impacts. Similarly, in addition to requiring demonstration of compliance with State and Federal numeric air quality standards, RCT regulations provide that the operator may be required to utilize a variety of dust control measures as deemed necessary by RCT. Enforcement of these non-numeric standards is, however, a more subjective matter.

Chemical dust control. Several comments asked about chemicals which DRRC might use to suppress dust. Nalco Dust-Ban 8801 is the dust control agent chosen by DRRC. It is a proprietary mixture containing an oxyalkylate compound, which agglomerates the finest particles into coarser particles less easily blown and of reduced health concern. The product was specifically developed for the suppression of fine coal dust. Once applied, the material retains its dust suppression characteristics. Little additional treatment is required unless fresh surfaces are exposed. The product is shipped as a concentrate for dilution with water at a typical ratio of 1000:1 by volume. The 10 to 20% oxyalkylate in the concentrate is a severe eye irritant, but inhalation studies indicate no toxicity hazard at concentrate dilutions of at least 50:1. If the product becomes a waste, it is not classified as a hazardous waste and notification of spills of the product is not required. A Product Bulletin and Material Safety Data Sheet are included as Appendix I.

Additional check on dust problems. EPA recognizes that the relative absence of dust problems at other coal mines in Texas may reflect the relatively wet climate at such mines, most of which are in the eastern or south-central parts of the state. To ensure that the DEIS correctly predicted that off-site dust impacts would be minor, EPA has reviewed the extent of dust problems at mines in an area more similar in climate to Eagle Pass, the Four Corners region of New Mexico.

Several large surface coal mines currently operate in the New Mexico Four Corners - the La Plata Mine, the Navajo Mine and the San Juan Mine - and more have operated in the area in the past. There are residences or businesses within one-half mile of each of the operating mines. There have been no official citizen complaints about dust against any of the mines, either to the New Mexico Mining and Minerals Division or the Federal Office of Surface Mining Reclamation and Enforcement (Sanderford, 1994; O'Rell, 1994). A review of the database of complaints at the New Mexico Air Pollution Control Bureau also did not find any complaints about dust against Four Corners mines (Ezeanyin, 1994).

Occasional concerns have been voiced about visibility impacts on New Mexico Highway 264, directly adjacent to the McKinley Mine, a surface coal mine somewhat farther south near Gallup, though there have been no official citizen complaints against this mine. The McKinley Mine uses a dragline for excavation, as might the Eagle Pass mine after a few years. The dust created when the dragline dumps its load is perhaps the most difficult source of mining dust emissions to control. Based on the investigation of New Mexico mines, EPA concludes that there have not been significant problems with dust in an area of climate similar to Eagle Pass, and regulatory standards have been complied with.

Dust from trains. Coal dust blowing off the trains transporting the coal to Carbón I/II is not expected to be a significant problem because the coal will be sprayed with water containing the dust-control agent at every transfer point in the coal handling circuit, including the loadout gate that dumps the coal into the train cars. The stockpiles awaiting loading also will be sprayed with the mixture. The low speed imposed by the short distance to the border will tend to reduce the amount of coal dust blown off on that leg of the trip. The concentrations of dust in the air would be expected to be very low and the small amount of coal deposited near the tracks would contain extremely small quantities of any trace contaminants in the coal.

Water quality impacts. Several comments raised concerns about the water quality impacts from the sedimentation ponds, including both direct effects of pond discharge, and recharge through the pond bottoms. EPA's judgments about water quality impacts from the mine are based on several considerations:

- . there is no evidence of water-quality degradation at present (i.e., nothing to suggest an existing problem which would be made worse by mining);
- . no acid-forming sediments or materials with significant amounts of toxic material have been identified in the overburden at the site, and if they were identified, they could not be placed at or near the land surface (i.e., there is nothing about the mine to suggest that an entirely new problem will be created);
- . EPA's technology-based NPDES permit reflects the agency's knowledge that the principle water quality problems from strip mines occur if there is low pH (not a concern at this site, where materials are measured as alkaline) or from sediment (controlled by sediment ponds, and not a concern for recharge).

Monitoring and permit enforcement provide additional assurance that significant adverse impacts will not occur.

D. COORDINATION

Overview. Section 3.3 of the DEIS summarized environmental laws, regulations and programs (other than NPDES and NEPA) which apply to the operations of the Eagle Pass Mine. This discussion considered: the Federal Surface Mining Control and Reclamation Act (SMCRA), as enforced by the Railroad Commission of Texas for the mine permit; the Endangered Species Act for threatened and endangered species; Section 404 of the Clean Water Act, for wetlands; the National Historic Preservation Act for cultural resources; and the Texas Natural Resources Conservation Commission for the Texas wastewater discharge and air quality permits.

Two of these laws assign EPA specific, formal consultation responsibilities. EPA is required to:

- consult with the U.S. Fish and Wildlife Service (USFWS) concerning endangered species (Section 7 of the Endangered Species Act and therefore often referred to as Section 7 coordination);
- consult with the State Historic Preservation Officer (SHPO) and with the U.S. Advisory Council on Historic Preservation (ACHP) on historic and archaeological (cultural) resources (Section 106 of the National Historic Preservation Act).

Table I-2 of the DEIS summarized monitoring and mitigation efforts stemming from this coordination, and from the other environmental permitting requirements identified above. Coordination is an ongoing process, which continues beyond the timeframe of the EIS. To the extent that additional coordination has occurred since the DEIS was published, new information is included here in the revised Summary Table I-2. Also, below, in the same order as Section 3.3 of the DEIS, EPA summarizes coordination efforts since the DEIS was published. Key letters involving coordination during that time are included in Appendix D. Note also that additional information regarding coordination is provided in the FEIS, in response to specific comments (e.g., clarifications of the Section 404 process).

The mine permit. RCT has approved the mining permit with six provisions (see Appendix E). Both the mine permit and NPDES permit, if issued, would have approximate concurrent 5-year terms. Both would require reapplication and reissuance for the mine to continue in operation past the initial permit terms. This process of repermitting would occur each 5 years for the duration of mine activity.

Endangered species (Section 7). EPA believes issuance of the NPDES permit to be an action which is likely to adversely affect endangered ocelots and/or jaguarundi and entered into formal consultation with the U.S. Fish and Wildlife Service pursuant to Section 7 of the Endangered Species Act. DRRRC worked closely with the U.S. Fish and Wildlife Service to develop a mitigation plan for ocelots and jaguarundi. This coordination is reflected in a

biological assessment which was prepared by consultants to DRRC after the DEIS was written, but before the DEIS was published; and an addendum to the biological assessment which was prepared after the DEIS was published. The biological assessment and its addendum represent new information, and are summarized in a new section of the EIS, Section 5.4.5. Section 5.4.5 can be found in Part III.C of this FEIS.

The EPA received the U.S. Fish and Wildlife Service's draft biological opinion on October 24, 1994. The EPA requested clarification of ambiguities found in the draft opinion by its comment letter to the USFWS on November 4, 1994 (See Appendix F). The Service sent its final biological opinion to EPA on November 23, 1994. This final opinion, also contained in Appendix F, does not resolve EPA's previous concerns and, indeed, creates some additional ambiguity. It appears that the USFWS is unwilling or unable to provide a complete biological opinion in this matter because there is no currently available site-specific "scientific data regarding the possible use of the project site as habitat." With or without benefit of a clear and complete USFWS opinion, EPA, Region 6 must make its decision about NPDES permit issuance. After considering all comments received on this FEIS, EPA will make that decision.

Waters of the U.S./Wetlands (Section 404). Initial formal coordination establishes whether or not jurisdictional "waters of the U.S." or "wetlands" will be involved; jurisdictional refers to waters or wetlands that are subject to Federal regulations. As indicated in the DEIS, Elm Creek has informally been identified as "waters", but no "wetlands" subject to Section 404 jurisdiction were identified. Wetlands outside of Elm Creek exist, but are tentatively determined to be not associated with "waters". Final determinations on these points may require surveying for wetlands (according to certain environmental criteria) and development of specific mitigation plans.

The process will repeat itself to some extent when DRRC applies for additional five-year mining permits. The first five-year permit area contains most of the possible "waters" or "wetlands" in the life-of-mine area: some 23 acres of "waters"; eight acres of "artificial" wetlands resulting from canal seepage; and 15 acres of stock ponds. Review of aerial photos indicate that future permit areas could, all together, contain another three or four acres of natural riparian areas along intermittent streams and a few more small stock ponds.

Cultural resources (Section 106). Since the DEIS was published, the results of two intensive ("Phase II") cultural resource surveys (Uecker, 1994; Uecker and Warren, 1994) have been released. As indicated in the DEIS (Section 5.5.2), protection of cultural resources centers around a Programmatic Agreement (PA) which has been developed by EPA in consultation with the Historic Preservation Officer of Texas and the Advisory Council on Historic

Preservation (see Appendix G). This PA provides the procedural framework under which cultural properties eligible for inclusion to the National Register of Historic Places will be identified and protected prior to their disturbance or destruction in the course of mining operations. Through its concurrence in the PA, Dos Republicas Resources Company has committed to fully cooperate with EPA, the Council, and the Texas Historical Commission in this effort.

Members of the public with interest in this undertaking and its effects on historic properties are provided reasonable opportunity to have an active role in the Section 106 process. Traditional cultural resource leaders and other Native Americans are considered to be interested persons with respect to undertakings that may affect historic properties of significance to such persons. The Sierra Club Lone Star Chapter and the Kickapoo Tribe have been included in the Section 106 consultation process as "interested parties".

Other interested persons, as follows, are invited to participate in the Section 106 consultation process: 1) the head of a local government when the undertaking may affect historic properties within the local government's jurisdiction; 2) the representative of an Indian tribe in accordance with 36 CFR Part 800.1(c)(2)(iii); 3) owners of affected lands; and 4) other interested persons when jointly determined appropriate by the EPA, the Historic Preservation Officer of Texas and the Advisory Council on Historic Preservation. The EPA requests that any other entities wishing to be interested parties should let EPA know during the 30-day review and comment period on this Final EIS.

Texas wastewater and air quality. TNRCC has certified that the wastewater permit will comply with Section 401 of the Clean Water Act, concerning the meeting of Texas water quality standards. TNRCC approved the Hearing Examiner's order to issue the wastewater permit to DRRC on November 29, 1994 (see Appendix H).

As discussed earlier in Part II.C.5, TNRCC staff has completed its review of DRRC's application for an air quality permit and has issued a recommendation that the draft permit be issued; a public hearing was scheduled for December 13, 1994.

PART III

**MODIFICATIONS AND
CORRECTIONS TO THE DRAFT**



III. MODIFICATIONS AND CORRECTIONS TO THE DRAFT EIS

This part of the Final EIS contains revisions made to the DEIS based on errors and omissions identified through the public review process, or resulting from internal review by EPA and the EIS consultant. Minor changes are incorporated into a list of Errata, III.A. Page revisions are presented in III.B; a new section in III.C; and additional citations in III.D.

A. EDITORIAL CHANGES

The changes in the DEIS listed below are of an editorial nature; they represent corrections of minor errors, or minor additions and rewrites to material, in the DEIS. Consequently, the affected pages have not been reprinted in full. In each case, the page, paragraph, and line that has been revised is identified; "Line" refers to a line of print. Revisions are indicated in the "Change" column. New or modified material is underlined.

<u>Page No.</u>	<u>Paragraph</u>	<u>Line</u>	<u>Change</u>
1- 8	Table 1-2, Surface water, during reclamation and after	1	In the sentence beginning "Jurisdictional waters...", replace the word "will" with the word " <u>may</u> ".
1- 9	Table 1-2, Endangered species, Federal Section 404 permit	1	Replace "pre-mine plans are required for replacement of wetlands; periodic inspections", with " <u>periodic inspections may be required</u> ".
4- 6	2nd paragraph	1	Replace "inactive" with <u>active</u> .
4- 8	1st paragraph	7	Replace "will" with <u>may</u> .
4- 8	1st paragraph	8	Add: " <u>DRRC expects that if a dragline is used, its use will be limited to Area D (Kost, 1994).</u> "
4- 11	1st paragraph	1	Replace first sentence with: <u>DRRC estimates its' water use demands as follows: industrial use 300 acre-feet per year (AFY), of which more than 250 AFY is for dust control on roads; irrigation use 800 AFY; possible alternate supplies for area landowners 100 AFY.</u>

<u>Page No.</u>	<u>Paragraph</u>	<u>Line</u>	<u>Change</u>
5- 5	Table 5-1, Natural units, wildlife	5	Replace "Figure 5-1" with " <u>Figure 1-2</u> ".
5- 5	Table 5-1, Natural units, wildlife	6	Replace "spring-fed" with " <u>rain-fed</u> ".
5- 6	2nd paragraph	3	Replace "1.12" with " <u>1.14</u> ".
5-13	1st paragraph	3	After "No. 21" insert " <u>within the mine area</u> ".
5-17	4th full paragraph	4	Replace "Figure 4-2" with " <u>Figure 1-1</u> ".
5-19	2nd paragraph	3	Following the sentence beginning "To secure City water...", add this sentence. " <u>This water line may require a section 404 authorization under the Clean Water Act if excavation or fill material is placed in a water of the United States.</u> "
5-19	3rd paragraph	3	Replace the sentence beginning "The existing area ..." and the following sentence, with: " <u>Those who live near the mine and choose to hook up to the system, should expect a more reliable, better quality water supply than can be obtained from Lateral 21. For a discussion of induced growth impacts refer to Section 5.6.2.</u> "
5-23	1st full paragraph	7	Delete the words: "now underway".
5-27	1st paragraph	3	After "bunchgrasses", add: " <u>as well as other areas of dense brush habitat</u> ".
5-27	5th paragraph	6	After "results of trapping survey, 1993", add: " <u>SWCA, 1994a and b</u> ".
5-27	5th paragraph	7	Replace "48" with " <u>57</u> ".
5-33	1st paragraph	5	Replace "one square mile" with " <u>474 acres</u> ".

<u>Page No.</u>	<u>Paragraph</u>	<u>Line</u>	<u>Change</u>
5-33	1st paragraph	9	After "hunting", add " <u>; cattle grazing</u> ".
5-33	3rd paragraph	5	Replace the sentence starting "Trapping..." with the following. " <u>Trapping on the project area was completed, but DRRC discontinued the study before the 10-mile radius survey was conducted, because it interpreted informal consultation between DRRC and USFWS as indicating that USFWS considered the project site to contain potential habitat, and failure of a trapping study to demonstrate the presence of the cats would not refute this finding.</u> "
5-33	4th paragraph	1	Replace "very few" with " <u>few</u> ".
5-34	2nd paragraph	1	Replace "Four" with " <u>Five</u> ".
5-34	2nd paragraph	6	Insert the following sentence after "(FWS, 1993)". " <u>In 1993, one or potentially two jaguarundi with 2 kittens were reportedly seen approximately five miles northeast of Eagle Pass about one mile from Elm Creek.</u> "
5-35	before 1st full paragraph		Insert the following paragraph: " <u>EPA has included a summary of DRRC's biological assessment and current mitigation proposals in Part III.C, and the USFWS' biological opinion in Appendix F. This information was received since the DEIS was written.</u> "
5-37	2nd paragraph	4	Replace "100 feet" with " <u>300 feet</u> ".

<u>Page No.</u>	<u>Paragraph</u>	<u>Line</u>	<u>Change</u>
5-39	2nd paragraph	1	Replace the sentence beginning "The COE has..." with the following. <u>"The COE has indicated that the applicant for a 404 permit will benefit by resolving issues (e.g., with FWS) prior to submitting a notification letter for permitting under a COE nationwide permit (see Section 3.3 of this EIS)."</u>
5-53	Table 5-5	1	In the column headings, change the second footnote 1 to "2" and footnote 2 to "3"; at the end of the table change footnote 1 to "2" and 2 to "3"; add a new footnote as follows: <u>"1/ Source: DRRC, 1993 as reported in UTSA, 1993; Don Marston, 1994"</u> .
5-58	5th paragraph	5	Delete the phrase "and about 1/4-1/2 mile up Thompson Road"; insert after "low water areas": <u>"and additional base coarse to strengthen the road"</u> ; and insert after "Rodriquez, 1994": <u>"Howard, 1994"</u> .
5-58	5th paragraph	8	Delete the sentence beginning "The work on Thompson Road ..." and replace it with: <u>"It is anticipated that work on the improvements to Thompson Road will go to bid in the spring of 1995 (Howard, 1994)"</u> ; and insert after the phrase "If the construction", the phrase: <u>"is delayed and"</u> .
5-66	2nd paragraph	6	Replace "nitrous" with <u>nitrogen</u> .
5-68	1st paragraph	4	Replace "potential for" with <u>"prevention of"</u> .

<u>Page No.</u>	<u>Paragraph</u>	<u>Line</u>	<u>Change</u>
5-68	1st paragraph	7	Replace "background" with " <u>baseline</u> ".
5-68	4th paragraph	4	Replace "also considered" with: " <u>however did not consider</u> ".
5-69	2nd full paragraph	9	Replace "load factor at the power plants" with: " <u>conversion of SO₂ to sulfate aerosol</u> ".
5-69	3rd full paragraph	1	Replace "undermine" with " <u>impede</u> ".
5-73	1st paragraph	5	Add the following paragraph: " <u>The U.S. government would also be, in effect, sanctioning an action that is contrary to the National visibility goal established by Congress in Section 169A of the Clean Air Act, i.e., the prevention of future, and remedying of any existing impairment of visibility in mandatory class I Federal areas which impairment results from manmade air pollution.</u> "

B. PAGE REVISIONS

Three page(s) of text, and one table have been revised and reprinted in their entirety. Revised text is underlined.

The revisions are listed below.

Text revisions:

DEIS page 3- 6

DEIS page 5-28

DEIS page 5-45

Table revisions:

Table 5-2, DEIS page 5-32

REVISED DEIS page 3-6

required to protect such sites. Section 5.5 of this EIS assesses the impact of the proposed action on cultural resources.

TNRCC. Two permits are required from the Texas Natural Resources Conservation Commission. One is a surface water discharge permit analogous to the Federal NPDES permit; the permitting process is managed by the Watershed Management Division. An air quality permit for emissions from the proposed coal-handling facility is the responsibility of the Office of Air Quality.

The permits will require the Eagle Pass Mine to control the concentrations of pollutants in its discharges to surface water and in its emissions to the air so that standards set by the State of Texas for the protection of the environment and the health of its people are not exceeded. Construction of the coal-handling facility cannot begin until the air-quality permit is acquired.

DRRC's application for its surface water discharge permit was approved by TNRCC on November 29, 1994. DRRC's application for its air quality permit is administratively complete, and was scheduled for public hearing on December 13, 1994.

Migratory birds. The applicant will need to comply with the Migratory Bird Treaty Act (MBTA), which prohibits takings of non-game migratory birds, nests, or eggs without a USFWS permit. The applicant states that if it appears that migratory birds could be impacted by DRRC's project, DRRC's clearing activities will be accomplished during non-nesting periods of the year, and in accordance with accepted practices (Kost, 1994a). Based on bird lists provided in DRRC's application to the RCT and in DRRC's biological assessment, migratory birds do use the Elm Creek corridor. It is EPA's understanding that the applicant should seek an MBTA permit from the USFWS law enforcement branch if it intends to conduct clearing activities during nesting season, or to move nests.

Raptors. DOI's comment letter indicates that special permits are required under State and Federal regulations to authorize the disturbance of raptor nests and their contents. The USFWS field supervisor must be contacted immediately if raptor nests are encountered in the permit area.

REVISED DEIS page 5-28

Hawk. Mammals include over 100 healthy white-tailed deer, coyotes, woodrats, bobcats, collared peccary, raccoons, porcupines, feral pigs, skunks, armadillos, and beaver. A jaguarundi sighting is discussed in Section 5.4.3, as are sightings of several reptiles.

Riparian corridors. Riparian (stream-side) habitats are important to wildlife for reasons which include: a natural diversity of habitat conditions; the availability of food, water and cover; an edge effect with adjoining areas; and use as a travel corridor for certain species. These benefits can be especially critical in arid areas. The riparian zone along Elm Creek may be an important habitat for carnivores, which can use it as a travel corridor to and from the Rio Grande and beyond (Tewes/Hicks, 1993).

SWCA (1994b) conducted a partial survey of the Elm Creek corridor from the southern edge of the permit area at Highway 1588 to the Rio Grande, using direct observation at road crossings and air photo analysis. Photographs are included in SWCA (1994b, Appendix B). The total width of the riparian vegetation ranges from less than 100 feet to more than 900 feet, but averages less than approximately 300 feet. The vegetation ranges from a variety of native trees and shrubs to dense stands of cane (Phragmites). Land use adjacent to the riparian corridor is mostly open agricultural fields with some residential and business property; virtually no naturally vegetated uplands are adjacent to the corridor. The most severe apparent restrictions occur at three road crossings (Highways 1588, 277, and 1589); a very narrow stretch just downstream of the Highway 1588 crossing (less than 75 feet wide for more than 2000 feet); another along an old gravel pit just downstream of the Highway 1589 crossing; and a long channelized stretch near the confluence with the Rio Grande (150 feet wide and densely vegetated with cane). The Maverick County Canal also is a potential riparian corridor linking to habitat along Elm Creek.

The City of Eagle Pass intends to establish a no-development corridor along the Rio Grande and lower Elm Creek (Ruiz, 1994). This action should help maintain the value of whatever riparian corridor habitat does exist in the area.

Eagle Pass and Piedras Negras limit access from Elm Creek to the Rio Grande, especially east of the confluence. There is very little cover to the east of the Elm Creek-Rio Grande confluence, between Eagle Pass and Piedras Negras. The Rio Grande is a potentially important corridor, especially upstream from the Elm Creek confluence; however, SWCA (1994a) states that brush habitat is apparently non-existent in this area, and adjacent land use in Mexico is agricultural.

(revised DEIS page 5-28 cont.)

To the north the habitat comes very close to the ephemeral headwaters of creeks in the Nueces River drainage (e.g., Picoso Creek). At this time there has been no survey of the type which would determine whether Elm Creek acts as an important travel corridor between the Rio Grande area and the Nueces drainage; or instead is an habitat island or a branch off of Rio Grande habitat.

SWCA (1994a) estimates that the dense brush habitat extends 25 to 30 miles to the north along Elm Creek, and calculates that if a liberal width of 200 feet were assumed, the Elm Creek corridor plus tributaries would amount to at most 1500 acres, and concludes that this quantity of habitat is less than the average home range of a female ocelot and about one-fourth the average home range of a male as described by Tewes (1986).

Aquatic resources. Gomez and Lindsay (1992) provide an extensive list of fishes that could occur in the permit area, including some species which probably occur in Elm Creek on the project area only during the spring run of the fishes which use small streams for spawning. Four species of fish were obtained at a seining site near the Highway 1588 (Thompson Road) bridge along Elm Creek. Fishing activity was also observed there, with large-mouth bass, sunfish and catfish being the main sport species (Gomez, 1994). As detailed in Section 3.3, COE indicates that the Elm Creek channel between high water marks probably will be considered jurisdictional waters of the U.S. This area comes to 23 acres in the five-year permit area; the life-of-mine jurisdictional waters area has not been calculated.

Rain-fed pools and two associated toad species were observed in Area "Y". Approximately 8 acres of artificial wetlands, resulting from canal seepage, are located between the end of Lateral 21 and Elm Creek. At least seven small stock ponds (15 acres

REVISED DEIS page 5-45

Induced development. The proposed mine will encourage the construction of new homes and businesses in Eagle Pass and Maverick County. Over a 10-year period, it is expected that about 100-200 new families will move to the area as a result of the mine; 70% of these families will have workers employed at the mine (see Section 5.7.3). These families, as well as workers with increased incomes, will create a demand for new housing. This demand will contribute to the overall growth of the area but is not expected to create any significant problems (see Section 5.7).

One area where growth may be concentrated as result of the mine is north of town between Eagle Pass and the mine site. Not only is this location convenient for workers at the mine but its development would be supported by the water line which will extend from Eagle Pass to the mine. Such growth has the potential to foster urban sprawl and a demand for other services to be extended into the area before it is economically feasible to do so. In this case, City Officials do not feel there will be a problem because the City has instituted "limited purpose annexation" which allows the City to implement zoning in unincorporated areas to manage growth and the extension of services (Ruiz, 1994).

Other potential impacts of the induced development include:

- . changes in land value, see Section 5.7.2;
- . conversion of about 640 acres of rural land to urban use, of this about one-third has soils with the potential to be classified as prime farmland soil (Montell and Copita series) however only a small portion of it is currently cultivated, see discussion p. 5-6;
- . increased runoff to area streams which could result in minor increases in pollutant levels in those streams and minor increases in the flooding potential of Elm Creek.

The development of this land should not have an adverse impact on endangered species habitat as this area consists predominantly of grazingland and large lot rural homesites along Thompson Road. Where Thompson Road crosses Elm Creek, the land can be protected from development by the proposed No Development Corridor and City zoning authority.

Blasting. Property impacts of blasting should be minimized by RCT requirements regarding safety, noise and vibration (see discussion in Section 5.3). For example, DRRC will be required to notify all residents and owners within one-half mile of the blasting site of their right to request a pre-blast survey of their property, so that any future damage

(revised DEIS page 5-45 cont.)

caused by blasting can be documented. However, EPA's review of environmental assessments for surface coal mines in Oklahoma indicated that there can be problems with the use of a one-half mile radius from the blasting site to delineate areas likely to be impacted by blasting. The character and structure of geologic materials can act to "telegraph" blasting effects to areas beyond the one-half mile radius (LWA, 1993). If evidence of blasting damage occurs, the RCT may specify lower limits on airblast levels in the vicinity of a specific blasting operation to prevent damage. Also see the discussion of blasting in Section 5.3.

Abandoned mines. Abandoned mine shafts can be a hazard to existing land uses, a condition that can be aggravated by nearby active surface mining. Effects of actions such as dewatering and blasting on old shafts are difficult to predict, as shafts have unique characteristics and can react differently. Hazards include collapse, fire and acid mine drainage.

There are no known abandoned underground mines within the first five-year mine permit area. For other parts of the life-of-mine area, review of such features is conducted by the RCT once a specific application is made. Of concern at EPA's scoping meeting

REVISED DEIS page 5-32

Table 5-2. Threatened and endangered species

State and Federally listed species that may occur in Maverick County

<u>Category/species</u>	<u>Common name</u>	<u>State-listed</u>
Federal Endangered		
<i>Felis pardalis</i>	Ocelot	Endangered
<i>Felis yagouaroundi</i>	Jaguarundi	Endangered
<i>Falco peregrinus anatum</i>	American peregrine falcon	Endangered
Federal Threatened		
<i>Falco peregrinus tundrius</i>	Arctic peregrine falcon	Threatened
<i>Ursus americanus</i>	Black bear	Threatened
Federal Category I*		
<i>Charadrius montanus</i>	Mountain plover	
Federal Category II**		
<i>Buteo regalis</i>	Ferruginous hawk	
<i>Buteo nitidus maximus</i>	Northern gray hawk	Threatened
<i>Icterus graduacauda audubonii</i>	Audubon's oriole	
<i>Icterus cucullatus cucullatus</i>	Mexican hooded oriole	
<i>Lanius ludovicianus</i>	Loggerhead shrike	
<i>Crotaphytus reticulatus</i>	Reticulate collared lizard	Threatened
<i>Phrynosoma cornutum</i>	Texas horned lizard	Threatened
<i>Siren intermedia texana</i>	Rio Grande lesser siren	Endangered
<i>Acleisanthes crassifolia</i>	Texas trumpets	
<i>Plegadis chihi</i>	White-faced ibis	Threatened
<i>Cycleptus elongatus</i>	Blue sucker	Threatened
<i>Etheostoma grahami</i>	Rio Grande darter	Threatened
State Endangered and Threatened (not Federally listed)		
<i>Nasua nasua</i>	Coati	Endangered
<i>Mycteria americana</i>	Wood stork	Threatened
<i>Buteogallus anthracinus</i>	Common black-hawk	Threatened
<i>Buteo albonotatus</i>	Zone tailed hawk	Threatened
<i>Gopherus berlanderi</i>	Texas tortoise	Threatened
<i>Drymarchon corais</i>	Texas indigo snake	Threatened

* CATEGORY I: Candidate species for listing, with sufficient information available for listing.

**CATEGORY II: Candidate species for listing, awaiting more information.

° Federally listed as threatened due to similarity of appearance to Louisiana black bear; this listing pertains to illegal traffic in endangered species, not to land management projects in areas outside the range of the Louisiana black bear and therefore does not pertain to this project.

Source: FWS, 1993; FWS, 1994; Morrill, 1992a; TPWD

C. SECTION REVISIONS

Since the DEIS was written, EPA has received DRRC's biological assessment of its mitigation plan and an addendum to the biological assessment. To address the new information contained in those documents, EPA has added a new section here, Section 5.4.5, which presents EPA's summary and evaluation of DRRC's biological assessment. (A copy of the complete biological assessment is available for review at the Eagle Pass Public Library).

5.4.5 EPA's summary of DRRC's biological assessment

In support of EPA's coordination with the USFWS under Section 7 of the U.S. Endangered Species Act, and in order to update EPA's biological assessment presented in Section 5.4.4 of the DEIS, DRRC has prepared a biological assessment of the proposed project's potential impacts on ocelots and jaguarundi, and has submitted this assessment to EPA and to USFWS. The biological assessment was prepared by DRRC's environmental consultant (SWCA, Inc.), and consists of DRRC's original June 1994 biological assessment (SWCA, 1994a) and an August 26, 1994, addendum thereto (SWCA, 1994b). The following text summarizes the two documents submitted by DRRC.

Introduction. USFWS indicates that two federally endangered species, ocelot and jaguarundi, may potentially occur in the project area, due to their historical ranges, site records, and some apparently suitable brush habitat. DRRC states that there is no confirmed evidence of ocelot or jaguarundi on or immediately adjacent to the project site; that potential habitat areas are too small to support the cats; and that a lack of significant areas of suitable habitat north and south of the site make the site's use as part of a movement corridor unlikely (SWCA, 1994a). DRRC concludes that the probability of significant impacts to the felids is small but that, because it is essentially impossible to conclusively prove the cats' absence, the company has developed a mitigation plan, and that with the proposed mitigation, long-term impacts should be insignificant whether or not the cats are present.

Existing environment. DRRC states that Tewes/Hicks (1993) delineated 392 acres of dense brush habitat (greater than 75% horizontal cover) in the project area. Tewes/Hicks describe this habitat as nearly continuous, but DRRC finds that the dense understory occurs as patches (SWCA, 1994a). DRRC quantified this vegetation by measuring percent cover (because of Tewes' work indicating it as a useful measure of cat habitat), and vegetation volume (because of SWCA's arid land riparian experience indicating it as a useful analog to bird populations, as presented in Mills et al., 1991 [Appendix A of SWCA, 1994a]).

DRRC laid out 15 transects across the Elm Creek channel brush habitat, and made measurements that included the unvegetated Elm Creek channel (47 feet wide on average) in the summary statistics given in Tables 1 and 2 of SWCA (1994a). USFWS requested that Elm Creek brush-habitat statistics exclude the unvegetated channel, and DRRC did this in Tables 5 and 6 of SWCA (1994b). Another 97 transects, grouped into 11 segments, were laid out longitudinally in the proposed upland bypass corridor. Upland bypass segment

locations are given in Figure 8 of SWCA (1994b) and vegetation measurements in Tables 7, 8, and 9 of SWCA (1994b). Table 5-3a summarizes the Elm Creek and upland bypass measurements. Percent cover is uniformly higher along Elm Creek, as is vegetation volume in the second meter above ground; but vegetation volume in the first meter above ground is actually higher in the upland bypass corridor. The Elm Creek measurements will be used as vegetation density goals for other corridors, as discussed below.

Table 2 of SWCA (1994a) shows that dominant plant species along Elm Creek included mesquite (*Prosopis glandulosa*) (21.9% of the total volume), cedar elm (*Ulmus crassifolia*) (15.5%), whitebrush (*Aloysia gratissima*) (13.8%) and alkali sacaton grass (*Sporobolus aeroides*) (12.1%).

Dominant plant species in the upland bypass corridor varied by segment, but overall dominants included mesquite (19.2% of the total volume), various perennial grasses (17.3%), blackbrush (13.9%) and whitebrush (8.1%). Trees and shrubs accounted for more than 75% of the total plant volume, subshrubs for 7.6% and perennial grasses for slightly more than 17% (SWCA, 1994b).

In addition to these vegetation surveys, Table 10 in SWCA (1994b) provides a list of 90 birds species observed by SWCA personnel during visits to the project site and the immediate vicinity; these are casual observations and were not intended for purposes of bird surveys.

Proposed project. SWCA (1994a) contains information on the mining project which does not conflict with or add to the discussion in the DEIS, and therefore is not summarized here.

Listed or proposed species present on the site. Information provided by DRRC on endangered and threatened species is similar to that provided in Section 5.4.3 of the DEIS. SWCA (1994a) states that the 392 contiguous Elm Creek brush habitat acres delineated by Tewes/Hicks (1993) are far less than the average composite home range for ocelots of 7,000 acres for males and 4,400 acres for females determined based on telemetry data (Tewes, 1986), and only slightly larger than the smallest known continuously occupied area of 301 acres for a young male. DRRC concludes that it is highly unlikely that any ocelot home range would be confined entirely to the project area.

Analysis of direct impacts. DRRC states that because the status of ocelot and jaguarundi on the project site are not known, impacts to ocelot and jaguarundi are necessarily unknown (SWCA, 1994a). Because these cats are highly mobile and secretive, DRRC judges that it appears unlikely that one would be killed or injured by mining

Table 5-3a. Measured existing vegetation densities

	<u>Elm Creek corridor</u> ¹	<u>upland bypass corridor</u>
percent cover ²		
1st meter, average	66	46
1st meter, range	38 to 91	13 to 68
2nd meter, average	48	28
1st and 2nd meter, combined average	75	51
vegetation volume, m ³ /m ²		
1st meter, average	0.301	0.35
1st meter, range	0.173 to 0.487	0.15 to 0.469
2nd meter, average	0.195	0.109
1st and 2nd meter, combined average	0.495	0.459

Notes:

- 1) Elm Creek brush habitat vegetation densities exclude the unvegetated Elm Creek channel.
- 2) DRRC included only cover provided by trees and shrubs in its upland bypass percent cover measurements, excluding perennial grasses and subshrubs because they did not appear to provide much cover for cats. If perennial grasses and subshrubs had been included, cover in the first meter in the upland corridor would have averaged 91%, much higher than in the first meter of the dense brush habitat along Elm Creek. All vegetation was included in the percent cover measurements along Elm Creek, because the majority of perennial grasses (mostly alkali sacaton) appeared to provide significant cover, and few subshrubs are present.

Source: SWCA (1994b)

activities. It cites three indirect potential impacts that could occur: destruction of habitat; interference with a possible movement corridor; and disturbance by noise and human activity.

DRRC states that effects of habitat destruction are unknown because the degree of use of the habitat by the cats is unknown (SWCA, 1994a). However, it concludes that the maximum number of ocelots that would be displaced by the proposed project is likely to be one, based on known home range sizes. DRRC further concludes that habitat destruction due to induced development between Eagle Pass and the mine site is unlikely to affect habitat suitable for the cats since that development would not be along Elm Creek.

Loss of riparian corridors. SWCA (1994b) addressed interference with a possible movement corridor by presenting: 1) the results of a partial survey of the Elm Creek corridor from the southern edge of the permit area at Highway 1588 to the Rio Grande, and 2) some analysis of corridor potential along Elm Creek to the north of the site, and along the Rio Grande near its confluence with Elm Creek. These findings were presented previously in the FEIS, in Part III.B, page revision of DEIS page 5-28.

Other impacts. DRRC states that the potential for genetic isolation of any cats north of the project area due to mining activities is slight, since there are unlikely to be any ocelots there because the project area is at the northern edge of the potential range of the ocelot (SWCA, 1994a). It notes further that ocelots can tolerate some human disturbance, as discussed in the DEIS, and are known to inhabit areas quite close to urban development, including irrigation canals and drainages. If the cats are in the area now, they must already be tolerating human activities.

DRRC states that cumulative effects would be due to brush clearing on private land, and are unknown (SWCA, 1994a); and that such private actions would be subject to Section 10a of the Endangered Species Act (ESA) and therefore would not be cumulative impacts under the ESA. DRRC asserts that death or direct injury to an individual of the species must be shown in order to constitute a take, as that term is provided for in Section 10; no take could occur if no cats are shown to exist in an area.

DRRC also briefly examines impacts to listed species of Texas as a result of burning of Eagle Pass coal at the Carbón I/II power plants (SWCA, 1994a). A table of listed species found within the potential sulfur dioxide plume of the Carbón I/II complex is included as Appendix A of SWCA (1994a). DRRC states that acid rain studies in the southwest have shown that sulfur dioxide impacts, if any, occur near to the source, and that there are currently no documented adverse effects of acid rain in the southwest.

DRRC's preferred mitigation alternatives. DRRC analyzed five alternatives for mitigating the impacts outlined above. DRRC's preferred alternative is described in detail here; a brief review of the other four alternatives follows.

DRRC, its consultants, and USFWS have developed a set of measures to minimize and mitigate any potential impacts to ocelot and jaguarundi. These are listed in SWCA (1994a) and include:

- 1) minimizing extent of potential habitat disturbed at one time;
- 2) maintaining existing brush habitats along Elm Creek as long as possible, and replacing these habitats as quickly as possible following disturbance;
- 3) creating additional brush habitat corridors within the project area during mining activities and providing for their protection following completion of mining;
- 4) creating a brush habitat bypass corridor around the project site prior to any disturbance; and
- 5) minimizing noise and human activity impacts adjacent to brush habitat corridors.

In SWCA (1994b), DRRC commits to maintaining a continuous brush habitat corridor at least 100 feet wide, by not disturbing the existing corridor along Elm Creek until volume and cover in the bypass corridor equals or exceeds that measured in existing brush areas. At the end of mining and reclamation, DRRC states that four brush corridors will be present instead of the one present now, and the quantity of dense brush habitat on the site will be approximately doubled. These mitigation measures are in addition to other reclamation plans, such as the establishment of 206 acres of bottomland woodland habitat required by RCT.

Revegetation. SWCA (1994a) summarizes DRRC's proposed revegetation methods, and experiments that DRRC plans to conduct on their effectiveness. There are no known revegetation efforts in similar brush habitats. TPWD (1993b) describes brush habitat restoration initiated on at least 27 acres of potential future ocelot habitat, by planting native seedling nursery stock at the Las Palomas Wildlife Management Area. DRRC says that this project shows preliminary success, and that with appropriate soil preparation and irrigation it seems likely that seeding would also be successful.

Two other revegetation methods - individual plant salvage and group salvage - appear to be experimental in this part of Texas, but have proven successful in other areas. DRRC's consultant, SWCA, has extensive experience with individual plant salvage in Arizona's Sonoran desert, where it has used a box technique to move over 2000 large mesquite and palo verde trees with a 95% success rate, and has also used tree spades with a somewhat reduced success rate (SWCA, 1994a).

Group salvage, entailing the movement of whole pads of vegetation using large equipment, has been employed for reclamation at two northwestern Colorado coal mines, with survival rates varying between 43 and 100 percent in one program dating back to 1982. DRRC says that personnel in these programs believe the success rate could have been improved had the mine employed irrigation during the dry season of the first growing year instead of only once immediately upon transplanting (SWCA, 1994a).

DRRC describes a series of experiments it intends to conduct over the first five years of mining, to determine how well the various methods will work, and which method can most adequately and quickly recreate the habitats at the least cost (SWCA, 1994a). The experiments will be closely monitored against undisturbed plots. It is anticipated that it will take two to three years to determine the best method, but all methods should be successful to some degree.

SWCA (1994a) proposes that the revegetation experiments occur on a 20-acre area along diversion C-C', which is easily accessible and near water, and which will be fenced against rodents (SWCA, 1994a). Within this area, land will be subdivided for testing of the four proposed revegetation methods. Seeding will be tried on one acre. 4000 seedlings, obtained by contracting with a nursery, will be planted on another acre. Individual salvage of 500 individual plants and shrubs from Reach 1 will be attempted on two acres. And 400 pads of vegetation from Reach 1 will be transplanted into a five acre area, as a group salvage test. The group salvage method should be the quickest way to get plants established, if the pads do not crumble and if they are irrigated (ideally over at least one growing season); however, group salvage may be expensive. With this technique, the smaller and shorter plants are most likely to survive, which is satisfactory because the brush habitat desired does not appear to be dependent on a tree canopy.

SWCA (1994b) modifies the above outline, saying that the experiments will take place on three test plots of 5 acres each, as shown on Figure 3 of the reference, and that additional areas may be established if monitoring efforts so require. SWCA (1994b) does not give details on how this test plot change would affect other aspects of the vegetation

experiments. Experiments would also take place along the length of diversion ditch C-C', and perhaps in the area where Reach 3 would be relocated following mining. Note, however, that revegetation along diversion ditch C-C' has been dropped from the mitigation plan since SWCA (1994b) was written; see Appendix F of this FEIS. DRRC may seek expert assistance from Texas A&M.

DRRC proposes submitting the following revegetation reports to USFWS: a research program design within two months of Section 7 permit issuance; quarterly and annual progress reports on the revegetation experiment (1995-1999), and a final report in 1999; and annual reports on revegetation progress and monitoring for 20 years, starting in December 1994. Site visits by USFWS will be accommodated on request. As results from the vegetation experiments become available, they will be put to use in the ongoing reclamation process.

Mitigation sequence. DRRC states that at the end of mining, four corridors will be present on the property, versus the one now: diversion C-C', two Elm Creek corridors, and the upland bypass corridor (SWCA, 1994b). Since the C-C' corridor has been dropped, there will be three corridors at the end of mining. Brush habitat on site will consist of 108 acres of original brush habitat, 187 acres of created brush habitat, and 218 acres of enhanced brush habitat in the upland bypass corridor. This means that dense brush will nearly double to approximately 513 acres, for an increase of approximately 80 percent. See Figure I-2 for the locations of the corridors, and Table 5-3b for the timing of mitigation measures along each of the corridors discussed below.

Principal goals of the mitigation effort are to maintain a continuous brush habitat corridor in the general vicinity of Elm Creek, and to use the existing Elm Creek brush habitat vegetation to the maximum extent possible. DRRC indicates that impacts will be limited to Reach 1 (the northwest branch of the "Y"-shaped Elm Creek drainage) in the first five years of mining, so that there will be no loss of a corridor during that period; and in the long-term, impacts will be minimized by re-establishing the Elm Creek drainage and brush habitat in the main continuous corridor and additional brush corridors (SWCA, 1994b).

Reach 1 will be disturbed prior to the onset of mining and mined through during the first five years, and vegetation from its banks will be used in the revegetation experiments along diversion ditch D-D' (diversion ditches are part of the original mine plan, and predate the mitigation plan, which takes advantage of them in several cases). Part of the Reach 1 flow will be rerouted to diversion ditch B-B' on the west side of the railroad, and the remainder to Reach 2 (the northeast branch of the "Y"-shaped Elm Creek drainage) via diversion ditch A-A'; neither A-A' nor D-D' will be vegetated. One loop of Reach 2 will be disturbed in the first five years, necessitating construction of diversion ditch D-D' in year 3.

Table 5–3b. Mitigation Sequence and Timing

	Reach 1 (NE arm of existing Elm Creek drainage)	Reach 2 (NW arm of existing Elm Creek drainage)	Old Reach 3 (stem of existing Elm Creek drainage; SE arm of drainage once new SW arm created)	New Reach 3 (new SW arm of Elm Creek drainage)	Upland Bypass Corridor
Existing Condition	Original; natural drainage channel	Original; natural drainage channel	Original; natural drainage channel	-----	-----
Year 1	Mining	Original, and berm erected 100' to the east; natural drainage channel	Original, and berm erected 100' to the east; natural drainage channel	-----	Creation starts (fencing); not riparian
Year 3	Mining	Original, plus D–D' creation starts (plntg, + transplntg from Reach 1); natural drainage channel	Original, plus berm; natural drainage channel	-----	Creation starts (fencing); not riparian
Year 6	Re–creation starts (planting); permanent drainage channel	Original, plus D–D' created, plus berm; natural drainage channel	Mining, if vegetation density in Upland Bypass meets conditions	Creation starts (planting, plus trans–planting from Reach 2); temporary drainage channel	Creation starts (fencing); not riparian
Year 10	Re–creation con't. (transplanting from Reach 2); perm. drainage channel	Mining, if vegetation density in Upland Bypass or Reach 1/ new Reach 3 meets conditions	Mining, if vegetation density in Upland Bypass or Reach 1/ new Reach 3 meets conditions	Created; temporary drainage channel	Creation starts (fencing); not riparian
After Mining and Reclamation	Re–created; perm. drainage channel	Re–created; perm. drainage channel	Re–created; perm. drainage channel	Created; no longer a drainage channel	Creation starts (fencing); not riparian

NOTES:

- 1) Boxes denote dense brush habitat corridors, per Table 11 of SWCA (1994b). Descriptions are taken from the text of SWCA (1994a).
- 2) To constitute a complete Elm Creek corridor, Reach 1 and/or 2 must be a corridor in the northern half of the site, and old and/or new Reach 3 must be a corridor in the southern half of the site.

A three-hundred foot wide upland bypass corridor, 218 acres total, will be established in year 1, extending from Elm Creek around to the east of the mining area and back to Elm Creek. The purpose of the upland bypass is to establish dense brush habitat, in order to provide an alternative wildlife movement corridor. DRRC believes this can be accomplished largely by fencing out all livestock; irrigation and supplemental planting may be used as well.

Other protective measures include making the haul road in Areas A and D an eastern barrier to all construction activities, and constructing a berm between the road and Reaches 2 and 3.

DRRC believes that by about year 6, it will be ready to mine through the main Elm Creek corridor. In year 6, some brush vegetation will be established in a corridor in the mined and reclaimed area where Reach 1 was originally. Reach 3 (the stem of the "Y"-shaped Elm Creek drainage) will be relocated west of active mining to a new Reach 3 location. As detailed in the "mitigation goals and commitments" section below, the upland corridor will have to have the same or greater vegetation densities as the existing Elm Creek corridor, in order for mining of the Elm Creek corridor to proceed at this point. In the event that the upland bypass corridor does not meet vegetation density conditions in year 6, DRRC says that it will wait until either the upland bypass or the Reach 1/new Reach 3 Elm Creek corridor meets those density conditions before mining the original Elm Creek channel; this could take a number of years.

In year 10, vegetation and flow from Reach 2 will be relocated west of active mining to the original Reach 1 location, where some planted vegetation may already be established. By the end of year 10, all of the original brush habitat within the active mining area that is scheduled to be disturbed will have been.

Following completion of mining, a new permanent Elm Creek channel will be established in the Reach 2 and old Reach 3 locations. Brush in the relocated Elm Creek channel will remain, but the drainage will be redirected to the permanent channel, depriving the revegetated corridor of natural water. RCT minimum design criteria, combined with the needs of the vegetation, will determine the reconstructed channel design. There are two options, depending on whether it is determined that the vegetation is dependent on periodic flooding or not: 1) a channel with a lower bank to contain runoff from smaller storms and

an upper bank to handle large storms, to allow controlled periodic flooding of the upper bank; or 2) a channel with one bank and a broad bottom, capable of handling all storms without flooding its banks. DRRC proposes that the bottom of either kind of channel be planted with pockets of vegetation, to make a braided wash that would make the engineered channel more useable as wildlife habitat.

Mitigation goals and commitments. DRRC is committed to maintaining a continuous brush habitat corridor at least 100 feet wide within the Elm Creek dense brush habitat delineated by Tewes/Hicks (1993). This will remain undisturbed until vegetation volume and percent cover in the upland bypass corridor or Elm Creek's new Reach 3 equal or exceed those measured in existing brush areas along Elm Creek (SWCA, 1994b), as shown in Table 5-3a. DRRC believes that this will minimize short-term impacts, and make long-term impacts insignificant. DRRC further believes it is highly unlikely that this strip will have to be left unmined.

The vegetation volume goal for the upland bypass and Elm Creek new Reach 3 is that dense brush habitat have an average vegetation volume of at least 0.492 cubic meters per square meter in the first two meters within six years (no segment more than 250 feet long may have a vegetation volume of less than 0.36).

For the upland bypass, goals in addition to the vegetation volume goal are that the habitat must be 300 feet wide, and continuous except for at most fifteen, 50-foot-wide unvegetated gaps for ranch equipment and livestock; minimum average cover of 66% for trees, shrubs and perennial grasses more than 0.6 m tall over a strip at least 100 feet wide within the 300-foot corridor (no segment in this strip more than 250 feet long may have less than 50% cover). DRRC believes these goals should be met just by fencing in most areas; by relocation of portions of the corridor into denser areas; and by irrigation of portions if necessary.

For the Elm Creek new Reach 3, goals in addition to the vegetation volume goal are that the habitat must be 100 feet wide (usually 50 feet on each side), and continuous except for at most six, 200-foot-wide unvegetated gaps for equipment and vehicle movement (culverts will be placed underneath these crossings as necessary for drainage and wildlife movement).

Status of mitigation after mining and reclamation. DRRC is exploring options for maintenance of the corridors after mining (SWCA, 1994a). This includes working with the leaseholder to develop protective measures. It should be kept in mind, however, that the areas upstream and downstream of the site are susceptible to habitat loss with or without this project. DRRC is committed to working with local, State, and Federal agencies and private conservation groups for the entire Elm Creek corridor. SWCA (1994b) adds that DRRC will seek agreements with landowners for maintaining the bypass corridor in perpetuity, and that its location may vary somewhat to make the most effective use of existing vegetation.

Other mitigation alternatives. In addition to the preferred alternative outlined above, DRRC considered and rejected the following mitigation alternatives.

- 1) No action (SWCA, 1994a). DRRC rejects this alternative, whereby the mine would not be constructed or operated, for the following reasons: the no action alternative would mean no short-term (20 or 30 years) impacts from the mine, but would not guarantee that brush habitat would be protected by future landowners; any impacts from burning coal at the Carbón I/II facilities would be the same; and economic benefits from the coal mine would not accrue.
- 2) Avoiding the Elm Creek drainage, as defined in Tewes/Hicks (1993) (SWCA, 1994a). DRRC rejects this alternative, saying that it would be economically infeasible because it would eliminate 35% of the total marketable coal from the project. It would directly eliminate the 25% of the project's high quality marketable coal which lies under the drainage. In addition, because this high quality coal would not be available for blending, this alternative would also reduce the amount of low quality coal that could be mined, for an additional 10% loss. This would shorten project life, and the lowered worth would impair DRRC's ability to support long-term financing and its ability to get a contract with Carbón I/II. The economic analysis is provided in Appendix B of SWCA (1994a).
- 3) Alternate mine location (SWCA, 1994a). DRRC rejects this alternative because it is not aware of other economically viable coal reserves, and sees no obvious advantages in moving the mine to a new location, where impacts to any listed species are entirely undefined.

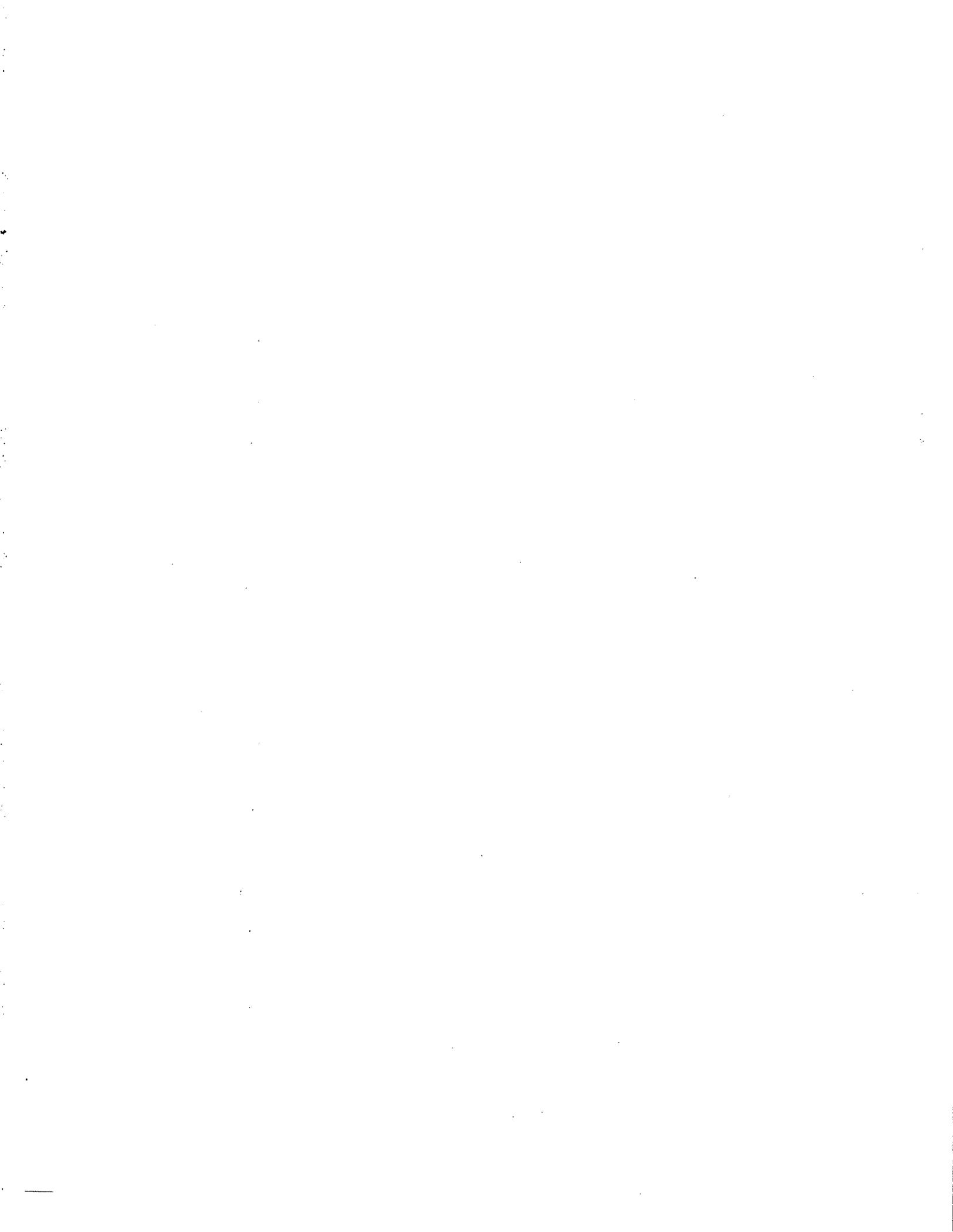
- 4) Moving the railroad and mining through that corridor, rather than moving and mining through the Elm Creek corridor (SWCA, 1994b). DRRC rejects this alternative, proposed by the USFWS. DRRC calculates that moving the railroad to a new 8-mile stretch of track through the Kincaid Ranch to the east of the project area would cost \$16.5 million (50% percent of that cost would be due to extensive earthwork, and 25% to the cost of the track itself). Further, the track is owned by Southern Pacific, who would have to agree to the proposal; and moving the track would split a number of area properties.

D. ADDITIONAL CITATIONS

Citations used in preparing new and revised material presented in the FEIS, which were not cited in the DEIS, are presented here.

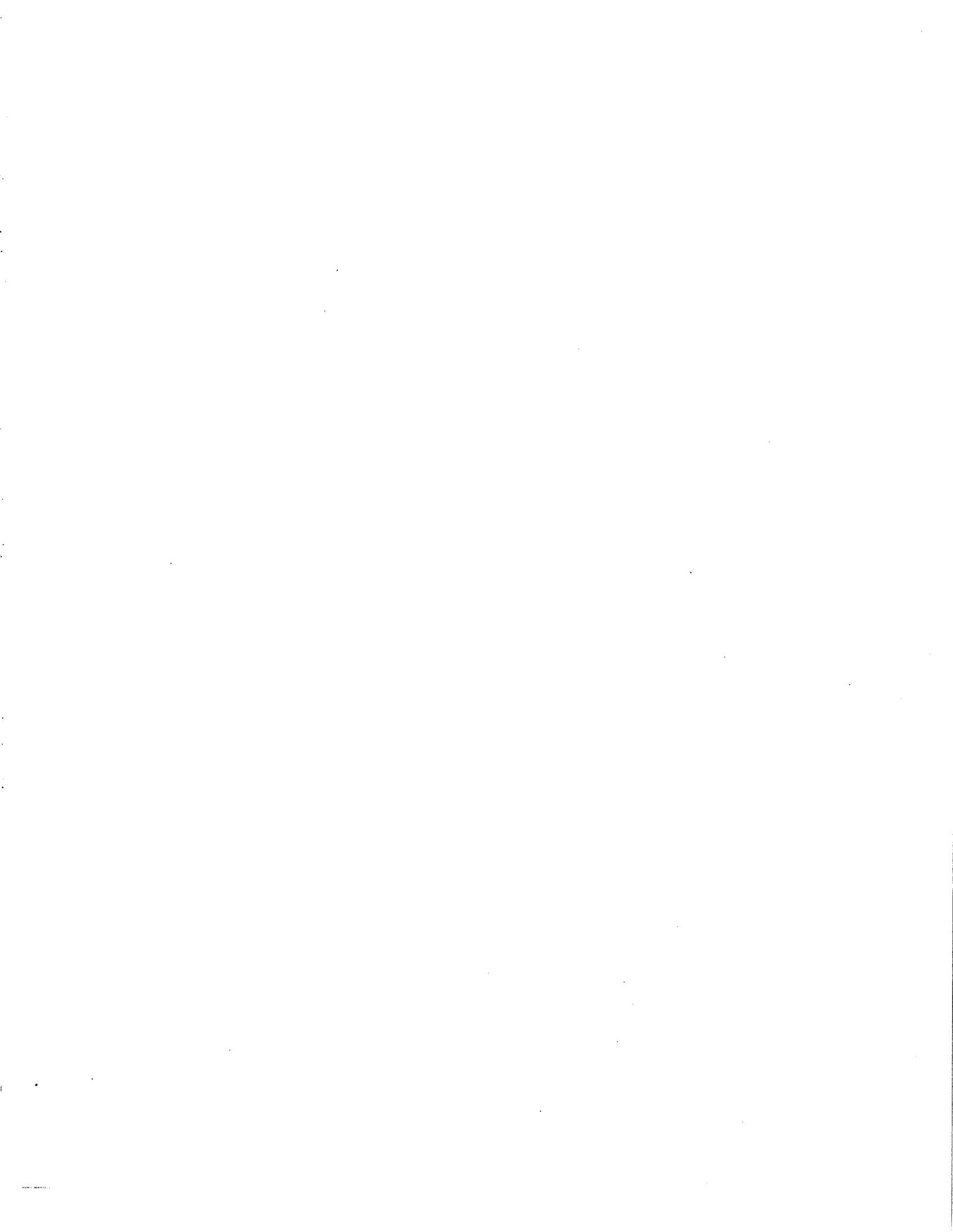
- Carroll, G., 1994. Cat on the spot. *National Wildlife*, 32:4:34-37.
- Ezeanyin, R., 1994. Personal communications. Richard Ezeanyin, Engineer, Air Pollution Control Bureau, New Mexico Environment Department, Santa Fe, NM.
- Howard, G., 1994. Personal communication. Greg Howard, Engineer, Texas Department of Transportation, Del Rio, TX.
- Jones, E., 1994. Personal communication. Earl Jones, Permits Engineer, Office of Air Quality, Texas Natural Resources Conservation Commission, Austin, TX.
- Kost, L., 1994a. September 13, 1994 letter from Lisa Kost, Marston and Marston, Inc., St. Louis, MO to Lee Wilson, Lee Wilson and Associates, Santa Fe, NM.
- Locke, L., 1994a. Personal communication to Katherine Bueler, Lee Wilson and Associates, Santa Fe, NM from Linda Locke, biologist, Laguna Atascosa National Wildlife Refuge, TX.
- Marston, Don, 1994a. September 6, 1994 letter from Donald Marston, Marston and Marston, Inc., St. Louis, MO to William Cox, Chief, Federal Assistance Section, Environmental Protection Agency, Region 6, Dallas, TX.
- Mapel, W. J., 1967. Bituminous coal resources of Texas. *U. S. Geological Survey Bulletin* 1242-D.
- O'Rell, R., 1994. Personal communication. Rade O'Rell, Regulatory program specialist, Office of Surface Mining Reclamation and Enforcement, Albuquerque, NM.
- Phillips, M., 1994a. Personal communication. Max Phillips, Director, Maverick County Water Control and Improvement District #1, Eagle Pass, TX.

- Reeves, R., 1994. Personal communication. Ron Reeves, Assistant Director, Legal Division, Railroad Commission of Texas, Austin, TX.
- Sanderford, B., 1994. Personal communications. Bill Sanderford, Bureau Chief, Coal Mine Reclamation Bureau, New Mexico Energy, Minerals and Natural Resources Department, Santa Fe, NM.
- SWCA, 1994a. Biological assessment, Dos Republicas Resources Company proposed Eagle Pass Coal Mine. Prepared by SWCA, Inc., Austin, TX, on behalf of DRRC, San Antonio, TX, for EPA Region 6, Dallas, TX. June 1994.
- SWCA, 1994b. Biological assessment addendum, Dos Republicas Resources Company proposed Eagle Pass coal mine. Prepared by SWCA, Inc., Austin, TX, on behalf of DRRC, San Antonio, TX, for EPA Region 6, Dallas, TX. August 26, 1994.
- TPWD, 1993b. September 22, 1993 performance report for Job No. 12: endangered feline population and habitat enhancement. Prepared by S.J. Benn for the Texas Parks and Wildlife Department.
- Uecker, 1994. The Dos Republicas project: Phase II archaeological investigations at a proposed coal strip mine, Maverick County, Texas. Herbert G. Uecker, Center for Archaeological Research, Archaeological Survey Report, No. 215, The University of Texas at San Antonio.
- Uecker and Warren, 1994. The Dos Republicas project: Cultural resources survey of a proposed surface mining project in Maverick County, Texas. Herbert G. Uecker and James E. Warren. Report No. 342. Submitted to Marston and Marston, Inc., St. Louis, MO., by Archaeology Consultants, Inc., George West, TX.



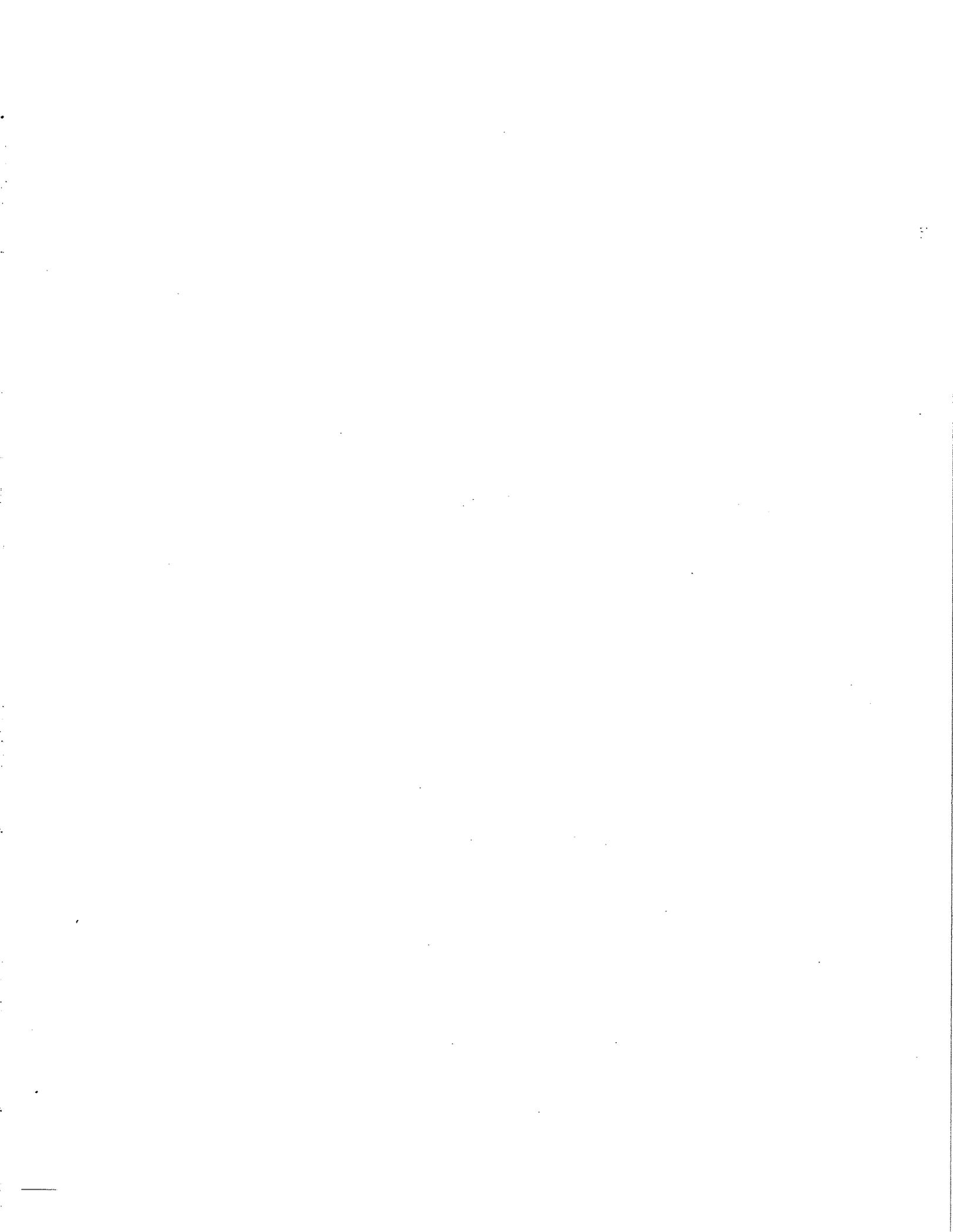
PART IV

EPA'S PREFERRED ALTERNATIVE



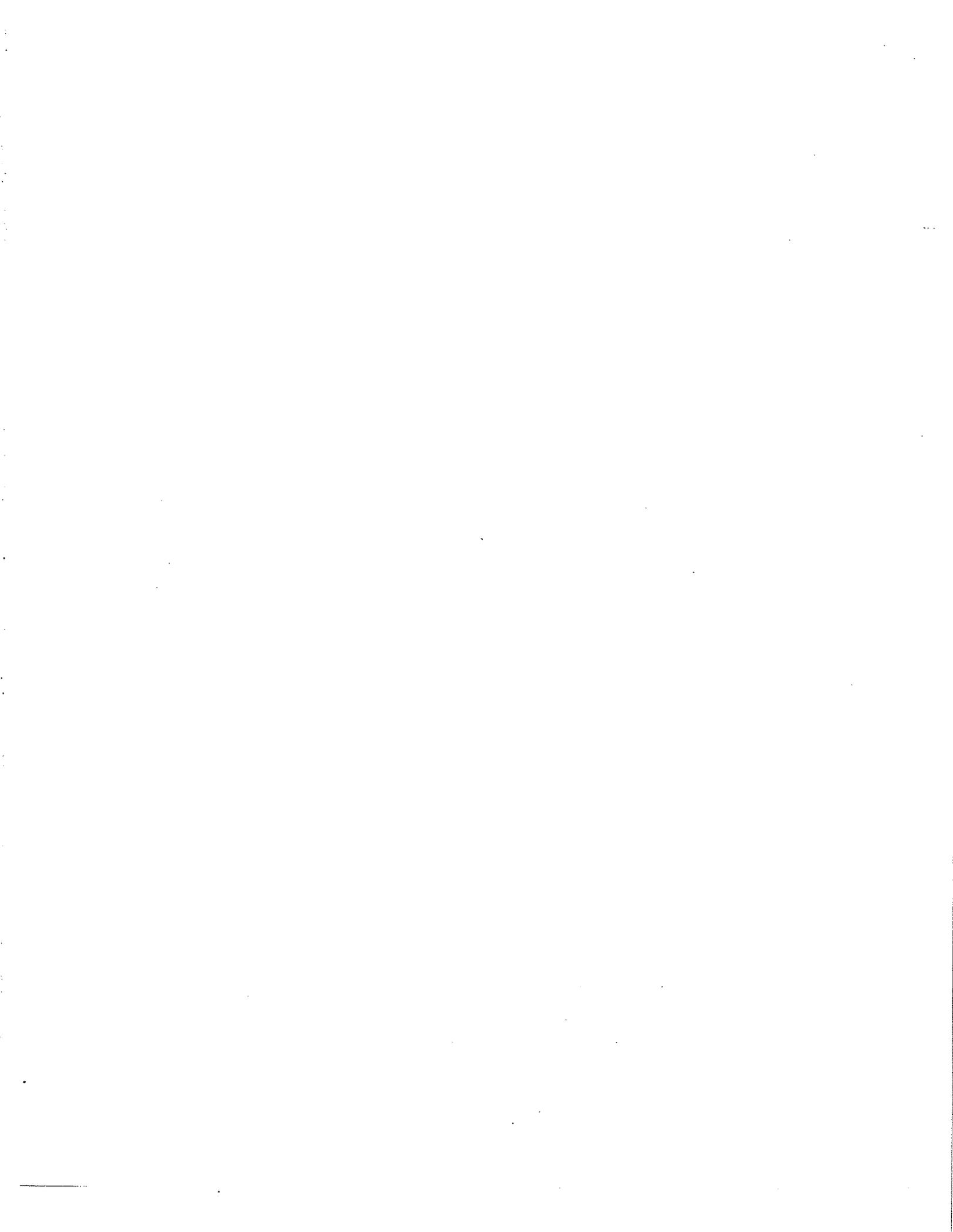
IV. EPA'S PREFERRED ALTERNATIVE

EPA's preferred alternative is to issue the NPDES permit (see Appendix A) to Dos Republicas Resources Company, Inc., for the discharge of wastewater from the Eagle Pass Mine in Maverick County, Texas. The impacts associated with this Federal action are presented in this Final EIS in combination with the Draft EIS. EPA's final decision on this permit action will be provided in a Record of Decision, documenting the completion of the EIS process.



APPENDIX A

DRAFT NPDES PERMIT



APPENDIX A

DRAFT NPDES PERMIT

EPA's Draft EIS included a copy of the Draft NPDES permit for the Eagle Pass Mine. The public notice for the NPDES permit resulted in comments from DRRRC to EPA. EPA has made minor revisions to the permit based on these comments. The revisions include the following:

1. The final permit will not have effluent limitations on outfalls D-1 and D-2, but will require monitoring for these outfalls.
2. References to the Texas Water Commission have been changed to the Texas Natural Resources Conservation Commission.
3. Management of domestic sewage has been modified to provide more flexibility in waste handling.

EPA's revised Draft NPDES permit is contained on the following pages.

AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Clean Water Act, as amended,
(33 U.S.C. 1251 et. seq; the "Act"),

Dos Republicas Resources Co., Inc.
Eagle Pass Mine
5797 Dietrich Rd
P.O. Box 200350
San Antonio, Texas 78220

is authorized to discharge from a facility located five miles northeast of the
City of Eagle Pass in Maverick County, Texas,

to receiving waters named Elm Creek; thence to the Rio Grande River, Waterbody
Segment Code No. 2304 of the Rio Grande River Basin, from

Outfalls 001-016: See map kept at the facility, per Part II D (16) and
Appendix A for outfall locations.

Final Outfall D1: Latitude - 28°47'51"N; Longitude - 100°27'57"W

Final Outfall D2: Latitude - 28°47'51"N; Longitude - 100°28'07"W

in accordance with effluent limitations, monitoring requirements and other
conditions set forth in Parts I, II and III hereof.

This permit shall become effective on

This permit and the authorization to discharge shall expire at midnight,

Prepared By:

Signed and issued on

Brian W. Mueller
Engineer
Industrial Permits Section (6W-PI)

Myron O. Knudson, P.E.
Director
Water Management Division (6W)

PART I
 REQUIREMENTS FOR NPDES PERMITS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

OUTFALLS 001 thru 016

During the period beginning the effective date of the permit and lasting through the expiration date of the permit,

the permittee is authorized to discharge from Outfalls 001 thru 016 (Outfall locations are listed in Appendix A) : the intermittent discharge of mine drainage, stormwater runoff from active mining areas and stormwater runoff from coal preparation areas of a coal strip mine prior to Phase II SMCRA Bond release.

Such discharges shall be limited and monitored by the permittee as specified below:

<u>EFFLUENT CHARACTERISTIC</u>	<u>DISCHARGE LIMITATIONS</u>			
	<u>MASS (LBS/DAY)</u>		<u>OTHER UNITS (mg/L UNLESS STATED)</u>	
<u>CONVENTIONAL</u>	<u>DAILY AVG</u>	<u>DAILY MAX</u>	<u>DAILY AVG</u>	<u>DAILY MAX</u>
TSS	----	----	35	70
Iron (Total)	----	----	3.0	6.0
pH Minimum/Maximum Values (Standard Units)	----	----	6.0 *1 (Min)	9.0 *1 (Max)
Flow (MGD)	----	----	Report	Report

<u>EFFLUENT CHARACTERISTIC</u>	<u>MONITORING REQUIREMENTS</u>	
	<u>MEASUREMENT FREQUENCY</u>	<u>SAMPLE TYPE</u>
<u>CONVENTIONAL</u>		
TSS	Once/week *3	Grab
Iron (Total)	Once/week *3	Grab
pH Minimum/Maximum Values (Standard Units)	Once/week *3	Grab
Flow (MGD)	Once/week	Estimate *2

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): Outfalls 001 thru 016 (*4) prior to discharge.

FOOTNOTES

- *1 The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units. The permittee shall report on the Discharge Monitoring Reports both the minimum and maximum instantaneous (rather than the daily average and daily maximum) pH values measured during the sampling month.
- *2 See Part II.D.11
- *3 When discharging
- *4 See Appendix A

OUTFALL D1 and D2 (FINAL)

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge from Final Outfalls D1 & D2: the intermittent discharge of stormwater from industrial activities to Elm Creek.

Such discharges shall be limited and monitored by the permittee as specified below:

<u>PARAMETER/STORET</u>	<u>DISCHARGE LIMITATIONS AND REPORTING REQUIREMENTS</u>			
	<u>QUANTITY/LOADING</u> (LBS/DAY UNLESS STATED)		<u>QUALITY/CONCENTRATION</u> (mg/L UNLESS STATED)	
	<u>DAILY AVG</u>	<u>DAILY MAX</u>	<u>DAILY AVG</u>	<u>DAILY MAX</u>
<u>CONVENTIONAL</u> pH (Standard Units)	----	----	Report (Min)	Report (Max)
TSS	----	----	----	Report
Oil and Grease	----	----	----	Report

<u>PARAMETER/STORET</u>	<u>MONITORING REQUIREMENTS</u>	
<u>CONVENTIONAL</u>	<u>MEASUREMENT</u> <u>FREQUENCY</u>	<u>SAMPLE</u> <u>TYPE</u>
pH (Standard Units)	1/Quarter	Grab
TSS	1/Quarter	Grab
Oil and Grease	1/Quarter	Grab

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): Outfalls D1 & D2.

FOOTNOTES

NO DISCHARGE REPORTING

If there is no discharge event at this outfall during the sampling month, place an "X" in the NO DISCHARGE box located in the upper right corner of the preprinted Discharge Monitoring Report.

The requirements of Section D of Part II of this permit are not applicable to Outfalls D1 and D2

B. SCHEDULE OF COMPLIANCE

The permittee shall achieve compliance with the effluent limitations specified for discharges in accordance with the following schedule:

NONE

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date. Any reports of noncompliance shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.

C. REPORTING OF MONITORING RESULTS (MINOR DISCHARGERS)

Monitoring results shall be reported in accordance with the provisions of Part III.D.4 of the permit. Monitoring results obtained during the previous three (3) months shall be summarized monthly and reported on Discharge Monitoring Report forms postmarked no later than the 28th day of the month following the completed quarterly reporting period.

The first report is due on _____ .

D. STORM WATER FROM CONSTRUCTION SITES

The permittee is authorized to discharge storm water associated with industrial activity from construction sites not covered by Part I.A of this permit and occurring after the effective date of this permit to Elm Creek. Such discharges shall be subject to the requirements as specified below:

Storm Water Pollution Prevention Plan

A storm water pollution prevention plan shall be developed for each construction site covered by this permit. The plan shall identify potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges from the construction site. In addition, the plan shall describe and ensure the implementation of practices which will be used to reduce the pollutants in storm water discharges associated with industrial activity at the construction site and to assure compliance with the terms and conditions of this permit. The permittee shall retain a copy of the storm water pollution prevention plan at the construction site from the date of project initiation to the date of final stabilization.

1. Deadlines for Plan Preparation and Compliance.

The plan shall be completed and implemented prior to commencement of construction on site.

2. Signature and Plan Review

- a. The plan shall be signed in accordance with Part III of this permit, and be retained on-site at the facility.
- b. The permittee shall make plans available upon request to the Regional Administrator; a State or local agency approving sediment and erosion plans, grading plans, or storm water management plans.
- c. The Regional Administrator, or authorized representative, may notify the permittee at any time that the plan is deficient. Such notification shall identify those provisions of this permit which are not being met by the plan, and identify which provisions of the plan require modification. Within 7 days of such notification, the permittee shall make the required changes to the plan and shall submit to the Regional

Administrator a written certification that the requested changes have been made.

3. Keeping Plans Current. The permittee shall amend the plan whenever there is new construction, a change in design, construction, operation, or maintenance, which has a significant effect on the potential for the discharge of pollutants to the waters of the United States that has not been addressed in the plan and if the storm water pollution prevention plan proves to be ineffective in eliminating or significantly minimizing pollutants from sources identified by the plan. In addition, the plan shall be amended to identify any new contractor and/or subcontractor that will implement a measure of the storm water pollution prevention plan. Amendments to the plan may be reviewed by EPA in the same manner as Part I.D.2 above.
4. Contents of Plan. The storm water pollution prevention plan shall include the following items:
 - a. Site Description. Each plan shall, provide a description of pollutant sources and other information as indicated:
 - (1). A description of the nature of the construction activity;
 - (2). A description of the intended sequence of major activities which disturb soils for major portions of the site (e.g. grubbing, excavation, grading);
 - (3). Estimates of the total area of the site and the total area of the site that is expected to be disturbed by excavation, grading, or other activities;
 - (4). An estimate of the runoff coefficient of the site after construction activities are completed and existing data describing the soil or the quality of any discharge from the site;
 - (5). A site map indicating drainage patterns and approximate slopes anticipated after major grading activities, areas of soil disturbance, an outline of areas which are not to be disturbed, the location of major structural and nonstructural controls identified in the plan, the location of areas where stabilization practices are expected to occur, surface waters (including wetlands), and locations where storm water is discharged to a surface water; and
 - (6). The name of the receiving water(s), and areal extent of wetland acreage at the site.
 - b. Controls. Each plan shall include a description of appropriate controls and measures that will be implemented at the construction site. The plan will clearly describe for each major activity identified in Part I.D.4.a.(2) appropriate control measures and the timing during the construction process that the measures will be implemented. The description and implementation of controls shall address the following minimum components:
 - (1). Erosion and Sediment Controls.
 - (a). Stabilization Practices. A description of interim and permanent stabilization practices, including site-specific scheduling of the implementation of the practices. Site plans should ensure that existing vegetation is preserved where attainable and that disturbed portions of the site are stabilized. Stabilization practices may include: temporary seeding, permanent seeding, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. A record of the dates when

major grading activities occur, when construction activities temporarily or permanently cease on a portion of the site, and when stabilization measures are initiated shall be included in the plan. Except as provided in Part I.D.4.b.(1).(a).(i), (ii), and (iii) below, stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased.

(i). Where the initiation of stabilization measures by the 14th day after construction activity temporary or permanently cease is precluded by snow cover, stabilization measures shall be initiated as soon as practicable.

(ii). Where construction activity will resume on a portion of the site within 21 days from when activities ceased, (e.g. the total time period that construction activity is temporarily ceased is less than 21 days) then stabilization measures do not have to be initiated on that portion of site by the 14th day after construction activity temporarily ceased.

(iii). In arid areas (areas with an average annual rainfall of 0 to 10 inches) and semi-arid areas (areas with an average annual rainfall of 10 to 20 inches), where the initiation of stabilization measures by the 14th day after construction activity has temporarily or permanently ceased is precluded by seasonal arid conditions, stabilization measures shall be initiated as soon as practicable.

(b). Structural Practices. A description of structural practices to divert flows from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site to the degree attainable. Such practices may include silt fences, earth dikes, drainage swales, sediment traps, check dams, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins. Structural practices should be placed on upland soils to the degree attainable. The installation of these devices may be subject to Section 404 of the CWA.

(i). For common drainage locations that serve an area with 10 or more disturbed acres at one time, a temporary (or permanent) sediment basin providing 3,600 cubic feet of storage per acre drained, or equivalent control measures, shall be provided where attainable until final stabilization of the site. The 3,600 cubic feet of storage area per acre drained does not apply to flows from offsite areas and flows from onsite areas that are either undisturbed or have undergone final stabilization where such flows are diverted around both the disturbed area and the sediment basin. For drainage locations which serve 10 or more disturbed acres at one time and where a temporary sediment basin providing 3,600 cubic feet of storage per acre drained, or equivalent controls is not attainable, smaller sediment traps and/or sediment traps should be used. At a minimum, silt fences, or equivalent sediment controls are required for all sideslope and downslope boundaries of the construction area.

(ii). For drainage locations serving less than 10 acres, sediment basins and/or sediment traps should be used. At a minimum, silt fences or equivalent sediment controls are required for all sideslope and downslope boundaries of the construction area unless a sediment basin providing storage for 3,600 cubic feet of storage per acre drained is provided.

(2). Storm Water Management. A description of measures that will be installed during the construction process to control pollutants in storm

water discharges that will occur after construction operations have been completed. Structural measures should be placed on upland soils to the degree attainable. The installation of these devices may be subject to Section 404 of the CWA.

(a). Such practices may include: storm water detention structures (including wet ponds); storm water retention structures; flow attenuation by use of open vegetated swales and natural depressions; infiltration of runoff onsite; and sequential systems (which combine several practices). The pollution prevention plan shall include an explanation of the technical basis used to select the practices to control pollution where flows exceed predevelopment levels.

(b). Velocity dissipation devices shall be placed at discharge locations and along the length of any outfall channel for the purpose of providing a non-erosive velocity flow from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (e.g. no significant changes in the hydrological regime of the receiving water).

(3). Other Controls.

(a). Waste Disposal. No solid materials, including building materials, shall be discharged to waters of the United States, except as authorized by a Section 404 permit.

(b) Off-site vehicle tracking of sediments and the generation of dust shall be minimized.

(c). The plan shall ensure and demonstrate compliance with applicable State and/or local waste disposal, sanitary sewer or septic system regulations.

(4). Approved State or Local Plans.

(a) The plan shall include procedures and requirements specified in applicable sediment and erosion site plans or site permits, or storm water management site plans or site permits approved by State or local officials. The permittee shall provide a certification in the storm water pollution prevention plan that the storm water pollution prevention plan reflects requirements applicable to protecting surface water resources in sediment and erosion site plans or site permits, or storm water management site plans or site permits approved by State or local officials. The permittee shall comply with any such requirements during the term of the permit. This provision does not apply to provisions of master plans, comprehensive plans, non-enforceable guidelines or technical guidance documents that are not identified in a specific plan or permit that is issued for the construction site.

(b) Storm water pollution prevention plans must be amended to reflect any change applicable to protecting surface water resources in sediment and erosion site plans or site permits, or storm water management site plans or site permits approved by State or local officials for which the permittee receives written notice. Where the permittee receives such written notice of a change, the permittee shall provide a recertification in the storm water pollution plan that the storm water pollution prevention plan has been modified to address such changes.

c. Maintenance. A description of procedures to ensure the timely maintenance of vegetation, erosion and sediment control measures and other protective measures identified in the site plan in good and effective operating condition.

- d. Inspections. Qualified personnel (provided by the discharger) shall inspect disturbed areas of the construction site that have not been finally stabilized, areas used for storage of materials that are exposed to precipitation, structural control measures, and locations where vehicles enter or exit the site at least once every seven calendar days and within 24 hours of the end of a storm that is 0.5 inches or greater. Where sites have been finally stabilized, or during seasonal arid periods in arid areas (areas with an average annual rainfall of 0 to 10 inches) and semi-arid areas (areas with an average annual rainfall of 10 to 20 inches) such inspection shall be conducted at least once every month.

(1). Disturbed areas and areas used for storage of materials that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion and sediment control measures identified in the plan shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters. Locations where vehicles enter or exit the site shall be inspected for evidence of offsite sediment tracking.

(2). Based on the results of the inspection, the site description, and pollution prevention measures, the plan shall be revised as appropriate, but in no case later than 7 calendar days following the inspection. Such modifications shall provide for timely implementation of any changes to the plan within 7 calendar days following the inspection.

(3). A report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken shall be made and retained as part of the storm water pollution prevention plan for at least three years from the date that the site is finally stabilized. Such reports shall identify any incidents of non-compliance. Where a report does not identify any incidents of non-compliance, the report shall contain a certification that the facility is in compliance with the storm water pollution prevention plan and this permit.

5. Contractors

- a. The storm water pollution prevention plan must clearly identify for each measure identified in the plan, the contractor(s) and/or subcontractor(s) that will implement the measure. All contractors and subcontractors identified in the plan must sign a copy of the certification statement in Part I.D.6.b. All certifications must be included in the storm water pollution prevention plan.
- b. Certification Statement. All contractors and subcontractors identified in a storm water pollution prevention plan shall sign a copy of the following certification statement before conducting any professional service identified in the storm water pollution prevention plan:

"I certify under penalty of law that I understand the terms and conditions of this National Pollutant Discharge Elimination System (NPDES) permit that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification."

The certification must include the name and title of the person providing the signature; the name, address and telephone number of the contracting firm; the address (or other identifying description) of the site; and the date the certification is made.

6. Definitions

"Best Management Practices" ("BMPs") means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

"Commencement of Construction" - The initial disturbance of soils associated with clearing, grading, or excavating activities or other construction activities.

"Final Stabilization" means that all soil disturbing activities at the site have been completed, and that a uniform perennial vegetative cover with a density of 70% of the cover for unpaved areas and areas not covered by permanent structures has been established or equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed.

"Runoff coefficient" means the fraction of total rainfall that will appear at the conveyance as runoff.

"Storm Water" means storm water runoff, snow melt runoff, and surface runoff and drainage.

PART II
OTHER CONDITIONS

A. STORET/CAS CROSS-REFERENCE

For the proper identification of parameters being regulated in this permit, the following table lists the corresponding EPA Storet Number and the Chemical Abstract Service (CAS) Registry Number where applicable. In the case of most chemical and physical parameters, the classification numbers can be used to identify the appropriate analytical, apparatus and materials, sample collection, preservation, handling, etc., procedures listed at 40 CFR Part 136 and at "Methods of Chemical Analysis of Water and Wastes," EPA 600/4-79/020, 1979 (revised March 1983). The EPA Storet number is additionally used to identify parameters on the Discharge Monitoring Report described at Part III.D.4.

<u>PARAMETERS</u>	<u>STORET</u>	<u>CAS</u>
<u>CONVENTIONAL</u>		
pH Range (Grab - Field Test)	00400	----
TSS	00530	----
Oil and Grease	00556	----
<u>METALS AND CYANIDE</u>		
Iron (Total)	01045	----
<u>NONCONVENTIONAL</u>		
Flow (MGD)	50050	----

B. DAILY MAXIMUM LIMITATION VIOLATIONS

Under the provisions of Part III.D.7.b.(3) of this permit, violations of daily maximum limitations for following pollutants shall be reported orally to EPA Region 6, Water Management Division, Enforcement Branch, Dallas, Texas, within 24 hours from the time the permittee becomes aware of the violation followed by a written report in five days.

NONE

C. 40 CFR PART 136 ANALYTICAL REQUIREMENTS

Unless otherwise specified in this permit, monitoring shall be conducted according to analytical, apparatus and materials, sample collection, preservation, handling, etc., procedures listed at 40 CFR Part 136 in effect on the effective date of this permit. Appendices A, B, and C to 40 CFR Part 136 are specifically referenced as part of this requirement. Amendments to 40 CFR Part 136 promulgated after the effective date of this permit shall supersede these requirements as applicable.

D. SPECIAL CONDITIONS

1. The term "active mining area" is defined as the areas, on or beneath land, used or disturbed in activity related to the extraction, removal or recovery of coal from its natural deposits. This term excludes coal preparation plants, coal preparation plant associated areas and post-mining areas.
2. The term "reclamation area" is defined as the area of a coal or lignite mine which has been returned to the required contour and on which revegetation (satisfactory seeding and plant) work has commenced.

3. The term "coal preparation plant" is defined as a facility where coal is subjected to cleaning, concentrating or other processing or preparation in order to separate coal from its impurities and then is loaded for transit to a consuming facility.
4. The term "coal preparation plant associated area" is defined as the coal preparation plant yards, immediate access road, coal refuse piles and coal storage pile and facilities.
5. The term "coal preparation plant water circuit" is defined as all pipes, channels, basins, tanks and other storage structures and equipment that convey, contain, treat or process any water that is used in coal preparation processes within a coal preparation plant.
6. There shall be no discharge of process wastewater from a coal preparation plant water circuit to waters of the United States.
7. The term "bond release" is defined as the time which the appropriate regulatory authority returns a reclamation or performance bond based upon its determination that reclamation work has been satisfactorily completed.
8. The term "controlled surface mine drainage" means any surface mine drainage that is pumped or siphoned from the active mining area.
9. The following procedure shall be used to determine settleable solids:

 Fill an Imhoff cone to the one-liter mark with a thoroughly mixed sample. Allow to settle undisturbed for 45 minutes. Gently stir along the inside surface of the cone with a stirring rod. Allow to settle undisturbed for 15 minutes longer. Record the volume of settled material in the cones as milliliters per liter. When a separation of settleable and floating materials occurs, do not include the floating material in the reading.

 The method detection limit for measuring settleable solids shall be 0.4 ml/l.
10. The term "10-year, 24-hour precipitation event" means the maximum 24-hour precipitation event with a probable recurrence interval of once in ten years as defined by the National Weather Service and Technical Paper No. 40, "Rainfall Frequency Atlas of the U.S.," May 1961, or equivalent regional or rainfall probability information developed therefrom.
11. Methods of flow estimating shall be by the "California Pipe Method" as described in Section 7.4.2.2 of the Handbook for Monitoring Industrial Wastewater, August 1973, U.S. Environmental Protection Agency, Technology Transfer.
12. The following standards apply to discharges from reclamation areas until SMCRA bond release:

<u>Effluent Limitations</u>		
<u>Pollutant or Pollutant Property</u>	<u>Maximum for any one day</u>	<u>Average of daily values for thirty consecutive days</u>
Settleable Solids	0.5 ml/l	N/A
pH	Within the range of 6.0 to 9.0 at all times	

13. EFFLUENT LIMITATIONS FOR PRECIPITATION EVENTS

a. Any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period less than or equal to the 10-year, 24-hour precipitation event (or snowmelt of equivalent volume) may comply with the following limitations instead of the otherwise applicable limitations:

Effluent Limitations During Precipitation

<u>Pollutant or Pollutant Property</u>	<u>Maximum for any one day</u>	<u>Average of daily values for thirty consecutive days</u>
--	------------------------------------	--

Settleable Solids	0.5 ml/l	N/A
-------------------	----------	-----

pH Within the range of 6.0 to 9.0 at all times

b. Any discharge or increase in the volume of a discharge caused by precipitation within any 24-hour period greater than the 10-year, 24-hour event (or snowmelt of equivalent volume) may comply with the following limitations instead of the otherwise applicable limitations:

Effluent Limitations During Precipitation

<u>Pollutant or Pollutant Property</u>	<u>Maximum for any one day</u>	<u>Average of daily values for thirty consecutive days</u>
--	------------------------------------	--

pH Within the range of 6.0 to 9.0 at all times

c. The operator shall have the burden of proof that the discharge or increase in discharge was caused by the applicable precipitation event described in subsections 1 and 2.

14. All discharges from all retention ponds shall comply with the limitations for hazardous metals as regulated under the Texas Natural Resource Conservation Commission, Permanent Rule, Title 30 Texas Administrative Code (TAC) Chapter 319, Subchapter B, 319.21 - 319.29, "Hazardous Metals".

15. The permittee shall notify the EPA and the Texas Natural Resource Conservation Commission (TNRCC) when each SMCRA Phase I or Phase II bonds are released.

16. Locations may be revised and added by the permittee if it becomes necessary to eliminate or establish new holding ponds. For any revision, the permittee shall submit appropriate maps to the EPA, TNRCC Austin and TNRCC regional offices redesignating the holding pond locations. The permittee shall also maintain a map at the mine site which shows the location of all ponds. This map shall be available to the EPA and TNRCC inspectors.

Any revised pond or outfall location shall be consistent with and fall within the mining area boundary as defined in the Environmental Impact Statement.

Any revised pond or outfall location shall be limited to discharging to the same receiving body of water.

E. DOMESTIC SEWAGE

There shall be no discharge of domestic sewage.

F. DUST SUPPRESSION

The permittee may use water contained in any pond for dust suppression purposes.

APPENDIX A

Outfall Locations

	<u>RECEIVING WATER</u>
Outfall 001: Latitude - N28°48'53"; Longitude - W100°26'11"	ELM CREEK
Outfall 002: Latitude - N28°48'59"; Longitude - W100°26'35"	ELM CREEK
Outfall 003: Latitude - N28°48'34"; Longitude - W100°26'54"	ELM CREEK
Outfall 004: Latitude - N28°48'58"; Longitude - W100°26'45"	ELM CREEK
Outfall 005: Latitude - N28°49'07"; Longitude - W100°26'02"	ELM CREEK
Outfall 006: Latitude - N28°48'40"; Longitude - W100°27'27"	ELM CREEK
Outfall 007: Latitude - N28°49'59"; Longitude - W100°25'50"	ELM CREEK
Outfall 008: Latitude - N28°48'29"; Longitude - W100°27'41"	ELM CREEK
Outfall 009: Latitude - N28°49'33"; Longitude - W100°27'07"	ELM CREEK
Outfall 010: Latitude - N28°49'43"; Longitude - W100°27'08"	ELM CREEK
Outfall 011: Latitude - N28°48'49"; Longitude - W100°28'13"	ELM CREEK
Outfall 012: Latitude - N28°49'02"; Longitude - W100°26'41"	ELM CREEK
Outfall 013: Latitude - N28°49'03"; Longitude - W100°26'23"	ELM CREEK
Outfall 014: Latitude - N28°48'44"; Longitude - W100°26'32"	ELM CREEK
Outfall 015: Latitude - N28°48'10"; Longitude - W100°26'48"	ELM CREEK
Outfall 016: Latitude - N28°47'50"; Longitude - W100°27'38"	ELM CREEK

III. STANDARD CONDITIONS FOR NPDES PERMITS
(REVISED 12-08-93)

A. GENERAL CONDITIONS

1. INTRODUCTION

In accordance with the provisions of 40 CFR Part 122.41, et. seq., this permit incorporates by reference ALL conditions and requirements applicable to NPDES Permits set forth in the Clean Water Act, as amended, (hereinafter known as the "Act") as well as ALL applicable regulations.

2. DUTY TO COMPLY

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

3. TOXIC POLLUTANTS

a. Notwithstanding Part III.A.5, if any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under Section 307(a) of the Act for a toxic pollutant which is present in the discharge and that standard or prohibition is more stringent than any limitation on the pollutant in this permit, this permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition.

b. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Act for toxic pollutants within the time provided in the regulations that established those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

4. DUTY TO REAPPLY

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The application shall be submitted at least 180 days before the expiration date of this permit. The Director may grant permission to submit an application less than 180 days in advance but no later than the permit expiration date. Continuation of expiring permits shall be governed by regulations promulgated at 40 CFR Part 122.6 and any subsequent amendments.

5. PERMIT FLEXIBILITY

This permit may be modified, revoked and reissued, or terminated for cause in accordance with 40 CFR 122.62-64. The filing of a request for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

6. PROPERTY RIGHTS

This permit does not convey any property rights of any sort, or any exclusive privilege.

7. DUTY TO PROVIDE INFORMATION

The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

8. CRIMINAL AND CIVIL LIABILITY

Except as provided in permit conditions on "Bypassing" and "Upsets", nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance. Any false or materially misleading representation or concealment of information required to be reported by the provisions of the permit, the Act, or applicable regulations, which avoids or effectively defeats the regulatory purpose of the Permit may subject the Permittee to criminal enforcement pursuant to 18 U.S.C. Section 1001.

9. OIL AND HAZARDOUS SUBSTANCE LIABILITY

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Act.

10. STATE LAWS

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Act.

11. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

B. PROPER OPERATION AND MAINTENANCE

1. NEED TO HALT OR REDUCE NOT A DEFENSE

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. The permittee is responsible for maintaining adequate safeguards to prevent the discharge of untreated or inadequately treated wastes during electrical power failure either by means of alternate power sources, standby generators or retention of inadequately treated effluent.

2. DUTY TO MITIGATE

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

3. PROPER OPERATION AND MAINTENANCE

- a. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by permittee as efficiently as possible and in a manner which will minimize upsets and discharges of excessive pollutants and will achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of this permit.
- b. The permittee shall provide an adequate operating staff which is duly qualified to carry out operation, maintenance and testing functions required to insure compliance with the conditions of this permit.

4. BYPASS OF TREATMENT FACILITIES**a. BYPASS NOT EXCEEDING LIMITATIONS**

The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Parts III.B.4.b. and 4.c.

b. NOTICE**(1) ANTICIPATED BYPASS**

If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.

(2) UNANTICIPATED BYPASS

The permittee shall, within 24 hours, submit notice of an unanticipated bypass as required in Part III.D.7.

c. PROHIBITION OF BYPASS

(1) Bypass is prohibited, and the Director may take enforcement action against a permittee for bypass, unless:

(a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and,

(c) The permittee submitted notices as required by Part III.B.4.b.

(2) The Director may allow an anticipated bypass after considering its adverse effects, if the Director determines that it will meet the three conditions listed at Part III.B.4.c(1).

5. UPSET CONDITIONS**a. EFFECT OF AN UPSET**

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of Part III.B.5.b. are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

b. CONDITIONS NECESSARY FOR A DEMONSTRATION OF UPSET

A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

(1) An upset occurred and that the permittee can identify the cause(s) of the upset;

(2) The permitted facility was at the time being properly operated;

(3) The permittee submitted notice of the upset as required by Part III.D.7; and,

(4) The permittee complied with any remedial measures required by Part III.B.2.

c. BURDEN OF PROOF

In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

6. REMOVED SUBSTANCES

Solids, sewage sludges, filter backwash, or other pollutants removed in the course of treatment or wastewater control shall be disposed of in a manner such as to prevent any pollutant from such materials from entering navigable waters.

7. PERCENT REMOVAL (PUBLICLY OWNED TREATMENT WORKS)

For publicly owned treatment works, the 30-day average percent removal for Biochemical Oxygen Demand and Total Suspended Solids shall not be less than 85 percent unless otherwise authorized by the permitting authority in accordance with 40 CFR 133.103.

C. MONITORING AND RECORDS**1. INSPECTION AND ENTRY**

The permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by the law to:

a. Enter upon the permittee's premises where a regulated facility or activity is located or

conducted, or where records must be kept under the conditions of this permit;

- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under this permit; and
- d. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the Act, any substances or parameters at any location.

2. REPRESENTATIVE SAMPLING

Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

3. RETENTION OF RECORDS

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report, or application. This period may be extended by request of the Director at any time.

4. RECORD CONTENTS

Records of monitoring information shall include:

- a. The date, exact place, and time of sampling or measurements;
- b. The individual(s) who performed the sampling or measurements;
- c. The date(s) and time(s) analyses were performed;
- d. The individual(s) who performed the analyses;
- e. The analytical techniques or methods used; and
- f. The results of such analyses.

5. MONITORING PROCEDURES

- a. Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit or approved by the Regional Administrator.
- b. The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instruments at intervals frequent enough to insure accuracy of measurements and shall maintain appropriate records of such activities.
- c. An adequate analytical quality control program, including the analyses of sufficient standards, spikes, and duplicate samples to insure the accuracy of all required analytical results shall be maintained by the permittee or designated commercial laboratory.

6. FLOW MEASUREMENTS

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability

of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to insure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than 10% from true discharge rates throughout the range of expected discharge volumes.

D. REPORTING REQUIREMENTS

1. PLANNED CHANGES

a. INDUSTRIAL PERMITS

The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

- (1) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR Part 122.29(b); or,
- (2) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements listed at Part III.D.10.a.

b. MUNICIPAL PERMITS

Any change in the facility discharge (including the introduction of any new source or significant discharge or significant changes in the quantity or quality of existing discharges of pollutants) must be reported to the permitting authority. In no case are any new connections, increased flows, or significant changes in influent quality permitted that will cause violation of the effluent limitations specified herein.

2. ANTICIPATED NONCOMPLIANCE

The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements

3. TRANSFERS

This permit is not transferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Act.

4. DISCHARGE MONITORING REPORTS AND OTHER REPORTS

Monitoring results must be reported on Discharge Monitoring Report (DMR) Form EPA No. 3320-1 in accordance with the "General Instructions" provided on the form. The permittee shall submit the original DMR signed and certified as required by Part III.D.11 and all other reports required by Part III.D. to the EPA at the address below. Duplicate copies of DMR's and all other reports shall be submitted to the appropriate State agency(ies) at the following address(es):

EPA:

Water Management Division
Enforcement Branch (6W-E)
U.S. Environmental Protection
Agency, Region 6
1445 Ross Avenue
Dallas, TX 75202-2733

New Mexico:

Program Manager
Surface Water Quality Bureau
New Mexico Environment Department
1190 Saint Francis Drive
Santa Fe, NM 87501-4182

Oklahoma (Industrial Permits Only):

Director
Oklahoma Department of
Environmental Quality
1000 NE 10th Street
Oklahoma City, OK 73117-1212

Louisiana:

Assistant Secretary for Water
Water Pollution Control Division
Louisiana Department of
Environmental Quality
P.O. Box 82215
Baton Rouge, LA 70884-2215

5. ADDITIONAL MONITORING BY THE PERMITTEE

If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report (DMR). Such increased monitoring frequency shall also be indicated on the DMR.

6. AVERAGING OF MEASUREMENTS

Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Director in the permit.

7. TWENTY-FOUR HOUR REPORTING

a. The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall be provided within 5 days of the time the permittee becomes aware of the circumstances. The report shall contain the following information:

- (1) A description of the noncompliance and its cause;
- (2) The period of noncompliance including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and,
- (3) Steps being taken to reduce, eliminate, and prevent recurrence of the noncomplying discharge.

b. The following shall be included as information which must be reported within 24 hours:

- (1) Any unanticipated bypass which exceeds any effluent limitation in the permit;
- (2) Any upset which exceeds any effluent limitation in the permit; and,
- (3) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in Part II (industrial permits only) of the permit to be reported within 24 hours.

c. The Director may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

8. OTHER NONCOMPLIANCE

The permittee shall report all instances of noncompliance not reported under Parts III.D.4 and D.7 and Part I.B (for industrial permits only) at the time monitoring reports are submitted. The reports shall contain the information listed at Part III.D.7.

9. OTHER INFORMATION

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information.

10. CHANGES IN DISCHARGES OF TOXIC SUBSTANCES

All existing manufacturing, commercial, mining, and silvacultural permittees shall notify the Director as soon as it knows or has reason to believe:

a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant listed at 40 CFR Part 122, Appendix D, Tables II and III (excluding Total Phenols) which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

- (1) One hundred micrograms per liter (100 µg/L);
- (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
- (3) Five (5) times the maximum concentration value reported for that pollutant in the permit application; or
- (4) The level established by the Director.

b. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

- (1) Five hundred micrograms per liter (500 µg/L);
- (2) One milligram per liter (1 mg/L) for antimony;
- (3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application; or
- (4) The level established by the Director.

11. SIGNATORY REQUIREMENTS

All applications, reports, or information submitted to the Director shall be signed and certified.

a. ALL PERMIT APPLICATIONS shall be signed as follows:

(1) FOR A CORPORATION - by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:

(a) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation; or,

(b) The manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

(2) FOR A PARTNERSHIP OR SOLE PROPRIETORSHIP - by a general partner or the proprietor, respectively.

(3) FOR A MUNICIPALITY, STATE, FEDERAL, OR OTHER PUBLIC AGENCY - by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:

(a) The chief executive officer of the agency, or

(b) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

b. ALL REPORTS required by the permit and other information requested by the Director shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

(1) The authorization is made in writing by a person described above;

(2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, or position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. A duly authorized representative may thus be either a named individual or an individual occupying a named position; and,

(3) The written authorization is submitted to the Director.

c. CERTIFICATION

Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

12. AVAILABILITY OF REPORTS

Except for applications, effluent data, permits, and other data specified in 40 CFR 122.7, any information submitted pursuant to this permit may be claimed as confidential by the submitter. If no claim is made at the time of submission, information may be made available to the public without further notice.

13. ARCHEOLOGICAL/HISTORICAL SITES (TEXAS PERMITS ONLY)

If during the life of this permit, new construction or land acquisition or any construction related activity where previously undisturbed ground is proposed for disturbance by the permittee which is related to an activity authorized by this permit, the permittee shall send the following items to the Texas State Historic Preservation Officer (SHPO): (1) a description of the new construction and the potential impact that this activity may have upon the ground (including sludge application methods, if applicable), and (2) a copy of a USGS topographic map outlining the location of the project and associated sludge disposal areas or other ancillary impact areas. The address of the Texas SHPO is:

Texas State Historic Preservation Officer
Department of Antiquities Protection
Texas Historical Commission
P.O. Box 12276
Austin, Texas 78711

This information will be used by the Texas SHPO and EPA to consult according to the requirements of 36 CFR Part 800.4-800.6 on methods to minimize harm to historical properties. The applicant will be contacted within 30 days about further actions that may be needed to meet the requirements of 36 CFR Part 800.

E. PENALTIES FOR VIOLATIONS OF PERMIT CONDITIONS**1. CRIMINAL****a. NEGLIGENT VIOLATIONS**

The Act provides that any person who negligently violates permit conditions implementing Section 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a fine of not less than \$2,500 nor more than \$25,000 per day of violation, or by imprisonment for not more than 1 year, or both.

b. KNOWING VIOLATIONS

The Act provides that any person who knowingly violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a fine of not less than \$5,000 nor more than \$50,000 per day of violation, or by imprisonment for not more than 3 years, or both.

c. KNOWING ENDANGERMENT

The Act provides that any person who knowingly violates permit conditions implementing Sections 301, 302, 303, 306, 307, 308, 318, or 405 of the Act and who knows at that time that he is placing another person in imminent danger of death or serious bodily injury is subject to a fine of not more than \$250,000, or by imprisonment for not more than 15 years, or both.

d. FALSE STATEMENTS

The Act provides that any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under the Act or who knowingly falsifies, tampers with, or renders inaccurate, any monitoring device or method required to be maintained under the Act, shall upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment shall be by a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or by both. (See Section 309.c.4 of the Clean Water Act)

2. CIVIL PENALTIES

The Act provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a civil penalty not to exceed \$25,000 per day for each violation.

3. ADMINISTRATIVE PENALTIES

The Act provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to an administrative penalty, as follows:

a. CLASS I PENALTY

Not to exceed \$10,000 per violation nor shall the maximum amount exceed \$25,000.

b. CLASS II PENALTY

Not to exceed \$10,000 per day for each day during which the violation continues nor shall the maximum amount exceed \$125,000.

F. DEFINITIONS

All definitions contained in Section 502 of the Act shall apply to this permit and are incorporated herein by reference. Unless otherwise specified in this permit, additional definitions of words or phrases used in this permit are as follows:

1. ACT means the Clean Water Act (33 U.S.C. 1251 et. seq.), as amended.
2. ADMINISTRATOR means the Administrator of the U.S. Environmental Protection Agency.
3. APPLICABLE EFFLUENT STANDARDS AND LIMITATIONS means all state and Federal effluent standards and limitations to which a discharge is subject under the Act, including, but not limited to, effluent limitations, standards or performance, toxic effluent standards and prohibitions, and pretreatment standards.
4. APPLICABLE WATER QUALITY STANDARDS means all water quality standards to which a discharge is subject under the Act.
5. BYPASS means the intentional diversion of waste streams from any portion of a treatment facility.
6. DAILY DISCHARGE means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in terms of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the sampling day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the sampling day. "Daily discharge" determination of concentration made using a composite sample shall be the concentration of the composite sample. When grab samples are used, the "daily discharge" determination of concentration shall be arithmetic average (weighted by flow value) of all samples collected during that sampling day.
7. DAILY AVERAGE (also known as monthly average) discharge limitations means the highest allowable average of "daily discharge(s)" over a calendar month, calculated as the sum of all "daily discharge(s)" measured during a calendar month divided by the number of "daily discharge(s)" measured during that month. When the permit establishes daily average concentration effluent limitations or conditions, the daily average concentration means the arithmetic average (weighted by flow) of all "daily discharge(s)" of concentration determined during the calendar month where C = daily concentration, F = daily flow and n = number of daily samples; daily average discharge =

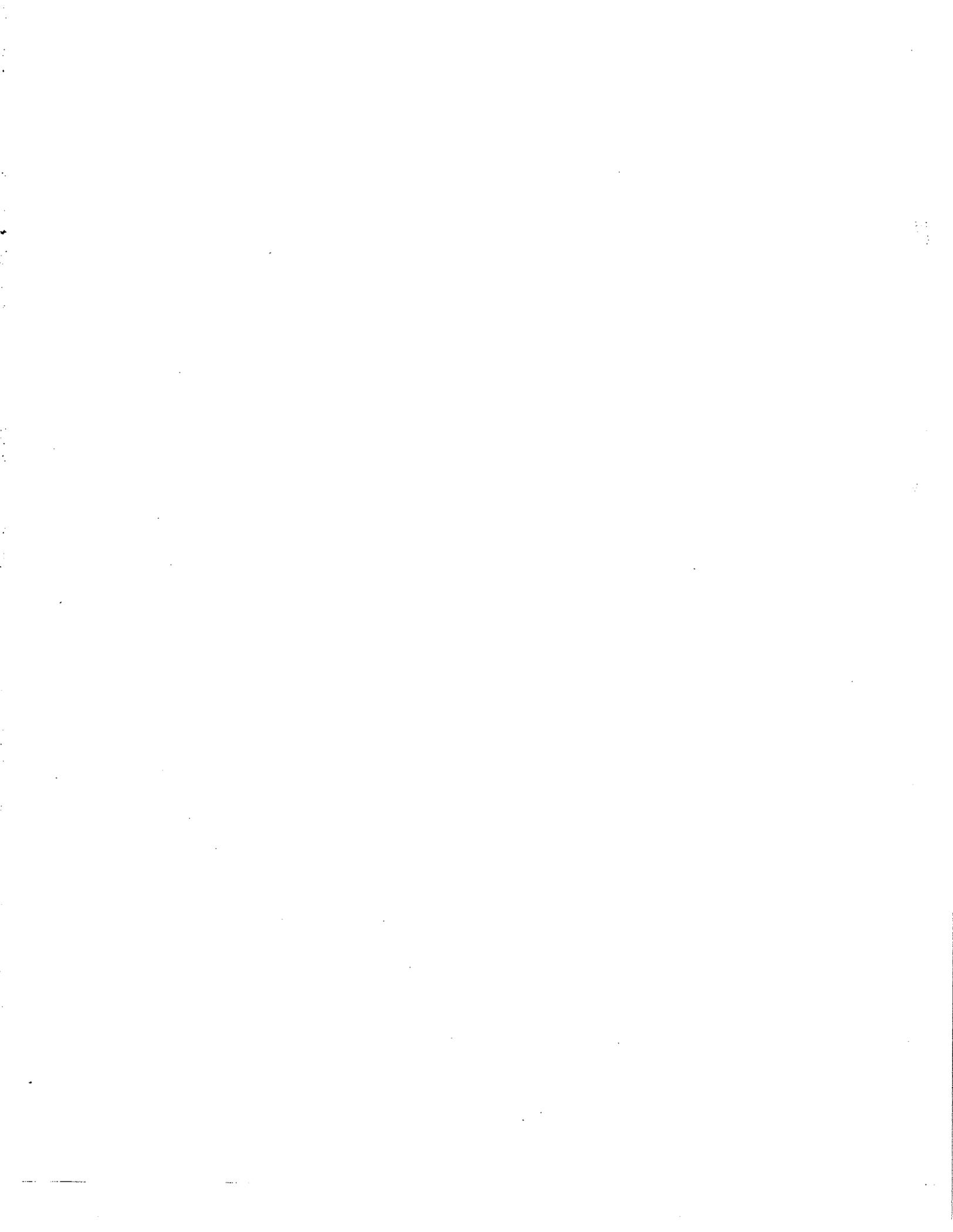
$$\frac{C_1F_1 + C_2F_2 + \dots + C_nF_n}{F_1 + F_2 + \dots + F_n}$$
8. DAILY MAXIMUM discharge limitation means the highest allowable "daily discharge" during the calendar month.
9. DIRECTOR means the U.S. Environmental Protection Agency Regional Administrator or an authorized representative.
10. ENVIRONMENTAL PROTECTION AGENCY means the U.S. Environmental Protection Agency.
11. GRAB SAMPLE means an individual sample collected in less than 15 minutes.
12. INDUSTRIAL USER means a nondomestic discharger, as identified in 40 CFR 403, introducing pollutants to a publicly owned treatment works.
13. NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM means the national program for issuing, modifying, revoking

and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 318, 402, and 405 of the Act.

14. SEVERE PROPERTY DAMAGE means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
15. SEWAGE SLUDGE means the solids, residues, and precipitates separated from or created in sewage by the unit processes of a publicly owned treatment works. Sewage as used in this definition means any wastes, including wastes from humans, households, commercial establishments, industries, and storm water runoff, that are discharged to or otherwise enter a publicly owned treatment works.
16. TREATMENT WORKS means any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage and industrial wastes of a liquid nature to implement Section 201 of the Act, or necessary to recycle or reuse water at the most economical cost over the estimated life of the works, including intercepting sewers, sewage collection systems, pumping, power and other equipment, and their appurtenances, extension, improvement, remodeling, additions, and alterations thereof.
17. UPSET means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
18. FOR FECAL COLIFORM BACTERIA, a sample consists of one effluent grab portion collected during a 24-hour period at peak loads.
19. The term "MGD" shall mean million gallons per day.
20. The term "mg/L" shall mean milligrams per liter or parts per million (ppm).
21. The term "µg/L" shall mean micrograms per liter or parts per billion (ppb).
22. MUNICIPAL TERMS
 - a. 7-DAY AVERAGE, other than for fecal coliform bacteria, is the arithmetic mean of the daily values for all effluent samples collected during a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week. The 7-day average for fecal coliform bacteria is the geometric mean of the values for all effluent samples collected during a calendar week.
 - b. 30-DAY AVERAGE, other than for fecal coliform bacteria, is the arithmetic mean of the daily values for all effluent samples collected during a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month. The 30-day average for fecal coliform bacteria is the geometric mean of the values for all effluent samples collected during a calendar month.
 - c. 24-HOUR COMPOSITE SAMPLE consists of a minimum of 12 effluent portions collected at equal time intervals over the 24-hour period and combined proportional to flow or a sample collected at frequent intervals proportional to flow over the 24-hour period.
 - d. 12-HOUR COMPOSITE SAMPLE consists of 12 effluent portions collected no closer together than one hour and composited according to flow. The daily sampling intervals shall include the highest flow periods.
 - e. 6-HOUR COMPOSITE SAMPLE consists of six effluent portions collected no closer together than one hour (with the first portion collected no earlier than 10:00 a.m.) and composited according to flow.
 - f. 3-HOUR COMPOSITE SAMPLE consists of three effluent portions collected no closer together than one hour (with the first portion collected no earlier than 10:00 a.m.) and composited according to flow.

APPENDIX B

SUMMARY OF PUBLIC HEARING COMMENTS AND EPA RESPONSES



APPENDIX B

SUMMARY OF PUBLIC HEARING COMMENTS AND EPA RESPONSES

This appendix responds to the oral comments received by EPA at the public hearing on the DEIS held at Eagle Pass, Texas on July 20, 1994. The verbatim transcript was utilized to insure that all major comments were given a response.

The speakers and a brief summary of their comments are listed in the order of their presentation at the hearing. Each comment identified is presented in column 1 and the response is presented in column 2, keyed to the comment in column 1. The responses are provided as follows:

- . comments which were made by the same person in a letter are cross-referenced here and responded to in Appendix C where the letter is reproduced;
- . comments which have been raised by several persons are responded to in Part II.C and cross-referenced here;
- . for all other comments made at the public hearing, the responses are presented in this appendix.

1. ROBERT RUIZ, County Commissioner

(1) Expressed support for the project; noted that several local public bodies had endorsed the project; and that Maverick County had high unemployment and the proposed mine would bring jobs, increased tax revenues, wages and supply purchases.

1-1 Comments noted.
2. MINERVA MANZANO, letter read by interpreter

Ms. Manzano spoke twice at the public hearing and submitted a comment letter. In addition to the comments in the letter, she had the following comment.

(1) Expressed the opinion that what we have was given to us by God and we should preserve it for the good of the community.

2-1 Comment noted; also see Appendix C.
3. KEITH YARBOROUGH, Park Science Administrator, Big Bend National Park

(1) The comments made by Mr. Yarborough are reproduced in the letter submitted by the Department of Interior. Refer to Appendix C, comments and responses: 4-47 to 4-61.

3-1 See the response to comments in Appendix C.
4. JIMMY GUITERREZ, President, Eagle Pass Chamber of Commerce

(1) Expressed support for the project; said new services would be developed due to the project and felt DRRC would adhere to required policies; stated that he was submitting about 1,200 signatures and 2,200 letters in support of the project.

4-1 Comments noted.
5. MARTHA BAXTER, citizen

Stated that:

(1) DRRC says they are going to provide jobs and bring money to the town and that nothing is going to happen, but: many jobs will go to outsiders; workers will be exposed to health risks; coal dust from the trains will expose still others to health risks; blasting could damage homes and public buildings in the area; other new businesses will be discouraged from locating in town because of the mine's presence; DRRC coal burned in the plants in Mexico will further pollute the town's air causing problems with breathing (and damage to the McDonald Observatory telescope); endangered animals and other animals are threatened;

5-1 See responses to major issues in Part II.C. In addition,

Local jobs. Some jobs would go to outsiders, this is discussed in the DEIS, pp. 5-55 to 5-56.

New businesses. While there may be some new businesses which would be discouraged from locating in the County due to the presence of the mine, it is generally the case that new business is generated by the construction of a mine. In many cases existing businesses expand to meet the demands of the mine, the demands of workers who have additional income to spend, and the demands generated by other businesses. New businesses are also attracted the area, such as those which specialize in mine services or supplies.

(2) winds [which would carry coal dust] do blow to the south and southwest contrary to what is stated in the report;

5-2 See response to comment 6-2, below.

- (3) we, with EPA's help, have to look out for our community since we have many people who cannot come and speak for themselves and the politicians are not representing our interests; 5-3 Comment noted.
- (4) we will lose more than we will gain if this project is approved. 5-4 Comment noted.
6. GEORGE BAXTER, citizen
- Stated:
- (1) safeguards proposed to prevent mine effluent from reaching Elm Creek and indirectly the City's water supply are inadequate since, as stated in the EIS, a 10-year flood event would cause settling ponds to overflow and discharge effluent into Elm Creek; uranium from the mine also poses a threat, especially when the ponds overflow; 6-1 See the discussion of mine activities in Part II.C.5; also see Appendix C, response to comment 16-28.
- (2) wind does blow from the south and southwest which would blow coal dust toward populated areas; since 50% of the coal dust raised would get into the air this would pose a health hazard not a "nuisance" as stated in the EIS; 6-2 The available information suggests that the prevailing wind direction in the Eagle Pass area is from the southeast, though the wind blows from every quadrant of the compass at least a small fraction of the time during a year. As noted in the DEIS (p. 5-22), it is the relative infrequency of wind blowing from the mine toward occupied residences that tends to reduce the overall effects; compliance with air quality standards means that the occasional dust at residences will not have health impacts. Also see the discussion of mine activities in Part II.C.5
- (3) EIS needs to address whether there is a limit on the amount of explosives that DRRC would be allowed to detonate at any one time, what that limit is, and its calculated effect on structures in the surrounding area; 6-3 RCT regulations limit the amount of explosives used by limiting the resulting ground motions at buildings outside the permit area, not owned by the mine. In the absence of seismic monitoring, the maximum amount of explosive allowed in an 8-millisecond period is determined by an equation using a "scaled-distance" factor and the distance from the blasting to the nearest such building. The allowed ground motions should not cause damage to properly constructed structures. Also see the discussion of mine activities in Part II.C.5
- (4) the gain to be had from the jobs generated by the project is miniscule compared to the health hazards inflicted on 30,000 other people. 6-4 No significant health hazards associated with the mine have been identified.
7. RAFAEL CHANCEY, Texas Employment Commission
- (1) Comments presented at the hearing are essentially the same as expressed in his letter, see Appendix C. 7-1 See response to comments in Appendix C.

8. DAN RISKIND, citizen

(1) Most comments are as presented in his letter, see Appendix C; oral comments, however, expanded on the discussion of economic issues; these comments are summarized here:

8-1 See response to comments in Appendix C.

(2) projected economic benefits are predicated on the projection of 250 jobs which is probably exaggerated; further: all royalties will not come to Maverick County, much of the heavy equipment will not be bought here, and what is the "local" market; these jobs probably won't reduce unemployment; mine started out with 200 jobs and extrapolated that out to 800, with the mechanized equipment used at the mine these numbers don't seem possible; further jobs will not happen overnight, and will people really be trained locally; if contract for coal doesn't materialize then the jobs won't either;

8-2 See the discussion of economic issues in Part II.C.4. Additionally, some of the other economic issues raised are discussed below.

Royalties. To the extent that people leasing properties to the mine do not live in the County and/or spend their income outside of the County, it is true that some of the income from royalties will not accrue to the County economy. In the analysis presented in the DEIS it is assumed that only a share of the royalties will in turn be respent in the County; this percentage is based on the Texas A&M's multipliers for royalties for the extraction industry in Maverick County, see Table 5-5. These figures could be further reduced due to royalty recipients living outside the County. However, even though they do not live in the County the fact that they have land there results in some of their income being spent in the County; an example is the money spent on taxes which will increase during the mining period.

Local purchases of supplies and equipment. It is not expected that specialized, heavy mining equipment would be purchased in the County. The company's estimate is based on anticipated purchases of utilities, fuel, lubes, replacement parts, miscellaneous operating consumables and general retail purchases; nonspecialized equipment such as trucks, dozers, and front end loaders may also be able to be purchased locally.

The "local" area. For the discussion of financial economic impacts, the DEIS has included a separate discussion of the impact on Maverick County. This impact would be "local", see DEIS pages 5-51 to 5-55. In terms of employment, the local area is the area from which people will commute to the job as opposed to moving to the Eagle Pass area. As noted in the DEIS, pp. 5-55 to 5-56, the majority of local employees are expected to come from Maverick County but could include some workers residing outside the County.

Reduction of unemployment. The proposed mine will create new jobs in an area of high unemployment thus improving the employment situation. This would not necessarily result in a reduction in the unemployment rate. The unemployment rate reflects many factors; in some cases the addition of jobs in an area causes the unemployment rate to go up because more people enter the job market looking for work. Also see the discussion in the DEIS, p. 5-54, Employment and Earnings in Maverick County.

Extrapolation of jobs. The extrapolation of jobs from "200" to "800" is due to the projection of indirect workers, not additional mine workers, see DEIS pp. 5-52 to 5-53. Indirect jobs are generated in response to the operation of the mine, i.e., additional people hired at local garages, restaurants, etc. The only impact the type of equipment used at the mine would have on these workers would be if a local business were to be established or expanded to sell or maintain the equipment. With regard to the validity of the job numbers refer to the discussion in Part II.C.4.

Timing of jobs. As shown in DEIS Table 5-5, the jobs will increase over time as the mine is developed peaking and leveling out after about the 10th year of the project.

Job training. Job training is discussed in the DEIS, see page 5-56. The company notes that since preparation of the DEIS, they have talked to the Texas Employment Commission about the possibility of coordinating training programs with the TEC (Kost, 1994a).

- | | | |
|--|------|---|
| (3) DRRC has not given us the facts straight; although the EIS does address some of these issues it doesn't discuss problems just positive aspect of the jobs, but the numbers can be questioned; all the figures are not there. | 8-3 | Comments noted. |
|
 | | |
| 9. ERNESTO RIBERA, citizen | | |
| (1) Expressed support for the project because of the jobs it would bring in; people will die one way or another and people in Mexico's coal towns don't appear to be dying because of the coal dust. | 9-1 | Comment noted. |
|
 | | |
| 10. SALVADORE CONTRERAS BALDERAS | | |
| (1) Comments presented at the hearing are essentially the same as expressed in his letter, see Appendix C. | 10-1 | See response to comments in Appendix C. |

11. JAMES O'DONNELL
- (1) Expressed concerns that he would like EPA to consider: cannot understand how any agency will condone granting a permit that would result in coal being shipped to Mexico where it will result in pollution in the US; had a storm 10 years ago that inundated proposed mine area with 7" of rain and covered railroad tracks; doesn't believe there will be as many jobs as predicted.
- 11-1 See the discussion of economic issues in Part II.C.4. The DEIS indicates (p. 5-14) that the potential for flooding along Elm Creek is high; see also Appendix C, response to comment 15-8.
- EPA does not condone the air pollution from Carbón I/II; but the agency has not found any basis to believe that denial of the NPDES permit would preclude the use of other U.S. coal (from existing, already permitted mines) at the power plants, much less preclude the use of non-U.S. coal.
12. FRED WILLS, resident of Bexar County
- (1) Comments presented at the hearing are essentially the same as expressed in his letter, see Appendix C.
- 12-1 See response to comments in Appendix C.
13. SCOTT ROYDER, Sierra Club
- (1) Comments presented at the hearing are essentially the same as expressed in the Sierra Club's letter, see Appendix C.
- 13-1 See response to comments in Appendix C.
14. JOSE FARIAS, citizen
- (1) Expressed support for the project, economic development is important to the area, this company has not asked for any tax abatements or other special considerations, even if there are 50-90 jobs they come with no pre-conditions.
- 14-1 Comments noted.
15. ESTER DIAZ, citizen
- (1) Expressed concern about the impact the mine would have on the people who lived near the mine: coal mines cause contamination which could harm the children and other residents and blasting could damage the properties; do not want the mine located near the residents in the Thompson Road area or near the town.
- 15-1 See the discussion of mine activities in Part II.C.5.
16. Ms. GAMEZ, citizen
- (1) Questioned credibility of DRRC and wishes EIS could address that;
- 16-1 EPA has found information submitted by DRRC to be similar in technical credibility to that submitted by other applicants for an NPDES permit.
- (2) people who support the mine do not live near the mine site;
- 16-2 Comment noted.
- (3) expressed concern about the impacts of blasting and how any damage would be taken care of;
- 16-3 See discussion of mine activities in Part II.C.5.
- (4) felt that jobs should not be the primary concern.
- 16-4 Comment noted.

17. GUADALUPE MARTINEZ, citizen, translated by interpreter

(1) Expressed support for Dos Republicas due to the jobs and money it would bring to the area, and felt outsiders who spoke at the hearing shouldn't be able to influence a decision regarding Eagle Pass and expressed disbelief of some of the points they made.

17-1 Comment noted.

18. MARIO RAMIREZ

(1) Commented in regard to flooding along Elm Creek that while he has been ranching there for 16 years, he has not seen the creek flood the area; DRRC has been responsive to questions he has raised with them; disagreed with some points made by other people during the hearing.

18-1 Comments noted.

19. JOHN JONES, citizen

(1) Feels DRRC would benefit area around the mine: rerouting of Lateral 21 would be beneficial since it was poorly engineered when it was built; pasture will be an improvement to grazing land; after mining reclamation will restore and perhaps improve the land; and it will bring employment; farming also disturbs the land.

19-1 Comments noted.

20. SONIA VASQUEZ, citizen, translated by interpreter

(1) Expressed feeling that while Eagle Pass needs jobs the mine would not be a benefit, existing pollution is causing unusually high rates of cancer in the area and more pollution would make this situation worse.

20-1 See discussion of air quality impacts in Part II.C.2; EPA is aware of no studies demonstrating excess cancer rates in the Eagle Pass area.

21. JAVIER MONTOYA, resident

(1) Expressed support for the project, felt there will be pollution with or without the mine.

21-1 Comments noted.

22. ARTURO FLORES, citizen

(1) Has hunted in the area for years and has never seen any of the endangered species, therefore doesn't feel a change in the area's habitat would really impact the animals;

22-1 Comment noted.

- (2) discussed the operation of the mine at Vermejo Park in New Mexico, where a mining operation coexists with other land uses and has not caused pollution problems and local residents support the mine; 22-2 Comment noted.
- (3) air quality is probably better now than when the old steel mill in Piedras Negras was operating; 22-3 No emissions rates have been found for the mill, which operated intermittently. Monitoring data for Eagle Pass are limited, so that EPA has no basis on which to evaluate this statement.
- (4) mine will spur additional economic development. 22-4 Comment noted.
23. HODGE LORD
- (1) Expressed the feeling that environmental concerns should not be able to shut down a business; it is an abdication of property rights. 23-1 Comments noted.
24. LADYE HERRING, citizen
- (1) Most comments are as presented in her letter, see Appendix C; oral comments, however, also addressed the following concerns: 24-1 See responses to comments in Appendix C.
- (2) regarding the discussion of flooding on page 1-4 of the EIS, she is concerned about any additional flooding along Elm Creek since they already have flooding problems; 24-2 See the discussion of flooding in Appendix C, response to comments 1-15, 15-8, and 16-28.
- (3) what effect will dust from blasting have on Lateral 21 (from which they get irrigation and domestic water) and on their crops and land; 24-3 See the discussion of mine activities in Part II.C.5; as noted in the DEIS, p. 5-58, the City of Eagle Pass has agreed to provide potable water to the mine, so current users of Lateral 21 will have nearby an alternative, higher-quality source of water for domestic uses should any adverse impact occur.
- (4) are there any plans to alleviate problems due to increased rail traffic, and in particular are any new overpasses planned; 24-4 The City is working with the mine, the highway department, and the railroad company to develop plans to alleviate problems which could arise from increased train traffic due to the mine. One measure being discussed is scheduling of trains to avoid peak traffic hours, DEIS pp. 5-62 to 5-63 and 5-59; recently there has also been discussion of the feasibility of building another overpass, but no firm plans have been developed to date (Ruiz, 1994).

- (5) has the ROW for widening Thompson Road been obtained;
- 24-5 Since the DEIS was prepared, the highway department has revised its plans for the proposed road improvements. The DEIS has been revised to reflect these changes, see Part III.A. No right of way will need to be acquired for the proposed improvements (Howard, 1994).
- (6) people will not be able to enjoy the park at the junction of Elm Creek and Hwy 277 due to pollution of the Creek.
- 24-6 The NPDES permit requirements are set to prevent any significant pollution of the Creek from activities at the mine, therefore there should be no adverse impact on people's enjoyment of the Creek at the park.
25. ROSA O'DONNELL, citizen
- (1) Some comments are as presented in her letter, see Appendix C; oral comments also addressed the following concerns:
- 25-1 See response to comments in Appendix C.
- (2) information in the DEIS comes from DRRC and from local people who stand to gain from the project and it is not all correct; the RCT has found many deficiencies that have not been corrected despite several opportunities to do so;
- 25-2 See the discussion of Scope of EIS in Part II.C.1.
- (3) how will restoration for blasting damages be handled, especially for people outside the official permit area; what effect will it have on the homeowner's insurance if they have to cover it themselves, even if temporarily; what will the vibrations from blasting do to the tunnels;
- 25-3 See the discussion of blasting in Mine Activities, Part II.C.5. As explained in the DEIS, pp. 5-45 & -46, RCT regulations will require DRRC to demonstrate that no safety hazard will be created by the future approach of its mining to an abandoned underground mine in the third permit term, before RCT will issue the permit for that increment of mining.
- (4) DRRC is unreliable, they told the Maverick County Water District that everyone had signed leases but in fact several homeowners had neither sold their homes nor leased the property;
- 25-4 According to the Maverick County Water Improvement District, the company told them they were in the process of acquiring leases, not that all homeowners had leased or sold their property. It is the position of the District that the District will work on an agreement with the mine regarding access easements and similar matters once the lease agreements are made with the individual property owners (Phillips, 1994).
- (5) it would be nice if NAFTA paid for the scrubbers, but we will also have Carbón III and IV, etc., and it will just go on; what does NAFTA do since EPA has no say over Carbón I and II;
- 25-5 NAFTA and other international arrangements provide a means to discuss and evaluate projects such as Carbón I/II, but provide no specific, assured solution to impacts caused by the power plants.
- (6) other new industries will not be able to come to this area if we have increased pollution due to the Carbón I and II plants since there is a limit on total emissions in an area;
- 25-6 This is discussed in the DEIS, pp. 5-68 to 5-70.

(7) homeowners do not have the resources to fight this project and there is no one to protect the residents from the impacts outlined in the DEIS; unfortunately the agencies look the other way and excuse what the company does; the company is repeatedly given opportunities to correct their deficiencies and are not held accountable; but the people have to rely on the agencies.

25-7 Comments noted.

26. DALE SAILORS, citizen

(1) Expressed support for the project; has extensive experience with mines and has seen mines properly operated and contributing members of their community that provide employment without having an adverse effect on their neighbors; and has seen successful reclamation; Federal and State regulatory authorities do have responsibility to ensure that the operators comply with the laws; the mine would provide coal for energy, employment, and contribute to the tax base, and should result in an equal if not improved environment after mining.

26-1 Comments noted.

APPENDIX C

DRAFT EIS COMMENT LETTERS AND EPA RESPONSES



APPENDIX C

DRAFT EIS COMMENT LETTERS AND EPA RESPONSES

This appendix contains photo-reduced copies of the comment letters received by EPA during the comment period. For each letter, EPA has identified and numbered comments requiring a response. Next to the comments, EPA has provided a response. Comments which have already been responded to, in Part II.C of the Final EIS, are so noted.

INDEX TO COMMENT LETTERS

Federal

1. Federal Emergency Management Agency, Region IV
2. International Boundary and Water Commission, Office of the Commissioner
3. Department of the Army, Corps of Engineers, Fort Worth District
4. Department of the Interior, Office of Environmental Policy and Compliance

State of Texas

5. The University of Texas at Austin, McDonald Observatory
6. Texas Historical Commission, Department of Antiquities Protection
7. Texas Parks and Wildlife Department, Resource Protection Division
8. Texas Employment Commission, Maverick County
9. The Texas Office of State-Federal Relations

Local and other (in order of date received)

10. Mary Van Kerrebrook
11. Parts Service Supply Company, Isidro De Los Santos Jr., President
12. Tom L. Herrick
13. Maverick County Development Corporation, Raymundo Gonzales, President
14. Dan Riskind
15. David A. Todd
16. Sierra Club, Lone Star Chapter
17. Fred H. Wills
18. Theodosia Coppock
19. Ladye Herring
20. Lloyd, Gosselink, Fowler, Blevins & Mathews, for Dos Republicas
21. Rosa M. O'Donnell
22. Dr. Salvador Contreras Balderas
23. Minerva Manzano
24. Melanie Sattler
25. National Parks and Conservation Association

In addition, several thousand form letters and a petition supporting the project were collected by the Eagle Pass Chamber of Commerce; examples, without comment, have been attached (from Bernardo Camarillo, Francisco J. Jimenez, Leocadio Espinoza, Yolanda DeLeon), along with the last page of the petition.



Federal Emergency Management Agency

Region VI
 Federal Regional Center
 800 North Loop 288
 Denton, TX 76201-3698

JUN 27 1994

Federal Emergency Management Agency

MT

June 23, 1994

Mr. Norm Thomas (6E-F)
 U. S. Environmental Protection Agency
 First Interstate Bank Tower
 1445 Ross Avenue
 Dallas, Texas 75202-2733

Dear Mr. Thomas:

1-1 This responds to your Draft EIS for the Eagle Pass Mine, Maverick County Texas dated June 1, 1994. Maverick County has had its floodplains identified by FEMA but has chosen, thus far, not to participate in the National Flood Insurance Program (NFIP). It has not adopted an appropriate floodplain management ordinance for issuing development permits in its floodplains. Proposed and actual alterations to the flow of surface water and changes to the flood elevations and floodplain delineations must be documented and reviewed by the TNRCC and should be provided to the County. If the County joins the NFIP, the information should be reviewed by the floodplain administrator and appropriate development permits issued.

1-2 In addition to complying with the NFIP requirements, this office is also concerned that the project will avoid any short or long term adverse impacts associated with the occupancy, modification or destruction of wetlands to the maximum extent possible. If you have any questions regarding this or any other floodplain management matter, please call me at (817) 898-5161.

Sincerely,

Charles D. Ellison
 Natural Hazards
 Program Specialist

1-1 Floodplain management. EPA appreciates this information and, by reference, incorporates the material into Section 5.8 of the DEIS: Public Health, Safety and Justice. In the DEIS, impacts to flooding are discussed on page 5-14. Alterations to the surface water flow, flood elevations and floodplain delineations are being reviewed by the TNRCC through its own oversight responsibilities regarding wastewater discharge permitting, through its review of this EIS, and through its coordination with the Railroad Commission of Texas's analysis of the surface mining permit. A copy of the FEIS will be provided to Maverick County. As noted on pages 5-38 and 5-39 of the DEIS, the mining company will design the permanent channel reconstruction to meet RCT and COE channel requirements; the latter are likely to call for meanders and other naturalistic features.

1-2 Wetlands avoidance. As indicated in Section 5.4.1 of the DEIS, there are approximately 8 acres of artificial wetlands associated with seepage and return flows from Lateral 21, plus several stock ponds in the area to be mined. The COE preliminary determination is that none of these areas are jurisdictional wetlands under Section 404 of the Clean Water Act. If, after formal coordination between DRRC and COE, the preliminary determination is confirmed, these wetlands would be eliminated by the mine and would not be likely to return unless the canal is replaced in an unlined condition. Restoration of dense brush habitat associated with Elm Creek itself is discussed in the DEIS at pages 5-35 to 5-39, and in Section 5.4.5 and Appendix F of this FEIS. Also, refer to expanded discussions of coordination concerning wetlands in Part II.D of this FEIS.

JUL 13 1994



INTERNATIONAL BOUNDARY AND WATER COMMISSION
UNITED STATES AND MEXICO

International Boundary and Water Commission

OFFICE OF THE COMMISSIONER
UNITED STATES SECTION

JUL 13 1994

Mr. Norm Thomas
Chief, Federal Activities Branch
U.S. Environmental Protection Agency (6E-F)
1445 Ross Avenue
Dallas, Texas 75202-2733

Dear Mr. Thomas,

Thank you for the opportunity to review the Draft Environmental Impact Statement (DEIS) dated June 1, 1994, regarding the issuance of a New Source National Pollutant Discharge Elimination System (NPDES) permit to Dos Republicas Resources Company, Inc. for its proposed Eagle Pass Mine in Maverick County, Texas. The discharges from this new source would be made to Elm Creek; thence to the Rio Grande in Segment No. 2104 of the Rio Grande Basin. The beneficial uses of this Segment, defined in the Texas Surface Water Quality Standards, are high quality aquatic habitat, contact recreation, and public water supply.

As you are aware, the U.S. Section represents the United States part of the International Boundary and Water Commission (IBWC). The IBWC is an international organization created by the United States and Mexico by treaties in 1889 and 1944 to apply water and boundary treaties dealing with land boundary demarcation, river boundary preservation, international flood control, national ownership of boundary river waters, solution of water quality problems including salinity and sanitation, and consultations regarding border water matters.

In the context of our interest in water quality matters, the U.S. Section is concerned that the discharges from the proposed Eagle Pass coal mine have the potential to produce adverse affects in Mexico. We do note, however, that Dos Republicas Resources Company has committed to extensive monitoring and mitigation commitments which will be overseen by your agency, the Texas Natural Resource Conservation Commission (TNRCC), and/or the Texas Railroad Commission (TRC). We understand that the discharge permit would be issued by your agency and certified by the TNRCC. The TRC would issue the mining and reclamation permit. The U.S. Army Corps of Engineers would issue the Section 404 permit. Finally, we note that coordination regarding the proposed action has occurred with the U.S. Fish and Wildlife Service and the Texas Historical Commission.

2-1 Concern about water quality impacts to Mexico. These comments are noted. As requested, an additional copy of the DEIS has been provided for transmittal to the Mexican Section.

2-1

The U.S. Section will continue to remain interested in the progress of the proposed project. Please send an additional copy of the DEIS at your earliest possible convenience so that we may transmit it to the Mexican Section of our agency. We will have one or more representatives at the July 20, 1994, public hearing in Eagle Pass who may submit additional comments at that time.

Sincerely,

Conrad G. Keyes, Jr.
Principal Engineer, Planning



DEPARTMENT OF THE ARMY
 FORT WORTH DISTRICT, CORPS OF ENGINEERS
 P. O. BOX 17300
 FORT WORTH, TEXAS 76102-0300

APPLY TO
 ATTENTION OF:

August 1, 1994

Corps of Engineers

Operations Division
 Regulatory Branch

SUBJECT: Project Number 199200001

Mr. Norm Thomas
 Chief of the Federal Activities Branch
 EPA (6E-F)
 1445 Ross Avenue
 Dallas, TX 75202-2733

Dear Mr. Thomas:

A Draft Environmental Impact Statement was received on June 23, 1994 for the Eagle Pass Mine located in Maverick County, Texas. This response provides the U. S. Army Corps of Engineers comments on the draft.

Page 5-39 states "the COE has indicated to DRRC that the Corps will abide by agreements reached between DRRC, EPA and FWS, and that the applicant should only apply for a Section 404 permit once issues between those three parties have been resolved". Our regulations under 33 CFR Part 330 provides Nationwide Permit Regulations for surface coal mining activities. Because of the 30 day decision period initiated by notification, we must be provided with enough information to determine if the activity is authorized by a nationwide permit or if an individual permit will be required. Accordingly, the applicant will benefit by resolving issues prior to submitting a notification letter if they are requesting to be permitted under a nationwide permit. Our evaluation will be based on information acquired during the EIS process and from the information DRRC provides during notification. Although information gathered during the EIS process will prove valuable in our decision on whether to issue a Nationwide Permit, our evaluation process is separate from the EIS process and we have not agreed to abide by decisions reached by the DRRC, EPA and FWS. Accordingly, the part of the sentence suggesting this position should be removed from the EIS.

Page 1 of Table 1-2 under the section "During reclamation and after", indicates the "Jurisdictional waters of the U.S. (or Elm Creek) will be replaced (through not necessarily in pre-mine form), with COE oversight. To date we have not received a notification request and have made no determination on mitigation for the project. Accordingly, the word "will" should be replaced with "may" in this sentence, or the sentence should be deleted.

Page 2 of Table 1-2 under the section "Federal Section 404 permit", states "pre-mine plans are required for replacement of wetlands; periodic inspections." Although providing mitigation plans often expedites the permitting process they are not initially required when requesting 404 permit authorization. Periodic inspections are often incorporated as special conditions to 404 permits, but are not required in pre-mine plans. This sentence should be restated or removed.

Page 5-19 paragraph 2 states. "To secure City water, DRRC will fund a six-inch water line from the existing facilities, some two miles to the south." A sentence should be added indicating this water line may require a section 404 authorization under the Clean Water Act if excavation or fill material is placed in a water of the United States.

If you have any questions concerning our comments, please contact Mr. Barry Osborn at the address above or telephone (817)334-3354.

Sincerely,

Wayne A. Lea
 Chief, Regulatory Branch

3-1 Resolve issues prior to any request for nationwide permit. Comment noted.

3-2 Revisions to text. All the suggested changes have been made; see Part III.A.



United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
Post Office Box 649
Albuquerque, New Mexico 87103

ER 94/536

August 19, 1994

OVERNIGHT FEDERAL EXPRESS

Norm Thomas (6E-F)
Chief, Federal Activities Branch
U.S. Environmental Protection Agency
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733

Dear Mr. Thomas:

The U.S. Department of the Interior has reviewed the draft Environmental Impact Statement (EIS) for Eagle Pass Mine, Maverick County, Texas, and finds the document to be deficient in several areas. The following comments are provided for your consideration in preparing the final document.

GENERAL COMMENTS

- 4-1 This draft EIS does not follow the format and definitions set forth in the Council on Environmental Quality's Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act (40 CFR 1502 - 1508). As a consequence, it lacks a section devoted to alternatives other than the proposed action, confuses connected actions with cumulative actions and fails to adequately address cumulative impacts.
- 4-2 The draft EIS frequently looks only at activities and impacts occurring during the initial 5-year period of the proposed coal mine's operation, resulting in an understatement of the life-of-project effects; this has resulted in a piecemeal analysis. Surveys and information necessary to protect resources such as wetlands, endangered species and cultural sites are incomplete making it impossible to evaluate project environmental consequences. In addition, the endangered species mitigation plan in the draft EIS is not current when compared to the biological assessment issued by your agency.
- 4-3 Wetlands, riparian habitats, water quality aspects and cultural resources are of special concern and adequate discussion of these resources and alternative means of avoiding impacts to them are lacking in the document. Therefore, the draft EIS needs to be substantially supplemented in order that the final EIS will have the benefit of comprehensive, germane commentary from an informed public.

U. S. Department of the Interior

- 4-1 NEPA compliance. EPA discusses its approach to evaluation of alternatives in Part II.C.1 of this FEIS. Appendix F and Part III.C provide the latest information on the mitigation plan alternatives (see especially 5.4.5, a new section in the EIS). For practical purposes, and except for socio-economic effects, the cumulative impacts of the project are those which do result from connected actions. See subsequent comments for responses to specific issues concerning cumulative impacts.
- 4-2 Piecemeal analysis. The DEIS looks at activities throughout the life of the mine, but with more detail for the first five years because more information is available for that period. This reflects the fact that the company need only supply a detailed mine plan for the length of its Railroad Commission of Texas permit, which is five years. Similarly, the Department of the Army 404 permit and the EPA's NPDES permit both must be renewed in five years based on the receipt of more detailed information from the mining company. Plans for life of the mine were provided to EPA by the mining company, and where necessary, EPA obtained additional details on long-term mining by discussions with DRRC. However, in general the mine has similar effects over the long-term as in the first five years, just more of them. EPA does not agree that the life-of-project effects are understated in general, and responds to specific comments provided subsequently in the DOI letter.
- 4-3 Coordination. Coordination is an on-going process. Initial coordination by various agencies occurs on different schedules, and in some cases must occur parallel with the EIS process, or even after mining begins. Coordination does not have to be complete for the EIS to proceed, although initial coordination (e.g., determination of eligibility under COE's nationwide permits, or preparation of biological or cultural resource protection plans) must be complete before EPA's permit will be issued.
- This FEIS contains the latest information available on the various coordination efforts; see especially Part II.D of this FEIS, and Part III.C, which contains a new EIS Section, 5.4.5, providing an update on endangered species and proposed mitigation. Appendix D presents coordination letters from the agencies involved. EPA believes the information available to it is adequate to predict impacts with the accuracy required to support an NPDES permitting decision.

4-4 Information is provided under the following "Specific Comments" concerning the modeling study, recently completed by the National Park Service (NPS), that better quantifies the impacts of the Carbon I/II power plants, as well as the larger Texas sources in the vicinity of Big Bend National Park. This information should be included in the final EIS (pages 5-69 and 5-71). If it cannot be incorporated into the document, then page 5-69 should be revised as indicated below.

SPECIFIC COMMENTS

4-5 Section 3.3 RELATIONSHIP TO OTHER REGULATORY PROGRAMS, Section 404, Pages 3-5. The draft EIS states that Nationwide Permit (NWP) 21 authorizes disturbance of waters or wetlands by surface coal mines, that an application (actually, "notification") for this authority is required and that specific approval of the proposed activity by the U.S. Army Corps of Engineers (Corps) is required. The draft EIS should also mention that if the surface coal mine project includes the discharge of dredged or fill material into special aquatic sites, including wetlands, there is a special condition that the notification must also include a delineation of the affected special aquatic sites, including wetlands, and that all NWPs have general conditions rendering them invalid if not followed. Pertinent examples of some of these general conditions are found at 33 CFR 330 Appendix A:

- "4. Aquatic life movements. No activity may substantially disrupt the movement of those species of aquatic life indigenous to the waterbody, including those species which normally migrate through the area, unless the activity's primary purpose is to impound water.

[and]

11. Endangered Species. No activity is authorized under any NWP which is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act, or which is likely to destroy or adversely modify the critical habitat of such species. Non-Federal permittees shall notify the district engineer if any listed species or critical habitat might be affected or is in the vicinity of the project and shall not begin work on the activity until notified by the district engineer that the requirements of the Endangered Species Act have been satisfied and that the activity is authorized. Information on the location of threatened and endangered species and their critical habitat can be obtained from the U.S. Fish and Wildlife Service (FWS) and National Marine Fisheries Service. (see 33 CFR 330.1 (f))"

4-4 Air quality modeling. EPA does not regard the MESOPUFF-CALMET air quality modeling it and NPS have been doing as completed and ready for public release, and so has made the alternative revision suggested by DOI. See also response 4-53.

4-5 COE nationwide permit conditions. EPA appreciates this information and, by reference, incorporates the material into Section 3.3 of the DEIS: Relationship to Other Regulatory Programs.

4-6

The draft EIS goes on to state that the Corps has made a preliminary determination that Elm Creek, between its ordinary high water marks, is a jurisdictional water of the United States throughout the Texas Railroad Commission's (Commission) 5-year permit area and that there are no jurisdictional wetlands within that area. However, as the draft EIS states later on page 5-28, "the life-of-mine jurisdictional waters area has not been calculated," leaving the question of whether jurisdictional wetlands remain to be delineated outside the 5-year permit area unanswered. Furthermore, the draft EIS also states on page 5-28 that some fish species probably occur in Elm Creek on the project area during spring spawning runs. Finally, as the draft EIS states in many places, e.g., page 5-41, the Eagle Pass mining project may adversely impact the ocelot and jaguarundi. In summary, there are several reasons why NWP 21 may not be applicable to this project and the draft EIS should make this situation and the applicant's consequent probable need to pursue an individual Section 404 authorization clear at this point.

4-7

The draft EIS draws attention here to the FWS January 14, 1994, letter to the Environmental Protection Agency (EPA) requesting that it make use of its 404 (c) authority to protect Elm Creek's riparian wetland vegetation. Perhaps it was unintentional, but the earlier statement in the draft EIS that the Corps found no jurisdictional wetlands outside the creek's ordinary high water marks, combined with the quotation marks surrounding the word "wetlands" in the draft EIS's reference to the letter, create the impression that EPA disputes the existence of riparian wetlands, at least within the area so far subjected to the Corps' preliminary determination. We are concerned not so much with this impression as with the issue the draft EIS leaves unresolved even though it was raised as a specific scoping item by the relevant portion of its January 14, 1994 letter: "In light of the potential value of Elm Creek's wetlands to the conservation of the ocelot and the jaguarundi, the Service requests that EPA make a special effort to see that the jurisdictional wetlands are properly delineated, and that the EIS thoroughly addresses the delineation process even if the Corps does the delineation." For example, the draft EIS should be supplemented to explain the basis for determining why Elm Creek, throughout the project area and not just in the area of the first 5 years of development, does or does not have riparian wetlands and whether they are or are not jurisdictional. Likewise, in each case where the draft EIS cites a determination that other project area wetlands are not jurisdictional (e.g., pages 5-28, 29), it should provide the rationale and, if the Corps made the determination, state whether the EPA considers it to be complete and correct since EPA has final authority on this issue. Because the provision of accurate wetland delineations is a nondiscretionary duty essential to the application of National environmental standards, failure to provide this information in the final EIS will be considered potential grounds for elevation in accordance with 40 CFR Part 1504.

4-6

Notification and determination. The COE coordination letter (letter #3) indicates that "notification" had not yet occurred, and that when it does COE's official determination as to the presence of jurisdictional wetlands and eligibility under the nationwide will be independent of the EIS process.

The presence of fish in Elm Creek, and the potential for impact to the ocelot and jaguarundi do not make the need for an individual permit probable unless the COE determines that the applicant has been unable to satisfy the U.S. Fish and Wildlife Service and Texas Parks and Wildlife as to those issues.

4-7

Jurisdictional wetlands. Response 1-2 and 4-1, 4-2, 4-3 and 4-6 address this issue, as do expanded sections in Part II.D and Part III.C concerning coordination and mitigation.

EPA's understanding, from personal communication with Mr. Osborn of the COE in Ft. Worth, is that it appeared that all bodies of water outside of Elm Creek were on intermittent streams not considered jurisdictional waters of the U.S. and were the result of man-made impoundment or seepage from man-made canals. Such water bodies are generally not considered wetlands. EPA does not take a position contradictory to COE.

The first five-year permit area contains most of the possible riparian areas and possible wetlands in the life-of-mine area: some 23 acres of "waters"; eight acres of "artificial" wetlands resulting from canal seepage; and 15 acres of stock ponds. Review of aerial photos indicate that future permit areas could, all together, contain another three or four acres of natural riparian areas along intermittent streams and a few more small stock ponds.

Section 4.0 DESCRIPTION OF ALTERNATIVES, Pages 4-1 through 4-16. As noted above in the General Comments, the draft EIS does not have a section addressing alternatives to the applicant's proposed action as mandated in National Environmental Policy Act. As clearly described at 40 CFR Part 1502.14:

"This section is the heart of the EIS. Based on the information and analysis presented in the sections on the Affected Environment (§1502.15) and the Environmental Consequences (§1502.16), it should present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decisionmaker and the public."

In this regard, we recommend that Section 4.0 of the Draft EIS be augmented to rigorously explore and objectively evaluate in a comparative form all reasonable alternatives to the proposed coal mine action. The supplemented alternatives section should discuss and compare, at a minimum, at least the following issues; some existing alternatives are barely referred to in the draft EIS and must be analyzed for comparison. The pursuit of protection of reclaimed brushlands through legal agreements with the landowners (page 4-9) and the outdated mitigation plan discussed at page 5-35 et seq., are examples. The mitigation plan presented in greatest detail in the June 1994 "Biological Assessment for the Dos Republicas Resources Company (DRRC) Proposed Eagle Pass Coal Mine" (Biological Assessment) prepared for EPA by SWCA, Inc. is another example. A variation of the latter currently under consideration by the applicant and the FWS would be to require the creation of an alternative corridor of habitat sufficiently dense to replace the existing brush corridor along Elm Creek prior to the mining of the existing corridor. Still another alternative, avoiding the Elm Creek corridor altogether, originally appeared in the August 1993 "Assessment of Potential Ocelot Habitat" prepared by Hicks & Company and Dr. Michael E. Tewes and is the subject of an economic analysis incorporated in the Biological Assessment as Appendix B.

The last item has given rise to another alternative which we recommend be addressed in the draft EIS. The economic analysis found the Elm Creek avoidance alternative infeasible because it would, when suitable buffer area was included, result in the applicant's inability to reach as much of 35 percent of the project's coal reserves, including some of the highest quality and cheapest-to-mine reserves. We do not dispute the conclusion reached in the analysis that this would render the alternative impracticable. However, we note that the proposed alternative would leave unmined a linear area adjacent to the Elm Creek brush corridor. We refer to the Southern Pacific Railroad right-of-way, which, along with proposed sidings for loading the trains, would bisect coal reserves and which would nonetheless leave the proposed alternative economically practicable. We, therefore, recommend that full consideration be given to the following alternative plan: 1) Reroute the railroad out of the mine

4-8 Alternatives. EPA considers the alternatives described in the DOI letter to be specific to biological mitigation measures associated with coordination under Section 7 of the Endangered Species Act. That is, the alternatives have been developed as a result of coordination, and were not available as project alternatives developed by DRRC. As such, they are discussed in Part II.D of this FEIS, which updates coordination efforts, and in a new Section 5.4.5, which provides the latest information on mitigation alternatives for endangered species, and which is provided in Part III.C of this FEIS.

area; 2) Mine the area beneath the existing right-of-way and proposed sidings; 3) Divert Elm Creek as necessary to prevent the flooding of the pits, but leave intact a corridor of the best riparian brush at least as wide as the average width of the existing railroad right-of-way and the sidings; and 4) Analyze the economics of variations on this general concept to produce the largest economically-feasible footprint for the corridor.

The above alternatives) and also our comments below on Section 5.5, regarding the avoidance of cultural resources, must be addressed during supplementary analysis of Section 4.C. Further description and analysis of all reasonable alternatives may preclude future consideration for referral of a deficient final EIS.

4-9 Section 4.2 DRAFT NPDES PERMIT, Page 4-12. The draft EIS states the pollutants in the National Pollution Discharge Elimination System (NPDES) permit are those listed by EPA for coal mines considered as new sources of alkaline mine drainage. It is unclear if EPA has taken samples of the formation water to determine its pH. The draft EIS should discuss reasons for assuming the mine drainage has a particular pH if it has no sample data to support the assumption. Would the pollutants proposed to be listed in the NPDES permit be different if the mine drainage proved to be acidic or neutral instead of alkaline? It is also unclear how pH affects the toxicity of the pollutants expected to occur in the drainage.

4-10 Section 4.3 EPA's ALTERNATIVES, page 4-15. The draft EIS states "Ranching and farming related activities which may occur without the coal mine in place could impact the existing brush habitat due to clearing practices." This may be an erroneous assumption made without the benefit of supporting data garnered through a land owner questionnaire.

4-11 Section 5.1.1, Figure 5-1, page 5-2; and Table 5-1, page 5-4, 5. The Table refers to the Figure regarding the locations of special wildlife Areas "y" and "z", but these areas do not appear on the latter. The Figure should be updated. In addition, there is an apparent conflict between Table 5-1's statement on page 5-4 that there is no significant shallow ground water within the project's boundaries and its statement on page 5-5 that Area "y" contains spring-fed pools. This requires clarification.

4-12 Furthermore, the draft EIS should, as recommended above, explain why none of Area "y" is considered to contain jurisdictional wetlands.

4-13 Table 5-1. The table defines Elm Creek as having a riparian width which is "generally 500 feet or less", yet Table 1-2 states that, as mitigation for the destruction of Elm Creek, DRRC proposes to plant a 50-foot wide strip of vegetation along diversion ditches C-C' and D-D'. Additionally, a 100-foot-wide corridor is proposed as a bypass corridor. The draft EIS should provide a discussion of the adequacy of these attempts to replace the much wider mature floodplain and riparian brush of Elm Creek, both during and after the project's life.

4-9 Alkaline mine drainage. As indicated on page 5-10 of the DEIS, baseline surface-water quality data at the site range from near-neutral to slightly alkaline (pH 6.8 to 8.6). Baseline ground water quality data also range from near-neutral to alkaline (pH 6.8 to 13.0), and, while some acid-forming pyrite is present in the coals and overburden, the coal will be removed and the overburden is predominantly alkaline-forming (DRRC, 1993b). All acid-forming material will be buried beneath a minimum of 4 feet of non-acid-forming material. Based on these data and knowledge gained from regulating other coal mines in Texas, EPA has determined that the Dos Republicas mine is subject to the alkaline mine drainage regulation of 40 CFR 434.

4-10 Ranching activities. EPA's point is that permit denial does not eliminate the prospect of certain impacts. Information provided on a landowner questionnaire would not represent commitments enforceable by EPA.

4-11 Special wildlife areas. The Table should refer to Figure 1-2, as indicated in Part III.A.

4-12 Area Y. The pools in Area Y are rain-fed, not spring-fed. The error has been corrected, see Part III.A. "Jurisdictional" waters are discussed at responses 4-6 and 4-7; however, in this case the area will not be disturbed and thus the issue as to whether or not the pools are jurisdictional is moot.

4-13 Dense brush corridor width. Note that the proposed upland bypass corridor width is 300 feet, not 100 feet, for a total of 218 acres; see Part III.A of the FEIS, and response to comment 22-28. DRRC intends to revegetate a strip 50 feet wide on each side of two complete Elm Creek corridors, for a total of 187 acres of created brush habitat; see details in Part III.C, new Section 5.4.5, of this FEIS. DRRC calculates that Tewes/Hicks (1993) outlined 392 acres of dense brush habitat along Elm Creek; EPA calculates that 30 acres of that is composed of the unvegetated Elm Creek channel, leaving 362 vegetated acres. DRRC intends to leave 30 or more acres of the existing dense brush habitat undisturbed. So if DRRC's mitigation is successful, there will be at least 217 acres of dense brush habitat in the Elm Creek floodplain (187 acres created plus 30 acres undisturbed), plus the 218 acres of the upland bypass corridor, versus 362 acres of dense brush habitat along the Elm Creek floodplain currently.

- 4-14 Section 5.1.1. Physical Environment-Existing Conditions, page 5-6. The draft EIS describes the coal to be mined as having an average sulfur content of 1.12 percent. Does this sulfur occur in minerals, like iron pyrite, which upon exposure to the air and sunlight would break down to form acids? If so, consideration of this situation should be added to the draft EIS' description of this coal mine's drainage as alkaline on page 4-12.
- 4-15 Section 5.1.2. Impacts to the Physical Environment, page 5-7. The Draft EIS states restoration of Elm Creek would probably produce a wider, smoother channel than now occurs. The draft EIS should elaborate on how these changes would affect the creek's water quality, particularly water temperatures and dissolved oxygen levels and the fish and invertebrates that live and spawn in it. These impacts could potentially occur not only in the permit area portion of Elm Creek, but downstream as well. These indirect and cumulative effects must be examined.
- 4-16 Sections 5.2.1. Surface Water; and 5.2.2. Impacts to Surface Water Quantity and Quality, Pages 5-9 through 5-16. The draft EIS states on page 5-11 that portions of the alluvium below Elm Creek are recharged by seepage from Lateral 21, irrigated fields and stock ponds, creating a man-made aquifer which averages 10 feet in thickness. The draft EIS also states on page 5-9 that Elm Creek is ephemeral upstream of and in the northern part of the project area. However, on page 5-4 Table 5.1 states: "No significant shallow ground water identified within project boundaries, but upland gravels to the north are saturated." An explanation is needed as to why an aquifer 10 feet thick, even if artificial, is considered insignificant, and why, if upland gravels to the north are saturated, this source of water is not considered, like the man-made sources cited, to be contributing to Elm Creek's perennial flows on and downstream of the project area.
- 4-17 The draft EIS also describes the baseflow of Elm Creek after mining as dependent upon how Lateral 21 is reconstructed, and upon irrigation practices. However, on page 5-17 the draft EIS also states: "The relatively loose spoils materials at reclaimed areas will have an initial infiltration capacity equal to or better than the existing alluvial aquifer;..." Even though the draft EIS goes on to state this capacity would decrease over time, would this increased infiltration through the disturbed bed of the creek also reduce the baseflow through the project area? The draft EIS should include a discussion of means, such as special compacting or clay linings, to prevent Elm Creek from becoming essentially an underground stream in the project area.
- 4-18 The draft EIS states on page 5-15 that the baseflow of Elm Creek would probably become more saline in the short term as a result of groundwater pumping and leaching of the overburden at the mine, but adds that this salinity impact has not been quantified. This is inconsistent with the draft EIS' statement on the following page that "Adverse impacts to domestic and livestock water supplies in lower Elm Creek, a scoping concern raised by several neighbors, are not expected." In the interest of
- 4-14 Sulfur. See response to Comment 4-9, above. Note that only a fraction of the sulfur in the coal is in the form of acid-generating pyrite; the majority is in organic or sulfate forms (DRRC, 1993b).
- 4-15 Biological impacts of rechannelization. As the EIS makes clear, EPA recognizes a significant net negative impact from mining through Elm Creek. The restored stream channel is not expected to provide as good habitat as the natural channel. In most of the area, this would have little effect on fish and invertebrates, because the channel is now and will be dry almost all of the time. The habitat of restored perennial reaches could be inferior to that now existing. EPA's judgment of the significance of this impact is affected by the fact that the perennial flows do not represent a natural hydrologic regime; thus this is a minor part of EPA's general conclusion that the proposed rechannelization will have adverse biological impacts.
- 4-16 10-foot aquifer; upland gravels. The thin aquifer is considered insignificant because it is artificial, small and has never been developed as an important water supply. EPA has reviewed the available information and has found no evidence or reason to believe that the aquifer to the north is hydrologically connected to Elm Creek through a saturated zone.
- 4-17 Maintaining surface base flow. Higher rates of infiltration will increase recharge to ground water and, ultimately, will increase base flows. Among other locations, this increase in infiltration will occur where the channel of a reconstituted Elm Creek lies above the water table. Baseflow will occur in areas where the channel of Elm Creek is lower than the water table, which is primarily in the area where there is substantial artificial recharge from Lateral 21 and/or irrigation. Infiltration rates will not have a significant impact on the ability of baseflow to reach the channel. Channel reconstruction is under the jurisdiction of the Corps of Engineers and Railroad Commission of Texas. EPA favors making minimal changes to Elm Creek, and restoring it to natural conditions, and would not recommend clay linings or other artificial channel conditions absent strong evidence that they are needed.
- 4-18 Increased salinity. EPA has no basis for quantifying the incremental salinity impact, but expects it to be small, especially given that ground water salinity is already 2,400 to 2,900 mg/l TDS (see p. 5-11). Domestic water supplies in the area are provided by Lateral 21, which will not be impacted by any salinity changes; in addition, DRRC's provision of a municipal water line provides neighbors with an alternative water supply. Standards for livestock water allow for relatively high salinities (typically several thousand mg/l total dissolved solids).

- neighbor's concern and in recognition of the fish and wildlife resources downstream from the proposed mine, the draft EIS should quantify the salinity impact and provide support for the quoted statement. If accurate quantification is not practicable, then the draft EIS should follow the procedures set forth at 40 CFR Part 1502.22 that addresses incomplete or unavailable information.
- Section 5.2.3, Impacts to Ground Water Quantity and Quality, page 5-18. According to the draft EIS, EPA's evaluation is that the recharge water from the project's sedimentation ponds should be of acceptable quality so that lining of the ponds is not required and that while dissolution of radionuclides and metals from spoil is an impact which has been hypothesized for other mines, where strongly reducing conditions develop, EPA at this time has no information indicating such an impact is likely at the Eagle Pass Mine. The draft EIS should provide EPA's rationalization for its first conclusion and produce the information necessary to quantify the likelihood of the hypothesis being true. The draft EIS should also describe the potential effects on fish and wildlife resources if EPA's evaluations of these situations are incorrect.
- Section 5.2.4, Impacts Related to Water Use, Page 5-19. The draft EIS states the applicant would construct a six-inch water line to secure treated water purchased from the City of Eagle Pass and allow free hook-ups for anyone along the pipeline right-of-way wishing to obtain a more reliable, better quality water supply than that provided by Lateral 21. The draft EIS suggests that because the existing area near the mine is rural, probably no more than 10 to 20 additional connections to the City water system would be made. Since a 6-inch water line is sufficient to supply several subdivisions, the draft EIS should also discuss this proposed water supply's potential to induce new development of a more urban nature. The discussion should include analysis of secondary and cumulative impacts of the induced development, such as brush clearing.
- Section 5.3.2, Air Quality Impacts: Emissions Sources, Controls and Rates, Page 5-22. DRRC proposes to control dust emissions through the use of water sprays and mists, including the potential use of "commonly used chemical agents". The draft EIS fails to identify the applicant's requirements and source(s) of such water, as well as to define what "commonly used chemical agents" would be used and their potential impacts on fish, wildlife and human resources. If the applicant intends to use hydrocarbons for dust control, the draft EIS should discuss the procedures to be used for the removal of hydrocarbons from contaminated soils at the end of the permit term.
- Section 5.3.2, Emissions Sources, Controls and Rates Page 5-22. The draft EIS states the applicant is conducting health effects modeling. The draft EIS should state what that modeling has produced and whether it takes into account the current and future air quality influences, such as the Carbon I and II generating stations.
- 4-19 Sedimentation pond seepage. See discussion in Part II.C.5, which gives several reasons why EPA does not predict significant adverse water-quality impacts from the Eagle Pass Mine. EPA has no basis on which to even speculate an adverse water-quality change from sedimentation pond recharge which could impact fish and wildlife.
- 4-20 Water line secondary impacts. The potential for induced development is discussed in the DEIS on page 5-45 in the section on land use impacts. As discussed in the DEIS, it is anticipated that the extension of the water line will encourage new development in the area between the mine and Eagle Pass. The text on DEIS p. 5-19 has been revised; see Part III.A. The discussion of the impacts of the induced development has also been expanded; see Part III.B.
- 4-21 Dust control. DRRC estimates its requirement for "industrial" (dust suppression) water at 300 acre-feet per year and proposes to purchase Rio Grande water rights from current owners of such rights. If sufficient industrial rights cannot be purchased, other types of Rio Grande rights will be acquired and converted to industrial rights (Kost, 1994a). DRRC proposes to use Nalco Dust-Ban 8801 (see Appendix I) as an additive in water applied to emissions sources throughout the coal-handling circuit and to stockpiles at the loadout facility. Dust-Ban 8801 is a proprietary aqueous solution containing an oxyalkylate compound. The concentrate can cause strong eye irritation, but inhalation studies indicate no toxicity at dilutions of at least 50 to 1. Potential impacts of Dust-Ban 8801 would be limited to DRRC employees who work with the concentrate. At the present time, DRRC plans to apply only water to the roads (Kost, 1994a). The draft TNRCC air quality permit does allow the use of dust suppressants in the water applied to roads if a higher level of control becomes necessary. Hydrocarbons would not be used.
- 4-22 Health effects modeling. See the discussion of dust in Part II.C.5.

- 4-23 Section 5.3.2, Radioactivity Issues, Pages 5-23, 24. The draft EIS concludes that radioactive materials in coarse materials would not travel far from the point of origin, yet, at the end of the previous section, the draft EIS found that fugitive coal dust emissions would spread from uncovered rail cars onto properties along the railway into Mexico. This apparent inconsistency should be explained. The draft EIS does not identify to which Texas mines the proposed mine's radioactive dust is compared, nor identify the radionuclides occurring in that dust. Since some of these produce gaseous fission products like radon which are themselves radioactive, the draft EIS should be supplemented to describe the potential for the spread of such materials far beyond their points of origin, and to discuss their possible concentration in the water, animal burrows and buildings around the mine and the railway.
- 4-24 Section 5.4.1, Vegetation, Page 5-27. As commented above, Areas "y" and "z" do not appear on Figure 5-1 as the draft EIS states.
- 4-25 Section 5.4.1, Wildlife, Page 5-20. This portion of the draft EIS cites several ways in which the riparian zone along Elm Creek may connect to other potential carnivore travel corridors, but drops the issue after stating no survey has been conducted to determine whether Elm Creeks acts as an important travel corridor between the Rio Grande area and the Nueces River drainage. We recommend that EPA consult recent aerial photography, if no other means of determining the corridor's existence with a higher degree of certainty are available, and publish this information in the draft EIS preferably using a figure.
- 4-26 The same sections of the draft EIS mention an intention by the City of Eagle Pass to establish a no-development corridor along the Rio Grande and lower Elm Creek. The draft EIS should state how and when such a corridor would be established. Would such establishment require compensation for the landowners? If so, how much and who would pay? It is also unclear how the applicant's proposed waterline and free water tap service would be consistent with the intent of the City's no development corridor.
- 4-27 Section 5.4.1, Aquatic Resources, pages 5-28, 29. The draft EIS states the life-of-mine jurisdictional waters area has not been calculated. This information must be included in the draft EIS if their loss is to be assessed. The draft EIS also states on page 5-28 that there are rain fed pools in Area "y;" however, Table 5-1 on page 5-5 claims the pools are spring-fed. This inconsistency requires clarification. Finally, this portion of the draft EIS states the Area "y" pools, approximately 8 acres of artificial wetlands resulting from canal seepage, and at least seven small stock ponds (15 acres or less) were all preliminarily identified as non-jurisdictional wetlands.
- 4-28 Section 5.4.1, Aquatic Resources, pages 5-28, 29. The draft EIS states the life-of-mine jurisdictional waters area has not been calculated. This information must be included in the draft EIS if their loss is to be assessed. The draft EIS also states on page 5-28 that there are rain fed pools in Area "y;" however, Table 5-1 on page 5-5 claims the pools are spring-fed. This inconsistency requires clarification. Finally, this portion of the draft EIS states the Area "y" pools, approximately 8 acres of artificial wetlands resulting from canal seepage, and at least seven small stock ponds (15 acres or less) were all preliminarily identified as non-jurisdictional wetlands.
- 4-23 Radioactivity issues. The discussion of coarse materials refers to dusts originating at the mine; this is a separate pathway than coal dust from rail transport. For a discussion of radioactivity associated with coal mining and burning in Texas, refer to "Verification of NEPA predictions in environmental impact statements on Texas Lignite Mine Projects", December, 1993, an EPA contractor report available from Region 6. Radioactive substances occur naturally, and EPA would engage in specialized studies of their distribution only if there were reason to believe that the proposed project would somehow concentrate the material.
- 4-24 Special wildlife areas. The Table should refer to Figure 1-2, as indicated in Part III.A.
- 4-25 Dense brush travel corridor connections. DRRC's biological assessment, received by EPA since the DEIS was written, provides some additional dense brush corridor information. See Part III.B, revision of DEIS p. 5-28, where this additional information is presented. In particular, DRRC estimates from aerial photographs that riparian habitat extends at most 25 to 30 miles north of the project area. EPA has not obtained aerial photographs of the nearby reaches of the Nueces drainage, but USGS topographic maps show that there are numerous places within that 25 to 30 miles where creeks in the Nueces drainage originate on the order of a mile or two from creeks in the Elm Creek drainage. However, without field verification, EPA can make no statement about whether such proximity makes use as a corridor possible.
- 4-26 No-development corridor. EPA tried, but did not succeed in obtaining more information from the City on this subject. EPA's understanding at the time of preparing the DEIS, was that the City and County were in the early stages of planning the No Development Corridor and that the specifics were not yet worked out. The potential for induced growth along the water line should not conflict with the concept of the No Development Corridor. As discussed in the DEIS (p. 5-45) the City has zoning authority to control growth in the area; this together with the plans for the corridor would allow local authorities to direct growth away from the land to be preserved.
- 4-27 LOM non-jurisdictional wetlands. Refer to response 4-7.
- 4-28 Area Y. The pools in area Y are rain-fed, not spring-fed. The error in Table 5-1 has been corrected, see Part III.A.

- 4-29 Upon reviewing the August 31, 1992, Draft Revision of the Phase II Archeological Survey Report provided by the Center for Archeological Research (CAR) at the University of Texas at San Antonio to Marston and Marston, Inc. regarding much of the project site, we encountered a number of pertinent descriptions of the portions of the project site outside the high water marks of the Elm Creek Channel including marsh, bogs, backswamp, oxbow lakes, ponds, sloughs, debris stacking, scouring of organic debris, periodic flooding, standing water, gleyed soils, soil concretions and mottled soils. These terms are all descriptions of wetlands, hydrologic indicators and hydric soils which the draft EIS should recognize as generally originating independently of canal seepage and attempt to resolve with the preliminary findings of the wetland determination. Please see the comments above on Section 3.3. Such hydrological and soils characteristics as listed above provide indication of wetland conditions.
- 4-30 Section 5.4.2, Vegetation, General, Page 5-29. The draft EIS fails to adequately address impacts to vegetation that would occur from dust accumulation and a reduction in water resources. These impacts would occur both on and off the mine site. Although identified as a potential impact, the details of this impact should be more thoroughly analyzed.
- 4-31 Section 5.4.2, Vegetation: Riparian, page 5-29. This section identifies no wetland vegetation, even though at least some of the soils along Elm Creek, i.e., those closest to the perennial portion of the stream, should be saturated frequently enough to qualify as wetland soils. The draft EIS should provide a description of the vegetation in this stream-side zone, even if it has been preliminarily described as non-jurisdictional. The final document should also discuss the potential importance of wetlands to threatened and endangered species.
- 4-32 Section 5.4.2, Wildlife, Page 5-29 through 5-30. The draft EIS contains no discussion on how the applicant proposes to comply with the Migratory Bird Treaty Act (MBTA). Recently, many migratory bird species have been experiencing population declines. This is particularly true of some waterfowl species, colonial waterbird species, area-sensitive species and neotropical migrants. The MBTA provides for a year round closed season for non game birds and prohibits the taking of migratory birds, nests and eggs, except as permitted by the FWS. Appropriate analyses of the alternatives under consideration must be conducted to determine possible impact on migratory birds.
- 4-33 The final EIS should state that a survey would need to document the presence of raptor nests before work was begun. Special permits are required under State and Federal regulations to authorize the disturbance of raptor nests and their contents. The Field Supervisor, U.S. Fish and Wildlife Service (ES), c/o Corpus Christi State University, Campus Box 338, 6300 Ocean Drive, Corpus Christi, Texas 78412 (Telephone: (512) 994-9005), must be contacted immediately if raptor nests were encountered in the permit area.

- 4-29 Wetland conditions identified by CAR. Subsequent coordination between the DRRC and COE may be required where specific disturbance of "waters" is to occur. Such coordination may include careful surveying for wetlands (using the kind of environmental criteria mentioned in the comment) and development of specific mitigation plans.
- 4-30 Vegetation as impacted by dust and reduced water. These dust impacts are expected to be minor and localized. Dust will be controlled as described at response 4-21; also see the discussion of dust in Part II.C.5. Maintenance of water resources (base flows) is discussed at response 4-17.
- 4-31 Description of dense brush vegetation. Part III.C, new Section 5.4.5, of the FEIS is EPA's summary of DRRC's biological assessment, which includes additional quantification of the dense brush habitat along Elm Creek, and addresses what is known of its importance to threatened and endangered species. Information available on soils is discussed in Section 5.1 of the DEIS. See also the response to comment 20-13.
- 4-32 Compliance with Migratory Bird Treaty Act. EPA appreciates this information, and has added it to the FEIS (Part III.B, page revision of DEIS p. 3-6). It appears that migratory birds could be impacted by the project and that DRRC will need to seek the appropriate MBTA permits.
- 4-33 Raptor nest survey needed. EPA has added a discussion of special permits for disturbance of raptor nests and their contents to the FEIS (Part III.B, page revision of DEIS p. 3-6).

- 4-34 Furthermore, the final EIS or supplement should discuss why the applicant must destroy a significant area of riparian habitat. Not only is it believed to provide habitat and forage for endangered species, but the destruction of riparian habitat has been cited as the most important cause for the decline of landbird species in western North America (Studies in Avian Biology No. 15: 173-190, 1994); this paper goes on to recommend that the most important management strategy that should be implemented for the protection of landbirds in western North America is the complete protection of riparian habitats. The supplemental document should document this, as well as provide rationalizations for the necessity of destroying a significant portion of riparian habitat. If such destruction is unavoidable, the EIS should discuss in detail the comparative abilities of the existing riparian area and the proposed mitigation features to support the fauna currently occupying the riparian zone.
- 4-35 Section 5.4.2, Aquatic Resources, Page 5-30. The draft EIS lacks a discussion of direct mine-related water quality impacts in addition to those indirect and cumulative impacts to fisheries resources (including freshwater clams in Elm Creek at Thompson Rd.) resultant from reduced base flows and increased turbidity both in Elm Creek and Rio Grande. These environmental consequences must be considered in the subsequent document.
- 4-36 Section 5.4.3, Ocelot, Page 5-33. The draft EIS states it is not known whether and to what extent habitat upstream from the project area is suitable for the ocelot. Again, our comments on Section 5.4.1, Wildlife, above, are appropriate to determine the importance of/impact on potential carnivore travel corridors.
- 4-37 Section 5.4.4, Biological Assessment of Impacts to Endangered and Threatened Species, Page 5-35 et seq. The draft EIS does not contain up-to-date mitigation activities which are contained in the Biological Assessment. A copy of the Biological Assessment (June 1994 version) should be appended to subsequent documentation. In addition, current habitat protection proposals should be integrated into alternatives under consideration and the beneficial environmental effects of these proposals also analyzed.
- 4-38 Section 5.4.4, EPA's Determination of Biological Effect, Page 5-39. The draft EIS points out that very little information on the long-term survival and growth rates of vegetation in restoration projects in arid regions is available. It is understood that coal was previously mined in the Eagle Pass area. Even though the mining methods may have differed, it is possible that examining these old mine sites might reveal evidence of natural revegetation rates of the mine's roads, spoil mounds and adits, as well as provide information on the acidity and chemical content of mine and spoil area effluents. Historical information that is available from the Lamar Mine in proposed mine Area C, should be utilized to determine vegetation survival and growth rate and included in the subsequent documentation.
- 4-34 Destruction of riparian habitat. The comment concerning the importance of riparian habitat to birds is noted. Part III.C, new Section 5.4.5, discusses DRRC's proposed mitigation plan, alternatives to it, and the Company's rationale for rejecting those alternatives. Part III.C includes a summary of DRRC's quantification of the dense brush habitat along Elm Creek, and outlines DRRC's commitment to not disturb the Elm Creek corridor until specified vegetation densities are met in replacement corridors. DRRC's baseline vegetation quantification includes measurement of vegetation volume by species along the corridor, due to proportionality between riparian vegetation volume and breeding bird density (Mills et al., 1991).
- 4-35 Discuss impacts to fisheries. This comment does not identify, and EPA is not aware of, fisheries-related water-quality impacts beyond those discussed in the DEIS.
- 4-36 Upstream ocelot habitat. See the response to comment 4-25.
- 4-37 EIA review of June BA and current habitat protection proposals. The company's biological assessment was received by EPA after the DEIS had been written; that assessment, and an addendum prepared for DRRC, are summarized in this FEIS in Part III.C, new Section 5.4.5. That section shows the status of mitigation alternatives, as integrated into the overall mine plan, as they are now known. The benefits of mitigation are primarily in relationship to the harm done by mining; EPA does not expect mitigation, even if successful, to produce a net gain in environmental conditions compared to current conditions. However, restoration knowledge gained by the relatively intensive activities and research at the site will benefit arid-zone restoration efforts.
- 4-38 Restoration potential. EPA does not believe that natural vegetation information from the old mine sites, if it were available, would be likely to be helpful in predicting impacts from the proposed project and mitigation. The old mines were underground; did not involve Elm Creek; and were never reclaimed by human action, much less by modern methods or to modern standards.

4-39 Section 5.5 CULTURAL RESOURCES. The draft EIS' description of the project site's archeological resources and of the proposed project's impacts to them are incomplete and inadequate. The draft EIS mentions the CAR report (see comments above regarding Section 5.4.1), for example, but does not recognize nor include the report's recommendations that eight archeological or historic sites be subjected to additional extensive controlled surface survey and intensive subsurface testing to further define their extents and contents and to determine their eligibility for nomination and listing in the National Register of Historic Places and/or for designation as State of Texas Archeological Landmarks. The draft EIS states that not all of the proposed project's area has been surveyed for cultural resources and acknowledges that EPA must consult with the Texas State Historic Preservation Officer over the entire life-of-mine impacts; however, the draft EIS does not state when these actions would be accomplished and whether the information derived will ever be available for public review. As a decision-assisting document, the draft EIS should elucidate what is already known about the general nature of the proposed project resources and impacts by recognizing some of the CAR study assumptions. These include: 1) there is much information on sites such as those within the Dos Republicas permit boundary; 2) south Texas sites, like these, have a distinct horizontal nature requiring open area or block excavations to obtain useful data; and 3) despite a great deal of natural and modern artificial disturbances, patterns of past human activities and behaviors can often be discerned. Given the probable validity of such assumptions, the following conclusions should be recognized: 1) archaeological resources are nonrenewable; 2) mining operations (especially at strip mines) frequently totally destroy the integrity and context of cultural resources; and 3) all of the significant archaeological sites found by the CAR during Phase II of the Dos Republicas Project investigations are within or near the primary mining impact zones. We, therefore, recommended that a comprehensive Phase III cultural resource investigation of the Dos Republicas Project sites be undertaken prior to any mining activities or other future artificial disturbances within the permit boundary. This action would preclude any irreversible or ir retrievable commitment of cultural resources should the proposed action be implemented.

It is noted that six of the eight archeological/historic sites that were considered most in need of further investigation in the CAR report were found within the Elm Creek floodplain. Hence, the assumption above that all the significant archeological sites found by the CAR are within or near the primary mining impact zones may be a moot point if an alternative(s) mining program avoiding portions of the floodplain were analyzed. This gives further weight to an alternative, recommended earlier in the comments on Section 4.0, which would preserve a corridor for endangered species within that same floodplain, because the same corridor might also avoid the destruction of sites potentially eligible of entry on the National Register.

4-39 Expand and update cultural resources section. Part II.D contains an update of activities involving cultural resources. Note that identification and discussion of specific cultural resources in widely distributed public documents is not an accepted practice due to the potential for vandalism.

Finally, attention should be given to two specific sites during the upcoming additional cultural survey work proposed for the project area. The first is the vicinity of Area "y". This area is referred to variously in the draft EIS as possessing spring-fed or rain-fed pools which would tend, along with the stratigraphy of the area, to attract human activity. The second is a site approximately 200 meters south of 41 MV 180, and 450 meters southwest of 41 MV 181, or Area "z". This site is on a relatively flat terrace perhaps 30 meters north of a fence. Chert debitage, chipped quartzite, and iron concretions and a possible ring of hearth stones has been observed on the north edge of the terrace. The amount of lithic scatter seen at this site exceeded twice that observed at Area "z".

Section 5.6.2. Abandoned Mines. Pages 5-45, 46. According to the draft EIS, the applicant faces hazards from abandoned mine shafts, including collapse, fire, and acid mine drainage, and one such mine shaft, that of the Lamar Mine, is known to exist in the project area. Apparently because the Texas Railroad Commission would not require an investigation of that part of the project area until just prior to issuance of the project's third 5-year permit, the draft EIS has no details on the specific hazards posed by the Lamar Mine. The draft EIS's scope, however, must include the life-of-the-project, not just its first 5 years. The 5-year segments the Commission would authorize are interdependent parts of a larger action that depend on the larger action for its justification [40 CFR Part 1508.25(a)(1)(iii)]. Furthermore, the significance of this action cannot be avoided by breaking the project into small component parts [40 CFR Part 1508.27(b)(7)]. Therefore, the draft EIS should be supplemented to include the results of a detailed investigation of the entire mine site for abandoned mine shafts.

Section 5.7.4. Direct Mine Impacts. Page 5-58. The draft EIS states that it is highly possible that both U.S. Highway 277 and Thompson Road would be widened since they are the two main access roads for the mine. Both of these expansion projects have the potential to impact Elm Creek outside of the permit area. Therefore, this impact would have the potential to impact not only public services, but also have direct impacts to endangered and threatened species. This is also in direct conflict with statements which state that the City is willing to establish a "no development" corridor in order to protect the wildlife corridor provided by Elm Creek (see Section 5.4.1, page 5-28).

The draft EIS states that DRRC will be willing to make arrangements with the City for emergency procedures and fire protection. There is concern with the fire potential associated with this project. A brush fire could have dire consequences on the surrounding fish and wildlife resources, both on and around the permit area. A detailed description of a fire plan should be included in the draft EIS. This should include the documentation of any coordination with the local fire fighting units to evaluate their capability to control a potentially large fire.

4-40 Survey for abandoned mines. Interactions with old mine shafts is a subject under RCT jurisdiction. It is outside of the scope of the EIS to require the applicant to undertake a detailed survey of the entire mine site for abandoned mine shafts. Both the potential impact and the means of mitigation are included in the EIS. Refer to Part II.C.1, Scope of EIS, for further discussion.

4-41 Road widening impacts. The EIS does not state that road widening is a result of mining; but that road widening proposals already exist which would expand the capacity of these roads. River crossings would require Section 404 coordination with the Corps of Engineers. The no-development corridor is discussed in response to comment 4-26, above. Note that, since the DEIS was published the plans for Thompson Road have been revised, see response to Comment 25-5.

4-42 Include a fire plan. A Fire Plan for the mine facilities will be fully developed by DRRC prior to initiation of mining and will be coordinated with the local fire department. The Fire Plan will provide for an auxiliary water tank that will be kept on site at all times to serve as a reserve in case there should be delays with the response of the local fire department. The auxiliary tank will be equipped with a pump and fire hose.

Additionally, water trucks used for haul road dust suppression will be capable of suppressing fires, and will be equipped with fire hoses and nozzles.

Further, DRRC employees will be trained in fire prevention and mitigation techniques. A Fire and Spill Prevention Team will coordinate DRRC's fire prevention efforts and its Spill Prevention Control and Countermeasure Plan. Classes will be held by the Safety Supervisor on an annual basis for all personnel. Fire and Spill Prevention Team members will be briefed on an on-going basis at their weekly safety meetings. (Kost, 1994a).

- 4-43 Section 5.9.2, Impacts Associated With Mining Activity, Page 5-62. The draft EIS notes that there are total recoverable coal reserves in the region large enough to support mining beyond that proposed by the applicant, that additional mining to serve Carbon I and Carbon II is a possibility, and that if additional mining were to occur, cumulative impacts to many resources beyond those discussed in the draft EIS would be likely. The draft EIS should identify the areas most susceptible to this additional mining and describe the habitat losses associated with their development. As was brought to attention at the public hearing held on July 20, 1994, there are cumulative impacts associated with the potential construction of Carbon III/IV, which we understand to be in the planning stages. Another potential coal mine in northern Mexico which is in the planning stages is a 65,000 acre site in Mexico by the U.S. company, Morrison-Knudsen Corporation (see San Antonio Express News, May 26, 1994). The cumulative effects of all of these proposed actions on fish and wildlife habitat and resources would be deleterious and, in this regard, should be evaluated.
- 4-44 Section 5.9.5, Air Emissions, Page 5-65. The draft EIS states the Carbon I and II generating plants reportedly can remove 97 percent to 99 percent of the particulates generated by coal combustion. The draft EIS should address the following questions: What becomes of the precipitated ash? Does leachate from the ash storage areas reach the Rio Grande? What materials would be introduced into that body of water from that leachate? What effects would these materials have upon fish and wildlife habitat resources?
- 4-45 The draft EIS makes this comparison: "If the Carbon I/II power plants were located in the U.S., their combined emissions would make them the seventh largest SO₂ source in the country." The draft EIS would do well to carry that thought further: "If such a large source of SO₂ were in the U.S., steps would immediately be taken to learn the probable location and degree of its impact to this country." Accordingly, subsequent documentation should provide analyses that illustrate the probable distribution and severity of impact to the U.S. from the Carbon I/II plants.
- 4-46 Table 1-1, Summary of Environmental Consequences, Page 1-7. Revision of the cumulative impacts section of Table 1-1 may be appropriate, based on the following comments on Section 5.9.6.
- 4-47 Section 5.9.6, Compliance of Carbon I/II With Air Quality Requirements of Mexico, Page 5-66. In the second paragraph, change "nitrous" oxides to "nitrogen" oxides. According to the draft EIS, modeling studies by Dames and Moore for Mission Energy indicate that emissions from Carbon I cause a violation of Mexico's ambient standard for NOX. The draft EIS should also state, if those models provide such information, where and how severely the NOX emissions affect the air quality within the U.S. We recommend that the draft EIS provide a figure to depict this information.
- 4-48 Section 5.9.6, Compliance of Carbon I/II With Air Quality Requirements of Mexico, Page 5-66. In the second paragraph, change "nitrous" oxides to "nitrogen" oxides. According to the draft EIS, modeling studies by Dames and Moore for Mission Energy indicate that emissions from Carbon I cause a violation of Mexico's ambient standard for NOX. The draft EIS should also state, if those models provide such information, where and how severely the NOX emissions affect the air quality within the U.S. We recommend that the draft EIS provide a figure to depict this information.
- 4-43 Identify extent of recoverable coal, and impacts. EPA does not agree that the EIS should assess possible future expansion of mining, when no specific proposals for such mining have been made and there is no assurance that a market exists even for the project now being evaluated. Were hypothetical mining to be assessed, there would be no logical basis for stopping short of a conclusion that the entire 525 million short tons of coal in the Eagle Pass area could be mined (Mapel, 1967). Refer to Evans (1974) for a map showing the outcrop of the Olmos formation; it is along the northern margin of the outcrop where overburden is thinnest and such mining would most likely occur.
- 4-44 Describe cumulative impacts of future plants/mines. DRRC has been informed by CFE officials that there are no plans for Carbon III and IV (Kost, 1994a). The comment letter does not indicate the location of the potential 65,000-acre coal mine in northern Mexico. In any event, EPA has already determined that Carbon I/II produce unacceptable environmental impacts. Refer to Part II.C.2 for further discussion of impacts from the Carbon power plants.
- 4-45 Fate of Carbon's ash. EPA understands that the ash is deposited on Carbon I/II property in an area that will accommodate a 30-year supply. However, EPA's NEPA analysis of DRRC is not an assessment of Carbon I and II, but of the NPDES permit for the Eagle Pass Mine. To the extent that Carbon I/II are involved in that decision, EPA has determined that the plants produce unacceptable environmental impacts.
- 4-46 Discuss air impacts from Carbon. Refer to Part II.C.2 for further discussion of impacts from the Carbon power plants. Information now available to EPA is sufficient to determine that severe impacts occur within the United States.
- 4-47 Change nitrous to nitrogen oxides. This change has been made; see Part III.A.
- 4-48 Indicate NOX impacts in the U.S.; provide figure. The Dames and Moore modeling of ambient air quality was limited to Mexico. Information now available to EPA is sufficient to determine that severe impacts occur within the United States, due to visibility impairment caused by sulfur dioxide emissions from Carbon I/II.

4-49 Section 5.9.6. Compliance With U.S. Ambient and PSD Standards, Page 5-68. In the first paragraph, change "Potential for Significant..." to "Prevention of Significant..." and, in the last sentence of this paragraph, change the word "background" to "baseline." In the fourth paragraph, the draft EIS states that the MESOPUFF modeling analysis performed by Mission Energy considered the effects of mountainous terrain.

4-50 It is our understanding that the meteorological preprocessor (MESOPAK) used by Mission Energy does not consider terrain features. This statement should be corrected. The draft EIS states that EPA has performed preliminary modeling of impacts from Carbon I/II and has found there would be no violation of U.S. ambient air quality standards in the U.S. The draft EIS should provide the actual locations and concentrations of the various emission constituents predicted by the models and state whether EPA intends to go beyond preliminary modeling. A figure should be added to subsequent documentation to show this information.

4-51

4-52 The draft EIS also states that Mission Energy independently used a long range transport model using different load factors and taking into consideration the effects of mountainous terrain between Carbon II and Big Bend National Park. The draft EIS further states that while Carbon II alone would not cause an exceedance of the Class I increment at the Big Bend, its impact nonetheless would be large and in combination with Carbon I would probably exceed the Class I increment. If the model used by the Mission Energy permits, the draft EIS should provide the actual locations and concentrations of the various emission constituents predicted by the model. It may be appropriate to use a figure to demonstrate the scope of the impacts.

Section 5.9.6. Visibility Impacts, Page 5-68, 69. In the last paragraph, reference is made to sulfate aerosols accounting for approximately 30-40 percent of the visibility impairment in the desert southwest. A more accurate estimate would be 30-50 percent. In the second full paragraph, the draft EIS discusses the visibility impact analysis performed by the NPS. Information from this study should be incorporated into the final EIS:

4-53 The NPS has recently completed a detailed regional-scale modeling study using the MESOPUFF model with the CALMET meteorological preprocessor (which incorporates terrain features). Sources modeled in this analysis included the Carbon I/II power plants and large SO₂ sources (emissions >= 100 grams SO₂ per second) located in Texas. The results of the Carbon I/II model run confirm the previous estimates that the maximum change to existing visibility conditions at Big Bend National Park would be: 60 percent reduction to visibility on the "best" days and 50 percent reduction on "average" days. On average, the magnitude of visibility impairment at the Park would vary from 20 percent on "average" days to 30 percent on the "best" days. The model results also show that between 60 to 80 episodes (i.e., 12-hour periods) with perceptible changes to existing visibility conditions at the Park would occur. The majority of the impacts would occur during the summer season. By

4-49 Change "Potential for..." to "Prevention of...", and the word "background" to "baseline". These changes have been made; refer to Part III.A.

4-50 Terrain features in Mission Energy model. The MESOPAK meteorological preprocessor used in the Mission Energy model does not consider terrain features. The EIS has been corrected; refer to Part III.A. As noted in Part II.C.2, the more refined modeling now being completed by EPA and NPS does account for terrain effects.

4-51 Provide detail/figure on EPA air quality modeling. In order to determine if SO₂ emissions from Carbon I/II might cause a violation of the U.S. National Ambient Air Quality Standards (NAAQSs) for SO₂ in U.S. territory, the earlier EPA modeling used the Industrial Source Complex 2 (ISCST2) model with five consecutive years of hourly meteorological data to simulate these impacts. (Surface data from San Antonio and upper air data from Del Rio for the years 1985-1989 were used.) This modeling is applicable for U.S. areas within a 50-km radius of Carbon I/II and was done following all regulatory requirements of EPA. Concentrations were calculated at eighteen receptors at the Texas-Mexico border in order to gauge the maximum Carbon I/II SO₂ impact on the U.S. These receptors were chosen at points where maximum concentrations in the U.S. were expected. The highest predicted annual concentration was 8.1 ug/m³ in Kinney County near Sycamore Creek. The highest 2nd-high predicted concentrations were 51.3 ug/m³ on a 24-hour basis at the same point and 200 ug/m³ on a 3-hour basis at a point in Maverick County in the vicinity of Normandy. The respective NAAQSs with which these should be compared are 80 ug/m³, 365 ug/m³, and 1300 ug/m³.

It is EPA's judgment that, based upon these results, there is little cause for concern that Carbon I/II would cause a violation of the SO₂ NAAQSs in the U.S.

Inquiries about specific details of this modeling should be made to Jim Yarbrough, EPA-Region 6 Air, Pesticides & Toxics Division (214-665-7232).

4-52 Provide more detail/figure from Mission Energy study. The Mission Energy modeling included the emissions only of Carbon II, and calculated the resulting air pollutant concentrations at five locations in Mexico, at Del Rio, at Eagle Pass and at five locations in Big Bend National Park, based on 1989 meteorological data. One of the Big Bend locations was the calculated point of maximum impact. Calculations were made for ambient SO₂ concentrations averaged over 3 hours, 24 hours and one year, and compared to the corresponding PSD increment. The results are tabled below.

Location	2-hour	24-hr	1 year	
PSD CLASS II INCREMENT	512	91	20	ug/m ³
Eagle Pass	176.9	34.9	1.937	ug/m ³
Del Rio	51.6	16.3	2.917	ug/m ³
PSD CLASS I INCREMENT	25	5	2	ug/m ³
Talley Mountain	9.3	3.4	0.151	ug/m ³
Boquillas Ranger Station	12.1	4.1	0.199	ug/m ³
Emory Peak	10	3.1	0.146	ug/m ³
Panther Junction	10.3	3	0.173	ug/m ³
Calculated maximum in Park	15.9	4.78	0.26	ug/m ³

comparison, the impact from the Texas sources modeled would be approximately one-third as frequent as from Carbon I/II and the maximum change to visibility at the Park would vary from 30 percent on "average" days to 40 percent on "best" days. The impacts from Texas sources occur almost exclusively during the fall and winter seasons, primarily during the winter.

As an alternative to incorporating the above new information into the final EIS, we recommend that the following sentence be corrected in the second full paragraph on page 5-69:

"These estimates may be high, because they reflect the assumption of a 100 percent load factor. . ." The reason for the "high" estimates was the assumption of a 100 percent conversion rate of SO₂ to sulfate aerosol not a 100 percent load factor, although a 100 percent load factor was used, as recommended by EPA modeling guidelines.

4-54

Page 5-69, Third Paragraph. The draft EIS states that according to NPS (NPS, 1993a) emissions from Carbon I/II would undermine the efforts of the Grand Canyon Visibility Transport Commission. We prefer that the word impede be used instead of undermine.

4-55

The draft EIS discusses the NPS's use of EPA's and Mission Energy's modeled pollutant concentrations to compute visibility impacts from Carbon I/II. Among the findings cited in the draft EIS are indications that, in addition to causing visibility impacts at Big Bend, Carbon I/II emission would also affect visibility at the Grand Canyon and 15 other Class I areas of the Colorado Plateau. The draft EIS should provide a figure illustrating the modeled limits of Carbon I/II visibility impacts in the U.S.

4-56

Section 5.9.6, Other Impacts, Page 5-69. The draft EIS notes that SO₂ emissions contribute to the formation of acid precipitation that can threaten vegetation and dependent wildlife, but adds that quantification of this impact is very difficult for any source and EPA has performed no quantification for Carbon I/II. Although we find it difficult to ascertain from this draft EIS precisely where Carbon I/II acid precipitation would fall, the previous paragraphs seem to indicate that at least the Big Bend, Grand Canyon, and Colorado Plateau are downwind. Some of the vegetation and wildlife in this vast region are unique, even endangered. Consequently, there is an urgent need for EPA to perform this quantification. At the very least, if quantification is not practicable, the draft EIS should follow the procedures set forth at 40 CFR Part 1502.22.

4-53 Adjust visibility discussion. Estimates of the contribution of sulfate aerosols to the visibility impairment in the desert southwest are 30-40 or 30-50 percent (NPS, 1993b; NPS, 1994). The comment letter also requests inclusion of the results of the more refined modeling by NPS and EPA of Carbon I/II impacts on Big Bend National Park. EPA does not consider the results of that modeling as completed and ready for public release, so that addition to the FEIS has not been made. Information now available to EPA is sufficient to determine that severe impacts occur within the United States. EPA has made the alternate suggested change to the text, see Part III.A.

4-54 Change the word "undermine" to "impede". This change has been made; refer to Part III.A.

4-55 Show limits of Carbon visibility impacts. Neither the EPA's nor Mission Energy's modeling included assessment of Carbon I/II impacts on other national parks besides Big Bend. EPA has not received results from NPS' modeling of impacts at other national parks on the Colorado Plateau, so the requested figure cannot be constructed.

4-56 More on acid rain. EPA disagrees that there is an urgent need to quantify the acid rain impact. The discussions in the DEIS make it clear that EPA believes that Carbon I/II have unacceptable adverse air quality impacts in the United States. Given this conclusion, the general issue is what can be done to solve the problem (see discussion Part II.C.2), and the specific issue is EPA's decision on the NPDES permit, as it relates to the problem.

Section 5.9.7. Binational Policy Issues and Considerations, Page 5-73. We recommend that the following be added as part of the second argument for denial of the NPDES permit:

4-57

"The U.S. government would also be, in effect, sanctioning an action that is contrary to the National visibility goal established by Congress in Section 169A of the Clean Air Act, i.e., "the prevention of future, and remedying of any existing impairment of visibility in mandatory class I Federal areas which impairment results from manmade air pollution."

SUMMARY

4-58

The deficiencies in this draft EIS, as noted in part above, should preclude the issuance of a final EIS without first providing a supplemental draft EIS. The draft EIS lacks a discussion of reasonable alternatives other than the proposed and no action making it virtually impossible to comparatively assess environmental consequences and, thus, acceptability. In the areas of primary, indirect and cumulative impacts, the draft EIS confuses these issues and often gives partial, preliminary and contradictory descriptions of project resources and impacts. It is impossible to adequately analyze the project or resultant effects without complete information. As stated with specific examples in the preceding pages of this letter, the draft EIS is deficient in its analysis and assessment of the proposed project's direct, indirect, and cumulative impacts to vegetative resources, endangered species, migratory birds, aquatic life, air quality, cultural resources and other fish and wildlife resources of concern. In addition, the release of the draft EIS appears to be premature, considering the currently ongoing Endangered Species Act Section 7 consultation and the document's information deficiencies. A supplemental document should be developed that addresses these shortcomings.

4-59

4-60

4-61

Where the draft EIS acknowledges that information is incomplete or unavailable, the document neither expresses an intent to remedy the data gap nor follows the procedures required for such situations at 40 CFR Part 1502.22. The proposed action, as elucidated in the draft EIS, has the propensity to result in adverse environmental impacts that may exceed National standards and that are severe in consequence, geographic scope and duration. In addition, it is our opinion that at least one other environmentally preferable alternative exists and should be considered. Our intent, obviously, is to coordinate and work with the Environmental Protection Agency to resolve the above issues and to develop a document that provides decisionmakers and the public an array of reasonable alternatives which would avoid or minimize adverse impacts. Failing this endeavor, we would find it necessary to proceed with the referral procedures described in 40 CFR Part 1504.

Thank you for the opportunity to review this draft EIS. We trust our comments will be of use during development of your future documentation. If we can be of further assistance or should you require additional information, please feel free to contact us at the above address or telephone (505) 766-3565.

Sincerely,



Glenn B. Sekavec
Regional Environmental C

4-57 Add statement re undermining visibility goals. Change made; see Part III.A.

4-58 Supplemental EIS needed. EPA does not concur with this comment. For a discussion of the treatment of alternatives, refer to "Scope of EIS" in Part II.C.1 of this FEIS.

EPA's experience indicates that large-scale coal mining conducted in accordance with modern environmental requirements results in significant, but acceptable impacts unless there are particular site-specific issues. EPA believes that all important impacts and site-specific issues are addressed in the DEIS. EPA has identified only one site-specific issue at the Eagle Pass mine which poses unusual concerns - the fact that the project is likely to adversely affect endangered species; EPA entered into formal consultation with U.S. Fish and Wildlife Service on this matter. The USFWS has issued a finding of 'no jeopardy' and DOI's comments do not identify any impact specific to the mine which would be unacceptable, if the mine is constructed and operated in accordance with applicable permits.

Although the Government of Mexico and others (including DRRC) may disagree, EPA believes that on the evidence now available, the air quality impacts from Carbon I/II are unacceptable. EPA's Record of Decision will consider the extent to which its action on the DRRC NPDES permit could make a meaningful change to those impacts. DOI's comments do not provide EPA with any information which raises a previously unidentified cause-effect linkage between the NPDES action and a change in Carbon I/II emissions.

4-59 Release of DEIS premature. EPA does not agree that Section 7 consultation must be completed prior to release of a DEIS. Part II.D and Section 5.4.5 in Part III.C have been added to the EIS to bring information on Section 7 consultation up to date.

4-60 Incomplete information. 40 CFR Part 1502.22 would require EPA to gather additional information only if certain circumstances apply, one of which is that the information would be essential to a reasoned choice among alternatives. The DOI comments identify no such missing information; refer also to response 4-59.

4-61 Consider another alternative. Section 5.4.5 in Part III.C provides information on additional alternatives for mitigation of adverse impacts to endangered species.

McDONALD OBSERVATORY AT MOUNT LOCKE
THE UNIVERSITY OF TEXAS AT AUSTIN

McDonald Observatory • RLM 15.308 • Austin, Texas 78712-1083 • (512) 471-3000 • FAX (512) 471-1635

McDonald Observatory (University of Texas)

23 June 1994

Mr. Norm Thomas
Chief of the Federal Activities Branch
EPA (6E-F)
1445 Ross Ave.
Dallas, TX 75202-2733

Dear Mr. Thomas:

I am writing to comment on the Draft Environmental Impact Statement for the Eagle Pass Mine, Maverick County, Texas, EPA-906-06-94-002. I would like this letter and its enclosure to be entered into the public record. My concerns relate to the air emissions described in the Cumulative Impacts section on page 1-7 of the Draft EIS.

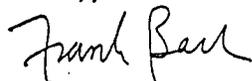
McDonald Observatory, a part of the University of Texas at Austin, is located north of Big Bend National Park in the Davis Mountains near Fort Davis, Texas. It is approximately 250 miles from the Carbon I and II complex. McDonald Observatory was established in the late 1930s, and in 1939 what was then the world's second-largest telescope was dedicated there. McDonald Observatory has grown to become one of the leading astronomical observatories, and a huge new telescope is now under construction there which will have the largest mirror of any optical telescope in the world. The new telescope is being built by a partnership which includes the University of Texas at Austin, Penn State University, Stanford University, and the Universities of Munich and Göttingen in Germany. The total investment at McDonald, when this new telescope is completed, will have an estimated value of \$40 million. The U.S. Government, through NASA and the National Science Foundation, has put no construction money in the new telescope, but it has invested in the other telescopes and in other apparatus at the Observatory. That investment has an estimated current value of \$15 million.

This investment and this internationally-recognized facility are very much at risk due to the emission from Carbon I and II. The effect of the emitted sulfur dioxide on visibility has serious negative effects on our ability to see the stars. In addition, the sulfur dioxide reacts in the atmosphere to produce sulfuric acid which seriously degrades our telescope mirrors, which, of course, are exposed to the atmosphere at night as the telescopes are being used.

Our concerns would be eliminated if the Carbon I and II plants were equipped with scrubbers which reduced the emissions to U.S. standards.

I enclose a copy of a letter from Chancellor William Cunningham to Ms. Carol Browner so that you can see the University of Texas' position on this matter.

Sincerely yours,



Frank N. Bash
Director

FNB/cg
enclosure

5-1 Reduce emissions from the Carbon plants. EPA agrees that the problem of air pollution from Carbon I/II needs to be solved. As indicated in Section 5.9.5 of the DEIS, this pollution already exists and will continue to exist regardless of the coal source used; and U.S. coal from existing mines can be exported to Mexico without EPA approval.

At this point in time, EPA has identified no sources for the large investment for pollution control measures at the plant; see discussion in Part II.C.2. EPA has identified no means by which its decision to approve or deny the NPDES permit for DRRC's Eagle Pass Mine would affect the availability of such an investment or otherwise change the air pollution problem. If the Carbón I/II problems are ultimately solved, EPA feels it will be through binational negotiations between the U.S. and Mexico and EPA is committed to pursuing such negotiations. Regarding the use of natural gas, see the discussion of alternatives in Part II.C.1.

C-21

The University of Texas at Austin
 The University of Texas at Brownsville
 The University of Texas at Dallas
 The University of Texas at El Paso
 The University of Texas at Permian Basin
 The University of Texas at San Antonio
 The University of Texas at Tyler
 The University of Texas at San Antonio
 The University of Texas at Tyler



The University of Texas Medical Branch
 The University of Texas at El Paso
 The University of Texas at San Antonio
 The University of Texas at Dallas
 The University of Texas at Tyler

THE UNIVERSITY OF TEXAS SYSTEM

601 COLORADO STREET AUSTIN, TEXAS 78701-2982

June 15, 1994

Ms. Carol M. Browner
 Environmental Protection Agency
 401 M Street, S.W.
 Washington, D.C. 20460

Office of the Chancellor
 (512) 499-4200

Dear Ms. Browner:

I write to request your assistance in persuading the government of Mexico to significantly reduce emissions from the Carbon I and Carbon II coal-fired power plants located in Piedras Negras, Mexico. Given the proximity of these plants to the U.S. border -- 20 miles south of Eagle Pass, Texas, and only 250 miles from the McDonald Observatory of The University of Texas at Austin -- it is crucial that they operate as cleanly as if they were permitted under current U.S. environmental standards. By taking action on this issue, Mexico would help to defuse one of the strongest objections to NAFTA in the United States -- the potentially adverse effects of Mexico's development on the U.S. environment.

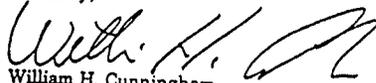
In addition, as you may be aware, the McDonald Observatory is one of the world's premier astronomical observatories. The new Hobby-Eberly Telescope, scheduled for completion in 1997, is one of the largest telescopes in the world and represents an important partnership with Pennsylvania State University, Stanford University, and two German universities. I am deeply concerned about the effect that over 230,000 tons per year of sulphur dioxide emissions from Carbon I and II will have on the critical astronomy activities at McDonald Observatory. Furthermore, it is my understanding that two additional units (Carbon III and IV) are planned for construction in the near future. These would produce even greater emissions.

The Observatory's Director, Dr. Frank N. Bash, has advised me that the sulphur dioxide pollution from Carbon I and II will adversely impact visibility at McDonald Observatory, and that the resulting acid rain will most likely damage the telescope mirrors and other delicate equipment. The people of Texas have made a \$20 million investment in the McDonald Observatory, as well as a \$7 million investment in the new Hobby-Eberly Telescope. Changing the operation of these power plants is essential to protecting our investment and to achieving the research excellence to which The University is committed.

While I have no desire to oppose the construction of those power plants, I strongly urge that, if coal is used as proposed, effective scrubbers be installed to reduce emissions. Alternatively, I understand that the plants can be converted to natural gas which is plentiful and which will also result in reduced emissions.

Your interest and support, particularly your special efforts in connection with this critical issue, are deeply appreciated. Thank you for your consideration and best personal regards.

Sincerely,


 William H. Cunningham
 Chancellor

WHC:mk

cc: The Honorable Henry Bonilla
 bc: Dr. James P. Duncan
 Mr. Ray Farabee
 Mr. Mike Millsap
 Dr. Robert M. Berdahl
 Dr. Frank N. Bash
 Ms. Carolyn Wright



JUL 14 1994

Texas Historical Commission

TEXAS HISTORICAL COMMISSION
P.O. BOX 13276 AUSTIN, TEXAS 78711-3276 (TELEPHONE) 512-463-6096 (FAX) 512-463-6095 (RELAY TX) 1-800-735-2989 (TDD)
DEPARTMENT OF ANTIQUITIES PROTECTION

July 7, 1994

Mr. Norm Thomas
Chief, Federal Activities Branch
EPA (6E-F)
1445 Ross Avenue
Dallas, TX 75202-2733

Re: Draft EIS, Eagle Pass Mine, Maverick County, Texas (EPA, F2)

Dear Mr. Thomas:

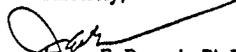
Thank you for the opportunity to review and comment on the draft EIS for the proposed Eagle Pass Mine in Maverick County, Texas. After reviewing the document we have the following comments:

- 6-1 1. The draft Programmatic Agreement in the EIS (Appendix B) does not address the more recent requested changes suggested by the Advisory Council on Historic Preservation (letter of May 24, 1994 to EPA). The final EIS should contain the most current version of the Programmatic Agreement.
- 6-2 2. The archeological reports on the surveys at the proposed Eagle Pass Mine should be submitted to EPA for review, and then finalized, in the near future; this includes the testing plan proposed by Dos Republicas Resources Co.. Our office has provided comments on several occasions concerning these documents to the Railroad Commission of Texas, but as yet there has been no Section 106 coordination on site assessment and evaluation needs between our office and EPA.

- 6-1 Include updated Programmatic Agreement. The most recent, updated Programmatic Agreement is included herein as Appendix G.
- 6-2 Complete cultural resources coordination. Section 106 coordination on site assessment and evaluation will be completed between THC and EPA before issuance of the NPDES permit. Refer also the discussion of coordination included in Part II.D of this FEIS.

If you have any questions, please contact Dr. Timothy K. Perttula of our staff at 512-463-5866.

Sincerely,


James E. Bruseth, Ph.D.
Deputy State Historic Preservation Officer
TKP/JEB/tp


Timothy K. Perttula, Ph.D.
Assistant Director for Antiquities Review

cc:T.C. Adams, Texas Office of State-Federal Relations



**TEXAS
PARKS AND WILDLIFE DEPARTMENT**
4200 Smith School Road • Austin, Texas 78744 • 512-369-4800

Texas Parks and Wildlife Department

ANDREW SANSON
Executive Director

COMMISSIONERS
YGNACIO D. GARZA
Chairman, Board
WALTER UMPHREY
Vice-Chairman
Beaumont

July 22, 1994

LEE M. BASS
Fl. Wom.
MCKEY BURLISON
Tempe
RAY CLYVER
Wichita Falls
TEPESE TARTON HERSHEY
Houston
GEORGE C. TILF
San Antonio
WILLIAM P. HOBBS
Houston
JOHN WILSON KELSEY
Houston

Mr. Norm Thomas (6E-F)
U.S. Environmental Protection Agency
First Interstate Bank Tower
1445 Ross Avenue
Dallas, Texas 75202-2733

Re: Draft EIS, Eagle Pass Mine, Maverick County

Dear Mr. Thomas:

A review of the Draft Environmental Impact Statement (DEIS) for the Eagle Pass Mine proposed by Dos Republicas Resources Company, Inc (DRRC) has been completed. The following response is provided.

This Department is concerned about the adverse impacts the mine will have on wildlife resources, particularly the endangered ocelot and jaguarundi, and to the adverse secondary effects that burning the coal by the Carbon I/II power plant in Mexico will have on natural resources in the Big Bend Region of Texas. These concerns were previously expressed when this Department petitioned the Railroad Commission of Texas (RCT) to reopen the record on the application by DRRC for a surface coal mining and reclamation permit for the proposed mine in Maverick County. While the record of the proceeding was reopened for the limited purpose of taking additional evidence into the record to address effects the mine would have on endangered species and habitat, the request by this Department for the RCT to consider air pollution effects of the power plant in Mexico was denied by reason that the coal mining regulations do not require such consideration. Failure by RCT to consider secondary air pollution impacts for this project makes it even more important for consideration by the Environmental Protection Agency.

Wildlife Resources

The conclusion as to the significance of the extent and magnitude of adverse impacts to wildlife resources is correctly stated in the summary of environmental consequences (page 1-5, section entitled Vegetation, Wildlife, and Endangered Species). However, the actual discussion of such impacts contained in Section 5.4.2 (Impacts to vegetation, wildlife and aquatic resources) on page 5-29 accounts for less than two pages of the entire DEIS. This deficiency probably follows from the absence in the Biological Assessment dated June 1994, of an analysis of impacts to occurring wildlife species (other than endangered species) and corresponding similar absence of any conclusion as to the significance of impacts.

7-1 Consider secondary air quality impacts. Please refer to the discussion of air quality issues in Part II.C.2 of this FEIS. Please also see the response to comments 4-46, 4-48, 4-51 through 4-53, and 4-55 through 4-56.

7-2 Wildlife impacts. Page 5-29 of the DEIS does note that wildlife impacts are significant. The biological assessment relates specifically to endangered species issues, rather than wildlife issues in general. However, EPA believes that in this case, if the mitigation proposed for impacts to endangered species is successful, it will significantly mitigate impacts to other species which require dense brush or riparian habitat. Other habitat losses (e.g., non-riparian shrublands converted to pasture land) are relatively minor, in that large amounts of this habitat are available in the area and such changes can readily occur from the actions of private landowners. See Part III.C, new Section 5.4.5, for additional information concerning the mitigation plan for the dense brush habitat corridors.

Mr. Norm Thomas
Page 2

- 7-3 Vegetation studies conducted by this Department using satellite data and historical flood plain data indicate that almost two thirds of the original bottomland hardwood and riparian woodland corridors that existed in Texas have been lost through land use changes. Additionally, as stated on page 5-31, over 95 percent of the original native brush community which supported biologically rich wildlife diversity within the lower Rio Grande River Valley has been lost to similar changes. This information is important to understanding the value of remaining habitats in this region. Projected impacts to wildlife should have been systematically measured to obtain data on habitat unit value lost or gained according to any one of a number of available wildlife habitat evaluation methodologies. Such measures would allow analyses to determine quantified losses and adequacy of proposed mitigation measures. The proposal by DRRC to convert, through reclamation, most of the mined land from rangeland to pastureland will result in seriously degraded wildlife habitat as a result of loss of the woody brush species and lowered vegetation diversity. Preserving the 3-acre upland area Y, 74 acres surrounding the upland area Y, and the 35-acre area Z does not constitute enough acreage to compensate for the conversion of 1,550 acres of brushy rangeland to pastureland that will contain predominately non-native grasses.
- 7-4 DRRC has discounted complete avoidance of the riparian corridor by stating simply that the coal underlining this corridor must be mined in order for the project to be economically feasible without providing any substantial supporting cost analysis. While the Biological Assessment contains an Appendix B entitled "Consequences of the Avoidance of the Elm Creek Channel on Coal Reserves", discussion is only general in nature with no specific benefit-cost data provided. The statement in Section 5.9.2 (page 5-62), that ".....total recoverable coal resources in the region are large enough to support mining beyond that proposed by DRRC" is supported by other sources. The magnitude of the existing coal seam has been well documented, supporting the proposition of accessibility from other locations.
- Endangered Species**
- 7-5 Statements were provided on page 5-41 that 1) the Eagle Pass Mining project may adversely impact the ocelot and jaguarundi and 2) if restoration efforts are not successful the adverse impact to the species could be significant and long-term. These conclusions should be revised according to new additional biological information provided at the reopened hearing on the mining permit application by the RCT. This information resulted in Findings of Fact set out in the RCT Hearings Examiner's Report on the Reopened Record for the mining permit application (June 17, 1994), stating that 1) the permit area contains habitat for both the jaguarundi and ocelot, and that occupied habitat of unusually high quality
- 7-3 Quantify brush losses and mitigation. See Part III.C, new Section 5.4.5, for additional information concerning the mitigation plan for the dense brush habitat corridors. See also responses to comments 4-13, 4-34, and 16-4.
- Concerning conversion of rangeland to pastureland, EPA recognizes that pastureland provides poorer wildlife habitat than the existing rangeland, as stated at the end of the third paragraph on p. 5-30 of the DEIS. However, ocelots and jaguarundis depend mostly on dense brush habitat to provide a prey base, consisting primarily of rodents, rabbits and some birds. According to the FWS, their dependence on the current rangeland areas would be minimal (Locke, 1994a).
- 7-4 Elm Creek avoidance Section 5.4.5, contain corridor. EPA belie sufficient, and will I.C.1, Scope of EIS wide Elm Creek co densities are met in al
- 7-5 Update endangered species information. The Final EIS contains updated endangered species information. Refer to Parts II.C.3, III.B, III.C, and Appendix F.

Mr. Norm Thomas

Page 3

exists for the jaguarundi; 2) the proposed surface coal mining and reclamation activities will adversely affect both species; 3) the proposed reclamation plan will result not only in the destruction of the vegetation corridors which exist along Elm Creek and which provide travel lanes for the ocelot and jaguarundi, but will also destroy the supporting ecological system which provides prey for the animals; and 4) additional evidence and information further indicated that the alternative land use as proposed (conversion of rangeland to pastureland) was not consistent with either the U.S. Fish and Wildlife Service's Recovery Plan for Listed Cats or the Texas Parks and Wildlife Department plans for maintaining and increasing habitat for the ocelot and jaguarundi. The Biological Assessment dated June, 1994, and DEIS should be amended to address the additional evidence and information presented. Information provided in Table 5-2 concerning threatened and endangered species should be revised according to the attached updated information.

7-6

Mitigation Plan

As stated on page 5-41 the proposed mitigation plan cannot assure success. The plan incorporates two critical assumptions which are flawed. The first assumption is that brush habitat components preferred by the ocelot and jaguarundi can be reestablished quickly. For the brush restoration and revegetation efforts to be successful, canopy cover must become nearly closed within the lower shrub layer to provide optimal or suboptimal habitat conditions. According to information provided in the Biological Assessment and DEIS, the integrity of the Elm Creek Corridor will be lost by destruction of the lower portion of the drainage known as "Reach 3" by the end of the 6th year of mining. In order for the substitute corridor to function, it must have closed or nearly closed canopy conditions within the lower shrub layer as early as the end of the 6th year or else there will be no effective corridor for use by ocelots, jaguarundi, or any other wildlife dependent on riparian travel corridors. Extensive brush restoration efforts have been conducted by this Department during the last three decades on a number of sites in the lower Rio Grande Valley of Texas (a region of slightly higher rainfall than the mine site). This long term project and associated studies indicate that native brush can be replanted, revegetated, and restored. However, while it is well documented that brush species can be planted and become viable with little care after six years, habitat components such as dense, closed canopy approaching those conditions needed by the cats occur only as a result of mature or old age growth (30 years) and will certainly not become evident by the end of the 6th year. Transplanting vegetation in mass by the use of front-end loaders or other heavy equipment appears innovative but ignores the effects of severed tap roots of established woody and herbaceous vegetation and prolonged effects of disturbed root systems within a semi-arid environment. More importantly, the integrity of the riparian ecosystem as a whole cannot

7-7

7-6 Revise Table 5-2. The revised Table 5-2 is included in Part III.B.

7-7 Mitigation measures are flawed and incomplete. Since publication of the DEIS, DRRC has made important modifications and additions to its proposed mitigation measures, in consultation with the USFWS. See Part III.C, Section 5.4.5, and the USFWS' biological opinion, Appendix F.

Mr. Norm Thomas
Page 4

be transplanted. The extent to which DRRC will commit funding to any of the experimental restoration methods is also unclear. The most effective methods could easily be the most costly.

The second flawed assumption is that fencing an out-of-kind habitat to exclude livestock automatically creates a wildlife bypass travel corridor. The proposed bypass brush corridor will not serve as a suitable substitute for portions of the destroyed riparian corridor because it is largely an upland brush community that will provide different habitat features and life requisite components to wildlife species than the riparian vegetation community. Restricting livestock grazing will not automatically make the area better for all wildlife and there is no evidence from any studies that this action will increase the attractiveness of the bypass corridor to the ocelot or jaguarundi.

Waters regulated under Section 404 of the Clean Water Act are also present on the mine site and issuance of any permit by the Corps of Engineers has not yet been made.

In summary, determination of required mitigation measures have not been resolved at the state or federal regulatory level.

Indirect Effects to Air Quality from Carbon I/II

Air emissions from the generating units at Carbon I and II in Mexico are another major concern of this agency since the Big Bend Ranch State Natural Area is in close proximity to the Big Bend National Park where degraded air quality has been documented. Further, the increase of sulphur dioxide emissions could begin to have noticeable effects on biological systems in this region.

Your agency states on page 5-69 that the facilities at Carbon I and II, if located in the United States would fail to meet basic standards for emissions for sulfur dioxide, nitrogen dioxide and particulates and that EPA does not believe that either the existing or new facilities could be permitted anywhere in the U.S. because of their failure to meet Clean Air Act requirements.

Conclusions

The position statements for and against issuing an NPDES permit for the Eagle Pass mine listed on pages 5-72 are significant and compelling. As is typical of projects of this nature the final analysis focuses ultimately on the conflicts between sustained economic development and adequate environmental protection.

7-8 Impacts from Carbon I/II. Comment noted. EPA agrees that the impacts from Carbon I/II are unacceptable.

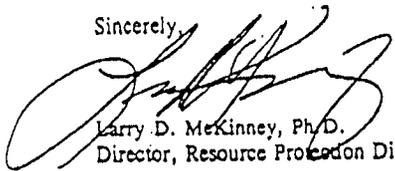
Mr. Norm Thomas
Page 5

7-9 A decision to issue an NPDES permit for the Eagle Pass mine should be deferred until the state regulatory process is completed and additional information is provided by DRRC to clarify resolution of the state permit issuance to conduct surface mining activities. *Adequate protection of wildlife habitat particularly for the ocelot, jaguarundi and other wildlife dependent on riparian woodland corridors has not been assured.* Yet, even with proper safeguards for protecting the riparian corridors, issuance of an NPDES permit may not be appropriate for this project given the air quality problems along the border. Issuing an NPDES permit for mining coal ultimately shipped to Carbon I/II will send the wrong signals to the Mexican government and to U.S. industries that cross-border economic ventures will not be held accountable for associated environmental impacts. This will further cloud any substantive action in resolution of environmental issues for future projects sanctioned by either the La Paz agreement or NAFTA. The fundamental principle stated on page 5-72 that any resources exported out of the United States should not be used in a way harmful to this country is a sound one that deserves full consideration

7-10

Thank you for providing a copy of the DEIS to this agency for review. I appreciate your consideration of this agency's review comments.

Sincerely,



Larry D. McKinney, Ph.D.
Director, Resource Protection Division

LDM:RGF:dab

Attachment

cc: Railroad Commission of Texas
Governor's Office
Texas Office of State-Federal Relations
FWS Corpus Christi Field Office
EPA Regional Administrator
Dos Republicas Resources Company, Inc.

7-9 Delay until State regulatory process is completed; delay because of flawed mitigation measures. EPA has no legal basis for deferring its decision until RCT has issued or denied a mining permit. However, as a matter of course, the RCT approved DRRC's surface mining permit application on October 3, 1994 (see Appendix E). Refer to Section 5.4.5 in Part III.C, and the USFWS biological opinion, Appendix F, for the most recent endangered species information.

7-10 Issuance of NPDES permit may be inappropriate given air quality impacts. Comment noted; in making its decision, EPA intends to carefully weigh all the factors listed on pages 5-72 and 5-73 of the DEIS.

DRAFT EIS, EPA REGION 6 NPDES PERMIT, EAGLE PASS MINE, TEXAS

Table 5-2. Threatened and endangered species

State and Federally listed species that may occur in Maverick County

Category/species	Common name	State-listed
Federal Endangered		
<i>Felis pardalis</i>	Ocelot	Endangered
<i>Felis yagouaroundi</i>	Jaguarundi	Endangered
• <i>Falco peregrinus anatum</i>	American peregrine falcon	Endangered
Federal Threatened		
• <i>Falco peregrinus tundrius</i>	Arctic peregrine falcon	Threatened
• <i>Ursus americanus (T/SA)</i>	Black bear	Threatened
Federal Category I*		
<i>Charadrius montanus</i>	Mountain plover	
Federal Category II**		
<i>Buteo regalis</i>	Ferruginous hawk	
• <i>Buteo nitidus maximus</i>	Northern gray hawk	Threatened
• <i>Numenius americanus</i>	Long-billed curlew	Removed
<i>Icterus graduacauda audubonii</i>	Audubon's oriole	
<i>Icterus cucullatus cucullatus</i>	Mexican hooded oriole	
<i>Lanius ludovicianus</i>	Loggerhead shrike	
<i>Crotaphytus reticulatus</i>	Reticulate collared lizard	Threatened
<i>Phrynosoma cornutum</i>	Texas horned lizard	Threatened
<i>Siren intermedia texana</i>	Rio Grande lesser siren	Endangered
<i>Acleisanthes crassifolia</i>	Texas trumpets	
• <i>Plegadis chihi</i>	White-faced ibis	Threatened
• <i>Cyprinops elongatus</i>	Blue sucker	Threatened
• <i>Etheostoma grahami</i>	Rio Grande darter	Threatened

State Endangered and Threatened (not Federally listed)

<i>Nasua nasua</i>	<i>Coati</i>	<i>Endangered</i>
<i>Myctena americana</i>	<i>Wood stork</i>	<i>Threatened</i>
* <i>Buteogallus anthracinus</i>	<i>Common black-hawk</i>	<i>Threatened</i>
<i>Buteo albonotatus</i>	<i>Zone-tailed hawk</i>	<i>Threatened</i>
<i>Gopherus berlandieri</i>	<i>Texas tortoise</i>	<i>Threatened</i>
<i>Drymarchon corais</i>	<i>Texas indigo snake</i>	<i>Threatened</i>

* CATEGORY I: Candidate species for listing, with sufficient information available for listing.

** CATEGORY II: Candidate species for listing, awaiting more information.

• Corrected listing: (Long-billed curlew - 3C, *Diarda diablo* - C1, does not occur in county)

SOURCE: FWS, 1993; FWS, 1994; MORRILL, 1992a

AUG 1 1994

EDDIE CAVAZOS, Chairman
JAMES J. KASTER, Commissioner
Representing Employers
JACKIE W. ST. CLAIR, Commissioner
Representing Labor
WILLIAM GROSSENBACHER
Administrator

TEXAS EMPLOYMENT COMMISSION

P. O. Box 4030
Eagle Pass, TX 78853
9210) 773-9481



Texas Employment Commission

July 29, 1994

Mr. Norm Thomas
Chief, Federal Activities Branch
EPA (6E-F)
1445 Ross Ave.
Dallas, TX 75202-2733

Dear Mr. Thomas:

The Texas Employment Commission, local office in Maverick County, would like to provide some input on the area of employment, which is part of service and the efforts we are making to assist the employer, Dos Republicas, in developing an employment management plan. Our mission is to deliver quality services designed to promote the well-being of individuals in the state's labor force, to participate in the development and full utilization of resources for maximizing employment and to serve employers.

Dos Republicas is in the process of obtaining permits to mine coal in Maverick County. We support the efforts of Mr. Terry McCoy, Local Office Manager, and his company in securing their permits through your organization so that we can further assist the unemployed obtain employment. We have an average unemployment rate of 22.8%, which is one of the highest in the State of Texas. We welcome Dos Republicas with open arms so that we can combat and lower the unemployment rate and hopefully improve the economic conditions of our community.

It is my hope that Dos Republicas Coal Mine project is approved so that we can provide assistance to the unemployed of our community and to the employer as we are mandated to serve as Job Service of Texas.

If I can be of further assistance, please call me at phone number listed above. Your efforts are appreciated in advanced.

Sincerely,

Rafael Chancey,
Area Manager III

8-1 Project may improve economic conditions. Comment noted.

Texas Office of State-Federal Relations

THE TEXAS OFFICE
OF STATE-FEDERAL RELATIONS

122 C STREET, N.W., SUITE 200
WASHINGTON, D. C. 20001
(202) 638-3027
FAX (202) 620-1043

201 E. 14TH STREET, SUITE 500
AUSTIN, TEXAS 78701
(512) 469-1803
FAX (512) 469-1084

August 8, 1994

Mr. Norm Thomas
U.S. Environmental Protection Agency
1445 Ross Avenue
Dallas, Texas 75202-2733

RE: TX-R-94-06-22-0001-50-00 / DRAFT EIS - EAGLE PASS MINE MAVERICK COUNTY

Dear Mr. Thomas:

Your environmental impact statement for the project referenced above has been reviewed. The comments received are summarized below and are attached.

9-1 Texas Parks and Wildlife Department mailed its comments to you in a letter dated July 22. They raised serious concerns about adverse impacts on wildlife, particularly the endangered ocelot and jaguarundi; about the mitigation plan; about possible secondary air pollution effects on the Big Bend area from burning coal at the proposed power plant in Mexico; and pointed out that a required Section 404 permit has not been made yet for the project. In view of the concerns raised, TPWD recommends that the "NPDES permit for the Eagle Pass mine be deferred until the state regulatory process is completed and additional information is provided by DRRC to clarify resolution of the state permit issuance to conduct surface mining activities." The Texas Historical Commission also replied directly to you, recommending two changes in the EIS regarding historic preservation and archeological surveys. UT Bureau of Economic Geology commented that "no major adverse environmental impacts should be expected" if the mine plan is assiduously followed. The Railroad Commission and TNRCC had no comments.

We appreciate the opportunity afforded to review this document. Please let me know if we can be of further assistance.

Sincerely,



T. C. Adams, State Single Point of Contact

TCA//yjy

Enclosures

9-1 Texas agency comments. Refer to responses to comments from the specific agencies.

11

TEXAS REVIEW AND COMMENT SYSTEM
REVIEW NOTIFICATION

JUN 27 PM 4:04

Applicant/Originating Agency: U.S. Environmental Protection Agency
Contact Name and Phone: Mr. Norm Thomas / (214) 655-2260

Project Title: DRAFT EIS - EAGLE PASS MINE MAVERICK COUNTY *655-7456*
Op. Swick

SAI/EIS#: TX-R-94-06-22-0001-50-00

Date Received: June 22, 1994

Date Comments Due BPO: 07/30/94

REVIEW PARTICIPANTS

- Bureau of Economic Geology
- Texas Historical Commission
- Texas Parks and Wildlife Department
- Railroad Commission of Texas
- Texas Natural Resource Conservation Commission ✓
- Texas Water Development Board
- Middle Rio Grande Development Council

JUN 28 1994

Special Notes/Comments: Subject application *enclosed by SPCC* must be provided to reviewers listed above within 5 working days of receipt of this notification.

No Comment. *TNRCC* *Adrian Wheeler*
Review Agency Signature

Return Comments to: *for* *to* *due* *7/28*
A. O. Adams #151
A. O. Adams, State Single Point of Contact
Texas Office of State-Federal Relations
P.O. Box 13005
Austin, TX 78711



Mary Van Kerrebroek
2100 Welch, Apt. C-213
Houston, Texas 77019

Mary Van Kerrebroek

June 27, 1994

Dear Mr. Thomas -

I am writing concerning the draft EIS on the proposed Des Republicas, Inc.'s coal strip mine. This mine will provide coal for the controversial Carbon II (and Carbon I) plant across the border.

Carbon I and Carbon II will be the tenth largest sources of ~~the~~ sulfur dioxide in North America, with enormous impacts on Big Bend park. The National Park Service predicts that visibility in the Park could be reduced by 60% when Carbon II comes completely on line. This is simply outrageous. Big Bend is the largest tourist attraction in the state - surpassing even the Alamo. The Park should not be severely degraded by these plants, and it is imperative that the EIS for the strip mine take into account

the impact of the Carbon I and II plants on the Park.

At a minimum, Mexico must place effective scrubbers on the plants. Better yet would be a conversion to natural gas; of both plants.

Thank you for considering these comments.

Sincerely,
Mary Van Kerrebroek

- 10-1 Reduce impacts from Carbon I/II. Impacts to Big Bend National Park are described in Section 5.9.6 of the DEIS. Refer to Part II.C.2, air quality, and response 5-1 for additional discussion of the issue.

JUL 25 1994



Parts Service Supply Co., Inc.

PARTS SERVICE SUPPLY CO., INC.

INDUSTRIAL & MINING EQUIPMENT

SERVICE IS OUR BUSINESS

July 15, 1994

Mr. Norm Thomas
U.S. Environmental Protection Agency
First Interstate Bank Tower
1445 Ross Avenue
Dallas, Texas 75202-2733

Subject: Dos Republicas Resources Inc.
Eagle Pass Mine Project

Dear Mr. Thomas:

My name is Isidro De Los Santos Jr., I am the President of Parts Service Supply Co., Inc., which has been in business for over 25 years in Eagle Pass, Texas, supplying automotive and equipment parts for the mining industry.

I have been in many open pit coal operations in the United States and naturally, like any other industry, they are pollution problems, but there are not problems that cannot be resolved.

I understand that all kind of environmental regulations have to be imposed on Dos Republicas Resources, in which I am sure they will comply all of them, otherwise, the Federal Environmental Agency will close the complete operation. My personal opinion at this time is that Federal Environmental Regulation are against productivity. Environmental Regulations and Economics both must be taken into consideration.

11-1 The rate of Maverick County unemployment is the highest of the entire nation, I ask you to please consider very seriously Dos Republicas Resources petition for the benefit of Eagle Pass community, our state, and our nation.

11-1 Consider unemployment problems. Comment noted.

Yours Very Truly,

Isidro De Los Santos Jr.
President

JUL 25 1994

6715 Westwick Drive
Houston, Texas 77072
July 20, 1994

Tom L. Herrick

Mr. Norm Thomas
Chief, Federal Activities Branch
EPA (6E-F)
1445 Ross Ave
Dallas, Texas 75202

Dear Mr. Thomas:

I was unable to attend the public hearing today in Eagle Pass but want to express my views concerning the proposed Do's Republican, Inc. coal strip mine.

I believe that polluting power plants should not be authorized in our state. We already have an air pollution problem from the El Paso plants that is injurious to the health of the residents in that area and there is degradation of the air for hundreds of miles. Frankly, Mr. Thomas, I have had enough of industries benefiting at the public expense. I want it stopped now.

12-1 Reduce impacts from Carbon I/II. Comment noted. Refer to the response to comment 5-1, above and the discussion of air quality in Part II.C.2 of this FEIS.

Places like Big Bend National Park and Grand Canyon Nation Park should be sanctuaries for man and beast. I have watched the air quality degrade to the point where the views from these special place are not much distant than in downtown Houston. The government agencies acting on behalf of the people must stop this process. I believe that each person in this country has an inherent right to breath clean air. That is not the case in the El Paso or Houston areas. I think it would be ridiculous to add to the pollution problems with more sulfur dioxide emissions from a coal fired power plant.

12-1

If this plant is to be built I think it should have all available technology used to insure that no air or water pollution will be emitted. Whatever is needed to protect the environment must be used whether it be in this country or in Mexico. Your efforts to protect and improve the quality of life for the many folks that don't have a voice and the environment will be appreciated.

Sincerely,

Tom L. Herrick



P.O. BOX 3050
EAGLE PASS, TEXAS 78833

(210) 773-6166
FAX (210) 787-3010

Maverick County Development Corporation

July 20, 1994

Environmental Protection Agency
Attn: Norm Thomas
Chief, Federal Activities Branch
USEPA-GE-FT
1445 Ross Avenue
Dallas, Texas 78202-2733

Re: Draft EIS for Eagle Pass Mine
Maverick County, Texas

Mr. Thomas:

We understand that the Environmental Protection Agency is soliciting public comments on the referenced draft EIS and the draft NPDES permit for the proposed Dos Republicas Eagle Pass Coal Mine. We want you to be aware of our very strong support for this project, and are specifically asking for the support and assistance of your office to make this project a reality.

This project is extremely important to the people of Texas, especially the people of South Texas. This is a project which is, as we understand it, committed to meeting or exceeding all State and Federal environmental and other regulatory requirements. Since this is the situation, it is clearly in the public interest of the people of Texas for this project to go forward. We understand that the project can only proceed if it does so in a timely manner.

Thank you for your consideration and assistance.

Sincerely,

Raymundo Gonzalez
President

Maverick County Development Corporation

13-1 Project important to south Texas. Comment noted.

13-1

July 25, 1994

Dan Riskind

Mr. Norm Thomas
 Federal Activities Branch, EPA (6E-F)
 1445 Ross Ave.
 Dallas, Texas 75202-2733

Dear Mr. Thomas:

I believe that the overriding issues concerning this EIS is the lack of truth relevant to the facts given by DRRC. DRRC has conveniently overstated the number of jobs and the possible economic impacts to Maverick County to garner support for this project. If the principle purpose of this project is to be the benefit of solely the creation of jobs to Maverick County, then the hard data does not even substantiate that. Comparable mines in Texas employ far less than 258 workers to extract coal than DRRC has publicly admitted.

14-1

DRRC only avenue of even limited success rest on a long term contract with CFE in Mexico to supply coal to Carbon 1 and 2. The quality of coal to be mined at the Eagle Pass Mine would not be saleable in the United States. To date no such contract has ever been publicly presented or is know to exist! Mexico has coal reserves between 400-600 million tons. Is it logical Mr. Thomas that they need to purchase coal from DRRC to supply their needs?

14-2

The latest PFD by Marcella Roberts of the Texas Railroad Commission has still found countless flaws with the application, even after two years and numerous supplements to the application. These people (DRRC) clearly should be given no more chances at fixing a deficient application. An amusing fact, the number of sediment ponds differs from agency to agency along with areas to be mined.

14-3

14-1 Employment overestimated. EPA has responded to this comment in Part II.C.4 of this FEIS.

14-2 Does Carbon need DRRC coal? EPA agrees that if Carbon I/II does not choose to purchase coal from the Eagle Pass mine, it is probable that the mine will never be developed.

14-3 Application discrepancies. Refer to the discussion of Scope of EIS in Part II.C.1 of this FEIS. The difference in the number of mining areas and sedimentation ponds is due to the fact that the NPDES permit and DEIS address the life of the mine area while the Texas Natural Resources Conservation Commission TPDES application addresses only 3 of the 4 proposed mine blocks (Kost, 1994a). (DRRC will secure additional TPDES authorization for Mine Area D sedimentation control ponds when they are needed.)

14-4 A review by The Texas Parks and Wildlife Department has come to the same conclusion. The economics of this project are not viable if mining can not be done in the creek areas. The conclusion by Parks and Wildlife is that the creek should be completely avoided, no mitigation is acceptable.

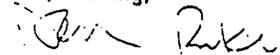
14-5 Both National Parks Service and the McDonalds Observatory have raised the issue of this coal being burned at Carbon 1 and 2 and the harmful effects they would generate. Additionally U.S. Fish and Wildlife have raised the flag on two endangered species of cats that would be further threatened and their habitat destroyed if this permit would be granted.

14-6 Many of these issues that were discussed in the draft EIS were based on information supplied by DRRC or the initial PFD by the first Hearings Examiner. Needless to say a rather rosy picture is portrayed by DRRC and its impacts of mining. The negative issues that result from granting of this permit clearly out weigh any possible economic gain to Maverick County. Maverick County's unemployment has remained constant with its growth! DRRC will not be able to solve that problem, they will only be another mining company trying to own another town.

14-7

Mr. Thomas, clearly stated this permit lacks for any purpose other than to benefit a few foreign investors of which we are not beholden to. DENY THIS PERMIT!

Respectfully,



Dan Riskind

14-4 Avoid Elm Creek. Comment noted. See Part II.C.3 for further discussion.

14-5 Other agency concerns. Refer to the responses to those agency's comments, and to the discussion of specific major issues in Part II.C of this FEIS.

14-6 Reliance on DRRC data. Refer to the discussion of Scope of EIS in Part II.C.1 of this FEIS.

14-7 Unemployment will not be solved. Refer to Appendix B, response to public hearing comment #8-2 which provides a response to a similar comment.

DAVID A. TODD
709 EAST MONROE STREET
AUSTIN, TEXAS 78704-3131
512-442-3130

AUG 2 1994

David A. Todd

27 July 1994

Norm Thomas
U.S. Environmental Protection Agency
First Interstate Bank Tower
1445 Ross Avenue
Dallas, Texas 75202-2733

Re: Eagle Pass Mine, Texas
Draft EIS

Dear Mr. Thomas:

The following are my comments on the Draft Environmental Impact Statement prepared for the proposed coal mine at Eagle Pass, Texas:

- Information*
- 15-1 • The Draft EIS is based on 1993 information, which appears to have become obsolete due to intervening changes in the mine plan (p.5-2).
 - 15-2 • The submission to the U.S. Fish and Wildlife Service failed to include any specific project plans which the Service could use to identify impacts on threatened and endangered species. Letter from Art Coykendall, USFWS, to Lisa Kost, Marston & Marston, April 13, 1993. This suggests that the habitat and species impact discussion in the Draft EIS falls short of NEPA-mandated full disclosure.
 - 15-3 • The Draft EIS does not discuss the uncertainty of the information provided concerning Mexican plans and Mexican governmental data. The information may be incomplete and inaccurate due to the lack of strong open meetings, open records, and community right-to-know legislation in Mexico.
- Energy*
- 15-4 • The Draft EIS fails to adequately examine alternatives to the proposed mine and associated power plant, such as natural gas fired plants, renewable source-based plants, or demand-side management programs, which may serve similar electricity needs yet be cheaper, less financially risky, and more environmentally benign (the discussion on p. 5-63 is restricted to high-Btu vs. low-Btu coal).
 - 15-5 • The Draft EIS claims that "most power produced at Carbon I/II would be used in the national power grid in Mexico". p. 5-65. This may be so, considering the higher projections for demand growth in Mexico. However, it appears at least possible that some of the power would be sold in the U.S. due to the proximity of the power plant to the border, the cost advantage over U.S. plants (due to avoided environmental protection costs of \$300 million, p. 5-70), and the higher incomes of consumers in the U.S. (where per capita income is roughly 10 times that in Mexico). The EIS should explore the likelihood that power would be sold in the U.S., since that would justify much closer examination and regulation of Carbon I/II. This analysis should be done now, when controls can be easily installed on Carbon II, not at some future date when cross-border electric sales begin and stack and process retrofits become prohibitively expensive.
 - 15-6 • *Air emissions and water discharges*
• The Draft EIS does not analyze the impact of understaffed Mexican environmental law enforcement on operations at and emissions from the power
- 15-1 Mine plan changes. Assuming the reference to changes in the mine plan is to page 4-2, rather than 5-2 of the DEIS, and that the concern is over the number of areas to be mined and the number of sedimentation ponds, please refer to the response to comment number 14-3, above. EPA has reviewed all reports and findings up to the date of the publication of this FEIS, and has used the material in preparing this FEIS and in reaching its preferred alternative. Refer also to the discussion of Scope of EIS in Part II.C.1 of the FEIS.
- 15-2 Biological mitigation alternatives. Additional information has become available since the Draft EIS was published, including the field surveys and the applicant's Biological Assessment (BA). The BA, and the applicant's addendum to the BA, have been reviewed by EPA and are discussed further in Part III.C of this FEIS; see especially new EIS Section 5.4.5. Also see the USFWS biological opinion in Appendix F.
- 15-3 Lack of information from Mexico. Comment noted. No aspect of EPA's NPDES decision is dependent on certainty in data from Mexico.
- 15-4 Explore energy alternatives. Refer to the discussion on the Scope of the EIS, Part II.C.1 of this FEIS.
- 15-5 Explore Carbon power markets. EPA's information is based on DOE (1991), cited in the DEIS, and on discussions with the U.S. Department of Energy. Significant cross-border energy sales would require new grid interconnections and would be subject to NEPA review at that time.
- 15-6 Compliance with emissions standards in Mexico. Comment noted. See also the general discussion of Carbon I/II air impacts in Section II.C.2.

plant. The EIS discussion and modeling efforts appear to be based on the assumption that the power plant will be operated in compliance with Mexican emission regulations. p. 5-67. However, a maquiladora association representative in Juarez estimated that 40% of the plants there violate Mexican hazardous waste laws, suggesting that compliance with other environmental laws in other parts of Mexico may also be poor.

• The mine operators expect to rely on water spray to keep dust emissions down. p. 5-22. It is uncertain whether they will be able to secure adequate water rights for the spray, together with other site demands such as sanitation and habitat restoration. Water rights are in high demand in the arid lower Rio Grande valley. The EIS should disclose the feasibility of securing adequate water rights, and the secondary impacts on competing needs such as agricultural and municipal use.

• Texas common law prohibits increasing runoff to neighboring properties. Also, all federal permits must avoid long and short term impacts to the floodplain. Executive Order 11988.

Yet, the Draft EIS admits that drainage channels for the mine may "increase the amount of runoff conveyed downstream", while conceding that "the effect has not been quantified", p. 5-14. Also, the Draft EIS is ambiguous about the standards for flood control at the mine, saying that the operators may need to engineer drainage for a 10-year event or a 100-year event, depending on the interpretation of governing regulations. p. 5-13.

The Draft EIS must identify these effects, and if a FONSI is issued and the NPDES permit approved, the permit must eliminate any mine-related downstream flooding effects.

Habitat and wildlife

• The Draft EIS does not fully explore the extent of wetlands, wetland habitat impacts, and wetland mitigation efforts.

There is disagreement about the extent and importance of wetlands in the mine site which the EIS should try to resolve: while the COE contends that there are no jurisdictional wetlands at the site (p. 5-29), the USFWS finds that there is critical jaguarundi and ocelot habitat in "riparian wetland vegetation dependent on Elm Creek". Letter from Johnny French, USFWS, to Norm Thomas, EPA, January 14, 1994.

The EIS concedes that "most of the riparian area within the project area will be removed and mined through before the end of the nineteen-year mine life". p. 5-29. However, there does not appear to be any assurance that this destruction of protected species' habitat will not result in takings or even identification of what impact destruction of the habitat will have on the species.

It is unclear how the proponent intends to restore wetlands and meet no-net-loss mandates. There is discussion of transplanting and introducing grasses, shrubs, and trees, but no mention of how the hydrologic regime that would support a wetland might be restored. p. 5-36. The watercourse which is proposed to replace Elm Creek is described as "more engineered and less natural than the existing channel". p. 5-13. In other words, it appears to be a drainage canal, likely deeper, wider, slicker, and straighter than the Creek, and much less likely to support wetlands and wetland vegetation.

• Restoration of vegetation is likely to rely heavily on fertilizing, considering the disruption of soil horizons, loss of topsoil, and mandate to return the land to "excellent" range condition. p. 5-46. However, there does not appear to be any arrangement for protecting against nutrient runoff and associated algal blooms (the proposed sedimentation ponds appear to be upstream, while restoration of riparian corridors would likely be below the ponds). The EIS should discuss these nutrient runoff issues.

• Restoration of vegetation is apt to need irrigation. However, it is unclear whether the project operators will be able to secure the necessary water rights for

15-7 Water rights available for dust spraying? EPA's discussions with State and Maverick County Water District officials have not identified major obstacles to DRRC's plans to acquire agricultural water rights for an industrial use. If water rights were not obtained, and DRRC did not otherwise obtain a water supply (e.g., using the Eagle Pass pipeline), DRRC could not satisfy mitigation requirements which will likely be imposed if TNRCC issues an air quality permit, nor reclamation requirements imposed by RCT's surface mining permit. Thus, if the water does not come, DRRC will not mine. However, as described at 15-11, below, DRRC expects to obtain water rights for dust control.

15-8 Identify downstream runoff, flooding impacts. Regulatory responsibilities related to flooding are assigned to COE and RCT, which are sensitive to the issue of downstream flooding. Preparation of the EIS was, in practice, the outcome of EPA's decision not to issue a FONSI for this project.

15-9 Wetlands, endangered species mitigation. EPA believes that the key habitat issue (including wetlands) is preservation or restoration of the Elm Creek dense brush habitat. Refer to Part II.C.3 of this FEIS and as referenced there Part III.C, Section 5.4.5, and Appendix F for discussions of the mitigation measures currently proposed for the corridor.

15-10 Nutrient runoff from reclamation fertilization. Land to be returned to excellent range condition is above the sedimentation ponds. EPA agrees that, to the extent that restoration of dense brush corridors requires fertilization, DRRC will need to apply fertilizers in amounts and ways which will provide for full uptake of nutrients by plants. Provided that best management practices for fertilizer use are followed, and given the small areas involved, EPA does not anticipate an algal bloom problem resulting from this project. DRRC has not mentioned any needs for fertilization in the dense brush habitat mitigation areas.

15-11 Water rights available for irrigation? DRRC has been assigned irrigation water rights by landowners in the proposed permit boundary area, and from whom it leases property. These water rights are owned by the Maverick County Water Control & Improvement District No. 1, within which the proposed mine area is included, and are held for use by landowners/lessees within the District. DRRC also owns property within the District and has irrigation water rights through the District. DRRC expects that the irrigation rights that it holds as landowner/lessee will be sufficient to accommodate the approximately 800 acre-feet of water per annum necessary for reclamation activities, including irrigation of proposed vegetated corridors.

DRRC will purchase Rio Grande water rights for its industrial water needs (dust suppression), approximately 300 acre-feet. DRRC is currently negotiating with several owners of Rio Grande water rights for the purchase of such industrial use waters. If DRRC is unable to locate industrial use waters for purchase, it will purchase other Rio Grande water rights and convert them to industrial use waters. EPA is not aware of a shortage in such rights.

adequate irrigation. With competing municipal and agricultural uses in a very dry climate, water rights are in tight demand in the lower Rio Grande valley.

Cultural resources

The Draft EIS fails to challenge the "potential environmental justice index" calculated by EPA for the mine project. The index is unrealistically low: EPA arrived at a score of 8 and 20 out of 100 for the 1 square mile and 50 square mile areas surrounding the mine. p. 5-61. This is low for two reasons: 1) the areas considered are too small when one takes into account the fact that the linked power plant will affect air quality hundreds of miles away (Big Bend visibility is expected to fall by 60%, p. 5-69) and conceivably serve power needs even farther under wheeling agreements; 2) the southern counties of Texas are known to be one of the poorest, least politically powerful, and most predominantly ethnic in the U.S. (see p. 5-49 for discussion of the low employment and income figures).

The preliminary surveys identified numerous and very old archaeological sites in the mine area. p. 5-42. It is disturbing then that the review of archaeological effects from the mine are relegated in the Draft EIS to a "play-it-by-ear" programmatic agreement that anticipates monitoring-as-you-go and last-minute salvage mitigation after mining is underway. There needs to be more discussion in the EIS before the mine is opened to determine if the site area is archaeologically significant enough to justify stopping the mine entirely. At the scale and speed of a modern stripmining operation, many artifacts can be missed and/or destroyed if a full reconnaissance is not undertaken before the mining begins. Such a survey should include several detailed test plots.

Economics

The Draft EIS makes much of the employment and earnings that the mine will add to the area. p. 5-54. However, that may not be the full picture. First, it is important to view these projections together with the cap on regional growth that will be placed by the power plant's consumption of air emission increments. Second, it is critical to look at the boom-and-bust impact of an extractive, limited-life project such as a mine (particularly when it is the dominant or sole employer in an area). At the end, it could be that the net employment/income impact on the community will actually be negative. In any case, the long term economic impacts of the project need to be looked at more closely in the EIS.

Since much of the guarantee of habitat restoration rests in the bond securing successful reestablishment of the local ecosystem, there needs to be more discussion in the EIS about the structure of the bond and its forfeiture conditions, the financial strength of the mine and power plant operators, and the U.S. liability exposure of foreign partners in the project. p. 5-47. This has become more important as some of the stronger partners within U.S. jurisdiction have backed out of the project in recent months.

Thank you for considering my comments. Please keep me on the mailing list for future hearings, editions of the EIS, and permit decisions.

Sincerely,

David Todd

David Todd

The TNRCC, which manages the allocation of Rio Grande water rights, has adopted regulations addressing the manner in which such rights are acquired and transferred, and the manner in which the authorized purposes of use of such waters are changed. Sales or transfers are routinely granted by the agency.

15-12 Environmental justice index too low. The calculation reflects EPA's intent to use the index to discuss area demographics and identify projects which are being located in neighborhoods with predominantly minority or disadvantaged populations. The index scores reflect EPA's equal consideration of 3 criteria including total population, percent minority and percent economically stressed. The low values are reflective of the small population (i.e., 2 people within the 1 square mile area and an average of 56 people/square mile within the 50 square mile area) directly affected by the project. EPA recognizes that Eagle Pass is a poor, dominantly Hispanic community. EPA also recognizes that a coal mining project must be located at the coal source.

15-13 Expand cultural resources section. Refer to response to comment 4-39, above. Part II.D contains an update of activities involving cultural resources; several detailed survey reports have been completed or are being reviewed.

15-14 Assess long-term economic impacts. As discussed in the DEIS, p.5-70, consumption of much of the PSD increment for the Eagle Pass region by the Carbon plants, could restrict industrial growth on the U.S side of the border. EPA's action on DRRC's permit application will not have an effect on this impact.

The proposed mine would not create a boom/bust cycle like the ones experienced in many communities impacted by energy development. As shown in the DEIS, p. 5-56, the population growth projected to result from the project is quite modest, an estimated 1-2 percent, which will have fairly minor impacts on public facilities and services. Further, the mine would not be the sole employer in the community. Presently there are 5 entities which employ 250 or more workers and another 4 which employ 100-200 workers (UTSA, 1993). The mine will contribute to jobs in the area and the loss of these jobs when the mine closes will have an adverse impact on the community, but it will not have the proportions of a boom/bust cycle.

15-15 Expand discussion of liability. The responsibility for evaluation of the bond lies with RCT rather than EPA; see DEIS p. 4-10. RCT indicates that a reclamation performance bond of \$3,873,884 will be required for the five-year RCT permit term. DRRC will have to submit the bond in a form acceptable to RCT before mining can begin. The financial strength of DRRC or any foreign partners will not become an issue unless DRRC chooses to post a self-bond, rather than a collateral or a surety bond (Reeves, 1994). Presently, DRRC is contemplating a surety bond (Kost, 1994). If DRRC, and its foreign partners, subsequently choose to self-bond, they will have to prove to RCT that RCT can attach sufficient assets to accomplish the remediation if DRRC should fail to do so, and will have to sign an agreement giving RCT access to these assets in the event of forfeiture.

Based on the information EPA has received, it appears that the proposed RCT permit does not incorporate USFWS recommendations for habitat restoration, so the bond required of DRRC covers only the RCT-required reclamation plan discussed in the DEIS, pp. 5-38 and 5-39.

SIERRA CLUB



AUG 9 1994

LONE STAR CHAPTER
P.O. Box 1931
Austin, TX 78767

Sierra Club, Lone Star Chapter

LONE STAR CHAPTER OF THE SIERRA CLUB COMMENTS ON
THE DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR
THE DOS REPUBLICAS, INC. STRIP MINE NEAR EAGLE PASS, TEXAS
August 1, 1994

The following are the comments of the Lone Star Chapter of the Sierra Club on the draft Environmental Impact Statement (DEIS) for the Dos Republicas Resources Co., Inc. (DRRC) strip mine. The Sierra Club strongly urges EPA to deny this NPDES permit and totally revise this DEIS so that EPA decision makers may readily understand that DRRC has not to date supplied the data necessary to make a reasoned decision regarding the NPDES permits.

16-1 This DEIS is primarily a rewrite of DRRC's permit application now pending before the Texas Railroad Commission (TRC). Thus, it is full of the same deficiencies noted by the TRC hearings examiner in her June 17 Proposal For Decision. This DEIS is based on flawed and insufficient biological data. The direct and indirect environmental impacts of this project still have not been thoroughly evaluated. There is no historic biological baseline for Maverick County and very little is known about the fish, wildlife, and water resources in this region. Obtaining this biological data is essential to determining the importance of the Elm Creek drainage ecosystem that will be destroyed by the proposed strip mine. Without a sound biological baseline it is impossible to develop a permit application that adequately addresses the environmental impacts caused by this proposed strip mine. Without the biological baseline, it is impossible to produce the required restoration plan that will restore the natural resources in the permit area to their pre-mine conditions.

16-2 Until a proper biological assessment is completed, no permits should be granted to strip mine this area. EPA can not acquit itself of the duty to take a "hard look" at the environmental consequences of its actions, unless the agency develops or is presented with credible biological data. The Lone Star Chapter urges the EPA to reconsider this biologically unsound decision and to require DRRC to produce the sound biological baseline data necessary to predict, avoid, and restore all environmental impacts that will be caused by this strip mine.

Fish & Wildlife

16-1 Use of RCT data. See the discussion of Scope of EIS in Part II.C.1 which addresses the use of information from DRRC documents; and the relationship of EPA's NEPA process to the RCT permitting process. EPA is not attempting to duplicate RCT's work; the finding of deficiencies by an RCT hearing officer may or may not be of significance to the EIS.

16-2 Insufficient biological data. See the discussion in Part II.C.1 as to how uncertainties are handled, and Part II.C.3 on threatened and endangered species issues; see also responses to specific comments below.

Habitat (wildlife corridor)

16-3 The Elm Creek riparian drainage is a very important corridor used by numerous species of wildlife. A thorough study of this wildlife corridor is necessary to determine how extensively it is used by wildlife. The riparian habitat is rare to this region of the state. The EPA has failed to require investigation of the Elm Creek corridor's linkage to other important wildlife corridors. This DEIS must include and go beyond the Texas border and into Mexico. Neither DRRC nor the EPA has attempted to obtain the biological data necessary to adequately assess the impacts of the strip mine on the wildlife community that utilizes this corridor.

Impacts to Vegetation

Neither DRRC nor the EPA has attempted to obtain the necessary biological data necessary to adequately assess the impacts of the strip mine on plants and plant communities on and near the permit area. This is very apparent to DRRC's mitigation and restoration plans.

16-4 Pertinent data assessing plant species/communities population densities and frequencies are still outstanding. The dominant wooded/sacaton riparian plant community along the Elm Creek corridor still has not been adequately assessed. DRRC and the EPA continue to misidentify the alkali sacaton grass (*Sporobolus wrightii*) as *Sporobolus airoides*. There is no information to determine whether or not plant communities found on the permit site are rare to Maverick County. This information must be obtained prior to the development of restoration and/or mitigation plans.

Restoration and Mitigation

16-5 DRRC's current restoration/mitigation plan will not restore the permit area to its pre-mine condition. The Sierra Club believes that because of the DRRC's unfinished and inaccurate natural resource assessments it will be impossible for the company to adequately mitigate impacts of the strip mine and restore the area to its pre-mine conditions.

16-6 DRRC's plans to mitigate some of the Elm Creek riparian habitat to be destroyed with 206 acres of waterless upland habitat was apparently swallowed hook, line, and sinker by EPA. This is not acre to acre mitigation of riparian habitat! (TRC exhibits clearly reflect the waterless nature of DRRC's riparian "mitigation.") The species that depend on that riparian habitat also depend on protected access to water.

16-7 The Sierra Club opposes DRRC's current plans to restore the mine area to pastureland. The cumulative impacts associated with the destruction of the Elm Creek corridor and DRRC's plans

16-3 Insufficient corridor investigation. DRRC's biological assessment and addendum, which EPA received after writing the DEIS, provides additional information on Elm Creek corridors north and south of the site. Part III.B of the FEIS includes a revised version of the dense brush corridors discussion from page 5-28 of the DEIS, and this corridor information is also summarized in Part III.C, where new information concerning threatened and endangered species has been added to the EIS.

EPA believes precise definition of corridors is not a critical issue, given DRRC's decision to act on the premise that the project area is occupied cat habitat. In addition, see Part II.C.1 of this FEIS for a discussion of uncertainties and the EIS process.

16-4 Inadequate information on plant species/communities. Part III.C of the FEIS includes a summary of DRRC's biological assessment, received by EPA after the DEIS had been written. The DRRC biological assessment and EPA's summary contain significantly more numerical data on the Elm Creek dense brush habitat areas, and on the proposed upland bypass corridor. Also see Part II.C.1 of this FEIS for a discussion of uncertainties and the EIS process. EPA did not independently identify species at the site, as the comment did not provide a specific basis (e.g., a reference) to indicate that a mis-identification has occurred, nor any information that a mis-identification would be significant. DRRC's biological consultant indicated that there is some disagreement over the species and subspecies names, and that some might call the species *Sporobolus airoides* s. *wrightii*, but that only further west did any species occur which could be called *Sporobolus wrightii*.

16-5 Inadequate natural resource assessments preclude adequate mitigation. Refer to Part III.C and Appendix F for mitigation information. DRRC has committed to not mine a 100-foot-wide Elm Creek corridor until specified plant densities are met in other habitat corridors.

16-6 Upland habitat not riparian. EPA initiated Section 7 consultation with USFWS for the specific purpose of ensuring that DRRC provided adequate mitigation for mine damage to dense brush riparian areas. The USFWS' biological opinion (Appendix F) addresses mitigation for the dense brush riparian areas. As discussed in the first full paragraph on p. 5-38 of the DEIS, EPA does not consider the 206 acres to be planted under DRRC's proposal to RCT to be riparian areas. As stated in the same paragraph, where these 206 acres of bottomland hardwood mitigation overlap the proposed dense brush corridors, the two plans complement and supplement each other. If the bottomland hardwood plantings do not succeed where they are proposed, that will be between DRRC and RCT, but will not interfere with EPA's evaluation.

16-7 Restoration to pastureland opposed. The decision on post-mine land use was made by DRRC and the other landowners, pursuant to RCT procedures. See also responses 7-2 and 7-3.

to grow a pasture with irrigation, fertilizer, pesticides, and non-native grasses will ensure that little quality indigenous habitat will ever exist again along and within the Elm Creek corridor. The DEIS should list the amounts of water and the amounts and types of fertilizer and pesticides that will be necessary to produce this sterilized pasture monoculture of non-native grasses.

There is still no biological data in DRRC's application that estimates restoration time. Dr. Michael Tawes, ocelot research specialist from Texas A&I, testified before the TRC that in his 11 or 12 years of research he had never seen the successful completion of an ocelot habitat restoration plan. (TRC TR. p.51) Dr. Ray Telfair, Texas Parks & Wildlife Department (TPWD) biologist testified, "I'm not sure you could restore that area. I am not of the opinion that it can be done." When Telfair was asked his opinion on the time range required to reestablish a mature riparian ecosystem Telfair said, "it would require a minimum of 30 years to establish what we would consider to be minimal habitat." (TRC TR. p. 235-236) Telfair was also asked if he knew of a successful riparian habitat restoration in Texas? He said, "no...it has not been done." (TRC TR. p. 251) Roy Frye another TPWD biologist testified, "We believe that what exists (habitat) there now is a mature vegetational community that probably took, we think, 30 to 50 years to get to the point it is now." (TRC TR. p.171) TPWD biologist, Lee Elliot also agreed that a successful restoration of this habitat was unlikely." (TRC TR. p. 56) In addition, no assessment has been done to determine mining impact to fish & wildlife resources during the restoration period.

DRRC's New "Mitigation" Plan

Probably the most astounding section of the EIS is the EPA's willingness to accept the new DRRC "mitigation" plan. This plan can hardly even be considered an experiment. There is no scientific data that shows that it can be done in this region of the state with these plant and animal species. Dr. Michael Tawes was not even consulted. Roy Perez, U.S. Fish & Wildlife Service Field Supervisor testified that it was "deficient." (TRC TR. p. 283) Roy Frye said that after his review of this new plan, he did not believe it is "feasible or practical or realistic." (TRC TR. p.177)

Expecting wildlife to use an existing corridor and to voluntarily shift their travel route is absurd. Accepting the assurances by a consultant who is unfamiliar with Maverick County and who has no experience in restoration of wooded/sacaton riparian habitat in Maverick County is ridiculous, especially when there is no biological baseline for the vegetation to be mitigated. More than one Texas expert has testified that it will take 30 years or more to restore this habitat. The U.S. Fish & Wildlife Service has not accepted this

16-8 Habitat restoration. EPA agrees that restoration of Elm Creek is a long-term activity without real precedent. See also the discussion in Part II.C.1 concerning how the NEPA process deals with uncertainty.

16-9 Mitigation plan inadequate. Refer to the mitigation measures discussion in Section 5.4.5, Part III.C, and the USFWS' biological opinion in Appendix F.

plan and neither did the TRC hearings examiner.

The DEIS has failed to address mitigation and restoration issues. All of the plans are based on experimentation and not based on any sound biological data. If a certain type of rare habitat cannot be restored, or there is no scientific data that ensure adequate restoration is possible, then other alternatives should be pursued. The "no action" alternative should be seriously considered.

Wildlife Impacts (including threatened and endangered species)

Ocelot and Jaguarundi

Adequate wildlife surveys have still never been completed.

16-10 The only reason we have the minimal information we have regarding the endangered ocelot and jaguarundi is due to a sighting by an ecologist employed by DRRC's consultant. That credible consulting firm is no longer employed by DRRC. None of the initial DRRC studies adequately investigated wildlife habitat that occurs within the Elm Creek drainage.

16-10 Inadequate surveys. Please see Part II.C.1 of the FEIS for a discussion of uncertainties and the NEPA process.

16-11 The DEIS fails to take a position that is consistent with the Recovery Plan for the endangered ocelot and jaguarundi. The U.S. Fish & Wildlife Service's ocelot and jaguarundi Recovery Plan includes goals to preserve and protect their existing habitat. The Recovery Plan's goals also include objectives to preserve, increase and restore ocelot and jaguarundi habitat for potential reintroduction in areas where they do not currently exist. Even if ocelot and jaguarundi do not currently use the Elm Creek corridor, this high quality ocelot and jaguarundi habitat should be protected and preserved for possible future use or reintroduction by these endangered cats as per their Recovery Plan. The EIS should require that this habitat be protected in its entirety in order to comply with the cats' Recovery Plan.

16-11 DEIS inconsistent with recovery plan. Comment noted.

16-12 The final EIS should not be released until FWS has completed and released the results of its Section 7 Consultation.

16-12 FEIS should not be released until Section 7 done. USFWS' biological opinion is included in Appendix F of the FEIS.

Black Bear

16-13 Black Bear have been sighted in and near Eagle Pass. However, no survey has been completed to determine whether there is black bear habitat in the area or whether black bears use or could use the Elm Creek corridor as they begin to reestablish populations in Texas. The DEIS failed to adequately address the presence of Black Bear in and near the permit area. (See attached newspaper article).

16-13 Address presence of black bears. The DEIS did address the issue of black bear sightings in the Eagle Pass area, and concluded that further investigation was not warranted because experts agreed that the bears were transients, not residents, and that the areas in question do not lead to areas of residence habitat (DEIS pp. 5-34 and 5-35).

Other Threatened or Endangered Species

- 16-14 The EIS does not adequately address impacts on endangered species related to traffic, noise, lights, vibration, blasting or any other effects of mining.
- 16-15 More information is needed on the other listed threatened species. The DEIS accepts DRRC's proposed plans for a one time sweep of the mining site to find threatened and important species. This is not adequate. The strip mine's impacts on threatened species such as the reticulate collared lizard, Texas tortoise, Texas horned lizard, and the Texas indigo snake has not been adequately investigated, and the proposed one time sweep will not adequately protect the threatened species on the mining site.
- Birds**
- 16-16 The EPA failed to require adequate bird surveys during the fall or spring bird migration. Therefore the strip mine's impacts to species such as the endangered peregrine falcon, bald eagle or other rare raptors that may inhabit or migrate through this neo-tropical area are unknown. Without taking into account migratory bird species, especially in a very important migratory route such as the Eagle Pass area, it is impossible to assess the strip mine's impacts to birds (including threatened or endangered species).
- Illegal Roadwork**
- 16-17 Attached are copies of FWS and DRRC correspondence as well as TRC transcripts that indicate that there was an agreement that no soil would be disturbed on the proposed mining site prior to the completion of the Endangered Species Act Section 7 Consultation. The enclosed March 11, 1994 FWS letter states, "...Service regulations at 50 CFR Section 402.12 (b) (c) state unequivocally that the 'biological assessment shall be completed before any contract for construction is entered into and before construction is begun.' The chief objective of this regulation is to prevent the diminution of the range of alternatives which are available before it has been determined whether such alternatives must be carried out to prevent jeopardy or the adverse modification of a critical habitat." The FWS letter continues saying, "the Service wishes to go on record as opposing the construction of the proposed sediment control ponds, their outfalls, their discharge routes, or any other project feature until both the EIS and formal consultation processes are complete." In response, an attorney for DRRC wrote in the enclosed March 15, 1994 letter, "DRRC has not and will not make an irretrievable commitment of resources to this project without all necessary permits, and it will certainly not initiate construction on or near the site without such permits."
- 16-14 Endangered analysis inadequate on effects of mining. Almost all information available concerning ocelots and jaguarundis, both in general and on this site, is sketchy. We do have some indications of the effects of mining, and those are discussed on p. 5-41 of the DEIS. In general, the effects are considered adverse.
- 16-15 More information needed on Texas T&E. EPA is relying on the regulatory authority of the Texas Railroad Commission to address this issue. DRRC, RCT and the Texas Parks and Wildlife Department are working together to develop a relocation plan for the species mentioned.
- 16-16 Inadequate migratory bird surveys. See response to comments 4-32 through 4-34.
- 16-17 Illegal roadwork. EPA's discharge permit application process does not prevent applicants from certain construction activities, but makes clear that the applicant undertakes such activities at its own risk. The USFWS conducted a site visit and viewed the roads that were cleared on August 11, 1994. As indicated in the USFWS letter to the Sierra Club dated October 5, 1994, the USFWS "does not believe the road clearing was significant enough to have had a measurable degree of adverse impact to endangered species". The USFWS further states that its regulations had not been violated.

During the last week of May 1994, DRRC authorized the use

of heavy equipment to widen an existing road on the proposed permit area. The road work consisted of clearing a three mile long 25 foot swath that included roadside vegetation. In response to a area residents complaint, TRC staff visited the site and took pictures as they investigated DRRC's roadwork. TRC reported in a June 7 to Melvin Hodgkiss, TRC, and a June 16 letter to the complaining party that "the maintenance work performed on an existing ranch road does not appear to constitute a violation of the Texas Coal Mining Regulations."

The Sierra Club believes this is a serious violation of the FWS/DRRC written agreement (March 11 & 15 FWS & DRRC letters) and FWS regulations 50 CFR Section 402.12 (b) (2) that were made for the purposes of protecting important potential endangered species habitat and archeological resources. Apparently unbeknownst to DRRC officials, the whole reason for collecting biological and archeological data on the permit area prior to construction is to avoid these very impacts. Vegetation and soil moving work on the permit site prior to completion of the Section 7 Consultation and archeological surveys must be prohibited and enforced by FWS, EPA and TRC. We request that the EPA and FWS thoroughly investigate this apparent violation.

Air Pollution

Will allowable ground-level particulate concentrations be exceeded? The DEIS should investigate whether the strip mine will comply with particulate standards, especially along the railroad right of way.

Coal Dust Dispersal (Particulate Matter Concerns)

The EIS should address dust impacts on the human residents and fish & wildlife species that live on and near the proposed strip mine. What impact will coal, dust, and other particulates have on humans and fish and wildlife? How far will this dust travel? How much coal dust is expected to be released from the trains traveling to and from Mexico, and what impact will that have on people and wildlife who live in Eagle Pass and along the rail route?

Do Republicas mining facilities have a very significant potential for exceedence of particulate ambient air quality standards and obvious nuisance air quality impacts. Compliance assurances that the DRRC facilities must not violate any emission standards, cause nuisance or a traffic hazard are certainly not convincing or acceptable.

DRRC is a start-up company with no demonstrated history of successful environmental management in the mining industry. Some details of its particulates control plan must be specified. The DEIS states on p. 5-22 that nearly "all aspects of the

16-18 Impact of particulates on humans, fish and wildlife, especially along rail right-of-way. See the discussion of impacts from mine activities in II.C.5. EPA relies on established regulatory programs in predicting impacts, in this case the air quality permitting program of the State of Texas. Permit issuance is considered as indicating that compliance is expected, provided that the permit terms provide for monitoring and enforcement. Air quality standards to protect human health are assumed to be protective of fish and wildlife. The most direct, probable and important impacts of the mining proposal on fish and wildlife have been identified and analyzed in this EIS, and are principally the loss of dense brush and riparian habitat. Requirements for mitigation of those impacts are the subject of ongoing coordination.

16-19 Need to maintain a higher efficiency of dust suppression. Technologies to control fugitive dusts do not achieve the high level of efficiency that is possible for point-source (stack) emissions. The draft air quality permit recommended for approval by the TNRCC staff requires emission controls of sufficient efficiency to meet the regulatory limits. Monitoring will determine whether the modeling is correct. If there are exceedances of standards, increased efficiency in the emission controls will be required by TNRCC if DRRC wishes to continue to mine. If regulatory limits are met, the probability of major nuisance or visibility impacts is small. See also responses to the following three comments.

project have the potential to cause dust emissions...." Yet, according to the DEIS on p. 5-22, DRRC is only proposing estimates of control efficiency of 50% to 80% for the dust suppression practices to be used in the project operation. DRRC needs to maintain a higher efficiency of dust suppression in the range of at least 85% to 90% to prevent frequent nuisance violations, traffic hazards and not to exceed particulate standards.

Associated with the nuisance potential is a two-fold problem. First, complaint response time is too long for it to be a viable check on dust emissions and second, dust is more than simply a nuisance. As a general rule, confirmation of an ongoing nuisance has to be made by a Texas Natural Resources Conservation Commission (TNRCC) investigator from the San Antonio regional field office located several hours driving time from Eagle Pass. The likelihood of same day nuisance confirmation is remote, especially if a complaint is received in the afternoon, and the likelihood is nil for complaints received in the evenings and on weekends. Since TNRCC prioritizes all air pollution complaints, dust-nuisance complaints might receive a slightly lower priority than health effects complaints and be investigated at a later date, giving consideration to the fact that almost all TNRCC regional field offices are overloaded and undermanned, including San Antonio. Permit special conditions of dust suppression need to be raised to at least 85% to 90% to adequately address concerns about dust impacts and the difficulties that TNRCC will have in promptly responding to all complaints by Eagle Pass residents.

Although Dos Republicas generally will be required to maintain Ambient Air Quality Standards, General Rule 101.6 eliminates all emissions limits during emergencies or "upsets." As long as DRRC reports such upsets to the TNRCC, it will not be penalized. General Rule 101.7 allows the same emissions freedom during maintenance operations that are reported to the TNRCC several days in advance. The only stipulation is that a nuisance from dust cannot be created but, as was stated above, nuisance complaints are not an effective measure of control.

Dust is not exclusively a nuisance: it is a health threat even when Ambient Air Quality Standards are maintained. The current Texas and EPA 24-hr standard for PM10 is 150 micrograms of PM10 per cubic meter of air. Published studies, however, show a correlation of 1% increased mortality rates for every 10 micrograms of PM10 above 50 micrograms per cubic meter. The EPA should assess the PM10 levels caused by the proposed strip mine and analyze the impacts on the citizens of Eagle Pass. PM 10's adverse impacts should be regarded as more than a nuisance, it is a threat to public health.

Dust Suppression (Water Use)

16-20 Complaint response time is too long. Nuisance dust impacts are not regulated by TNRCC alone. RCT and the Federal Office of Surface Mining Reclamation and Enforcement also have regulatory authority. While TNRCC personnel may not always be able to timely verify the existence of a single nuisance dust incident because of the constraints mentioned in the comment letter, monitoring data will be being collected at the time of the incident. A pattern of continued nuisance dust complaints will be investigated by TNRCC and/or the other regulatory authorities having jurisdiction; the collected monitoring data will be available for such an investigation. As noted in the response to the previous comment, EPA assumes that the air quality regulations will be enforced. See also the discussion of mine activities in II.C.5.

16-21 Upsets and maintenance provide regulatory loopholes. The provisions of the regulations mentioned do allow temporary exceedances of the ambient air quality standards during emergencies, or during necessary maintenance if nuisance dusts are not created. They recognize the value of immediate action to protect worker safety and the long-term value of properly maintained equipment, including pollution-control equipment. They do not, however, allow an operator to exceed the standards for more than a very short time.

16-22 Dust may be a health hazard even when PM-10 levels are complied with. EPA is aware of the published studies cited in the comment letter and is evaluating their implications for the existing PM-10 standard. If that review indicates that the current standard is insufficiently protective of public health, the process for setting a new standard will be started. If a new ambient air quality standard is developed, existing sources will be required to meet it. Assessment of the adequacy of current standards is not a function for an EIS.

DRRC claims it will use 300 acre feet of water per year for dust suppression. It also says it will provide water to any property owner whose groundwater is impacted by the mine. Where will the water come from? This question has not been answered. DRRC's plan is to buy agricultural water rights from current Rio Grande water rights owners and have TNRCC convert them to mining water rights. Water is not a plentiful resource in this region of the state, Rio Grande water rights are rarely if ever available, and TNRCC transfers of water rights for mining use is not a given. The TRC hearings examiner Proposal for Decision lists the water use question as a deficiency yet the DEIS has regrettably adopted DRRC's position that if it mines, the water will come.

16-23 Source of water rights. See responses 15-7 and 15-11, above.

Carbon I and Carbon II Power Plants

The Sierra Club appreciates the EPA's decision to include the indirect impacts associated with Carbon I and II powerplants in this DEIS. Because of the severe pollution that has been projected by the National Park Service, the Sierra Club believes the EPA should address solutions that will clean up this pollution source.

The DEIS does not adequately assess possible impacts to biological systems along the border and within state and national park lands. Chihuahuan and Sonoran desert ecosystems depend heavily on their limited water resources. Impacts to water, plant and wildlife resources must be assessed to ascertain impacts to these valuable and unique desert ecosystems.

16-24 Assess border biosphere impacts. The comment addresses unspecified hypothetical impacts. EPA has addressed all impacts which it believes could reasonably be attributed to the Eagle Pass Mine.

The DEIS stops short of recommending any substantial action that will address and solve Carbon I and II's existing and predicted unnecessary air pollution emissions. For example, there are still no plans to require these plants to be retrofitted with sulfur dioxide scrubbers. This pollution source should be considered a serious problem that is threatening the continued existence of the border environment and beyond. EPA should never allow the export of U.S. resources that will harm the United States, Mexico, or Canada. The Sierra Club believes that EPA's granting of an NPDES permit would contribute to the already existing air pollution problem known as Carbon I and II. An NPDES permit should not be issued until this severe air pollution problem is completely resolved.

16-25 Completely resolve scrubber issue before permit issuance. EPA's preferred alternative to issue the NPDES permit is based in part on the fact that the impacts from Carbon I/II will occur regardless of coal source, permit denial will not solve the problem, and EPA does not have authority to prohibit export of U.S. resources which cause the country environmental harm (e.g., coal from already approved U.S. mines in New Mexico or Wyoming). EPA believes that the U.S. policy should be to take actions which will generate the investment capital needed to directly solve the Carbon I/II problem.

Water Pollution

Surface Water

The impacts of wastewater discharges of mining waste into Elm Creek are not adequately addressed. DRRC claims that the water quality of the wastewater will be the same as the water quality currently found in Elm Creek, is so far as "organics"

16-26 Discharge water quality can't be as good as baseline. The comment appears to be to an uncited DRRC document, not to the DEIS. Discharges from the mine may be of lower quality than native water, but based on the agency's experience and analysis, effects will be within acceptable limits if EPA's NPDES permit standards are met.

are concerned. This is a ludicrous assumption, in that Elm Creek waters have come into contact with neither sub-bituminous coal nor with the organic trash with which the coal is inter-leafed.

More studies are needed to determine the wastewater discharge impacts to aquatic and wildlife species that depend on Elm Creek and the Rio Grande (the drinking water source for Eagle Pass). Currently the only data on fish species comes from a one time summer sample of Elm Creek by Gomez and Lindsey. This is not adequate. Additional samples, including winter samples should be taken. The ongoing joint TPWD\TRRC research project has found the endangered Rio Grande darter in the segment of the Rio Grande below Eagle Pass. The endangered fish species was not known to inhabit this segment of the Rio Grande. It is no surprise that DRRC's one time Elm Creek sample did not find this fish. The impacts of the strip mine's discharges on the endangered Rio Grande darter have not been assessed. Both DRRC and the EPA have failed to determine what the pollutants in the waste water discharges will be and what impact these pollutants will have on the aquatic community of Elm Creek.

Flooding

The DEIS should assess the impacts of flooding on the proposed mining operation. Historically the Elm Creek drainage has carried flood waters to the Rio Grande. A flood event would flush all toxics contained in the sedimentation ponds into the Rio Grande via the Elm Creek drainage. It is not appropriate for the EPA to adopt the DRRC position to ignore this very real flooding threat. Impacts related to flooding of the permit area and downstream property owners are not adequately addressed in the DEIS.

Impacts to Groundwater Resources

DRRC continues to claim that the Elm Creek drainage does not have an alluvial valley floor. The Sierra Club agrees with the TRC hearings examiner's request that a revised Cumulative Hydrological Impact Assessment should be conducted and additional well monitors should be placed north of the proposed mine site.

TRC hearings revealed that the DRRC hydrologist decided against more thorough studies of the groundwater resource because TRC had decided that 13 years ago that another, smaller proposed mine would not affect an alluvial valley floor. It simply makes no sense to so lightly dismiss an alluvial valley floor beneath Elm Creek, given the presence of alluvial gravels and frequent heavy flooding of the Creek. The Sierra Club believes that there is an alluvial valley floor and the data used to make the negative determination is incomplete.

16-27 Additional fish information needed. The terms of the NPDES permit reflect EPA's determination as to what pollutants are likely to be present in the wastewater discharges; in turn, this reflects the agency's extensive experience with NPDES permits for coal mines, and specific studies of mine effluents. Stream standards have been set by the State of Texas to protect aquatic resources; these standards will not be violated by DRRC discharges if EPA's NPDES permit standards are met.

16-28 Assess flood impacts. Based on extensive experience at comparable coal mines, EPA does not expect toxic substances to accumulate in the sedimentation ponds to a significant degree and, based on analyses performed for other projects, believes that any flood discharges would be highly diluted. EPA relies on its experience and on the enforcement of its NPDES permits in addressing these and other water-quality concerns, and would need to receive specific, substantive information indicating a reasonable possibility of an otherwise unexpected problem at this site, in order to agree that additional evaluation is required.

16-29 Alluvial valley floor. Comment noted. The alluvial valley floor determination is part of the RCT process, and does not affect EPA's evaluation of the NPDES permit application.

16-30 The DEIS again accepts DRRC's position that groundwater will not be adversely impacted. New information indicates that subsurface fractures may exist. (TNRCC TR. p. 90-92) If this is the case, wells north of the mine could be drained by the mine pits. This warning has unfortunately gone unheeded. It appears that groundwater resources will be affected. The DEIS should investigate the impacts of the mine on the groundwater in the area. Currently there are no restoration plans that address groundwater resources because DRRC claims that there is no groundwater beneath the proposed mine. The EIS should more thoroughly evaluate impacts on the groundwater resources in and near the proposed strip mine.

Groundwater Contamination

16-31 No investigation has been done to determine the mine's impacts related to contamination of groundwater resources because of the "no groundwater" determination. No attempt has been made to determine whether groundwater could be contaminated by transport of toxics by stormwater runoff across the permit area and into the groundwater via the 13 (or 16) unlined sedimentation ponds. If there is seepage from Lateral 21, Elm Creek or a stock tank into the alluvium, a rain event could wash toxic mining waste into an aquifer.

In addition, DRRC has no information about possible contamination of groundwater from the Lamar Mines. Pit C is proposed to be located near the Lamar Mines. Yet DRRC still does not know the locations of the mine tunnels. If the mining operation hit a shaft filled with toxic water, would this contaminate the area groundwater? The DEIS should analyze impacts to groundwater due to contamination.

Prime Farmland Impacts

16-32 DRRC bears the burden of proof on the question of whether prime farmland is or is not present within the permit boundary. Despite the presence of Lateral 21 and Elm Creek as sources of water for irrigation, DRRC nonetheless seeks a negative determination on the prime farmland question. DRRC says that the land has not historically been used as cropland, the land is salted out, thus it is not prime farm land. Residents in the area have testified that crops have historically been grown in the area. The DEIS should not adopt DRRC's negative prime farmland determination and should investigate this issue further.

Impacts to Cultural Resources

16-33 DRRC continues to claim that no archeological resources will be impacted by the proposed strip-mine. However, it has still failed to complete the surveys requested by the Texas Historical Commission/Department of Antiquities Protection (THC/DAP). The DEIS (5-42) statement "...and therefore, may

16-30 New information on fractures indicates effect on wells. EPA has performed an independent analysis of ground water conditions (Lee Wilson, Certified Hydrogeologist, AIH #220) and has not identified likely impacts from the mine beyond those described in the DEIS. More importantly, EPA relies on RCT requirements to provide for monitoring and mitigation of ground water impacts, see Appendix E.

16-31 More investigation of ground water contamination. Refer to discussion in Part II.C.5. EPA relies on its experience and on the enforcement of its NPDES permits in addressing these and other water-quality concerns, and would need to receive specific, substantive information indicating a reasonable possibility of an otherwise unexpected problem at this site, in order to agree that additional evaluation is required.

16-32 DRRC has not met prime farmland burden of proof. The existence and impacts to prime farmland, as obtained from the Maverick County District Conservationist, are described on pages 5-6 and 5-8 of the DEIS.

16-33 Cultural clearances needed to proceed; failed to complete surveys. The current status of cultural resources coordination is described in Part II.D. Cultural resources have been investigated by the Center for Archaeological Research of the University of Texas at San Antonio. Two additional studies have been completed since the DEIS, and are cited as Uecker, 1994 and Uecker and Warren, 1994. Complete citations are provided in Part III.D as additions to page 7-13 of the DEIS.

require additional testing or work" is misleading. THC/DAP is requiring DRRC to complete additional archeological surveys. In addition, DRRC has failed to submit its findings to the above agencies. The THC/DAP has still not given DRRC clearance to proceed with the project.

The DEIS ignores important historic resources that have still not been adequately investigated. There is no information or investigation regarding the historic road between Ft. Duncan and Ft. Clark. Without historical investigations these important historic resources are sure to be destroyed by the proposed strip mine and lost forever.

There is no way DRRC or TRC can adequately assess or mitigate for the impacts to archeological resources prior to completion of the archeological investigations. The DEIS should require a thorough study of the cultural resources that will be impacted by the proposed strip mine prior to issuance of the NPDES permit.

Impact to Wetland Resources

DRRC claims that the only wetlands that will be impacted by the strip-mine are those directly associated with Elm Creek. The Corps of Engineers claims that it only has jurisdiction of those wetlands directly associated with Elm Creek.

The Sierra Club believes that other important wetlands exist on the mining area that meet the federal wetland definition. Because of the Corps view (based on the unsubstantiated artificial groundwater determinations drawn by DRRC), the wetland resources on and outside the permit area have not been adequately assessed. Therefore, there is no way DRRC can assess the impacts of the strip-mine on wetlands and consequently, without that assessment, it is highly unlikely that DRRC will be able to restore the wetlands to pre-mine conditions. The DEIS should assess wetland resources on and near the proposed permit area. EPA should not issue a NPDES permit until additional wetland investigations have been completed.

Increased Traffic

The DEIS should more thoroughly assess the impacts of increase traffic, especially railroad traffic, on the surrounding environment. Noise, dust, and traffic impacts on residents and fish & wildlife should be more thoroughly addressed.

Economic Impacts

The Sierra Club is very sensitive to the high unemployment rates in Maverick County, and the Club certainly is not opposed

16-34 Other wetlands neglected. Refer to Part II.D of this FEIS for additional information on wetlands.

16-35 More on traffic impacts to environment needed. Traffic impacts are discussed in the DEIS at several points from pages 5-58 through 5-61. As indicated in Table 1-2 of the DEIS, DRRC and Eagle Pass are cooperating to time train traffic to minimize interference with road traffic in rush hours. Also see Appendix B, response to public hearing comment 24-4.

16-36 Employment numbers questionable. Refer to the discussion of Economics in Part II.C.4 of this FEIS and to Appendix B, response to public hearing comment 8-2.

to economic development. However, the DEIS should include accurate employment data. The DEIS does not adequately question DRRC's overly optimistic employment and economic benefit projections of the proposed strip mine. The DEIS assumes that DRRC's projections that it ultimately will need a total of 275 workers is true, even though other Texas mines the same size as DRRC only have about 90 employees (FUCT 1992 Lignite Mine Survey Results). Twenty-five percent of these jobs are management or technical positions and will likely be brought in from other areas, leaving only approximately 70 jobs to be filled locally, if DRRC carries through with its assurances that it will train and hire an unusually high percentage of its employees from the Eagle Pass area.

The DEIS ignores important factors when it accepts without question DRRC's benefits analyses for the Eagle Pass area. DRRC assumes that \$11.9 million will be spent on capital equipment and supplies annually, with 80% of this spent locally. Yet, according to Growth Impacts of Lignite/Coal Production (June 1983, Texas Energy Natural Resources Advisory Council), only 15% of capital equipment is purchased locally because most supplies and large equipment are bought in bulk in large cities. This means that fewer than \$2 million will be spent locally for supplies and large equipment annually. DRRC claims that it will generate \$47,000 in county sales tax and \$95,000 in city sales tax from its local purchases. If only 15% of capital equipment and supplies are actually bought locally, as is projected by Growth Impacts of Lignite/Coal Production, Maverick County will receive less than \$10,000 and Eagle Pass less than \$20,000. DRRC claims that expenditures by new mine employees could bring in another \$40,000-60,000 in sales tax revenue annually. Yet DRRC's employment figures are exaggerated, so total payroll figures are exaggerated, too. Further, employees will likely spend much of their incomes in other cities and will send money to relatives (Growth Impacts of Lignite/Coal Production). Finally, the DEIS fails to note that the U.T. San Antonio study on which DRRC bases its claims of economic benefits did not independently evaluate DRRC's employment and earnings claims, it simply took those figures as "givens" from DRRC.

Alternatives

The Sierra Club believes that this DEIS fails to meet NEPA requirements regarding the listing of alternatives to the proposed project. This includes but is not limited to a thorough evaluation of the "no action" alternative. If the environmental impacts of this proposed strip mine are determined to be too extensive, then the "no action" alternative should be pursued.

This DEIS fails to adequately assess all reasonable alternatives. These include shifting the mine to avoid important environmental features; wildlife, birds, fish, and to

16-37 Benefit analysis questionable:

Share of local expenditures. The \$11.9 million is an ongoing, annual expenditure for equipment and supplies (see DEIS pp. 5-51 and 5-54), while the report cited by the Sierra Club is discussing total large capital expenditures and supply purchases. Since the \$11.9 million figure does not include the large, initial capital expenditures for equipment the comparison is not applicable. Following the information referred to in the Sierra Club letter, the cited report states: "Local firms are more likely to provide fuels, lubricants and such reclamation supplies as fertilizer". The ongoing, annual costs consist largely of expenditures for such items as fuel, see Appendix B, response to public hearing comment 8-2.

Exaggerated employment figures. Refer to the discussion of Economics in Part II.C.4.

Employee expenditures. The discussion of employee expenditures, DEIS p. 5-54, takes into account the fact that many expenditures are not made within the local area.

Data source. The EIS does state that the information on mine jobs and earnings is based on DRRC's numbers, see DEIS p. 5-51. For clarity, however, Table 5-5 has been modified to also reflect this fact, see Part III.A.

16-38 Inadequate alternatives. See the discussion of Scope of EIS in Part II.C.1 and the discussion of additional mitigation alternatives in Part III.C.

decrease traffic, dust, etc. The railroad track could also be re-located which might allow mining of the railroad right-of-way. We strongly disagree with the wholly unexplained DRRC position that there are no other economically feasible alternatives to the current plan. In fact, due to a huge void of the necessary baseline biological data, it can not adequately analyze the environmental impacts of this proposed mine. There are many other alternatives that must be thoroughly analyzed in this DEIS. EPA is doing a disservice to U.S. citizens by adopting DRRC's position that there is only one alternative. No NPDES permit should be issued until all of the alternatives are adequately addressed.

The DRRC Plan?

What is the DRRC plan? The application before the TRC has been supplemented seven times and amended three times. Attached is an example of the latest and maybe the most significant DRRC aboutface. DRRC has represented to EPA that its plan calls for mining four areas and constructing 16 sedimentation ponds. At the TNRCC, DRRC presented a plan for three mining areas and 13 sedimentation ponds, which plan includes rerouting of effluent discharge points. However DRRC failed to notify EPA and TRC and of course the other parties in the contesting hearings. Because of this, the Sierra Club believes improper public notice was given regarding this NEPA EIS process. This DEIS and NPDES permit application is not based on this new DRRC amended plan. Thus, the Lone Star Chapter requests that the EPA require renotice of this NPDES permit application so that the public will have the information necessary to evaluate this DEIS. It is our opinion that, unbeknownst to EPA, proper public notice has not been given and thus, NEPA process has been short circuited.

16-39 Mine plan changes. See the response to comment 14-3, above. There has been no change in the description of the mine plan presented in the public notice.

Conclusion

The DEIS should require a complete scientific analysis of the biological and cultural resources in the area to be affected by the proposed strip mine. There is no historic biological baseline for Maverick County and DRRC's assessment of fish and wildlife and its habitat has added little if any sound biological data about resources in Maverick County.

Just as the Corps is doing, awaiting the FWS Section 7 Consultation prior to issuance of a 404 permit, the EPA should not issue a NPDES permit until all the investigations have been completed and all pertinent information has been submitted. Roy Frye testified during the TRC administrative hearings that the Texas Parks & Wildlife recommends "That no permit be issued until a mitigation plan for endangered felines is submitted to the TRC and approved by the technical staff of the TRC in consultation with both the U.S. Fish and Wildlife Service and the Texas Parks and Wildlife Department" and that "the

entire Elm Creek drainage corridor be avoided in determining where the mining operation would be located."

As new information about the proposed strip mine surfaces, the Sierra Club continues to believe that the direct and indirect environmental impacts of this proposed strip mine are extreme and this DEIS fails to adequately assess those impacts. Without an adequate biological baseline and a thorough assessment of alternatives this DEIS is deficient and the NPDES permit should be denied.

1 A Yes, DRRC will comply with the terms of the permit.

2 MR. ROCHELLE: Pass the witness.

3 MS. CRAVEN: Okay.

4 CROSS-EXAMINATION

5 QUESTIONS BY MR. FREDERICK:

6 Q Ms. Kost, I think I'm up next. I'm David Frederick
7 still. In the event DRRC decides that it will mine
8 in Area D in the first five years, it would be your
9 intent to come back to the TNRCC for a permit
10 amendment. Is that correct?

11 A Prior to mining in Area D, DRRC would seek the
12 necessary approvals, but DRRC does not intend to
13 mine Area D during the first five years at this
14 time.

15 Q Did DRRC not represent to EPA for purposes of the
16 NPDES permits that you did plan to mine in Area D?

17 A EPA requested additional information from DRRC on
18 stormwater information to include that in their
19 NPDES permit and also advised DRRC that adding three
20 additional discharges would not change that
21 application. It would not be noticed.

22 Q I understand, but did DRRC not represent to EPA that
23 it would mine in Area D in the first five years?

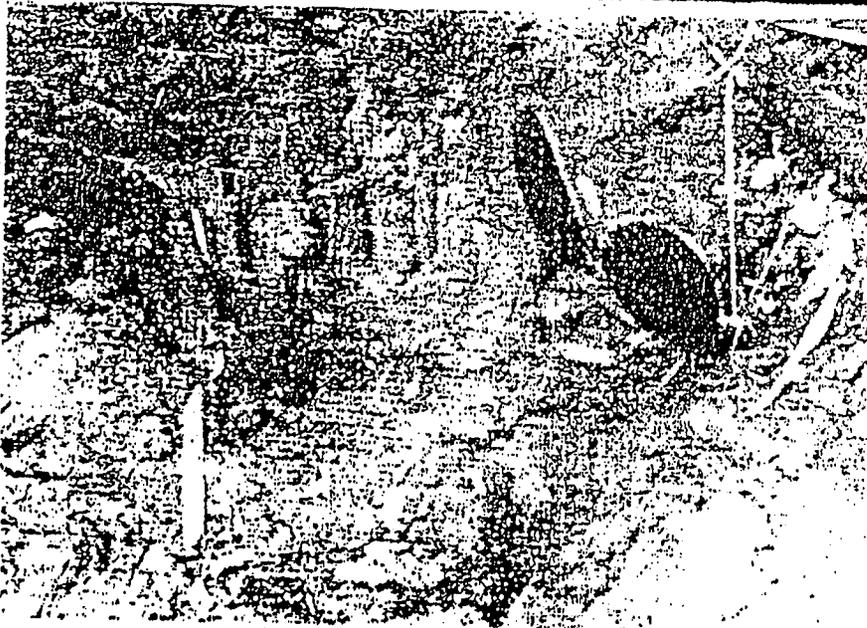
24 A DRRC recently submitted information to EPA,
25 including the stormwater information and the three

Eagle Pass News-Guide

News-Guide

This newspaper is 100 percent local owned and controlled by people dedicated to the youth and progress of this area.

THURSDAY, APRIL 14, 1994 25 CENTS PER COPY



Frontier living can get a bit hectic but there is one young black bear finding the living is easy along the banks of the Rio Grande. Border Patrol agents spotted these tracks at midweek just below the infamous Cevlon-Second Street elbow down on the river bank. Texas Parks & Wildlife Department's Rick Taylor of Uvalde not only confirmed their authenticity, but found still more tracks Tuesday and what is believed to be bear droppings as well.

—NEWS GUIDE photo by Al Kinsall

Not a car dealer's advertising gimmick . . .



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Ecological Services
670 CC2L, Campus Box 345
6300 Ocean Drive
Campus Christi, Texas 78112

March 11, 1994

Ms. Leslie Craven
Hearings Examiner
Texas Natural Resource Conservation Commission
P.O. Box 13087
Austin, Texas 78711-3087

Dear Ms. Craven:

The Fish and Wildlife Service (Service) recently received a copy of a letter dated March 9, 1994, and addressed to you by Martin G. Rechelle, attorney on behalf of Dos Republicas Resources Co., Inc. (DRRC). The letter purported in several instances to reflect positions taken by the Service with regard to a proposal by DRRC to conduct surface coal mining and related activities known as the Eagle Pass Mine Project (Project) at a site on and near Elm Creek in Maverick County, Texas. The Service wishes to express its positions in the matter directly, and would be pleased to be considered the best source of information on the subject should questions arise in the future.

The Service is aware that the project site contains habitat highly valuable for occupancy by endangered felids. The recovery plan for these species requires the conservation, management, and expansion of such habitat, which has become so rare that downlisting the status of the ocelot from endangered to threatened is considered unlikely unless its current acreage is doubled. The configuration of the cat habitat at the project site is linear, that is, it follows the course of Elm Creek, which may indicate this habitat not only could support these endangered species *in situ*, but could also provide a travel corridor connecting other semi-isolated patches of similar habitat. There have been reports of not just one, but of repeated sightings, of jaguarundi and ocelots at and around the project site. Although not confirmed sightings (in this context, "confirmed" means incontrovertible physical evidence such as a photograph, body part, etc.), some of these sightings have been made by qualified biologists. Taken together with the presence of habitat necessary for the recovery of both species, these sightings are credible enough to assume the project may affect and interfere with the recovery of these cats. For these reasons the Service has requested that the Environmental Protection Agency (EPA), the Federal agency with the lead responsibility for authorizing one of the more significant project activities, enter into formal consultation with it in accordance with Section 7 (a)(2) of the Endangered Species Act (ESA).

Because the Service has reasoned that the cat sightings and the presence of potential endangered cat habitat at the project site are indications that the project may through the destruction of that habitat affect the cats, absolute proof of the current presence or absence of the cats themselves is not necessary, the low threshold for determining a "may affect" situation having already been crossed. Perhaps this position of the Service is what DRRC's letter of March 9, 1994 misconstrues as a belief that "because DRRC could never prove to the [Service's] satisfaction that no ocelot or jaguarundi were using such habitat, the proposed project may affect the species." The Service has, in fact, accepted the testimony of independent experts as to what degree of trapping or site surveying would be sufficient to rule out the presence at a particular project

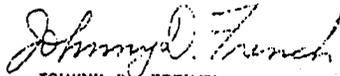
site of a listed species, including the ocelot. The Service notes that the DRRC does not report whether the trapping program referred to in the March 9, 1994 letter satisfied the cat expert(s) in charge that the project's habitat was not likely to be occupied by either species. In all fairness, so few jaguarundis have been live-trapped that the Service knows of no specific protocols for conducting a jaguarundi trapping program in Texas and is unaware of anyone with the data on which to base an estimate of a reasonable lower limit for an effort to confirm or deny its presence. Nonetheless, if the DRRC chose to discontinue the trapping program, an action the Service deeply regrets and certainly did not advocate, it was not because the Service would never accept the program's results. Indeed, not only do DRRC and EPA have an obligation to provide the best scientific and commercial data available for the purposes of the formal consultation, the Service has an equal obligation to consider the data, regardless of its content, when it writes its biological opinion.

Another difference between the facts as the Service knows them and the impression left by the March 9, 1994 letter is that regarding the status of consultation between the EPA and the Service. EPA has not agreed to enter into formal consultation with the Service, although the Service officially requested such initiation in a letter dated January 14, 1994. According to EPA's February 25, 1994 letter of reply, EPA does not intend to decide whether to consult formally until after it completes its Environmental Impact Statement (EIS), which will in turn include a biological assessment, a key element in the consultation process. Consequently, while the Service's position is that, based on the existing information, formal consultation is inevitable, it may only consult informally at this time with DRRC and EPA.

DRRC has as a part of this informal consultation presented a preliminary concept for developing the coal mine while attempting to reduce the project's impact on the cats and their habitat. The Service encourages such attempts, but has no way of knowing at this time whether the alternatives being discussed are feasible, much less whether the cats and their habitat would be adequately protected by them. In particular, the Service knows of no reason why, based upon the discussions so far, that DRRC has been given to believe that construction or even contracts for construction should go forward at this time on any portion of the project site. In fact, since the project is a major construction activity, Service regulations at 50 CFR § 402.12 (b)(2) state unequivocally that "The biological assessment shall be completed before any contract for construction is entered into and before construction is begun." The chief objective of this regulation is to prevent the diminution of the range of alternatives which are available before it has been determined whether such alternatives must be carried out to prevent jeopardy or the adverse modification of a critical habitat. Carrying out this regulation also prevents a permit applicant from prejudicing the decisions of the authorizing agencies by irretrievably committing resources prior to those decisions. Furthermore, there are parallel regulations limiting pre-decisional development during formal consultation (50 CFR § 402.09) and the EIS process (40 CFR §§ 1502.2 (f) and 1506.1). Consequently, the Service wishes to go on record as opposing the construction of the proposed sediment control ponds, their outfalls, their discharge routes, or any other project feature until both the EIS and formal consultation processes are complete.

This completes the Service's statement of its positions as they pertain to the proposed coal mine project. If you have questions, please contact Rogelio Perez, Karen Moyer or me at (512) 994-9005.

Sincerely,



JOHNNY D. FRENCH
Acting Field Supervisor

LLOYD, GOSSELINK, FOWLER, BLEVINS & MATHEWS, P. C.

ATTORNEYS AT LAW

111 CONGRESS AVENUE
SUITE 1100
AUSTIN, TEXAS 78701
TELEPHONE (512) 342-3900
TELEFACSIMILE (512) 342-3943

WILLIAM'S Direct Line: 322 9870

March 15, 1994

111 CONGRESS AVENUE
SUITE 1100
AUSTIN, TEXAS 78701
TELEPHONE (512) 342-3900
TELEFACSIMILE (512) 342-3943
LLOYD, GOSSELINK, FOWLER, BLEVINS & MATHEWS, P. C.
ATTORNEYS AT LAW

ROBERT L. LLOYD
LLOYD, GOSSELINK, FOWLER, BLEVINS & MATHEWS, P. C.
ATTORNEYS AT LAW
111 CONGRESS AVENUE
SUITE 1100
AUSTIN, TEXAS 78701
TELEPHONE (512) 342-3900
TELEFACSIMILE (512) 342-3943

VIA FEDERAL EXPRESS

Ms. Jane Saginaw
Environmental Protection Agency, Region 6
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202

Re: Application of Dos Republicas Resources Co., Inc. for NPDES Permit (120502:1.2)

Dear Ms. Saginaw:

First, let me thank you for the opportunity to meet with you and your staff concerning the proposed coal mining project of my client, Dos Republicas Resources Company, Inc. (DRRC). We understand how busy you are and your willingness to give us some of your time is appreciated.

I am in receipt today of a letter to you from Johnny D. French, Acting Field Supervisor of the United States Fish and Wildlife Service (USFWS) office in Corpus Christi, dated March 11, 1994. I must admit I am disappointed in both the content and the tone of this letter, and am quite surprised that Mr. French is so misinformed concerning the intentions of the DRRC in securing necessary permits, licenses and approvals for the proposed Eagle Pass mine project.

The central theme of Mr. French's letter is the suggestion that DRRC is intending to proceed with constructing the mine without first obtaining all required authorization and permits. Please be assured that DRRC has absolutely no intention of violating federal law by initiating construction at the proposed Eagle Pass mine without first obtaining each and every required permit and authorization. DRRC knows that before it can construct necessary infrastructure at the proposed mine, it must first obtain a storm water discharge permit for construction activities, issued by EPA. Before it can secure that permit, issues related to threatened or endangered species must be resolved in a manner that will not jeopardize such species. That is why DRRC made written request, in early December, 1993, that EPA consult with USFWS under the provisions of § 7 of the Endangered Species Act (ESA). That is why DRRC has gone to Corpus Christi and Eagle Pass to meet with USFWS staff on four (4) separate occasions in the last ten (10) weeks to actively pursue a resolution of the ESA issues. That is why DRRC has tried to provide EPA's Environmental Impact Statement consultant with as much information as possible, so that a comprehensive and thorough EIS will be produced in a timely manner.

Ms. Jane Saginaw, Regional Administrator
March 15, 1994
Page 2

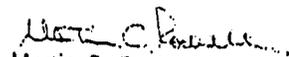
As evidence of DRRC's alleged intent, Mr. French misconstrues a pleading that I filed on behalf of DRRC in January, 1994. The purpose of that portion of the pleading referenced by Mr. French in his letter was to suggest to the Texas Natural Resource Conservation Commission (TNRCC) hearings examiner that consolidation of two different environmental quality applications pending at the TNRCC (a process water discharge permit application and an air quality construction permit application) was not necessary, and would in fact harm DRRC by delaying the overall approval of the project. The water quality application was at the time of that pleading ready for an evidentiary review of its merits. The air quality application was not then and is not now ready for such a review. DRRC was concerned that consolidation of these matters would unduly delay the permitting process at the TNRCC, and for no good reason. The quoted language concerns the differences between the permitting of NPDES process waste streams and TNRCC process waste streams. Nowhere in this pleading does DRRC state that an EPA storm water discharge permit for constructing activities is not needed, or that DRRC would initiate construction at the site without such a permit in hand. The quoted language represented one of several examples DRRC offered in the pleading to support its position, generally, that unnecessary delays attended consolidation, and that DRRC was harmed by such delays.

In addition, USFWS has misquoted DRRC in its letter to you. DRRC's pleading states in the fourth sentence of paragraph 3.1 that "... an NPDES applicant ... may not discharge pollutants ... until the NPDES permit is secured." [Emphasis added.]

DRRC is committed to pursuing all necessary and appropriate permitting associated with this project, in accordance with local, state and federal requirements, and it has done nothing to warrant the treatment afforded it by USFWS in Mr. French's letter of March 11, 1994. DRRC has not and will not make an irretrievable commitment of resources to this project without all necessary permits, and it will certainly not initiate construction on or near the site without such permits. DRRC stands ready to provide EPA, USFWS, and any other agency regulating the proposed activities with whatever other assurances are appropriately required.

If you or your staff have any questions concerning this matter, I hope you will contact me or DRRC's Project Manager, Ms. Lisa Kost, at (512) 322-5800, at your earliest opportunity.

Sincerely,


Martin C. Rochelle

1 additional ponds that EPA advised us would not cause
2 that permit to be renoticed.

3 Q So has DRRC represented to EPA that it will mine in
4 the first five years in Area D?

5 A Yes.

6 Q Thank you. Let me ask you a question about
7 discharge routes. I believe in the document --
8 well, has DRRC made any changes in the proposed
9 discharge routes for the flow from the 13
10 sedimentation ponds since its April - or maybe July
11 of '92 filing?

12 A DRRC has evaluated different flow routes. At this
13 time the information in this application is correct.

14 Q So the flow route for which you seek a permit for
15 the discharge from Pond No. 11 ---

16 A Yes.

17 Q --- is that pond No. 11 would discharge to a ditch
18 and then to a diversion rather than to a tributary
19 of Elm Creek. Is that correct?

20 A Pond No. 11 would discharge to the north. There's
21 an outfall flow route map that is included in the
22 permit application.

23 Q Pond 11 will discharge to the north and not to this
24 drainage indicated here?

25 A No, Pond 11 will go around Area C to the north and

1 operator who is moving dirt where he's not
2 supposed to and can take enforcement action
3 against that operator?

4 THE WITNESS: Yes, it is.

5 HEARING EXAMINER ROBERTS:
6 All right. Thanks. That's following from a
7 particular question. You don't have any other
8 witnesses, Ms. Livingston?

9 MR. FREDERICK: I have one
10 or two if I may, and I don't mind doing it at a
11 subsequent time.

12 HEARING EXAMINER ROBERTS:
13 This always happens. Go ahead.

14 QUESTIONS BY MR. FREDERICK:

15 Q. Is it not true that right this minute if Dos
16 Republicas went out and began mining-related
17 activities on that site without a permit, that
18 the Railroad Commission could go out and stop
19 it? Is that not true?

20 A. I believe it's true, that they could stop it.

21 Q. So the Railroad Commission can go conduct
22 inspections and stop what it perceives to be
23 illicit activity whether or not there is a
24 permit; isn't that right?

25 A. Well, I'm not sure of all of the ramifications

GLEND A FULLER & ASSOCIATES
400 West 15th Street, Suite 604
Austin, Texas 78701
(512) 478-7883 Fax (512) 478-3303

1 of that, but, for example, if a rancher was to
2 go out there with his bulldozer, I don't think
3 the Railroad Commission would have anything to
4 say about it.

5 HEARING EXAMINER ROBERTS:

6 Okay. Well, I can read the act and I can read
7 the statute and this is really getting into a
8 legal interpretation and analysis and you're not
9 a lawyer, are you, Mr. Blair?

10 THE WITNESS: I am not.

11 HEARING EXAMINER ROBERTS:

12 All right. Anything else, Mr. Frederick?.

13 MR. FREDERICK: One.

14 QUESTIONS BY MR. FREDERICK:

15 Q. It is true that you have been in touch -- that
16 is, that the staff and the Sierra Club have been
17 in touch, but you don't mean to convey to the
18 Examiner that the recommendation you read is the
19 one endorsed by the Sierra Club?

20 A. No. We have just been in contact --

21 Q. In contact.

22 A. -- as we have been in contact with Texas Parks &
23 Wildlife Department and the applicant.

24 MR. FREDERICK: I have no
25 further questions.

GLENDIA FULLER & ASSOCIATES
400 West 15th Street, Suite 604
Austin, Texas 78701
(512) 478-7883 Fax (512) 478-3303

1 HEARING EXAMINER ROBERTS:

2 All right. Ms. Livingston?

3 MS. LIVINGSTON: I didn't
4 get the Sierra Club clarification of the in
5 touch language and of the possible benefits to
6 be gained by staff's recommendation. We have no
7 questions.

8 HEARING EXAMINER ROBERTS:

9 So you have no questions?

10 MS. LIVINGSTON: I have no
11 questions.

12 HEARING EXAMINER ROBERTS:

13 All right. Ms. Herring?

14 MS. HERRING: I have one
15 question.

16
17 EXAMINATION

18 QUESTIONS BY MS. HERRING:

19 Q. Mr. Blair, do I understand when you say no
20 disturbance, does this mean no structure roads,
21 no infrastructure can begin until the U.S. Fish
22 & Wildlife makes their decision even though the
23 permit here is granted?

24 A. What it means is that the Railroad Commission
25 permit requires -- puts a burden on the

GLEENDA FULLER & ASSOCIATES
400 West 15th Street, Suite 604
Austin, Texas 78701
(512) 478-7883 Fax (512) 478-3303

1 operator, on the permittee to ensure that no
 2 disturbance occurs within the permit area, and
 3 that this permit provision applies as -- as long
 4 as the -- there is a need for no disturbance to
 5 occur until the applicant comes in to either
 6 revise their permit or they get an approval from
 7 the U.S. Fish & Wildlife Service for their plan.

8 MS. HERRING: Okay. Thank
 9 you.

10 HEARING EXAMINER ROBERTS:
 11 Is there re-direct?

12 MS. RAVEL: There's one
 13 question, just a brief follow-up to the question
 14 asked by Ms. Herring.

15
 16 FURTHER EXAMINATION

17 QUESTIONS BY MS. RAVEL:

18 Q. And that is, the change that occurred between
 19 the language contained in Exception 4 and the
 20 language that was just read into the record, am
 21 I correct that the main reason for the change
 22 was to place the burden on the permittee to
 23 ensure no disturbance at all and not just no
 24 mining disturbance?

25 A. That's correct. The original language in the

GLEND A FULLER & ASSOCIATES
 400 West 15th Street, Suite 604
 Austin, Texas 78701
 (512) 478-7883 Fax (512) 478-3303

1 January 10th, 1994, staff response to the
2 Examiner's proposal for decision said that there
3 should be no mining disturbance. The new
4 language that the staff is proposing is that the
5 permittee ensures there is no disturbance.

6 MS. RAVEL: That's all we
7 have by way of re-direct, Madam Examiner.

8 HEARING EXAMINER ROBERTS:
9 All right. Any questions, Mr. Rochelle?

10 MR. ROCHELLE: No, ma'am.

11 HEARING EXAMINER ROBERTS:
12 Mr. Sewell?

13 MR. SEWELL: No, ma'am.

14 HEARING EXAMINER ROBERTS:
15 Mr. Frederick?

16 MR. FREDERICK: No, ma'am.

17 HEARING EXAMINER ROBERTS:
18 Ms. Herring?

19 MS. HERRING: No.

20 HEARING EXAMINER ROBERTS: I
21 have one question about the permit -- proposed
22 permit provision that you read into the record.
23 And this comes about due to my earlier question
24 about enforcement. And this may be something
25 that may be more appropriate for a brief, or not

GLEND A FULLER & ASSOCIATES
400 West 15th Street, Suite 604
Austin, Texas 78701
(512) 478-7883 Fax (512) 478-3303

TRC

15

1 is just the best way to do business.

2 Q. And even if both phases of the study indicate
3 -- have not captured a cat, whether it is a jaguarundi or
4 an ocelot, would this coordination with U.S. Fish &
5 Wildlife Service nonetheless go forward because of the fact
6 that there is habitat in the area?

7 A. Yes.

8 Q. Dr. Tewes, in your opinion and based on your
9 knowledge and experience, would it be correct to state that
10 DRRC cannot commence disturbance of this site through
11 mining-related activities prior to resolving these issues
12 relating to threatened or endangered species with the U.S.
13 Fish & Wildlife Service?

14 A. If disturbance of the site does not occur, then
15 I don't see that being a factor to the endangered cats.

16 Q. Is it your understanding that those kind of
17 approvals from U.S. Fish & Wildlife Service are required in
18 this instance?

19 A. Yes.

20 Q. Have you had an opportunity to look at
21 applicant's Supplement 4 to its application where it
22 commits that it will not disturb this area prior to that
23 coordination and necessary approvals being received?

24 A. Yes.

25 Q. Dr. Tewes, if Dos Republicas refrains from any

1 activity within the area until threatened or endangered
2 species and habitat issues are resolved with the U.S. Fish
3 & Wildlife Service, in your opinion, would any threatened
4 or endangered species or the habitat of such species be
5 impaired or harmed by the issuance of this permit at the
6 Railroad Commission?

7 A. No, if there is no activities on or near the
8 habitats, I would not see any kind of effect on the cats.

9
10 MR. BLEVINS: Mr. Examiner, I pass the
11 witness.

12 EXAMINER KING: Parties, would you like to
13 follow the same order of cross-examination that we
14 established down in Eagle Pass?

15 MR. LOWERRE: Mr. Examiner, I guess you are
16 going to have to let me know what that is, unfortunately.

17 EXAMINER KING: The order that we
18 established was applicant, City, Sierra Club, staff,
19 intervenors not represented by counsel.

20 MR. LOWERRE: Examiner, because of Mr.
21 Calderon and Mr. Riojas handled the case down in Eagle Pass
22 and I did not -- I would hate to ask things that were
23 redundant. It might be better for me to follow the other
24 parties, the other intervenors. Just -- that way I think
25 we can reduce the amount of time needed, and I think I can

7/27/94

Fred H. Wills

Mr. Norm Thomas, Chief
Federal Activities Branch, EPA (6E-F)
1445 Ross Avenue
Dallas, TX 75202-2733

Dear Mr. Thomas:

This letter is a written version of my comments presented at the hearing in Eagle Pass, Texas on 20 July, 1994. My contention is that issuance of the NPDES permit for the proposed Eagle Pass mine will promote air pollution in the United States and Mexico. Specific arguments are as follows:

- 17-1 1) The increased coal supply will make the construction of additional generating plants possible. These are unlikely to be fitted with adequate scrubbers.
- 17-2 2) There is no evidence that other air pollution sources in Mexico are being reduced. Therefore, any further emissions will be strictly cumulative. Air pollution is already being exported to the U.S. via the generating plants, smelters, and steel mills in Mexico.
- 17-3 3) Big Bend National Park is northwest of the plants, is being affected by the current emissions, and will be further impacted when Carbon II is fully on line. The effect of sulfur dioxide precipitation on plant/animal communities in the park was not quantified by the EIS.
- 17-4 4) Air pollution impacts on the Serrania del Burro and Sierra de la Madera will probably be even greater than on BBNP. The latter mountain range is part of a proposed international biosphere reserve which includes BBNP.
- 17-5 5) This project will set a bad precedent by continuing a business as usual approach to border pollution. The mine and power plants need to be addressed in the context of the environmental side agreements to NAFTA.

Thank you for taking these comments into account in your decision to deny or issue the NPDES permit.

Sincerely,



Fred H. Wills
11322 Two Wells
San Antonio, TX 78245

- 17-1 Air quality will worsen due to increased coal supply. Refer to Part II.C.2 of this FEIS for an update of air quality issues. EPA understands that Carbon I/II could obtain coal from already permitted mines in the U.S. or from non-U.S. sources. EPA further understands that the size of the Eagle Pass Mine is such that it would meet only existing coal demands. EPA has no evidence that issuance of this particular permit would in fact be responsible for increased air pollution in the U.S.; if a direct link between the NPDES permit and U.S. air pollution were established, so that permit denial would reduce such pollution, EPA would likely deny the permit.
- 17-2 No evidence air pollution sources in Mexico are being reduced. EPA notes and agrees with these comments. See also, the air quality discussion in Part II.C.2 of this FEIS.
- 17-3 Impacts to Big Bend, plants, animals. This comment is responded to in Part II.C.2. See also, responses to comment letter 4, especially beginning at 4-51.
- 17-4 Pollution will impact Sierra de la Madera, part of proposed international biosphere reserve which includes Big Bend National Park, and Serrania del Burro. Comment noted. As discussed in Part II.C.2, EPA agrees that Carbon I/II causes severe, unacceptable air pollution impacts.
- 17-5 Project will set a bad precedent. EPA has sought, but not found a direct linkage between its decision on this permit, and air pollution from Carbon I/II. EPA also has not identified any international environmental protocol which pertains directly to its decision on the DRRC NPDES permit. EPA agrees that if the Carbon I/II problems are ultimately solved, it will be through binational negotiations between the U.S. and Mexico, and is committed to pursuing such negotiations.

July 28, 1994
Page 1

TO: Norm Thomas

Theodosia Coppock

FROM: Theodosia Coppock

SUBJECT: Comments on draft Environmental Impact Statement
Doe Republics Resources Co. Proposed Coal Mine, Eagle Pass, Texas

Section 4.1: Mining Proposal

18-1

Page 4-6: The 10" Aquila Southwest Natural Gas Pipeline is active; it is not "inactive" as the draft Environmental Impact Statement says. Please consider safety requirements, particularly regarding blasting.

18-1 Gas pipeline still active. The Aquila Southwest pipeline is active; Part III.A includes a change to reflect that fact. DRRC intends to move the pipeline rather than mine around it, and has already contacted Aquila Southwest to begin coordination (Kost, 1994a).

Section 5.2: Water Resources

18-2

Page 5-11: Groundwater - The subject of reopened hearings before the Texas Railroad Commission. Proposal for decision, exceptions, and replies to exceptions already forwarded to EPA. DRRC's original sworn application to the Texas Railroad Commission states that, "There is no known naturally occurring subsurface water within the proposed mine area," and, "There are no known . . . water wells within the proposed permit area or adjacent area." In fact, there are groundwater seeps and water wells on DRRC property, and at least one well within the proposed permit area. DRRC did not disclose the presence of these wells in its application or test them to determine what effect mining would have on groundwater in the area. (EPA's draft EIS, on page 2 of Table 5-1, refers to spring-fed pools at "Area Y", located near a water well within the permit boundary.)

18-2 Re-opened RCT hearings provided new ground water information. The DEIS assumed the existence of wells within the mine site. See also response to comment 16-30 above, and the general discussion of new information submitted to the RCT, which is provided in Section II.C.1 of the FEIS. Other responses to this letter discuss specific information submitted with the letter.

In response to interrogatories for the reopened Railroad Commission hearings, DRRC acknowledged that drill hole data for holes with numbers beginning with "79" and "81" does not reveal either presence or absence of water in those holes; DRRC has no information regarding groundwater in those holes with those numbers which lie North of Elm Creek and South of wells on adjoining property. Considerable information was presented at the reopened hearing which was not previously known regarding groundwater in the area, although DRRC still elected not to test its own wells for the reopened hearing.

Section 5.2.2 & 5.2.3: Impacts to surface water and ground water quantity and quality

Pages 5-12 through 5-18: I have not found a discussion of the extremely bad quality water found in Monitor Well 4. Information provided to the Railroad Commission shows the following:

18-3 Bad ground water quality at MW-4. See the response to comment 18-17 below, for a discussion of the potential effects of the poor-quality water in the vicinity of MW-4 on surface water. EPA is aware of no specific information to indicate that there is a very deep source for the poorer-quality water, or that faulting in the area provides a route for its upward migration at an unusually rapid rate, or that blasting would cause an increase in the hypothesized flow along the faulting. The available evidence, while not conclusive, is consistent with the local ground water being located in a poor aquifer in which there is limited flow. Monitoring requirements imposed on DRRC by RCT are intended to detect adverse impacts; DRRC will be required to take corrective actions, if necessary, such as replacement of water resources damaged by the mining.

Cl	SO4	TDS
12,000	2,300	25,000

18-3

Although DRRC did not disclose the ground elevation of MW-4, an estimate taken from a topographic map is 768'. The bad water level is 18' below the surface, or at 750'. Stratigraphic columns indicate that the coal in the Northeastern portion of the permit area where Elm Creek would be mined through ranges from 730' to 745'; deeper than the bad water in MW-4.

Might the mining through of Elm Creek cause the release of bad water although the mining would take place South of MW-4? Did DRRC include such very bad water in its determination of the quality of discharge from its site? What volumes of water would be expected? What impact would this have on Elm Creek and the Rio Grande? Might the bad quality water be from a very deep source and brought near the surface by faulting in the area? What impact would blasting have in that case? What about contamination of high quality shallow ground water by release of the deeper bad water?

Section 5.2.4: Impact related to water use

Page 5-18 & 19: DRRC's proposed purchase of Rio Grande water rights to provide water needed for dust control does not take into consideration curtailments of water use through rationing and decreased allotments due to water shortages. The mere possession of water rights does not mean that the holder gets to use them. This unreliability of water from the Rio Grande also affects the potential use of Rio Grande water for irrigation of plants used to restore the site after mining; it may not be available when needed even if use for that purpose were permitted. Additionally, Railroad Commission regulations require DRRC to replace the water supply of an owner of interest in real property who obtains all or part of his or her supply of water for domestic, agricultural, or other legitimate use from an underground or surface source, where the water supply has been affected by contamination, diminution or interruption resulting from the surface mining activities. The unreliability of Rio Grande water also makes it an inappropriate source as an alternative for well water lost due to mine dewatering and thereby affecting domestic and livestock use. Such alternative water would have to be delivered outside the boundary of the water district to which water rights apply. Further, EPA's EIS states that water rights now associated with mining area lands are not transferable for mining use. To date, DRRC has not satisfied requirements relating to alternative water for those affected by mining, for its own dust suppression needs, or the reestablishment of cover after mining.

18-4 Water rights really available? Refer to the response to comments 15-7 and 15-11 above. If needed, replacement supplies will be available to area residents from the City water line to be extended to the mine site.

Section 5.4.4: Biological assessment of impacts to endangered and threatened species

Page 5-35: The first paragraph mentions the potential for long-term loss of riparian habitat due to DRRC's need to blend coal beneath the creek with other coal because of the under-creek coal's high quality. It is my understanding that coal will have to be brought in from another source to blend with the coal DRRC plans to mine in order to bring the Eagle Pass mine site coal up to a quality which can be used in the Carbon I & II plants; that there is no coal at the proposed mine site of sufficient quality to accomplish that purpose.

18-5 No high quality coal at mine site. DRRC tells EPA that coal at the mine is of adequate quality, if coal beneath Elm Creek is available.

Section 5.6.2 Impacts

Page 5-45: Blasting. Please refer to the comment on Section 4.1 regarding the active gas pipeline and the comment on Section 5.2.2 & 5.2.3, regarding the impact of blasting on possible faulting in the northern part of the proposed mine site and the very bad water in Monitor Well 4.

18-6 Impacts of blasting. As noted in response 18-1 above, the pipeline will be moved. No specific evidence for a fault zone in the area of MW-4 or for a deeper source of poorer quality water has been identified; without such evidence, the impact predicted is hypothetical. Section II.C.5 describes the provisions of SMCRA designed to protect property outside the permit area from blasting impacts.

Section 5.7.2: Economic & employment impacts of the Eagle Pass Mine

Page 5-54: Tax, land value and royalty impacts. A copy of the two page list of landowners within the permit boundary is enclosed; persons and entities which would be receiving a royalty. Although acreages owned are not shown, by far the majority of the acreage is owned by Consolidation Coal Company and members of the Kincaid family; royalties to those owners will not be paid to persons or entities in Maverick County as shown by the addresses on the list. Source of list: DRRC's Railroad Commission application.

18-7 Many royalties go out of County. Refer to Appendix B, response to public hearing comment 8-2.

Section 5.7.3: Population Impacts

Pages 5-55 through 5-57: The EIS refers to the percentage of jobs which can be filled from the local labor force. Mexican labor is certainly local with Piedras Negras being only across the Rio Grande. These might well be the workers the EIS refers to as "workers residing outside the County within commuting distance of the mine." Persons with the skills required for mining do reside in Mexico. It would be understandable for a company such as DRRC which is of majority

Mexican ownership to hire "its own" from Mexico to work the Eagle Pass Mine; permissible under U. S. law to satisfy its requirements for workers experienced in mining. To the best of my knowledge, DRRC has never committed not to hire workers for the mine from Mexico, nor has it committed to hire only U. S. citizens residing in the United States. It has only referred to "local" workers which easily would include the Piedras Negras area. As stated in the EIS, DRRC has no specific plans for job training programs at this time.

In order for EPA's assessment of the impacts of various numbers of local/non-local employment and immigrant population to be complete and study all the alternatives, I believe it would be appropriate for EPA to do an analysis of impacts resulting from a situation in which the great majority of mine jobs are filled by Mexican nationals, residing in Mexico. It would be very easy to bring them across the Rio Grande in shuttle buses at shift change.

18-8

18-8 DRRC is Mexican-owned and may hire non-U.S. persons. DRRC's stated intent is to hire as many people from Maverick County and south Texas as possible (Kost, 1994a). While this would not preclude the hiring of Mexican nationals, it is not anticipated that there would be any large scale hiring of workers from Mexico and an analysis of this option is not needed. Also refer to Appendix B, response to public hearing comment 8-2.

General comments:

18-9

1. EPA's EIS discusses the situation with Carbon I & II. Carbon III & IV are now in the planning stage; should they be considered?

18-9 Consider Carbon III and IV. As noted in response 4-44 above, EPA is not aware of any plans for Carbon III or IV. EPA has already determined that the existing Carbon I/II has unacceptable adverse air quality impacts in the US.

18-10

2. It has been reported to me that the Eagle Pass office of the Texas Employment Commission has commented that jobs created by the proposed mine would have no impact on the high unemployment rate in Maverick County because of the very high percentage of migrant workers in the County.

18-10 No effect on unemployment rate. Comment noted. Please refer to the comment letter from the Texas Employment Commission, Eagle Pass Office and Appendix B, response to public hearing comment 8-2.

18-11

3. Figure 1-1 Proposed Monitoring shows a "spoils well" at about the center of the map, but I have not found a discussion of what it is. What will it be used for, how deep will it be, how will it be completed and used, etc???

18-11 What is the spoils wells on Figure 1-1? The spoils well is discussed on page 5-17 of the DEIS.

18-12

4. A number of persons have commented to me that support for the mine project has declined over time. Many persons who had previously signed letters in support of the mine now regret having done so.

18-12 Mine support dwindling. Comment noted.

18-13

5. It has been reported to me by persons concerned with the endangered species situation at the mine site that DRRC did not report its wildlife consulting firm employee's sighting of a jaguarundi at the site to the Railroad Commission then considering its application. The consulting firm apparently made the required notification to Texas Parks & Wildlife which, in turn, notified the Railroad Commission. This, combined with DRRC's failure to disclose the presence of water wells on its own property and failure to test those wells to determine the impact of mining on groundwater, has caused many to become concerned about the results of the "self-monitoring" and "self-testing" associated with EPA's NPDES permit. Since the presence of water wells and jaguarundi have not been reported, the quality of the self-monitoring and self-testing has become a question for many.

18-13 Reliability of NPDES self-monitoring. Most water quality monitoring today is automated, with testing being done by independent laboratories.

18-14

6. Enclosed is a copy of an article from the Eagle Pass-News Guide which mentions the fact that the business community in Eagle Pass is divided on the issue of the proposed mine.

18-14 News article re: businesses divided on issue of proposed mine. Article and comment noted.

ATTACHMENT 778.116(e)
 LANDOWNERS WITHIN THE PERMIT BOUNDARY

PROPERTY MAP TRACT NO.	NAME	ADDRESS	MAVERICK COUNT WATER DISTRICT ACCOUNT NO.
CONSOLOIDATION COAL COMPANY LEASE:			
1	Reserve Coal Properties Company - John Schlueter	1800 Washington Road Pittsburgh, Pennsylvania 15241	C120001100 C120001300 C120001800 C120001900 C120002000 C120002100 C120002200 C120002300
		(Water rights assigned to MARCCC Resource Development Co., Inc.)	
KINCAID LEASE:			
2	Dr. Dan Kincaid	535 Greer Pittsburg, Texas 7586	----
2	Keneth W. Kincaid	3030 McKinney #605 Dallas, Texas 75204	----
2	Hollis Kincaid	3619 Pinebluff San Antonio, Texas 78230	----
2	James G. Kincaid	P.O. Box 25 Sabinal, Texas 78881	----
2	John M. Kincaid	P.O. Box 25 Sabinal, Texas 78881	----
2	Lelia Kincaid Mathis	P.O. Box 569 Sabinal, Texas 78881	----
2	Joseph K. Kincaid	P.O. Box 25 Sabinal, Texas 78881	----
2	Jewel K. Kincaid	P.O. Box 25 Sabinal, Texas 78881	----
ABASCAL LEASE:			
5	Amado Abascal, Jr. and Rumalda M. Abascal	2406 Monterrey Circle Eagle Pass, Texas 78852	C120001700 C120001701

ATTACHMENT 778.116(e) — LANDOWNERS WITHIN THE PERMIT BOUNDARY

PROPERTY MAP TRACT NO.	NAME	ADDRESS	MAVERICK COUN WATER DISTRIC ACCOUNT NO.
OTHERS:			
3	MARCCC Resource Development Co., Inc. Formerly owned by: Sturgis Robinson	5797 Dietrich Road San Antonio, Texas 79220-0350	
		1837 Ferry Street Eagle Pass, Texas 78852	C120001500
4	Ernesto G. Ibarra	3187 Tina Street Eagle Pass, Texas 78852	C120001600
8	Alicia Mireles	P.O. Box 2162 Eagle Pass, Texas 78852	C120001400
11	Jose M. Gonzalez	2366 Lorilee Drive. Eagle Pass, Texas 78852	C120001200
12	E. K. Taylor	Route 2, Box 186 Eagle Pass, Texas 78853	C120001000
13	Juan Antonio Valdez	887 Bibb Street Eagle Pass, Texas 78852	C120000900
19	Mike Hernandez	P.O. Box 1007 Eagle Pass, Texas 78852	---
21	Francisco Acosta	533 Nueces Eagle Pass, Texas 78852	C120000800

Chamber'someone' said to be calling up 'IOUs'

An Eagle Pass Chamber of Commerce board director has heard strong rumblings that someone associated with the Chamber organization has asked Dos Republicas Resources Company for "favors."

The word out on the streets is that the "favors" from the coal mining company were allegedly requested after the Chamber of Commerce passed a resolution endorsing and supporting the efforts of Dos Republicas to establish a coal mine in Maverick County.

Board director Elvira Ruiz told fellow board directors that she felt she needed to advise them of what is being said.

She would not name the person(s) who allegedly requested the alleged "favors" and only said the alleged person is associated with the Chamber.

"It wouldn't be right (to say who)," she said and neither board chairman Roy Zamora nor other board members pressed on. She also didn't specify what the favor had been, but she made no bones about bringing the strong weeks-long rumblings from under and to the top of the Chamber board table.

"There might be nothing to it, but we have to be careful with those things," Mrs. Ruiz told fellow Chamber board directors.

The NEWS GUIDE's attempts of Friday to locate several officials with

RATE OF EXCHANGE of the peso was being quoted Friday at 3300 or 3.3 new pesos to one by the Frontier State Bank where pesos were being taken both for deposit and as payment on loans. NBC Bank was not quoting an exchange rate nor taking pesos as payment on loans. FSB was selling pesos at 3100 or 3.1 new pesos to one while NBC was not selling pesos. Cerna Money Exchange was buying pesos at 3250 or 3.25 new pesos to one and was selling pesos at 3100 or 3.1 new pesos to one as of Friday afternoon.

Dos Republicas in Eagle Pass and in San Antonio were not successful, but this will be pursued.

Mrs. Ruiz' comments at Wednesday's meeting of the Chamber board of directors were spurred by Zamora's request to the board. Zamora told the board he had received a call from a Dos Republicas Company official, requesting that the Chamber board of directors forward a letter to the Environmental Protection Agency providing business data of why the business community wants a coal mine in Maverick County.

It was apparent that Zamora also had begun to work on the request prior to the Chamber meeting. He cited unemployment data for the past five years which he told the board he had obtained from the Texas Employment Commission.

Zamora also indicated he had obtained figures on the number of welfare recipients in the County and said he would like the board to send a letter to EPA supporting the coal mine.

Board director Beto Garza didn't see any need for a letter, pointing to the resolution in support of the project which the Chamber board already had passed.

Mrs. Ruiz followed, telling board directors that something was bothering her. She said she wouldn't want Dos Republicas to feel that they owed a favor to the Chamber in exchange for passage of the resolution.

"It seems that people were asking them for favors because the Chamber had passed a resolution, and I don't think that is right. I don't know if there is anything to it (but) if we are going to do it, it's going to be for the good of the community, not because we expect them to do anything for the Chamber," Mrs. Ruiz told the board.

Mrs. Ruiz said she would not mention names "but I just want you to be aware that there is talk going on." She also expressed mixed feelings of issuing further support, noting there are Chamber members on both sides of

said, adding that "there was all kinds of stuff in there, including money."

He was unable to estimate the amount of marijuana involved but noted that this evidence pertained to approximately 15 criminal cases dating back to 1988.

"I immediately directed that each and every bit of this evidence are property be taken out of there, be inventoried, and be placed in the property-evidence room and that the work not stop until it is completed," Chief Santoya said.

"I just don't know why these things were misplaced, but I'm particularly concerned about the marijuana and pills because these are very delicate matters," he added.

Meanwhile, the question continues as to whether or not a wallet is missing now from the Police Department. Enrique Garza of 685 Trinity Street was riding his horse on Ferry Street approximately 10:00 p.m. Sunday last week. In the process, he lost his brown wallet which contained his social security card, passport, driver's license, and other personal documents.

Garza told police officers he searched the area in the 1800 block of Ferry Street and that a man had stopped him, telling him he had found a brown wallet on his property at that the wallet had been taken to the City of Eagle Pass Police Department. Garza went to the police department last Wednesday and spoke with the officer in charge of the EPP property-evidence room. Garza was told that the wallet was not at the police department.

Chief Santoya indicated he was preparing a complete report on the situations and would be submitting to interim city manager Lupe Cerdona.

In the midst of all these developments, Chief Santoya has not yet been asked about a couple of stereo evidence seized in a case—which is being used at City Hall by some employees.

According to information obtained by the NEWS GUIDE, a police officer was among these. He had been using one of these stereos, seized cases and which belong in the evidence-property room, in his office

(Con't. on page 2A)

(Con't. on page 8A)

CHAMBER ...

(Con't. from page 1A)

the issue: those who completely support and those who still have reservations evolving around environmental concerns.

Board directors' consensus was that they already have passed a resolution and that will suffice.

The use of the Eagle Pass Chamber of Commerce to further political views also was very much on Mrs.

Ruiz' mind. She was upset that a recent Chamber of Commerce breakfast had been used as the forum to talk about the upcoming election on the site of the international bridge.

A Chamber board director did the talking at that breakfast. Mrs. Ruiz noted, "I was very concerned . . . I don't think that was the place for this person to speak. I spoke to him, he's not here right now. I spoke to him privately and I told him my concerns and I thought that you also, as a board,

Discover the

TO: Norm Thomas/Darlene Coulsen

FROM: Theo Coppeck

SUBJECT: Additional Comments on Doe Republicas Resources Co. EIS

Section 5.2.4i Impact related to water use.

Pages 5-18 & 19: Doe Republicas' proposed purchase of water rights from the Rio Grande: This proposed source of water for dust suppression, alternative water for those affected by mining, and reestablishment of cover after mining is already unreliable due to curtailments, rationing and decreased allotments due to water shortages. Due to the burgeoning population along the border and the programs to bring fresh water to colonies along the river, the demand for water for domestic/municipal use will increase dramatically over the next few years. Domestic/municipal use has priority over all others. This will cause an increased demand for water for a higher priority use, thereby increasing the likelihood of curtailments for lower priority uses. EPA should consider water demands on the Rio Grande over the proposed life of the mine and subsequent reclamation time (including demands from the Mexican side of the river where an increased population is being connected to Rio Grande water.) The mine would need greater volumes of water, it is assumed, in later years for both alternative use water and reestablishment of cover water.

18-15 Consider water rights, demands on the Rio Grande. Refer to the response to comment 15-11 above. EPA's discussions with the local irrigation district and the IBWC have not identified problems of the type noted in the comment.

18-15

August 26, 1994

TO: Norm Thomas/Darlene Coulson

FROM: Theo Coppock

SUBJECT: Dos Republican Resources Co. Environmental Impact Statement

18-16 Your draft EIS devoted considerable space to the economic impact of the proposed mine, including the impact on local ad valorem tax revenues. For that reason, the following article from the August 14, 1994 issue of the Eagle Pass News-Guide is sent to you so that you will be able to determine the potentially reduced impact of the mine on taxing authority receipts.

18-16 News article re: tax abatement proposal. The article discusses a proposal by the Chamber of Commerce and the Maverick County Development Corporation to encourage new businesses to locate in Eagle Pass by offering them tax abatements. At this point this is a proposal to the various taxing districts, it would not be mandatory on the entities, and if adopted by them it is unknown what the final form of the tax abatements would be and whether they would be offered to DRRC. To date the company has not been offered any tax abatements (Kost, 1994). If the company were offered tax abatements at some point in the future, it would reduce the taxes received by the taxing jurisdictions from DRRC for a period of time. Refer to the discussion of taxes in the DEIS, pp. 5-54 to 5-55.

GILLETTEZ PRESENTS PLAN for economic growth

Chamber of Commerce president and Maverick County Development Corporation (MCDC) board member Jimmy Guillette presented three organizations' newly-developed incentives for economic growth plus to an unprecedented gathering of governmental bodies Thursday.

Officials of EPDSD, City of Eagle Pass, Maverick County, Fort Duncan Medical Center and the Maverick County Water Control and Improvement District met to hear glowing reports of pet political projects including the summer youth program, master plan for the City, and the San Juan Plaza restoration project.

Guillette unveiled guidelines and criteria on tax abatements he written for the entities, developed in hopes of luring quality investments in manufacturing and establishing an ongoing improvement for the quality of life for this community.

The proposed criteria each entity has been encouraged to use to determine if tax abatement incentives should be granted; the proposed developments/development shall create at least 25 jobs and a \$500,000 annual payroll; a capital investment of at least \$1-million is required; and the proposal does not include property that is owned or leased by a member of the taxing entities nor by a member of the Planning and Zoning Commission.

In addition, subjective criteria recommended in the taxing entities is an analysis of a proposal's consistency with the long term plans of the entity and what direct expenditures would be necessary to accommodate an industrial prospect.

Suggested abatements range from 25 percent per year for five years for an industry with \$1/2-to-\$1-million in payroll and \$1-to-\$2-million investment to 100 percent per year for ten years for an industry with an annual payroll of over \$12-million and an initial investment of over \$400-million.

Each governmental body would review a request on a case-by-case basis and is not obligated to grant tax abatements, but their participation and consideration is necessary to further the efforts of the non-profit MCDC and Chamber of Commerce.

All of the taxing entities were provided with the incentive package recommendations, and it is expected that each will take the matter of participation to a future meeting.

keeping the park established during school months when it is used as a playground.

MGR. APPLICANTS

(Con't. from page 1A)

of El Paso, David T. Carter of Balch Springs and Frederick A. Bernhardt of Canton. Only two out-of-state applicants were chosen to be called for an interview: Paul J. Callahan of San Jose, Florida and Christopher W. Calhoun of Okemuhnee, Oklahoma.

The advertisement seeking applicants had called for master's degree in public administration or related field. With the exclusion of liberal city manager John Ruiz Jr. and other Eagle Passes from the list to be interviewed, it is presumed the Council stuck to this requirement.

BRIDGE BOARD

(Con't. from page 5A)

to deal the system has taken a \$2,991,815.

In addition, bridge manager Leo Perca informed the board that a company out of the Valley intends to haul grain from the Urals area into Mexico through this international crossing. This company has indicated that as many as sixty trucks a day will be crossing here.

Unless a special meeting is called before the regular session of September, it is was for John bridge director Tito Fitch's last meeting as a member of this governing body. According to the settlement agreement recently entered into with the City of Eagle Pass, one of the three permanent future spouses will retire which could regular meeting beginning in August. Next to retire will be Val Jara, followed by Alvin Stock at the October meeting.



September 6, 1994

TO: Norm Thomas/Darlene Coulson

FROM: Theo Coppeck

SUBJECT: Dos Republicas Resources Co. Eagle Pass Proposed Mine Site
Depth and quality of water in Monitor Well 4

18-17

The following information regarding the very bad quality water and the shallow (27.6') depth of Monitor Well 4 just North of the permit boundary and in the Elm Creek drainage way is sent for your review of its potential impact on the quality of discharge and on the quality of good quality ground water when mining is undertaken immediately South of MW4 and to a deeper depth than the bad quality water in MW4.

18-17 Poor ground water quality. The RCT analysis of the probable cumulative hydrologic impacts considered the effects of the flow of poorer-quality water in the Olmos overburden into the mine spoils on a worst-case basis. It concluded that the impacts to both ground water quality and surface water quality would be insignificant (RCT, 1993a). EPA does not believe that the RCT analysis is flawed. However, the RCT requirement for a spoils monitoring well, RCT's requirement for DRRC to perform extensive monitoring on new and existing wells north of the mined area, and the monitoring of sediment pond discharges to Elm Creek required under EPA, RCT and TNRCC permits, will provide data to verify the correctness of the RCT analysis, and to ensure that poorer-quality water is not discharged to Elm Creek nor migrates to nearby wells of concern.



Westech Laboratories Inc.
 10737 Gateway West, No. 100
 El Paso, Texas 79935
 (915) 592-3391 • fax 592-3594
 The Quality People
 Since 1986

CLIENT Dos Republicas Resources Co., Inc.
 LISA KOST
 P.O. Box 200350
 5797 Dietrich Rd.
 San Antonio, TX 78219

SAMPLE NO. : 6301746
 INVOICE NO.: 62130397
 REPORT DATE: 06-03-93
 REVIEWED BY: *[Signature]*
 PAGE 1 OF 1

CLIENT SAMPLE ID : MW4
 SAMPLE TYPE: Water
 SAMPLED BY: C.E. Grindstaff
 SUBMITTED BY: C.E. Grindstaff
 SAMPLE SOURCE: Eagle Pass

AUTHORIZED BY : Lisa Kost
 CLIENT P.O. : --
 SAMPLE DATE ...: 05-26-93
 SUBMITTAL DATE : 05-28-93
 EXTRACTION DATE: --

Inorganic Non-Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Bicarbonate	400	mg/L	2.0	06-04-93
Carbonate	<2.0	mg/L	2.0	06-04-93
Chloride	13000	mg/L	1.0	06-02-93
Electrical Conductivity	37000	umhos/cm		06-01-93
Fluoride	0.80	mg/L	0.10	06-01-93
pH	7.3	S.U.	N/A	05-28-93
Sulfate	3200	mg/L	5.0	06-03-93
Settleable Solids	<0.50	mg/L	0.50	06-01-93
Total Dissolved Solids	25000	mg/L	2.0	06-02-93
Total Suspended Solids	540	mg/L	1.0	06-01-93
Acidity	66	mg/L	1.0	06-03-93

(1) Copy to client

[Signature]
 Managing Director



Westech Laboratories
 10717 Gateway West, No. 100
 El Paso, Texas 79935
 (915) 592-3591 • Fax 592-3594
 The Quality People
 Since 1988

CLIENT Dos Republicas Resources Co., Inc.
 Lisa Kost
 P.O. Box 300350
 5797 Dietrich Rd.
 San Antonio, TX 78219

SAMPLE NO. : 6301746
 INVOICE NO. : 62130397
 REPORT DATE: 06-03-93
 REVIEWED BY: *[Signature]*
 PAGE : 1 OF 1

CLIENT SAMPLE ID : MD4
 SAMPLE TYPE: Water
 SAMPLED BY: C.E. Grindstaff
 SUBMITTED BY: C.E. Grindstaff
 SAMPLE SOURCE: Eagle Pass

AUTHORIZED BY : Lisa Kost
 CLIENT P.O. : --
 SAMPLE DATE ...: 06-26-93
 SUBMITTAL DATE : 05-28-93
 EXTRACTION DATE: --

Inorganic Chemistry - Total Metals.

DATA TABLE				
PARAMETER	Result	Unit	Detection Limit	Analysis Date
Total Calcium	1600	mg/L	0.50	06-11-93
Total Iron	2.1	mg/L	0.10	06-03-93
Total Magnesium	300	mg/L	0.10	06-09-93
Total Potassium	23	mg/L	1.0	06-11-93
Total Sodium	6400	mg/L	0.05	06-09-93

(1) Copy to Client

[Signature]
 Managing Director



**Westech
Laboratories
Inc.**
The Quality People
San Luis
10337 Gateway West, No. 100
El Paso, Texas 79935
(915) 592-3591 • fax 592-3594

CLIENT **Des Republicas Resources Co., Inc.**
Lisa Kost
P.O. Box 200350
5797 Dietrich Rd.
San Antonio, TX 78219

SAMPLE NO. : 6301746
INVOICE NO.: 61130397
REPORT DATE: 06-03-93
REVIEWED BY: *[Signature]*
PAGE : 1 OF 1

CLIENT SAMPLE ID : MW4
SAMPLE TYPE Water
SAMPLED BY C.E. Grindstaff
SUBMITTED BY C.E. Grindstaff
SAMPLE SOURCE Eagle Pass

AUTHORIZED BY : Lisa Kost
CLIENT P.O. : --
SAMPLE DATE 05-26-93
SUBMITTAL DATE : 05-29-93
EXTRACTION DATE: --

Inorganic Chemistry - Dissolved Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Dissolved Iron	0.17	mg/L	0.10	06-03-93
Dissolved Manganese	0.10	mg/L	0.05	06-03-93

(1) Copy to Client

[Signature]
Managing Director

Mrs. Ladye Herring
 Rt. 2 Box 187
 Thompson Rd.
 Eagle Pass, Texas 78852

Ladye Herring

July 29, 1994

Mr. Norm Thomas
 Chief of the Federal Activities Branch, EPA
 1445 Ross Ave.
 Dallas, Texas 75202-2733

RE: DRRC Permit for Eagle Pass Mine

Dear Mr. Norm Thomas,

I would like to address a few of my family's concerns since we have 308 acres of land and have two separate homes within 300 feet of the permit area. My 77 year old mother-in-law is very active in the operation of the farm and own's the majority of the land. She lives in her home and my husband and I live nearby in our home.

19-1

1. Page 1-5 of the EPA draft, (Air Quality)- I am very concerned how this is going to affect our land since we are so close. The coal dust will blow on to our land since we are north west of the mine site our land joins the permit area with (Lateral 21 separating the two) We all know it ruins vegetation. Since we have raised all the hay for our cattle in the last several years, WHO is going to be responsible for the economic impact it will have on our income? Also, the most important concern is the effect will have on our health from breathing all of this coal dust.

19-2

2. Page 1-6(Lifestyle) I keep hearing ten families being affected. Out of these ten families all but about four are retired and another one will be in the next year. They have spent their life time planning this time of their life to have homes and land paid for to enjoy the rest of their lives. Yet now they are faced with being punished for working hard and taking pride in their accomplishments. Many of these retired people can't afford to pick up and leave as they have adjusted their lives to live on their income from Society Security and retirement benefits. With what DRRC has offered some of the landowner and homeowners it isn't even market value let alone enough where they can start over somewhere else since they most are retired or widowed. DRRC doesn't

19-1

Coal dust impacts to vegetation and health. Refer to the discussion of mining impacts in Part II.C.5; EPA's concerns are largely with soil dusts, and significant emissions of coal dust from the mine are not predicted. The particulate standards the mine must meet are protective of public health and the TNRCC staff has done a separate health-effects analysis of coal dust specifically in preparation of the draft air quality permit (Jones, 1994). Also, inhalation of coal dust is the exposure route of most concern to cattle, rather than ingestion through feed.

19-2

Lifestyle impacts. The 10 families cited on page 1-6 are those who would be most likely to experience direct adverse impacts resulting from relocation. The EIS does consider the adverse impacts that could occur to other residents of the area as well as to these families, see particularly DEIS pp. 5-59 to 5-60. People living in the immediate area of the proposed mine would be most impacted by the project in terms of dust, noise, blasting, potential relocation, etc. This population includes the 10 or so families which could be relocated, as well as an estimated 20 or so other families living within a mile or so of the site (Ruiz, 1994). Farther out, about 5-6 miles from the site there are a number of developments, housing several thousand people (Ruiz, 1994). It is anticipated that the impacts to these populations will be similar to those for the area population as a whole, and will be minor. With regard to the purchase of properties near the mine, the company states that the basis for determining the proposed purchase price is the "fair market value" of the properties (Kost, 1994a). As mentioned in the DEIS (p. 5-59), even if people receive fair market value for their homes, relocation can be a significant adverse impact.

care if they put them on welfare. It seems unfair that we treat our retired people as if they don't count anymore. Yet if our county got back to the honesty & hard work these people believe in our county wouldn't be in the mess it is in.

The ten families seem to be the magic number yet no one has counted up all the families on FM 1588(Thompson RD) in Elm Creek, Deer Run Additions. They all are within five miles of the permit area. This is a group of poor people that don't come to the meeting because they do not understand English.

3. Blasting: I am concerned about what effects it will have on the underground tunnels. If there is damage to our homes how much red tape are we going to have to go through before we get someone to fix it? Will DRRC be accountable to our claims in a timely matter!

4. Mining operation hours: In a letter to David Frederick dated June 7, 1994 from Martin Rochelle indicating that mining operations would be conducted for 24 hrs and 7 days a week. When is a person suppose to sleep? There are some people who still work shifts and will need rest.

5. Unlined sediment ponds: I am concerned that unlined sediment ponds could affect Lateral 21 where our domestic water comes from. Additionally the Elm Creek where some of our cattle drink from. What effect will these unlined sediment have on the ground water.

6. Page 5-59 The city has only one overpass already heavily congested which at present will not be adequate to handle increased rail traffic and emergency situations.

They are so many more concerns but I must stop somewhere. We pray the EPA looks into all our concerns with an open mind and not be influence with political pressure.

19-3 Blasting Claims. EPA has responded to concerns regarding blasting in Part II.C.5; see also Appendix B, response to public hearing comment 25-3.

19-4 Mine operating hours. Some aspects of the mining operation will occur 24 hours a day, 7 days a week, but not all; see the DEIS, p. 4-10. Blasting will be limited to 7 a.m. to 6 p.m., Monday through Friday, within 1 mile of Thompson Road. EPA's analysis is that EPA-recommended values for sound levels might be exceeded at a single residence within 200 feet of the life-of-mine boundary.

19-5 Effect of unlined sediment ponds on water. The response to this comment is provided at the end of Part II.C.5.

19-6 Traffic congestion. See Appendix B, response to public hearing comment 24-4.

Respectfully submitted,

Mrs. Ladye Herring

Mrs. Ladye Herring

LLOYD, GOSSELINK, FOWLER, BLEVINS & MATHEWS, P. C.
ATTORNEYS AT LAW

GEORGE C. BALDWIN
PAULA FISHER BALDWIN
GEORGE V. BASHAM III
ERICH H. BIRCH
SHELLEY N. BLEVINS
GEORGIA N. CRUMP
ROBERT D. FOWLER
C. JOE FREELAND
PAUL G. GOSSELINK
RICHARD L. HAMALA
ROBERT H. LLOYD
JIM MATHEWS
MARTIN C. ROCHELLE
ELIZABETH V. RIDD
KERRY L. RUSSELL
LAMBETH TOWNSEND

111 CONGRESS AVENUE
SUITE 1800
AUSTIN, TEXAS 78701
TELEPHONE (512) 322-5800
TELECOPIER (512) 472-0532
Writer's Direct Line: 322-5810

SAN ANTONIO OFFICE:
111 SOLEDAD STREET
SUITE 300
SAN ANTONIO, TEXAS 78205
TELEPHONE (210) 212-5888
TELECOPIER (210) 212-5888

OF COUNSEL
JACKSON B. BATTLE

MARC A. RODRIGUEZ
STEVE STAGNER
GOVERNMENT RELATIONS CONSULTANTS
(NOT LICENSED TO PRACTICE LAW)

August 1, 1994

VIA FEDERAL EXPRESS

Mr. Norm Thomas
Chief, Federal Activities Branch
EPA Region 6 (6E-F)
1445 Ross Avenue
Dallas, TX 75202-2733

Re: Comments of Dos Republicas Resources Co., Inc. to Draft
Environmental Impact Statement - Proposed Eagle Pass Coal Mine
(120502:6.2.6)

Dear Mr. Thomas:

On behalf of my client, Dos Republicas Resource Company, Inc. (DRRC), please accept these comments to the Draft Environmental Impact Statement (EIS) recently issued by United States Environmental Protection Agency (EPA) Region 6. DRRC appreciates the effort made by you, your staff and consultants in developing the Draft EIS, and the opportunity to provide these written comments.

DRRC attended the July 20, 1994 public hearing in Eagle Pass associated with this Draft EIS and the Draft National Pollutant Discharge Elimination System (NPDES) permit. DRRC provided its written comments concerning the Draft NPDES permit to EPA Region 6 by correspondence of July 15, 1994, and in accordance with the public notice associated with that draft permit.

Much has been written and said by opponents of the proposed Eagle Pass Coal Mine concerning the alleged impacts of the project. At the July 20th public hearing in Eagle Pass, there were various claims made by these opponents ranging from mere mistake or misinformation (the proposed blasting activity will result in structural damage to a school 3-4 miles away) to outright lies (one nearby landowner implied that DRRC had tried to force the landowner to move into town for 2 years while mining occurred near her property - this offer was made by DRRC only as a suggestion and was included in a wide ranging discussion of various options associated with DRRC's efforts to negotiate the acquisition of the landowner's property). In any event, DRRC trusts that EPA will consider facts when it prepares the final EIS, and not the conjecture, speculation or fiction perpetrated by the opponents of this project.

DRRC is committed to comply with each and every permit or regulatory requirement applicable to its operation of the proposed Eagle Pass Mine. Given the possible economic benefits to the Eagle Pass area resulting from this project, DRRC

Mr. Norm Thomas
August 1, 1994
Page 2 -

DRRC - Lloyd, Gosselink, Fowler, Blevins & Mathews, Martin C. Rochelle,
Attorney for Dos Republicas

believes the project provides a rare and significant economic and social opportunity for this part of the state, and that the benefits of the project substantially outweigh any possible detrimental impacts.

DRRC makes the following comments, which are organized by reference to the section and page numbers of the Draft EIS.

- 20-1
- Table 1-1. Summary of Environmental Consequences. Physical environment. During reclamation and after (p. 1-4). The first sentence of this subsection is incorrect and misleading. The sentence should be revised to reflect actual topsoil management, as follows:

Topsoil stockpiles are required to be revegetated to prevent significant erosion and for dust control. Once final grading of a mined area has occurred, the topsoil is replaced and revegetation efforts are immediately instituted to prevent erosion and to provide dust control.
- 20-2
- Table 1-1. Summary of Environmental Consequences. Surface water. During mining (p. 1-4). The second sentence and the last two sentences in this subsection are inaccurate. First, neither Lateral 21 nor its associated seepage are going to be eliminated. That portion of Lateral 21 in the permit area will be cut off and mined through, and the seepage from this portion of the lateral will therefore be eliminated. However, Lateral 21 and its associated seepage will certainly continue to provide baseflow to Elm Creek outside the mine area. There should be no significant reduction in Elm Creek baseflow below the mining area, because the current sources of baseflow to the creek, seepage and tailwater drainage from Lateral 21, will continue, albeit at the downstream end of the proposed mining area. Therefore, uses of Elm Creek by fish and wildlife downstream of the mine should not be impacted. These sentences should therefore be revised as follows:

No significant effect on fish or livestock downstream of the mine is expected as a result of reduced flows in Elm Creek within the mine area. Return flows from Lateral 21 will continue to provide Elm Creek with baseflow before the creek leaves the southern disturbance boundary of the mine area.

Not only are the current sentences inaccurate, as noted, they are inconsistent with the last sentence of the first paragraph of the subsection entitled "Water quality and use during mining" on this same page.
- 20-3
- Table 1-1. Summary of Environmental Consequences. Air quality. During mining (p. 1-5). The second sentence of this subsection is misleading and inaccurate, and should be removed. While this

20-1 Topsoil erosion. The mitigation measures noted concerning topsoil have been added to Table 1-2, Summary of Monitoring and Mitigation Commitments. However, EPA believes that some increase in erosion, however minor, is inevitable during reclamation and after, as a result of earth moving and prior to the thorough re-establishment of vegetation.

20-2 Lateral 21 and associated seepage. EPA agrees with the revised language and has adjusted Table 1-1 in Part I of this FEIS.

20-3 Fugitive dust emissions. This section has been modified to reflect DRRC and TNRCC input, see Table 1-1.

Mr. Norm Thomas
August 1, 1994
Page 3

statement does not indicate whether air dispersion modeling for fugitive emissions was performed in order to draw the conclusion presented therein, the results of DRRC's air dispersion modeling for fugitive emissions certainly contradict this conclusion. Further, Mine Safety and Health Administration regulations prohibit the type of nuisance conditions suggested in this statement. Water sprays will be utilized to control dust from coal stockpiles at the load-out facility. The coal will be sprayed throughout the loading process and the coal will be wet when loaded onto railcars. Water trucks will be utilized for watering haul roads, and during overburden and topsoil removal and replacement, to control dust.

- Table 1-1. Summary of Environmental Consequences. Vegetation. During mining (p. 1-5). This subsection should be amended to reflect DRRC's current proposed mitigation efforts, as included in the Biological Assessment (BA) submitted to USFWS, by adding the following:

A minimum of one brush habitat corridor will remain at all times during mining operations. Over the course of mining the site, several brush habitat corridors will be created by DRRC, so that upon completion of mining and reclamation, four brush habitat corridors will be left, with the goal of increasing the amount of brush habitat vegetation currently found on the site.

- Table 1-1. Summary of Environmental Consequences. Vegetation (p. 1-5). This section should be amended to add a subsection for "During reclamation and after," which accurately reflects DRRC's proposed mitigation efforts, and as follows:

During reclamation and after. With the proposed mitigation, a minimum of one brush habitat corridor will be maintained at all times during the mining of this site. Over the course of mining, four brush habitat corridors will be established on the project site, which should mitigate the short-term loss of brush habitat during mining.

- Table 1-1. Summary of Environmental Consequences. Wildlife. During mining (p. 1-5). The first sentence of this subsection states that "several thousand" acres are proposed for mining at any given time. This is incorrect, due in part to regulatory requirements for contemporaneous reclamation. DRRC estimates that, on average, approximately 200 acres will be disturbed by mining at any one time during the project. Additionally, the mitigation efforts proposed by DRRC should not result in "significant" impacts to wildlife in the area of the proposed mine, as suggested in the first sentence of the subsection.

- 20-4 Brush habitat. Some of the suggested material has been added to Tables 1-1 and 1-2, under Vegetation and Wildlife. Also added is information from DRRC's biological assessment submitted to USFWS.

- 20-5 Wildlife impacts. The DEIS does not refer to several thousand acres being disturbed at any given time, but to the total impact of the mine. EPA believes that, even with mitigation, the impacts will be significant. Adequate mitigation is necessary for the impacts to be judged acceptable. EPA agrees that there should not be a significant impact to turbidity or baseflows below the mine; however, the statement refers to impacts above the canal, i.e., within the mine area. EPA's experience is that turbidity can increase below mines, but agrees that when NPDES permit conditions are followed, the impact has no significant effect on fish and wildlife.

Mr. Norm Thomas
 August 1, 1994
 Page 4

The last sentence of this subsection is also incorrect. DRRC does not believe there are facts which support the conclusion of reduced flows in Elm Creek, nor that a "significant" increase in turbidity in Elm Creek will result from the proposed mining. As noted above, the baseflow of Elm Creek should be similar before, during and after mining, due to continuous return flows from Lateral 21. Additionally, use of sediment control ponds and other storm water Best Management Practices, as proposed in the draft NPDES permit, should insure that no "significant" increase in turbidity occurs. *DRRC's water quality analysis supports a finding that no existing uses of Elm Creek or the Rio Grande will be impaired or impacted by the proposed mining operation.* Should a slight or insignificant increase in turbidity occur, this certainly will not "significantly" affect fish and wildlife in the area.

20-6

- Table 1-1. Summary of Environmental Consequences. Wildlife. During reclamation and after (p. 1-5). The second sentence of this subsection is inaccurate. Disturbance of riparian habitat will not continue until reclamation is completed, due in part to regulatory requirements for contemporaneous reclamation. That is, upon completion of a mining area, it will be regraded and reclaimed as soon as possible, and all recreated riparian habitats will be monitored and allowed to grow, even as mining continues in other areas of the project. No further disturbance to such riparian habitats will occur following the completion of mining and the initiation of reclamation activities in the area.

- Table 1-1. Summary of Environmental Consequences. Endangered species. During mining (p. 1-5). This entire subsection assumes many "facts" which are not known. For instance, the extent to which the project site is used by endangered species is unknown. Nor is it known that the brush habitat along Elm Creek serves as a travel corridor for endangered cats. Therefore this subsection should be revised by adding the following sentences after the second sentence:

20-7

If the brush habitats along Elm Creek are used by endangered felids, then short-term, adverse impacts may occur as a result of mining activities. If the brush habitats are not used, or if the habitats are relatively unimportant to endangered species, then no adverse impacts are expected.

This subsection also concludes that adverse impacts "will" result from the increased human presence and traffic associated with the mine project. It is not known that this conclusion is accurate, and it would be more accurate to state that such impacts "may" result from the proposed activities.

20-8

- Table 1-1. Summary of Environmental Consequences. Endangered species. During reclamation and after (1-5). As noted above, there will

20-6

Dense brush habitat. Based on the dense brush corridor reclamation process outlined in DRRC's biological assessment and summarized in Part III.C of the FEIS, EPA believes that disturbances are likely to continue in dense brush and riparian areas throughout the reclamation process. Plants will be planted and monitored, irrigation by truck may occur, and each corridor will apparently have several crossings for mine equipment. In addition to these active forms of disturbance, the initial immaturity of the vegetation in these corridors may be a disturbance to wildlife. Disturbance to dense brush corridors will also occur during the final reclamation period, when drainage patterns established during mining may change.

20-7

Endangered species. The suggested language has been added to Table 1-1. In relation to increased human presence and traffic, the word "could" is used in the DEIS, not "will".

20-8

Endangered species. Concerning continued disturbance of dense brush and riparian habitat, please see the response to comment 20-6. Table 1-2 has been amended to reflect information in DRRC's biological assessment. Because of DRRC's plans to change the drainage pattern at the end of mining, thus depriving some of the dense brush habitat areas of water, EPA does not believe it is accurate to call these areas "riparian".

Mr. Norm Thomas
 August 1, 1994
 Page 5

be no "continued disturbance of riparian habitat until reclamation is completed." This sentence should be deleted and replaced as follows:

Following completion of mining, four brush habitat corridors will be present within and adjacent to the project, and it is expected that the density of brush vegetation along these corridors will be equal to or greater than current brush density. Upon completion of mining activities, these corridors are expected to stabilize, and their value as riparian habitats returned. The acreage of brush habitat is expected to be greater than currently exists. Therefore, the disturbance to potential endangered felid habitats is expected to be of a short-term nature.

20-9 • Table 1-1. Summary of Environmental Consequences. Socioeconomics. Lifestyle (p. 1-6). The last sentence of this subsection implies that additional rail traffic through Eagle Pass may result in an adverse impact. However, DRRC has committed to the City of Eagle Pass that it will coordinate its proposed rail traffic so as to avoid peak traffic hours. This additional rail traffic is therefore not expected to cause delays or result in adverse impacts.

20-10 • Table 1-2. Summary of monitoring and mitigation commitments. Vegetation and wildlife. (p. 2 of Table 1-2). This section makes no mention or reference to the revegetation and mitigation efforts proposed by DRRC to reconstruct brush habitat, as noted above and as included in the BA prepared by DRRC on behalf of EPA and submitted to USFWS. The section should be amended accordingly.

20-11 • Table 1-2. Summary of monitoring and mitigation commitments. Endangered species. Before and during mining. (p. 2 of Table 1-2). The first sentence of this subsection includes the conclusion that the loss of riparian habitat on the mine site may be essential to the recovery of the ocelot. This is pure speculation, and the sentence should be removed or modified accordingly.

20-12 The last sentence of this subsection refers to a "100 feet wide" bypass corridor. DRRC has recently proposed to USFWS that this corridor be "300 feet wide." Additionally, please note that EPA has already requested and initiated formal consultation with USFWS, and the reference in this subsection should be modified accordingly.

20-13 • Figure 1-2. Proposed mitigation. This figure does not accurately represent the proposed mitigation measures, as noted below:

- The second Elm Creek brush habitat corridor is not shown in Area D and should be added;

20-9 Rail traffic. Coordination of traffic to avoid peak traffic hours will reduce but not eliminate impacts. Unless DRRC can schedule its trains at times when there is no car traffic whatsoever, some delays will occur.

20-10 Brush habitat. This section has been amended, see Table 1-2. Also see the response to comment 20-11, below, for more detail. Note that with respect to many of the comments posed by DRRC, EPA received DRRC's biological assessment only after the DEIS had been written. The DEIS thus contained current information, as it had been provided by DRRC at the time. DRRC's newest information is included in this FEIS, through the addition of new Section 5.4.5 in Part III.C of the FEIS.

20-11 Endangered species recovery. Based on EPA's determination that this project "is likely to adversely impact" ocelots and jaguarundi (p. 5-41 of the DEIS), EPA believes that the statement in Table 1-2 is accurate.

20-12 Corridor width and formal consultation. Table 1-2 of the FEIS has been modified to reflect both of these points.

20-13 Figure 1-2, proposed mitigation. Figure 1-2 has been modified to reflect the fact that DRRC now plans to construct a final Elm Creek channel with vegetated banks in its current location. The upland bypass location shown is outside the life-of-mine coal removal boundary, and is the same as that shown in DRRC's biological assessment; the legend has been changed to reflect DRRC's intention to arrange that the bypass be protected following mining and reclamation. The natural units labels (uplands, riparian and floodplain) were intended to be informational, and not part of the proposed mitigation; the legend has been changed to reflect this status. EPA considers the protection of valued natural areas (e.g., areas Y and Z) to be a type of mitigation.

Mr. Norm Thomas
 August 1, 1994
 Page 6

- The location of the bypass corridor is not shown to be outside the life of mine coal removal boundary, as it should be;
- Unique areas Y and Z are protection areas not mitigation areas and should therefore be omitted from this exhibit;
- A "monitoring plot for brush habitat" area should be added as shown in the current Biological Assessment;
- The delineation and labeling of "uplands" should be omitted from this map because this information does not represent proposed mitigation; and
- The bypass corridor is currently proposed to remain following mining and reclamation activities. This should be labeled accordingly in the legend of this figure.

20-14 The foregoing comments to the Table 1-1 and Table 1-2 summaries should also be considered at the appropriate sections in the text of the EIS. In addition, DRRC makes the following comments to the text portion of the Draft EIS.

- Section 3.3. Relationship to other regulatory programs. TNRCC (p. 3-6). The second paragraph should be revised by adding the following sentence to the end of the paragraph:

Construction of the sediment control ponds cannot begin until authorized by the TNRCC.

20-15 Additionally, the last paragraph should be updated by revising the first sentence, as follows:

DRRC's application for its surface water discharge permit is under consideration by a TNRCC Hearings Examiner following a public hearing.

- Section 4.1. DRRC Mining Proposal. Reclamation (p. 4-8). This subsection should be revised to reflect the proposed reclamation of Elm Creek and the brush habitat, as noted in the most current mitigation plan included in the BA submitted by DRRC to USFWS.

- Section 5.2.2. Water Resources. Water quality (p. 5-15). The next to last sentence of the first complete paragraph on this page is inaccurate. DRRC's expert water quality consultants have evaluated the impacts of its proposed mining on water quality in Elm Creek and have testified at a TNRCC evidentiary hearing that existing uses of Elm Creek and the Rio Grande will not be impaired as a result of the proposed mining

20-14 Make above changes to text. EPA's revisions to the text of the DEIS are contained in Part III of this FEIS.

20-15 TNRCC permits. Section 3.3 of the DEIS has been revised to include the most recent information available to EPA, see Part III.B.

20-16 Reclamation update. Refer to Part III.C, Section 5.4.5 of the FEIS, for EPA's summary of DRRC's biological assessment, and to USFWS' biological opinion, in Appendix F.

20-17 Water quality impacts. The sentence referred to in the comment is that increased salinity impacts have not been quantified. EPA has reviewed all documentation provided by DRRC, and has discussed the issue with DRRC's consultants; quantification of the impact has not been provided. EPA agrees that there will be no impairment of uses of Elm Creek downstream of the mine area.

Mr. Norm Thomas
 August 1, 1994
 Page 7

operation. This sentence should be deleted, and the following sentence added in this paragraph:

The project is not expected to impact the uses of Elm Creek, including its suitability for fish or livestock.

- 20-18 • Section 5.3.3. Air Environment. Noise sources and effects (p. 5-25). The next to last sentence on the last full paragraph on this page is inaccurate. The blasting proposed by DRRC will not pose a "significant" adverse impact on nearby residences or on wildlife. The size and frequency of the proposed blasting make this conclusion erroneous. Further, scientific studies have shown that wildlife quickly acclimate to predictable noise.
 - 20-19 • Section 5.4.1. Biological Environment. Vegetation (p. 5-27). The first complete sentence on this page is misleading. It is not the "areas of dense, tall, alkali sacaton bunchgrasses," necessarily, that have been identified as potentially useful to ocelots, it is "areas of dense brush habitat" that may be found on a particular site. The sentence should be revised accordingly.
 - 20-20 • Section 5.4.2. Biological Environment. Aquatic resources (p. 5-30). The first sentence of this subsection is inaccurate, as noted above.
 - 20-21 • Section 5.4.3. Biological Environment. Endangered and threatened species. Ocelot (p. 5-33). The second sentence of the first paragraph on this page is inaccurate, when it suggests that "one square mile" of land in the project area qualifies as optimal or suboptimal habitat. Mapping of this habitat by Dr. Tewes indicates that approximately "400 acres" of land met that description, which is considerably less than one square mile. Further, it should be noted that less than 300 acres of habitat is proposed to be disturbed by mining.
- 20-22 Additionally, the last sentence of this paragraph should be revised to add "cattle grazing" as an existing activity for which the site is currently used. Cattle grazing, and the clearing of land that accompanies such activity, has a significant impact on the suitability of potential habitat for these species. These impacts, which will result if the project is not approved (because cattle grazing will continue on the site) but which will not result if the project is approved (because cattle grazing will not be allowed), should be noted.

- 20-18 Noise impacts. EPA's experience at other mines indicates that the noise from blasting can be a significant impact; the blasting program at the Eagle Pass Mine has not been described with sufficient specificity for EPA to conclude that no significant impact exists. Wildlife may acclimate to regular noise, but to our knowledge cannot predict noise and acclimate accordingly.
- 20-19 Ocelot habitat. EPA's understanding is that areas of dense brush in general, and areas of alkali sacaton in particular, have been identified as potentially useful to ocelots. This sentence has been modified accordingly; see Part III.A of the FEIS.
- 20-20 Aquatic impacts. DRRC's previous comments on aquatic impacts, and EPA's responses, have distinguished between Elm Creek in the mine area, which will be impacted, and below the mine area, where changes in baseflow should be minimal. Portions of the mine come within a few hundred feet of the Maverick County Canal, and in that location during mining there would be no aquifer between any remnant of Lateral No. 21 and Elm Creek.
- 20-21 Ocelot habitat. EPA cannot find a reference to "400 acres" in Tewes/Hicks (1993). EPA understands that DRRC has proceeded beyond EPA's rough figure of one square mile, used in the DEIS, and has calculated the area shown on the Tewes/Hicks (1993) map more carefully. Based on DRRC's biological assessment and on further information in Kost (1994a), EPA calculates that DRRC measured 474 acres of dense brush habitat shown on the map, of which 366 are to be disturbed by mining. This sentence has been modified accordingly; see Part III.A of the FEIS.
- 20-22 Cattle grazing. The sentence has been revised to mention cattle grazing; see Part III.A of the FEIS. EPA has not seen anything in DRRC's biological assessment or other documents which indicates that cattle grazing will not be allowed in any of these dense brush areas, other than the fencing of the upland bypass corridor.

Mr. Norm Thomas
 August 1, 1994
 Page 8

- 20-23 This paragraph should also be revised to include the following factual statement at the end of the paragraph:

However, it appears that there is insufficient acreage to provide an average home range for an ocelot, even if all of the riparian habitat along Elm Creek in and to the north of the project site are counted.

20-23 Ocelot habitat. Comment noted.
- 20-24 The third sentence of the third paragraph on this page is incorrect and should be revised, as follows:

The trapping study was discontinued as informal consultation with USFWS indicated that USFWS considered the project site to contain potential habitat, a finding which the trapping study would be unable to refute.

20-24 Trapping study. The suggested change has been made, with some addition. EPA believes that the failure of a trapping study to document ocelot and jaguarundi in the area would not invalidate EPA's determination that the project is likely to affect ocelots and jaguarundi, for the reasons discussed on p. 5-33 of the DEIS.
- 20-25 Finally, the last paragraph of this subsection is inaccurate and misleading. DRRC conducted an expensive, extensive trapping study in the fall of 1993 on the project site. This greater than 3,000 trap night survey and study can hardly be equated with the statement included in this section that "there have . . . been very few attempts" to gather evidence. Additionally, there are no "facts" for EPA to have "determined" that ocelots are on the project area. EPA has "assumed" such facts and the last sentence of this paragraph should be modified accordingly.

20-25 Ocelot habitat. "Very few attempts" has been changed to "few attempts"; see Part III.A of the FEIS. As DRRC acknowledges, the trapping survey was not completed as designed. Very little other baseline biological information is available for Maverick County.
- 20-26 • Section 5.4.4. Biological Environment. Biological assessment of impacts to endangered and threatened species (p. 5-35). The third paragraph of this section should be revised to reflect DRRC's proposed mitigation efforts as included in the BA prepared by DRRC on behalf of EPA for USFWS. The paragraph should be amended to reference incorporation and attachment of the most current BA to the final EIS.

20-26 Revised mitigation plan. Refer to Part III.C, new Section 5.4.5, for a summary of the most recent mitigation proposals made by DRRC. A sentence referring to this new information has been added to Section 5.4.4 (see Part III.A of the FEIS).
- 20-27 In the third complete paragraph on p. 5-36 of this section, the following sentence should be added:

The goal of the revegetation effort, as noted in the mitigation plan included in the Biological Assessment, is to recreate brush habitat as fast as possible with a similar mix and quality of dense brush species which currently exist along Elm Creek.

20-27 Brush habitat. See response to comment 20-26, above.
- 20-28 The second sentence of the first full paragraph on p. 5-37 of this section should be amended to reflect DRRC's proposed "300" feet wide bypass corridor, as noted above.

20-28 Corridor width. This change has been made; see Part III.A of the FEIS. See also the response to comment 20-26.
- 20-29 This paragraph should also be amended to add the following sentence:

20-29 Biological monitoring. See response to comment 20-26.

Mr. Norm Thomas
 August 1, 1994
 Page 9

According to the mitigation plan included in the Biological Assessment, monitoring through the establishment of several monitoring plots will occur during the life of mine within and adjacent to the project site and the fenced bypass corridor, to quantitatively determine the difference in vegetative density inside and outside the corridors.

- Section 5.4.4. Biological Environment. DRRC's proposal for long-term habitat restoration (p. 5-37). The second paragraph of this section should be revised by adding the following provisions, which are reflected in DRRC's current proposed mitigation plan:

20-30 Mitigation plan. See response to comment 20-26.

20-30

In all, approximately 9.7 miles of drainage will be vegetated, consisting of approximately 240 acres. Corridors which are expected to be available after year 10, consist of Diversion C-C', the relocated Elm Creek, and the brush bypass corridor. Following completion of mining, a second Elm Creek channel will be constructed, brush habitat previously created for the relocation of Elm Creek will remain, and the drainage patterns will be established for the tributaries of Elm Creek. Therefore, after mining and reclamation four corridors will be present within and adjacent to the site, Diversion C-C', the two Elm Creek corridors, and the bypass corridor. Additionally, throughout mining a berm will be established between the haul road and Elm Creek, which should help mitigate noise and dust impacts as well as restrict intrusion into brush habitats.

- Section 5.4.4. Biological Environment. EPA's determination of biological effect (p. 5-41). The fourth paragraph on this page should be revised by adding the following factual statement before the last sentence of the paragraph:

20-31 Ocelot habitat. EPA believes that the sentence suggested by DRRC does not add to the content of the referenced paragraph, which already conditions the impact predictions as contingent on "if the habitat is in fact important".

20-31

If the habitat is unoccupied by endangered felids, then adverse impacts to these felids would not occur regardless of whether the restoration of Elm Creek was successful.

- Section 5.9.7 Cumulative Impacts. Binational policy issues and considerations (p. 5-72). The list of "positions" articulated by EPA which could "be used to argue that the NPDES permit should be issued" should be supplemented by the addition of the following "positions":

20-32 Policy positions. Comment noted.

20-32

It would be patently unfair for EPA to deny an NPDES permit to DRRC based solely on possible adverse air quality impacts of Carbon I/II when DRRC has no interest in or control over the operation of the Carbon I/II facilities, and when issuance of an NPDES permit to DRRC would not result in water quality impairment in receiving streams.

Mr. Norm Thomas
August 1, 1994
Page 10

Granting an NPDES permit to DRRC could allow the coal mining project to go forward. If allowed to mine coal, DRRC could sell coal to the owners of Carbon I/II at a cost which generates fuel savings for such owners. These fuel savings could be used to offset the cost of installing appropriate air quality control facilities at Carbon I/II.

20-33

- Appendix A of the Draft EIS should include the most current draft NPDES permit.
- Appendix B should include the most current draft Programmatic Agreement on Cultural Resources into the final EIS.

20-34

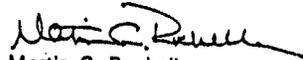
- Appendix F should be added to incorporate the BA prepared by DRRC on behalf of EPA and submitted to USFWS, and the addendum to the BA, which DRRC will be submitting to USFWS and EPA in mid-August.

• • • • •

DRRC certainly appreciates the significance and difficulty associated with preparation of this Draft Environmental Impacts Statement, especially considering the timeframes within which EPA Region 6 and its consultants have worked. DRRC believes the foregoing comments reflect accurate, factual statements, and that inclusion of such comments into the final EIS should make for a more accurate impacts analysis.

If you or your staff or consultants have questions concerning these comments, or we may be of service to you, please feel free to call on me at your earliest convenience.

Sincerely,


 Martin C. Rochelle
 Attorney for Dos Republicas
 Resources Co., Inc.

MCR/asl
1205/002-047.LTR

- cc: Mr. Kenneth Huebner
 Mr. Alejandro Salgado
 Mr. Donald Marston
 Ms. Lisa Kost
 Mr. Chesley Blevins

- Dr. Scott Mills
 Mr. Ron Borkan
 Mr. Jack Thibodeau
 Mr. Paul Oldaker
 Mr. Irvin Bilsky

20-33 Appendices. The most recent versions of these documents have been attached, see Appendices A and G.

20-34 Biological assessment. The biological assessment (and an additional addendum, provided after DRRC wrote its comment letter) are documents which could be attached to the EIS but which would make it extremely bulky. Instead, EPA has included the BA with the documents of record in the Eagle Pass Public Library. The BA and its addendum are summarized in Section 5.4.5, Part III.C.

August 1, 1994.

Eagle Pass, Texas.

RE: Doe Republican Resources Co. Inc.
Eagle Pass Mine - Maverick County, Texas

Rosa M. O'Donnell

Dear Mr. Thomas,

I am one of the 10 families mentioned in the EIS, page 1-6. Our lives have already been adversely affected by two years of letter writing, public hearings and traveling to Austin to attend public hearings. Right now, I am visiting from Austin where homeowners have attended the Decision of the Railroad Commission. They recommended three more weeks of studies on groundwater and its effects on area ranchers.

Mr. Thomas, I am a housewife and our family of four live on one paycheck. Being involved in the hearing process has put a great burden on our time and especially on our limited income. DRRC leased the properties that make up the permit area, shipped homeowners, and leased the properties of two wealthy and politically well-connected businessmen. People who leased their properties do not reside in our neighborhood. They either live in town or out of the county.

DRRC has made this permit a job issue and has worked closely with our local politicians. The letters you have received in support of the mine does not reflect the local people's views, and the people who attend public hearings do so at DRRC's request. These people have no idea about real concerns because they have never

21-1

read any of the RCT records. DRRC does not have an operator for a mine and whatever they hire will bring its own employees, such as Morrison Knudsen, who relocated from Idaho to San Antonio with its 40 employees. Skilled workers from Mexico will also be hired, and the people from Maverick County who are in need of jobs will not get them. According to Terry McCoy of DRRC, these people need some high school education. These people had followed DRRC from the beginning in hope of jobs and now that they have outlasted their usefulness (acquiring signatures) they have been told most of them do not qualify for the jobs. Mr. Eddie Day, who represents a great number of the people in poor communities close to the permit area has gone on local television and a Mexican radio station to oppose this mine.

21-2

They feel they will get all the adverse effects and nothing to benefit them. Most of these people do not attend meetings or write letters because of the language barrier. Your staff became aware of this problem during the afternoon question and answer session conducted in Eagle Pass on July 30, 1994.

21-3

Our political system is at an all time low. Neither the County Commissioners or the City Councilmen can agree on the airport and landfill issues much less concern themselves on the consequences of this mine. On page 1-6 of the EIS, local officials see no problems on infrastructure except possibly for fire protection and emergency vehicle access. No plans to correct these

21-1

Despite promises of jobs DRRC will hire outside labor. See the response to comment 18-8, above, and to public hearing comment 8-2 in Appendix B. Also see the discussion in the DEIS, pp. 5-55 to 5-56.

21-2

Involvement of poor communities. EPA is aware that a significant number of Eagle Pass residents oppose the mine. EPA considers this fact, and the fact that other residents favor the mine, but bases its decision on factors such as compliance with the Clean Water Act, and its best judgment about the nature and acceptability of actual impacts, rather than on a count of proponents versus opponents.

21-3

Infrastructure impacts. Refer to Appendix B, response to public hearing comment 24-4.

problems have been discussed. I sincerely hope EPA has more concern for the welfare of our community than they do.

Carbon I + II is not only a great problem but the fact that Carbon III is being planned in Rosita, Coahuila about an hour's drive from Carbon II should be of even greater concern for our border area.

Thank you so much for giving us the opportunity to express our views, concerns and frustrations with public officials and state and Federal agencies.

Sincerely,
Rose M. O'Donnell

P.S. As I mentioned during my oral comments presented during the July 20, EPA hearing, the draft EIS does not adequately assess the impacts of this proposed strip mine. I urge you to revise this draft EIS in order for EPA to thoroughly evaluate the impacts to my property, my air and the important environment for the well being of my family.

21-4 Carbon III. Refer to the response to comment 4-44, above.

21-5 Impact assessment is inadequate. No specific deficiencies are noted. Refer to responses to other comment letters for a discussion of concerns which have been raised regarding the impact predictions on property, air and other resources.

DR. SALVADOR CONTRERAS BALDERAS AUG 2 199

TELEFAX: (8) 376-22-31 APDO. POSTAL 504 SAN NICOLAS, N.L. MEXICO 66450
E-MAIL: SCONTRERAS@UANL.MTY.ITESM.MX

Dr. Salvador Contreras Balderas

TESTIMONY OF DR. SALVADOR CONTRERAS-BALDERAS BEFORE EPA ON THE DOS REPUBLICAS / CARBON I & CARBON II PROJECT, DEVELOPED AT PACIFIC MINE, TX., ON JULY 20, 1994.

NAME. Salvador Contreras Balderas,

TITLE / POSITION: Ph.D., retired professor from the Universidad Autónoma de Nuevo León, Monterrey, México.

EXPERIENCE: Specialist in fishes, environmental impact and restoration for aquatic environments, experience based in research and teaching, on Rio Grande fishes basin-wide and dates back 35 years, concerned mainly with species ecology, dynamics, changes associated to impacts and restorations, extinction and extinction causes, all related to water availability (quality and quantity), as atested by numerous publications on the subject.

I am member, and past president or chairman, of the Sociedad Mexicana de Zoología, Sociedad Ictiológica Mexicana, Desert Fishes Council, and Bioconservación. One of my positions is as member of the Rio Grande Fishes Recovery Team (U.S. Fish & Wildlife Service) but not speaking in their behalf. I am also member of a basin-wide committee for the sustainable development of the Rio Grande Basin.

As researcher and teacher, my courses were Fish Biology, Ecosystems, Conservation of Natural Resources, Environmental Sciences, and Environmental Impact, among others.

DECLARATION.

I have strong concerns in respect to the Dos Republicas / Carbon I-II project under its EIS because of the following reasons:

- A.- Not enough information, or insufficiently analysed.
b.- The ecological reports are to few and scarcely representative, especially in reference to fish species. Although Elm Creek has no history of samplings, enough is known to affirm that there are potential impacts, given that some of the species in the nearby Rio Grande, below the discharge of said creek are known as threatened or endangered, federal or state listed. Some of the species have no authenticated records from the area below Elm Creek, mostly the exotic species. The records of Moxostoma congestum, Etheostoma grahami, and Percina maculata are the only ones recorded in the area. From the 39 tributaries north and south of the border. Thirty nine (39) of the species in the list are native, 10 are exotic, and 1

22-1 Rio Grande fishes should be included. EPA relies on the U.S. Fish and Wildlife Service and Texas Department of Parks and Wildlife as the formal basis for identification of threatened and endangered species. All identified species have been considered in the EIS; please note some additions, as indicated in Part III.B of the FEIS, Table 5-2 revision. EPA appreciates the additional information on fisheries. EPA considers that the terms of the proposed NPDES permit are sufficiently stringent to protect fisheries in Elm Creek and the Rio Grande. Effects on Elm Creek from the project are projected to be within acceptable limits, and impacts to the Rio Grande are predicted to be negligible.

22-1

SALVADOR CONTRERAS 6-350 7844 F.02

DR. SALVADOR CONTRERAS BALDERAS

TELEFAX: (8) 376-22-31 APDO. POSTAL 504 SAN NICOLAS, N.L. MEXICO 66450

E-MAIL: SCONTRERAS@UANL.MTY.ITESM.MX

should not be considered as it is most probably a misidentification, or if recorded would be another exotic (*Cyprinella formosa*).

ANNEX. Table 1, with a commented list of the species reported or suspected in the region.

- 22-2 | b. There is no trend analysis, either time or place, that are the logical reference points.
- | B.- There is no comparison.

The basis for ecological prediction should emerge from: a baseline of known biodiversity in the area to receive the impact in terms of trends, a comparison of similar projects and their known impacts, and known effects of pollutants to the same or similar species.

ANNEX. Tables 2 and 3, comparisons of the fish fauna of two areas in Coahuila, that have had similar discharges from mining operations, and in a time series show species that have disappeared, and those that were on the verge of extirpation at the time of the most recent collection.

INTERNATIONAL ASPECTS.

A.- The main purpose of the Mine project is to furnish coal for the thermoelectricity facilities Carbon I and Carbon II (and subsequent?).

- 22-3 | In 80 days of the Mexican law and its regulatory workings plants in Río Escondido. Copies of the reports presented by inspectors from SEDUE show that in 1984, the contents of Cd, Pb, Turbidity, pH, suspended solids and dissolved solids, and DO far exceeded permissible levels at least in 1984.

ANNEX. TABLE 4, showing the chemical analysis of water purportedly product of inspections, but obtained without signatures, from sources that can not be disclosed.

GENERAL CONSIDERATION.

- 22-4 | A.- The general environmental quality has been measured using the ability of the research team have shown that for several regions in México,

- 22-2 | Provide some trend analyses and comparisons. Thank you for the tables showing fish biodiversity changes at Río Alamo and Río Sabinas. EPA's judgments about fisheries impacts are based not on receiving water conditions, but on the efficacy of the NPDES permit.

- 22-3 | Water quality at Carbon plants on Río Escondido. Thank you for the table showing the chemical analysis of water. EPA has adequate information to determine that impacts from Carbon I/II are unacceptable; but has identified no way in which permit denial would alter this situation.

- 22-4 | Water quality index demonstrates sensitivity. We appreciate the table on survival of fish species. See response to Comment 22-2, above.

ECOLOGIA, IMPACTO, RESTAURACION, EDUCACION AMBIENTAL, ICTIOSISTEMATICA.

DR. SALVADOR CONTRERAS BALDERAS

TELEFAX: (8) 376-22-31 APDO. POSTAL 504 SAN NICOLAS, N.L. MEXICO 66450

E-MAIL: SCONTRERAS@UANL.MTY.ITESM.MX

The water quality index developed by the government closely approaches the measures we have taken shown as percent survival of the fish community. For several localities in the Rio Grande, the WQI is 41.5 to 42.5%, whereas the fish community survival averages 37%, hence demonstrating that fishes are a sensitive yardstick for the environment.

ANNEX. TABLE 5, with the trends in fish community survival for localities in the Rio Grande Region, presented to the American Fisheries Society, Western Division, 1994 Annual Meeting.

Last, but not least, EISs usually do not contemplate the regional or cumulative aspects of ecology and environment. The Rio Grande is already a heavily polluted area in most of its subareas. It needs regulation, restoration, cleaning, not added loads. These impact loads are cumulative if they surpass the self-recovery capacities of the ecosystems, and regardless of their origin and situation (air, soil, water) are carried by water thru its cycle downstream causing problems and more expenses in water treatment for those human settlements, and human health problems in those areas where public services are defective, insufficient or non available. These effects depend on the kind of impacts (or pollutants), even when they are below the standards or legal limits. In this case, are the hydrocarbons and heavy metals.

22-5 Cumulative water quality impacts. EPA agrees that the mine would add to impacts from other sources. However, this source would be well-regulated and measured, indirect, and relatively minor, compared to the direct impacts from such activities as agriculture on the Rio Grande. EPA relies on its NPDES permitting program to ensure that effects from the Eagle Pass Mine will be within acceptable limits.

DR. SALVADOR CONTRERAS BALDERAS
 TELEFAX: (8) 376-22-31 APDO. POSTAL 504 SAN NICOLAS, N.L. MEXICO 66450
 E-MAIL: SCONTRERAS@UANL.MTY.ITESM.MX

TABLE 1. FISHES OF THE RIO GRANDE AROUND EAGLE PASS, TX, USA.

COLUMNS	1 EIS	2----- DOWN EP UP		3 STATUS USA/MEX
NUMERUM NOMINUM				
1 L. osseus	X		X	
2 Anguilla rostrata	X*		X	
3 Dorosoma cepedianum	X			X
4 Astyanax mexicanus	X	X	X	X
5 Cycleptus elongatus	X			X
6 Ictiobus bubalus	X*			SC/RA
7 Carpiodes carpio	X			X
8 Moxostoma congestum	X			X
9 Campostoma anomalum	X*			X
10 Macrhybopsis aestivalis	X	X	X	X
11 Rhinichthys cataractae	X	X	X	X
12 Notropis jemezianus	X	X	X	X
13 Notropis amabilis	X			X
14 Notropis braytoni	X	X	X	X
15 Notropis buechanani	X	X	X	X
16 Notropis simus simus	X*			
17 Notropis orca	X*			EXT/END
18 Notropis ludibundus	X*			EXT/END
19 Cyprinella venusta	X*	X	X	X
20 Cyprinella lutrensis	X*	X	X	X
21 Dionda diaboli	X*			/KAK
22 Dionda episcopa	X*			END/END
23 Hybognathus amarus	X	X		/END
24 Pimephales promelas	X		X	END/
25 Pimephales vigilax	X		X	
26 Ictalurus punctatus	X	X	X	X
27 Ictalurus furcatus	X	X	X	
28 Pylodictys olivaris	X	X	X	X
29 Cyprinodon eximius	X*			
30 Lucania parva	X			X
31 Gambusia affinis	X	X	X	X
32 Percina macrolepida	X	?	?	X
33 Etheostoma grahami	X			X
34 Micropterus salmoides	X		X	X
35 Chaenobryttus cyanellus	X		X	X
36 Lepomis macrochirus	X		X	X
37 Lepomis megalotis	X*			
38 Aplodinotus grunniens	X	X		
39 Cichlasoma cyanoguttatum	Y	Y	Y	Y

ECOLOGIA, IMPACTO, RESTAURACION, EDUCACION AMBIENTAL, ICTIOSISTEMATICA.

DR. SALVADOR CONTRERAS 2-356 7644 P. 65

DR. SALVADOR CONTRERAS BALDERAS

TELEFAX: (8) 376-22-31 APDO. POSTAL 504 SAN NICOLAS, N.L. MEXICO 66450

E-MAIL: SCONTRERAS@UANL.MTY.ITESM.MX

(continuation)

FISHES OF THE RIO GRANDE AROUND EAGLE PASS, TX, USA.
 PECES DEL RIO BRAVO ALREDEDOR DE EAGLE PASS, TX, USA.

COLONIA	1	2-----	3	
	EIS	DOWN EP	UP	STATUS
EXOTIC SPECIES				
6 Cyprinus carpio		X		
Carassius auratus	X+			
Ictalurus natalis	X+			
Morone chrysops	X+			
Lepomis auritus	X+			
Lepomis microlophus	X+			
Lepomis punctatus	X+			
Micropterus dolomieu	X+			
Pomoxis annularis	X+			
Chaenobryttus gulosus	X+			

MISTAKES (ERRONEOUSLY INCLUDED IN LIST)

Notropis formosus

NOTE: Column 1 after EIS. Column 2 After Treviño Robinson (1959), Stevenson (1971), and others. Column 3 after ESA (Endangered species act, USA)/Norma Oficial Mexicana (Mex). EIS -Environmental Impact Statement. EP - Eagle Pass. Down and Up refer to Rio Grande stream sections, less than 50 line km in either direction. END - Endangered, SC - Special Concern, RA - Rare, EXT - Extinct.

DR. SALVADOR CONTRERAS BALDERAS

TELEFAX: (81) 376-22-31 APDO. POSTAL 504 SAN NICOLAS N.L. MEXICO 66450
 E-MAIL: SCONTRERAS@UANL.MTY.ITESM.MX

TABLE 2. FISH BIODIVERSITY CHANGES AT RÍO ALAMO, 4.4 KM W NUEVA ROSITA, COAHUILA, MÉXICO.

	LVG 52	SCB 66	GAG 84
NATIVE			
<i>Dionda diaboli</i>	-	23	---
<i>Notropis</i>	X	17	---
<i>Gambusia marshi</i>	X	21	---
<i>Dorosoma cepedianum</i>	X	124	6
<i>Lepomis macrochirus</i>	X	138	1
<i>Cichlasoma cyanoguttatum</i>	X	43	1
<i>Astyanax mexicanus</i>	X	27	65
<i>Micropterus salmoides</i>	X	3	2
	---	---	---
TOTAL SPECIES	8	8	5

EXOTIC

<i>Cyprinus carpio</i>	---	---	3
------------------------	-----	-----	---

Species survival as percent of the original fish fauna, 62.5%.
 Trend: disappearance of sensitive and scarce species.

TABLE 3. FISH BIODIVERSITY CHANGES AT RÍO SABINAS, 11.7 KM WSW NUEVA ROSITA, COAHUILA, MÉXICO.

	LVG 52	SCB 66	SCB 82
<i>Dorosoma cepedianum</i>	X	55	
<i>Dionda diaboli</i>	-	20	
<i>Notropis saladonia</i>	X	70	
<i>Ictalurus lupus?</i>	-	3	
<i>Gambusia 2</i>	X	43	
<i>Lepomis macrochirus</i>	X	561	
<i>Lepomis megalotis</i>	X	7	
<i>Micropterus salmoides</i>	X	1	
<i>Cichlasoma cyanoguttatum</i>	X	29	
<i>Astyanax mexicanus</i>	X	30	2
<i>Notropis amabilis</i>	-	---	4
<i>Dionda episcopa</i>	X	3	71
TOTAL SPECIES	12	11	3

Species survival as percent of the original community 27.3%.
 Trend: high disappearance of sensitive and scarce species.

ECOLOGIA, IMPACTO, RESTAURACION, EDUCACION AMBIENTAL, ICTOSISTEMATICA.

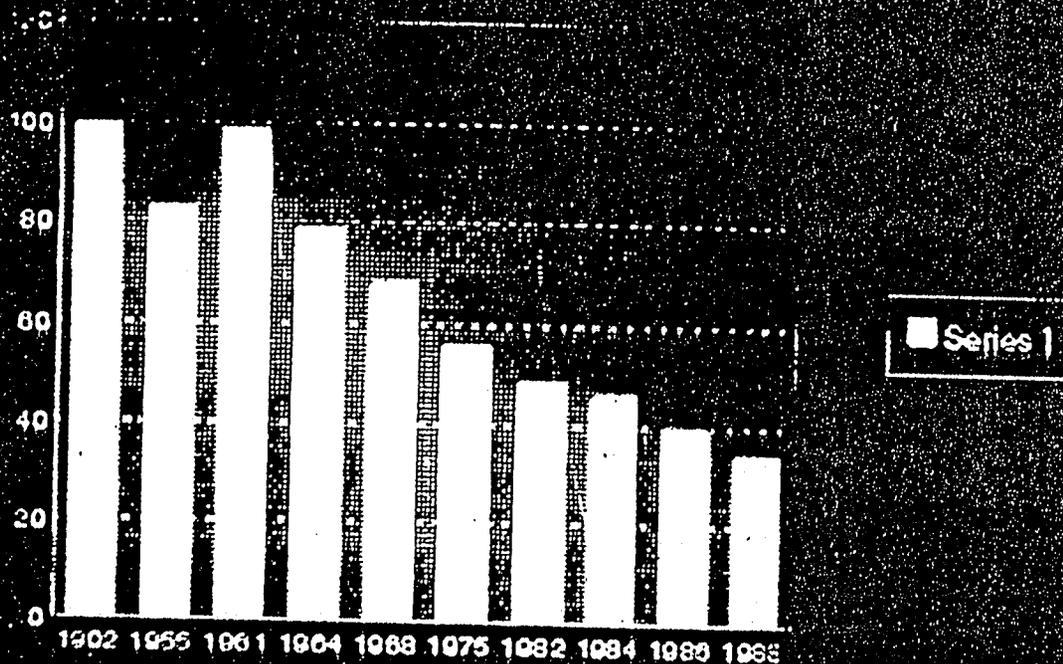
TABLE 4.

RESULTADO DE LOS ANALISIS DE LAS MUESTRAS TOMADAS A LAS DESCARGAS DE AGUAS RESIDUALES DE LAS MINERIAS DE LA CANTON CARBONIFERA LOS DIAS DEL 29 AL 31 DE MAYO DE 1984.- FECHA DE ESTE REPORTE 15 DE JUNIO DE 1984.

Nº	SOLIDOS EN SUSPENSION grs/L.	SOLIDOS SEDIMENTABLES cm ³ /lit.	pH.	Pb. ng/L.	As. mg/L.	Cd. µg/L.	O ₂ DISUELTO p.p.m.
1	0.09	1.0	7.2	0.3	0.0	0.05	8.6
2	-	-	-	-	-	-	-
3	0.16	2.0	6.9	0.6	0.0	0.02	0.0
4	0.08	1.0	7.2	0.2	0.0	0.03	1.8
5	0.0	0.1	7.5	0.0	0.0	0.05	4.8
6	0.00	0.05	6.9	0.1	0.0	0.03	0.0
6'	0.06	0.05	7.2	0.0	0.0	0.07	0.4
7	0.02	0.3	7.3	0.1	0.0	0.00	1.6
8	0.04	0.05	7.0	0.0	0.0	0.03	0.0
9	0.16	0.2	7.3	0.2	0.0	0.16	1.6
10	0.0	0.05	2.5	5.7	0.0	3.0	7.4
11	0.02	0.05	2.6	2.7	0.0	3.0	10.7
12	0.02	0.1	7.3	0.2	0.0	0.05	10.3
13	0.14	0.3	7.4	1.6	0.0	0.05	0.7
14	0.04	0.1	7.8	0.3	0.0	0.05	10.2
15	2.50	25.0	7.6	0.2	0.0	0.05	11.1

TABLE 5

Trend of fish community survival of species in percent of maximum number between 1902 - 1988.



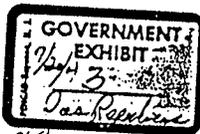
SALVADOR CONTRERAS

8-350 7844

L.P. 08
P. 08

MEXICO; RIO GRANDE/GRANDE REGION. AVERAGE WATER QUALITY (CONALUA) 41.5-42.5 %
in four basins (1960-1970)

Minerva Manzano



Gracias Amigos de la mesa de
 trabajo de Washington Tx. D. C.
 por invitarme a reunirme con uds.
 y con todos los demás amigos
 de la Republica Mexicana y Americana
 el día 20 del mes entrante, agradezco
 sus presencias con el favor de "Dios"
 y nuestra madre santísima nos conceda
 estos temas que van a llevar de
 este pueblo de Eagle Pass Tx,
 ojala que los resuelvan pronto y
 recibamos toda esta comunidad
 de este pueblo con la ayuda de
 "Dios" y la esperanza de la comunidad
 que esperan que pronto se llegue
 el momento que manden proyectos
 de trabajo para las colonias y
 comunidades.

Atta:
 Minerva Manzano B.

23-1

23-1 Comment noted.

Minerva Manzano: translation of preceding letter.

6-30-94

Thank you friends from the Washington, D.C. workgroup, for inviting me to be here with you and with the rest of my friends from the US and Mexico on July 30,

I thank God for your presence here and I hope the issues discussed ^{that you're going to take back} here will help you, the people from Eagle Pass, to solve as soon as possible, all the problems of the community & with the help of our Lord Jesus Christ and our mother the Virgin Mary. All the community is hoping for the moment when all the projects to generate jobs will soon come to the colonias and communities

MINERVA MANZANO

Melanie Sattler

AUG 10 1994

3524 Greystone #195
Austin, Tx. 78731
July 25, 1994

Mr. Norm Thomas
Chief of the Federal Activities Branch
EPA (6E-F)
1445 Ross Ave.
Dallas, Tx. 75202-2733

Dear Mr. Thomas:

24-1 In your review of the EIS for the proposed Dos Republicas, Inc. coal strip mine, please suggest that Mexico convert Carbon I and II to natural gas. Using natural gas instead of coal would reduce emissions of sulfur dioxide as well as carbon dioxide associated with global warming.

24-1 Convert Carbon plants to natural gas. Please refer to Part II.C.1 of this FEIS for a general discussion of alternatives available to EPA, and to Part II.C.2 for air quality issues.

Please do not feel obliged to reply to this letter. Thank you.

Sincerely,

Melanie Sattler

Melanie Sattler

AUG 16 1994



National Parks and Conservation Association

SOUTHWEST REGIONAL OFFICE



National Parks and Conservation Association

August 1, 1994

Mr. Norm Thomas, Chief
Federal Activities Branch
EPA (6E-F)
1445 Ross Avenue
Dallas, TX 75202-2733

Dear Mr. Thomas:

The National Parks and Conservation Association (NPCA) is a 450,000-member nonprofit citizens group dedicated to the protection and enhancement of the U.S. National Park System. NPCA appreciates the opportunity to comment on the Draft Environmental Impact Statement (DEIS) for the Eagle Pass Mine in Texas.

NPCA generally commends EPA for the preparation of a thorough draft EIS that examines the broad scope of environmental impacts associated with this project over time. We are pleased that the agency has attempted to address the cumulative impacts of the proposed mine, particularly as they relate to air quality impacts, and signs of good cooperation with other federal agencies that manage important resources affected by the proposed project, such as the U.S. Fish and Wildlife Service and the National Park Service, are evident.

25-1 The DEIS documents the pervasive adverse environmental impacts of the proposed mine, most of which would defy mitigation and would be irreversible. NPCA is particularly concerned about degradation of surface and ground water, disruption of wildlife habitat and potential jeopardy to endangered species, and the cumulative air quality impacts on Class I and other protected areas.

25-2 EPA has stated that only three alternatives exist: approval of the permit as drafted, denial of the permit, or issuance of the permit with some modifications. The EPA, however, can only impose conditions on the permit that are authorized by the Clean Water Act. The modifications to the permit and the additional requirements on the entire project that would need to be made are so significant, and beyond the scope of the Clean Water Act, that under these conditions NPCA believes that EPA is therefore clearly required to deny the NPDES permit.

25-1 Most adverse impacts of project would defy mitigation and be irreversible. EPA's experience at numerous modern, large coal mines in the U.S. is that they can cause significant impacts but that, absent unusual site-specific conditions, mitigation measures are adequate to reduce these impacts to acceptable levels. NPDES permit limits are specifically set to ensure no unacceptable degradation of water quality (see Part II.C.5). Regarding habitat impacts at the Eagle Pass Mine, EPA has engaged in formal consultation with U.S. Fish and Wildlife Service, under Section 7 of the Endangered Species Act, to ensure that issuance of the NPDES permit will not result in jeopardy to the endangered species. The USFWS biological opinion is presented as Appendix F of the Final EIS. EPA does not judge the air quality impacts from Carbon VII to be a consequence of the mine since, among other reasons, the impacts already occur and the mine does not yet exist.

25-2 EPA must deny permit because permit conditions needed are beyond scope of CWA. Comment noted.

NPCA Comments on DEIS for Eagle Pass Mine
Page 2 of 4

NPCA has the following comments about specific sections of the DEIS and the conclusions that they should lead the agency to reach:

Section 5.4 Biological Environment

A lengthy discussion of biological impacts in the DEIS leads EPA to make several important conclusions with respect to wildlife and endangered species. The first is that the Eagle Pass project may adversely affect federally listed species such as the jaguarundi and ocelot, which FWS considers likely to be present in the area. The second is that a Section 7 consultation with the Fish and Wildlife Service is required. The third is that impacts to endangered species "depends on the . . . success of habitat restoration and that the restoration and mitigation measures proposed by DRRC are clearly "experimental" and "cannot assure success." These are not conditions under which this project should move be approved, nor that the Endangered Species Act permits.

25-3

25-3 Deny permit based on endangered species issues. DRRC has recently committed to leaving the Elm Creek corridor unmined until vegetation in other designated corridors reaches specified densities. Please refer to Part II.C.3 of this FEIS for an updated discussion of endangered species issues.

Section 5.7 Socio-Economics

Virtually this entire section is devoted to attempting to assess the socio-economic consequences of the Eagle Pass Mine project. Virtually none of this section discusses the benefits of ecological protection. At a minimum, this section should include discussion of the economic benefits and values of endangered species and national parks. The U.S. National Park System represents an investment of billions of public dollars. The annual budget of the National Park Service now exceeds \$1 billion. How does Big Bend National Park contribute to a sustainable Texas economy? Where else have the benefits of air quality-related values been judged? For example, the national parks in Arizona contribute over \$1 billion dollars annually to the state economy. The world-famous attraction of the Grand Canyon is a substantial part of that, and this economic asset is highly dependant on resource conditions, such as excellent air quality. In addition, the section should include information on the socio-economic costs and benefits of preserving good air quality. Based on the long-term customer base for power from Carbon 1/II, what would the cost of scrubbers mean to the average consumer of power?

25-4

25-4 Discuss economic benefits of clean air. The DEIS, p. 5-69 to 5-70, states that air pollution from the plants would have a major adverse effect on the recreation and economic benefits of tourism; further quantification would not change this conclusion.

Section 5.9 Cumulative Impacts

NPCA finds Section 5.9 to be a welcome addition to an EIS of this type. This 12-page section include discussion of some important precedents issues in bi-national environmental policy, and contains some solid discussion of air quality impacts on Class I areas, such as national parklands like Big Bend National Park.

25-5

NPCA recommends, however, that the final EIS include more discussion of the actual air quality-related values that are protected by the Clean Air Act in places such as Big Bend.

25-5 Expand discussion of impacts to Big Bend. This comment is responded to in Part II.C.2. See also, responses to comment letter 4, especially beginning at 4-51.

NPCA Comments on DEIS for Eagle Pass Mine
Page 3 of 4

The discussion should include more physical description of the affected environment in Big Bend National Park and other parks and how reduced visibility will specifically impact park resources and the visitor experience. For example, what are some of the most dramatic vistas that would be impacted? How does this relate to visitation and use? The section could also benefit from more description of "other impacts," which is covered in only two sentences. What is the vegetation and what is known about air pollution impacts to similar systems? What aquatic resources are at risk, and what significance do they place in the ecosystem of Big Bend National Park?

25-6 NPCA would point out that Big Bend National Park was designated an International Biosphere Reserve in 1976. Biosphere Reserves, which are part of a UNESCO program, are particularly important as scientific research areas, often serving as invaluable controls for environmental change that occurs in more human-dominated and impacted landscapes. This should be discussed in the EIS.

Sections 5.9.5 through 5.9.7 contain useful information, and frame some of the technical and environmental conditions well. The bi-national policy issues and considerations are also summarized well. While all of this information does not bear repeating, NPCA feels that aspects of this discussion carry particular weight and argue strongly for denial of the permit.

The first important point to underscore is the relation of the proposed mine to what is an enormous pollution source that is, and will continue to have serious adverse impacts on U.S. national parks and protected areas. The national parks were set aside by Congress for the benefit and inspiration of present and future generations, and are to be conserved "unimpaired," according to the Act of August 25, 1916, the organic legislation for the National Park Service. This is one of the most serious and awesome responsibilities of our federal government. A series of court cases in the 1970s (Sierra Club v. Dept. of the Interior) and the resulting Redwoods Act (16 USC 1a-1) also underscored the trust responsibility of the Secretary of the Interior to protect the national parks according to a "nonderogation" standard. NPCA believes that this trust responsibility extends broadly and includes the actions of the EPA such that the agency can take no action legally that would knowingly result in derogation of national park resources. Any step that would allow the Eagle Pass Mine to go forward and lead to the burning of coal at the Carbon facility under current conditions would do just that.

As the DEIS points out, Carbon III is a huge facility whose emissions are likely to have a "severe" impact on visibility in Class I areas, particularly Big Bend National Park. If it were located in the U.S., this facility would be the 7th largest SO₂ source in the country. The summary of environmental consequences related to air quality in the DEIS states:

25-6 Discuss importance of Biosphere Reserves. This information is appreciated. EPA is satisfied that, under the Clean Air Act, Big Bend National Park already qualifies for the full degree of air quality protection under U.S. law.

NPCA Comments on DEIS for Eagle Pass Mine
Page 4 of 4

"If located in the U.S., Carbon III would fail to meet U.S. standards for sulfur dioxide, nitrogen dioxide, and particulates. The uncontrolled emissions are a special concern because they are determined to be a significant cause of visibility degradation at locations such as Big Bend National Park. Carbon III could reduce visibility at Big Bend by as much as 60 percent on days with the best visibility, and undermine efforts to protect visibility at Grand Canyon and 15 other Class I areas of the Colorado Plateau. The visibility impact is large enough that neither Carbon I or II could be permitted in the U.S. due to their failure to meet Clean Air Act requirements. Visibility degradation has adverse impacts on recreational enjoyment, and on the economic benefits of tourism. (p. 1-7)

This is a powerful statement that should dominate U.S. policy in this matter.

Right now, the country is grappling with visibility protection in the western United States, mostly prominently through the Grand Canyon Visibility Transport Commission. I am a member of the Public Advisory Committee and the Alternative Assessments Committee to the GCVTC. Texas is not even part of the GCVTC attempts to model pollution sources and visibility protection scenarios, let alone Mexico, and yet one of the major storm tracks that dumps pollution onto the Colorado Plateau originates in these areas. Feeding in any way the visibility-destroying monster that is Carbon III is in direct conflict with this important work authorized by Congress and the Clean Air Act Amendments of 1990, and funded by U.S. taxpayers.

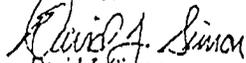
The EPA has stated that it "is committed to seeking a solution to the Carbon III air pollution problem that eliminates any significant impairment of visibility at Big Bend and addresses any other significant transborder impacts. However, at this time, EPA cannot state when, how, or if the problem will be solved." (p. 1-7) The binational technical work group established to address air quality degradation continues to work, and may release findings this fall. NPCA believes, therefore, that approval of a permit for the Eagle Pass Mine is — at a very minimum — totally premature.

25-7 Delay permitting; solve trans-border problems. Comments noted.

25-7 NPCA associates itself with the policy arguments against permit approval (p. 5-72, 73). We see no other course of action for the EPA other than that it "should place the highest priority on the control of trans-border environmental problems."

Thank you for considering the association's views.

Sincerely,



David J. Simon
Southwest Regional Director

EAGLE PASS, CONDADO MAVERICK, TEXAS

18 de Marzo de 1994

La Honorable Ann Richards
Governor of Texas
P. O. Box 12428
Austin, Texas 78711

El Honorable Frank Madla
State Senator
P. O. Box 12068
Austin, Texas 78711

El Honorable Pete Gallego
State Representative
P. O. Box 2910
Austin, Texas 78769

Estimados Gobernador Richards, Senador Madla, Congresista Gallego:

Apoyo el proyecto de Dos Repùblicas Resources Co., el Proyecto de la Mina de Carbón Eagle Pass localizada en el Condado Maverick.

Los ciudadanos del Condado Maverick necesitan esos empleos, y los necesitamos ahora. Los clientes para el carbón sencillamente se irán a otra parte si no pueden surtir sus necesidades de combustible para consumo del Proyecto de la Mina de Carbón Eagle Pass. Y con ellos se irán los empleos y las entradas de divisas que se una a nosotros en solicitar de todas las agencias federales y estatales, incluyendo, EPA, USFWS, Railroad Commission of Texas y el Texas Natural Resource Conservation Commission, para que otorgen su aprobación en la manera más rápida posible a Dos Repùblicas Resource Co., Inc. para que el Proyecto de la Mina de Carbón Eagle Pass proceda en forma adecuada.

Sinceramente,

Bernardo Camarillo
Bernardo Camarillo
1346 HIDALGO
EAGLE PASS, TEXAS 78852

EAGLE PASS, MAVERICK COUNTY, TEXAS

- March 18, 1994

The Honorable Ann Richards
Governor of Texas
P. O. Box 12428
Austin, Texas 78711

The Honorable Frank Madla
State Senator
P. O. Box 12068
Austin, Texas 78711

The Honorable Pete Gallego
State Representative
P. O. Box 2910
Austin, Texas 78769

Dear Governor Richards, Senator Madla, Representative Gallego;

I am in support of the Dos Republicas Resources Co., Inc.'s Eagle Pass Coal Mine Project in Maverick County.

The people of Maverick County need these jobs, and we need them now. The customers for the coal will simply go elsewhere if they cannot purchase their fuel supplies from the Eagle Pass Coal Mine Project. And with them will go the jobs and income which could have been generated in Maverick County. I ask you then to join us in urging all federal and state agencies, including the EPA, USFWS, Railroad Commission of Texas, and the Texas Natural Resource Conversation Commission, to grant their earliest possible approvals to the Dos Republicas Resource Co., Inc. so that the Eagle Pass Coal Mine Project can proceed in a timely fashion.

Sincerely yours,



Francisco J. Jimenez

P.O. Box 717

Eagle Pass, TX 78853

EAGLE PASS, MAVERICK COUNTY, TEXAS

The Honorable Ann Richards
Governor of Texas
P. O. Box 12428
Austin, Texas 78711

The Honorable Frank Madla
State Senator
P. O. Box 12068
Austin, Texas 78711

The Honorable Pete Gallego
State Representative
P. O. Box 2910
Austin, Texas 78769

Dear Governor Richards, Senator Madla, Representative Gallego;

I am in support of the Dos Republicas Resources Co., Inc.'s Eagle Pass Coal Mine Project in Maverick County.

I believe the establishment of this enterprise will significantly help to reverse the trend of poverty which has afflicted our region for far too many years, and it will do so without subsidies or other welfare measures from the federal, state, or local governments. My support reflects a genuine bootstraps effort on our part to help our region and ourselves. As such, I feel it is one which deserves your support in appropriate ways as well.

The people of Maverick County need these jobs, and we need them now. The customers for the coal will simply go elsewhere if they cannot purchase their fuel supplies from the Eagle Pass Coal Mine Project. And with them will go the jobs and income which could have been generated in Maverick County. I ask you then to join us in urging all federal and state agencies, including the EPA, USFWS, Railroad Commission of Texas, and the Texas Natural Resource Conservation Commission, to grant their earliest possible approvals to the Dos Republicas Resource Co., Inc. so that the Eagle Pass Coal Mine Project can proceed in a timely fashion.

Sincerely yours,

Leocadio Espinoza
Leocadio Espinoza

1808 King Arthur
E.P. TX 78852

EAGLE PASS, MAVERICK COUNTY, TEXAS

The Honorable Phil Gramm
Attn: John Savercool, Director of Special Projects
United States Senate
370 Russell Senate Office Building
Washington, D.C. 20510

The Honorable Kay Bailey Hutchison
Attn: Amy Henderson, Legislative Aide
United States Senate
703 Hart Senate Office Building
Washington, D.C. 20510

The Honorable Henry Bonilla
Attn: Phil Ricks, District Coordinator
United States House of Representatives
1116 Longworth HOB
Washington, D.C. 20515

Dear Senator Gramm, Senator Hutchison, Congressman Bonilla:

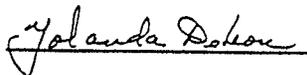
I am in support of the Dos Republicas Resources Co., Inc.'s Eagle Pass Coal Mine Project in Maverick County.

I believe the establishment of this enterprise will significantly help to reverse the trend of poverty which has afflicted our region for far too many years, and it will do so without subsidies or other welfare measures from the federal, state, or local governments. My support reflects a genuine bootstraps effort on our part to help our region and ourselves. As such, I feel it is one which deserves your support in appropriate ways as well.

The people of Maverick County need these jobs, and we need them now. The customers for the coal will simply go elsewhere if they cannot purchase their fuel supplies from the Eagle Pass Coal Mine Project. And with them will go the jobs and income which could have been generated in Maverick County. I ask you then to join us in urging all federal and state agencies, including the EPA, USFWS, Railroad Commission of Texas, and the Texas Natural Resource Conservation Commission of Texas, to grant their earliest possible approvals to the Dos Republicas Resource Co., Inc. so that the Eagle Pass Coal Mine Project can proceed in a timely fashion.

Sincerely yours,

Sign:



Print Name: YOLANDA DELOREN

Mailing Address: P.O. Box 7668
Eagle Pass, Texas 78853

NOSOTROS (LOS SIGUIENTES ANOTADOS) DECLARAMOS Y CERTIFICAMOS QUE SOMOS RESIDENTES LEGALES DEL CONDADO DE MAVERICK, ESTADO DE TEXAS. IGUALMENTE DECLARAMOS QUE APOYAMOS A DOS REPUBLICAS EN SU ESFUERZO PARA ABRIR UNA MINA DE CARBON EN ESTE CONDADO DE MAVERICK.

WE THE FOLLOWING HEREBY CERTIFY THAT WE ARE LEGAL RESIDENTS OF MAVERICK COUNTY, TEXAS. WE HEREBY DECLARE THAT WE SUPPORT DOS REPUBLICAS IN ITS EFFORT TO OPEN A COAL MINE IN MAVERICK COUNTY.

NAME	ADDRESS	PHONE
GLAFIRO NAVARRETE	P. 2494 del Rio Huast	757-690
Pedro Varela Solis	1885 Main St Virens Auto Shop	
Robert H. Farnish	1884 Main St. E. P.O. 797-620	
Ignacio Araya Jr	1061 V. Hermosa E. P. 757-0033	
Mariada Sanchez	3148 Tina DR	757-2329
Juan R Sanchez	3148 Tina DR	757-2329
Eleazar Sanchez	P.O. Box 44 Eagle Pass	757-820
Sofia C. Trujillo	1298 ZAVETTE CR	757-413
Hector Navarrete	1314 MINERVA, E. PASS, TX.	757-690
Gregorio Medina	2454 BARRERA INT-	

APPENDIX D

AGENCY COORDINATION CORRESPONDENCE



APPENDIX D

AGENCY COORDINATION CORRESPONDENCE

This appendix provides copies of agency coordination correspondence (as opposed to Appendix C comment letters addressing the DEIS) since publication of the DEIS, plus all coordination correspondence to EPA from the Advisory Council on Historic Preservation (ACHP) and the Texas Historical Commission (THC).

The following letters are included in this appendix:

- Texas Natural Resource Conservation Commission (TNRCC) to EPA, dated July 20, 1994, certifying that the NPDES permit contains conditions necessary to insure compliance with Texas water quality standards.

Cultural resources:

- Texas Historical Commission to EPA, dated December 29, 1993.
- Advisory Council on Historic Preservation to EPA, dated February 24, 1994.
- Texas Historical Commission to EPA, dated April 27, 1994.
- Advisory Council on Historic Preservation to EPA, dated May 24, 1994.
- Texas Historical Commission to EPA, dated July 7, 1994.
- Advisory Council on Historic Preservation to EPA, dated August 11, 1994.
- Texas Historical Commission to EPA, dated August 26, 1994.
- EPA to Texas Historical Commission, dated September 14, 1994.
- EPA to Advisory Council on Historic Preservation, dated November 14, 1994.

John Hall, *Chairman*
Pam Reed, *Commissioner*
Peggy Garner, *Commissioner*
Anthony Grigsby, *Executive Director*



GE-F . III 28 1994
4-600
JSE
60
60
60
(1)

TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

Protecting Texas by Reducing and Preventing Pollution

July 20, 1994

Ms. Jane N. Saginaw, Regional Administrator
Environmental Protection Agency, Region VI
Attn: Brian Mueller
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733

Re: NPDES Permit Number TX0109011 (State Permit No. 03511)
Applicant: Dos Republicas Resources Co., Inc.

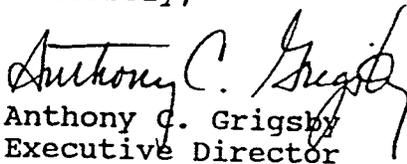
Dear Ms. Saginaw:

The Texas Natural Resource Conservation Commission (TNRCC) has examined the above referenced permit in response to the public notice dated June 18, 1994 in accordance with Title 30 Texas Administrative Code (TAC) Section 279.1-.13 and Section 401 of the Clean Water Act (Act), as amended. We hereby certify this draft permit contains the conditions necessary to insure compliance with the applicable provisions of the Act, Sections 208(e), 301, 302, 303, 306, and 307, and with Chapter 26 of the Texas Water Code.

In accordance with Title 30 TAC 279.10, the Commission has not identified any condition in the draft permit deemed to be more stringent than the requirements of state law.

Should you have any questions about this matter, contact Mr. Charles Eanes of the Watershed Management Division at 512/239-4563.

Sincerely,


Anthony C. Grigsby
Executive Director

cc: Region 13, TNRCC
Dos Republicas Resources Co., Inc.
Attn: Mr. Donald Marston
Vice President Operations
P.O. Box 200350
San Antonio, Texas 78220

OFFICE OF THE DIRECTOR

28 JUL 28 AM 7:52



CURTIS TUNNELL
EXECUTIVE DIRECTOR

TEXAS HISTORICAL COMMISSION

P.O. BOX 12276 AUSTIN, TEXAS 78711-2276 (TELEPHONE) 512-463-6096 (FAX) 512-463-6095 (RELAY TX) 1-800-735-2989 (TDD)

DEPARTMENT OF ANTIQUITIES PROTECTION

December 29, 1993

Mr. William L. Cox
Chief, Federal Assistance Section (6E-FF)
U.S. Environmental Protection Agency
Region 6
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

Re: Programmatic Agreement for Dos Republicas Resources Co., Inc., Proposed Eagle Pass Mine, Maverick County, Texas (EPA, F2, F41)

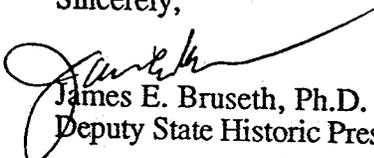
Dear Mr. Cox:

Thank you for the opportunity to review and comment on the draft Programmatic Agreement (PA) for the proposed Eagle Pass Mine in Maverick County, Texas. In general, the basic content and language of the PA is appropriate, but we request the inclusion of additional stipulations to insure that some consultation problems which have occurred on other coal mine projects in Texas can be avoided in the Eagle Pass Mine project.

Specifically, we have the following recommendations on the PA: (a) include a stipulation that calls for the development of a site testing plan to identify eligible properties. This plan would be submitted to SHPO and EPA for review and approval; (b) Stipulation 8: What is the "overview of research to date" to be attached to the PA? Also, the "Plan for the Treatment of Historic Properties" should include a discussion of curation, report schedules, and the preparation of a popular report on the archeological investigations; (c) We recommend the addition of a stipulation calling for the preparation of an annual report on work conducted under the PA; and (d) it is appropriate to request the Railroad Commission of Texas to be a concurring party to the PA.

If you have any questions, please contact Dr. Timothy K. Perttula of our staff at 512-463-5866.

Sincerely,


James E. Bruseth, Ph.D.
Deputy State Historic Preservation Officer


Timothy K. Perttula, Ph.D.
Assistant Director for Antiquities Review

TKP/JEB/tp

cc: Claudia Nissley, ACHP

Advisory Council On Historic Preservation

The Old Post Office Building
1100 Pennsylvania Avenue, NW, #809
Washington, DC 20004

Reply to: 730 Simms Street, #401
Golden, Colorado 80401

February 24, 1994

William L. Cox, Chief
Federal Assistance Section (6E-FF)
Environmental Protection Agency
Region 6
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

REF: Programmatic Agreement regarding Dos Republicas Resources Co.
Inc., proposed Eagle Pass Mine in Maverick County, Texas

Dear Mr. Cox:

On December 15, 1993, we received the draft Programmatic Agreement (PA) regarding the Dos Republicas Resources Company's proposed Eagle Pass Mine in Maverick County, Texas. Our comments on the PA are provided below. In order to complete our review of this project, we request the following additional documentation:

a) a copy of the permit application for the project submitted by Dos Republicas Resources Co., Inc. to the Railroad Commission; b) a copy of the testimony resulting from the public hearing held in Eagle Pass, Texas on September 21-24, 1993; c) the "Overview of Research to Date" which is referenced in the PA, but not included with the documentation provided to us; d) the Environmental Impact Statement, when it has been prepared.

We are in substantial agreement with the terms of the PA and our comments are primarily aimed at clarification of the stipulations, as follows:

1. The title of the PA should include mention of the project, the Eagle Pass Mine.
2. The role of the Railroad Commission of Texas in monitoring or permitting the project should be clarified in a WHEREAS clause and they should be invited to concur in the agreement.
3. Stipulation 1 is unclear and should be reworded. The Applicant must prepare a "Survey Plan for Unsurveyed Areas" in consultation with the SHPO and submit the Plan to EPA and SHPO for review and approval. The term "phased approach" is confusing and should be explained in more detail. The final line of the Stipulation ("The Survey Plan shall be developed in consultation with the SHPO") is unnecessary as it repeats the first line.

4. Stipulation 2 should provide for a SHPO review of the reports prepared under the Survey Plan and for revisions to the reports that may result from SHPO comment.

5. A Stipulation should be added that calls for the development of a site testing plan to evaluate the eligibility of properties to the National Register of Historic Places. The site testing plan should be submitted to SHPO for review and, if necessary, revised according to SHPO comments.

6. Stipulation 3 should be reworded as follows: "The EPA will determine, in consultation with the SHPO, whether properties identified within the area of potential effect for the project are eligible for the National Register of Historic Places." This will ensure that all identified properties are appropriately evaluated.

7. Stipulation 8 is unclear and should be reworded as follows:

A. "The Applicant will develop a "Plan for the Treatment of Historic Properties" (Plan). The Plan will discuss treatment of historic properties that may be effected by the proposed undertaking. The Plan shall include, as appropriate, plans for controlled grading, landscaping, monitoring, relocation, preservation, reburial, recordation, or rehabilitation of historic properties.

B. If the treatment of archaeological properties requires data recovery, the Plan will include a data recovery plan. The data recovery plan will..."

[here insert the standard wording for data recovery plan development and review from pages 45 and 46 of Council's publication "Preparing Agreement Documents"]

C. The Plan will be submitted to the signatories to this agreement for a 30 day review period. Unless any signatory objects to the Plan within 30 days after receipt, EPA will ensure that it is implemented. If any signatory requests revisions to the Plan, the other signatories will be provided with 20 days from receipt to review and comment on the revised plan.

8. When Stipulation 8 is revised as described above, the first sentence of Stipulation 9 should be deleted and the stipulation should include only public comment. The phrase "To the extent feasible.." should be deleted.

9. A stipulation should be added that calls for the preparation of an annual report on work conducted under the PA.

10. Stipulation 11 is awkwardly worded; the following revision is suggested:

"If historic properties are discovered during project activities, the Applicant shall cease activities in the vicinity of the discovery and will immediately notify EPA and SHPO. EPA will consult with the SHPO concerning eligibility of the property. If the property is determined eligible to the National Register of Historic Places, the Applicant will prepare a treatment plan. SHPO and Council will be provided an opportunity to review and approve the plan before it is implemented."

11. Stipulation 13 is unclear. Please clarify which activities the SHPO and Council will review.

12. Stipulation 16 should be revised to comply with standard wording for such documents, as follows: "Any party to this Programmatic Agreement may request that it be amended, whereupon the parties will consult in accordance with 36 CFR § 800.13 to consider such amendment."

13. We do not object to Stipulation 18, but request clarification of its intent.

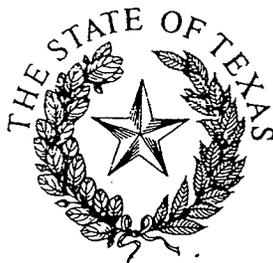
14. Stipulation 19 should be removed or restated. The appeal process for this agreement is stated in Stipulation 14 (Dispute Resolution). Of course, the Applicant may appeal to the agency under regulations other than those implementing Section 106 of the National Historic Preservation Act.

Thank you for providing us with the opportunity to review and comment on this document. If you have questions, please contact Catherine Cameron of our staff at (303) 231-5320.

Sincerely,



Claudia Nissley
Director, Western Office
of Review



MAY 3 1994

CURTIS TUNNELL
EXECUTIVE DIRECTOR

TEXAS HISTORICAL COMMISSION

P.O. BOX 12276

AUSTIN, TEXAS 78711-2276

(TELEPHONE) 512-463-6100

(FAX) 512-463-6095

(RELAY TX) 1-800-735-2989 (TDD)

April 27, 1994

William L. Cox
Chief, Federal Assistance Section (6E-FF)
Environmental Protection Agency, Region 6
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

Re: Eagle Pass Mine Programmatic Agreement (EPA, F2, F41)

Dear Mr. Cox:

Thank you for the opportunity to review and comment on the revised Programmatic Agreement (PA) for the proposed Eagle Pass Mine. Our office is in basic agreement with the terms and stipulations of the PA, but we do have a few comments to offer that we think will clarify the wording in the document, namely:

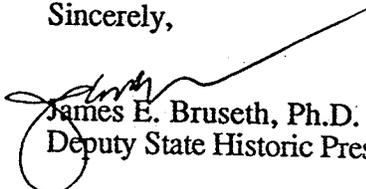
1. Our office has a Memorandum of Understanding (MOU) with the RCT, not a Memorandum of Agreement, and the MOU addresses RCT responsibilities for compliance with the National Historic Preservation Act under both federal and state mining laws. The PA should clearly state under what jurisdiction the RCT is considering and monitoring potential mining impacts on cultural resources.

2. Stipulation 1: Substitute **historic** properties for cultural properties

3. Stipulation 3: Use area of potential effect rather than the cumbersome "potentially adversely effected"

If you have any questions, please contact Dr. Timothy K. Perttula of our staff at 512-463-5866.

Sincerely,


James E. Bruseth, Ph.D.
Deputy State Historic Preservation Officer

TKP/JEB/tp


Timothy K. Perttula, Ph.D.
Assistant Director for Antiquities Review

cc: Claudia Nissley, ACHP
Melvin Hodgkiss, RCT

Advisory Council On Historic Preservation

The Old Post Office Building
1100 Pennsylvania Avenue, NW, #809
Washington, DC 20004

Reply to: 730 Simms Street, #401
Golden, Colorado 80401

May 24, 1994

William L. Cox, Chief
Federal Assistance Section (6E-FF)
Environmental Protection Agency
Region 6
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2732

REF: Programmatic Agreement regarding Dos Republicas Resources Co.,
Inc. proposed Eagle Pass Mine in Maverick County, Texas

Dear Mr. Cox:

On March 28, 1994, we received the revised draft Programmatic Agreement (PA) regarding the Dos Republicas Resources Company's proposed Eagle Pass Mine in Maverick County, Texas. On May 4, 1994 we received the preliminary draft Environmental Impact Statement for the project. Although many of our concerns about the PA (expressed in our letter of February 24, 1994), were addressed in the most recent draft, we request several additional changes, as follows:

1. We suggest the following wording for stipulation 2.

"2. Surveying, Testing, and Evaluation Reports. The Applicant shall prepare reports of the results of the archaeological and historic survey that are consistent with the Secretary of the Interior's "Guidelines for Archaeological Documentation" (48 FR 44734-37).

The Applicant shall submit all Survey, Testing, and Evaluation Plans and Reports to the SHPO for a 30-day review period. The Applicant will revise the Plans or Reports in accordance with SHPO comments and resubmit them for a 20 day review period. Disputes over the content of any Plan or Report will be resolved in accordance with the Dispute Resolution procedure in Stipulation 12."

2. The eligibility to the National Register of Historic Places must be determined for all historic properties identified within the Area of Potential Effect. Stipulation 3 should be worded as follows:

"3. The EPA shall determine, in consultation with the SHPO, the eligibility to the National Register of Historic Places of all properties identified within the project area."

3. Avoidance of historic properties should be considered a treatment measure. Stipulation 6 should include the following statement: "All avoidance measures will be included in the Plan for the Treatment of Archaeological Properties described in Stipulation 8." Under stipulation 8, please delete "and may not feasibly be avoided." Please add "avoidance" to the list of treatments applied to historic properties in the next line of Stipulation 8.

4. Stipulation 4 should read:

"4. The EPA shall ensure that the Applicant implements the Plan(s) described in Stipulation 8."

The second line of Stipulation 4 should be made a separate stipulation entitled "Annual Report" which should read as follows:

"The Applicant will submit, in January of each year, to all signatories to this agreement, a report summarizing the results of the previous year's work conducted or completed in accordance with the Plan(s)."

5. Finally, please add a stipulation that addresses curation of artifacts that may be recovered during identification efforts, testing, or data recovery. Artifacts should be curated in accordance with 36 CFR Part 79.

Thank you for providing us with the opportunity to review and comment on the revised PA and preliminary EIS. If you have questions, please contact Catherine Cameron of our staff at (303) 231-5320.

Sincerely,



Claudia Nissley
Director, Western Office
of Review



CURTIS TUNNELL
EXECUTIVE DIRECTOR

JUL 14 1994

TEXAS HISTORICAL COMMISSION
P.O. BOX 12276 AUSTIN, TEXAS 78711-2276 (TELEPHONE) 512-463-6096 (FAX) 512-463-6095 (RELAY TX) 1-800-735-2989 (TDD)
DEPARTMENT OF ANTIQUITIES PROTECTION

July 7, 1994

Mr. Norm Thomas
Chief, Federal Activities Branch
EPA (6E-F)
1445 Ross Avenue
Dallas, TX 75202-2733

Re: Draft EIS, Eagle Pass Mine, Maverick County, Texas (EPA, F2)

Dear Mr. Thomas:

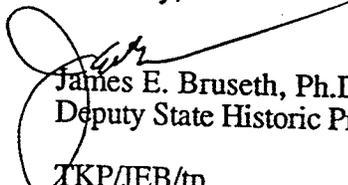
Thank you for the opportunity to review and comment on the draft EIS for the proposed Eagle Pass Mine in Maverick County, Texas. After reviewing the document we have the following comments:

1. The draft Programmatic Agreement in the EIS (Appendix B) does not address the more recent requested changes suggested by the Advisory Council on Historic Preservation (letter of May 24, 1994 to EPA). The final EIS should contain the most current version of the Programmatic Agreement.

2. The archeological reports on the surveys at the proposed Eagle Pass Mine should be submitted to EPA for review, and then finalized, in the near future; this includes the testing plan proposed by Dos Republicas Resources Co.. Our office has provided comments on several occasions concerning these documents to the Railroad Commission of Texas, but as yet there has been no Section 106 coordination on site assessment and evaluation needs between our office and EPA.

If you have any questions, please contact Dr. Timothy K. Perttula of our staff at 512-463-5866.

Sincerely,


James E. Bruseth, Ph.D.
Deputy State Historic Preservation Officer
TKP/JEB/tp


Timothy K. Perttula, Ph.D.
Assistant Director for Antiquities Review

cc:T.C. Adams, Texas Office of State-Federal Relations

Advisory Council On Historic Preservation

The Old Post Office Building
1100 Pennsylvania Avenue, NW, #809
Washington, DC 20004

Reply to: 730 Simms Street, #401
Golden, Colorado 80401

August 11, 1994

William L. Cox, Chief
Federal Assistance Section (6E-FF)
Environmental Protection Agency
Region 6
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

REF: *Programmatic Agreement regarding Dos Republicas Resources Co.,
Inc. proposed Eagle Pass Mine in Maverick County, Texas*

Dear Mr. Cox:

On July 21, 1994, we received the FAXed revised draft Programmatic Agreement (PA) regarding the Dos Republicas Resources Company's proposed Eagle Pass Mine in Maverick County, Texas. In the paragraphs below, we discuss several modifications to the document and requests for further consultation with interested persons for the project.

On July 18, 1994, we received a letter from the Lone Star Chapter of the Sierra Club requesting that they be considered interested parties during consultation for the Eagle Pass Mine Project. We request that you contact them to begin consultation. With the passage of the 1992 Amendments to the National Historic Preservation Act (NHPA), the role of Native Americans in the Section 106 process has been greatly enhanced. Agencies must consult with concerned Native Americans during planning and implementation of projects regardless of the status of land on which the project occurs (Federal or non-Federal). As discussed in a telephone conversation between Joe Swick of EPA and Catherine Cameron of our staff, we request that you contact Native Americans who may have an interest in the area to determine if they wish to become interested persons. Finally, local long-term residents of the area may have concerns about some of the historic properties located in the project area; their concerns should also be elicited.

Our comments on the draft PA are as follows:

1. A WHEREAS clause should be added to indicate that EPA has consulted with interested persons, including concerned Native Americans.

2. Figure 4-2, the map showing the Life-of-the-Mine Boundary, should also include a boundary for the NPDES permit disturbance area as described in Stipulation 1.

3. The third sentence in Stipulation 1 should read;

"When completed, the Applicant shall submit the Survey and Site Testing Plans to EPA for review and approval. EPA shall submit the Survey and Site Testing Plans to SHPO for a 30 day review period. Disputes arising over these plans shall be resolved in accordance with Stipulation 14."

4. In the last sentence of Stipulation 1, "taken" should be "taking."

5. We suggest the following wording for stipulation 2.

"2. Surveying, Testing, and Evaluation Reports. The Applicant shall prepare reports of the results of the archaeological and historic survey that are consistent with the Secretary of the Interior's "Guidelines for Archaeological Documentation" (48 FR 44734-37).

The Applicant shall submit all Survey, Testing, and Evaluation Plans and Reports to EPA for review and approval. EPA shall submit all Survey, Testing, and Evaluation Plans and Reports to the SHPO for a 30-day review period. The Applicant will revise the Plans or Reports in accordance with SHPO comments and resubmit them for a 20 day review period. Disputes over the content of any Plan or Report will be resolved in accordance with the Dispute Resolution procedure in Stipulation 14."

6. The first sentence of the second paragraph of Stipulation 8 should read:

"If the treatment of archaeological properties requires data recovery, EPA shall ensure that the Applicant develops a data recovery plan in consultation with the SHPO for the recovery of archaeological data from historic properties subject to effect. The plan shall be

consistent with the Secretary of the Interior's Standards and Guidelines for Archaeological Documentation (48 FR 44734-37) and take into account the Council's Publication Treatment of Archaeological Properties (Advisory Council on Historic Preservation, (draft) 1980), subject to any pertinent revisions the Council may make in the publication prior to the completion of the data recovery plan. It shall specify, at a minimum....."

7. With regard to the third sentence of the third paragraph of Stipulation 8 ("EPA shall elicit the views....."), be aware that the views of interested parties must be elicited at the earliest planning stages of a project and they must be consulted throughout the Section 106 process. This provision should be reworded so that it is clear that in this stipulation it refers to the review of data recovery plans by interested persons.

8. The second sentence of Stipulation 11 should read: "If site are discovered....."

9. Stipulation 12 should read:

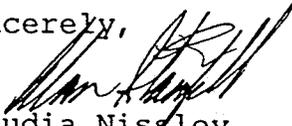
"EPA shall ensure that the Applicant curates all records resulting from survey, testing or data recovery stipulated in this agreement in accordance with 36 CFR Part 79, and that the Applicant curates all material resulting from survey, testing, or data recovery stipulated in this agreement in accordance with 36 CFR Part 79."

10. If necessary, Stipulation 13 should include the Railroad Commission of Texas in the entities to which the Applicant must provide access.

11. In Stipulation 15, last line, "objection party" should be "objecting party."

Thank you for providing us with the opportunity to review and comment on the revised PA. If you have questions, or if you disagree with any of the specific wording requested above, please contact Catherine Cameron of our staff at (303) 231-5320.

Sincerely,


for Claudia Nissley
Director, Western Office
of Review



CURTIS TUNNELL
EXECUTIVE DIRECTOR

TEXAS HISTORICAL COMMISSION
P.O. BOX 12276 AUSTIN, TEXAS 78711-2276 (TELEPHONE) 512-463-6096 (FAX) 512-463-6095 (RELAY TX) 1-800-735-2989 (TDD)
DEPARTMENT OF ANTIQUITIES PROTECTION

August 26, 1994

Mr. William L. Cox, Chief
Federal Assistance Section
Environmental Protection Agency, Region 6
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

Re: Road Construction activities by Dos Republicas Resources Company at the Eagle Pass Mine, Maverick County, Texas (EPA, F2, F13, F14)

Dear Mr. Cox:

We have been informed by the Lone Star Chapter of the Sierra Club that there has been recent road construction at the proposed Eagle Pass Mine, and that this road construction may have impacted historic or prehistoric archeological resources. We have no evidence in our files that this undertaking was coordinated by EPA with our office in accordance with Section 106 of the National Historic Preservation Act, and we have also had no consultation with the Railroad Commission of Texas about the undertaking.

In examining our records on the locations of cultural resources in the proposed Eagle Pass Mine, and the route of the road, the road construction appears to have impacted site 41MV135; this site was recommended some months ago by our office for test excavations to evaluate its National Register eligibility. The road may have also impacted portions of 41MV143, 168, and 170; our office had recommended that these sites warranted no further work based on previous survey-level investigations sponsored by Dos Republicas Resources Company.

Given that the scope of the road construction was not coordinated between EPA, the Railroad Commission, and our office, and the unknown nature of the road construction impacts on these four sites (or others not previously identified along the road ROW), further archeological assessment is immediately warranted to determine the impacts to 41MV135 and any other previously undiscovered sites. Our recommendations are as follows:

- (a) the road right-of-way corridor (the width of the road and ca. 10-20 meters on either side of the road) should be examined by a qualified professional archeologist to determine if previously unrecognized archeological sites are present along the road ROW;

Mr. William L. Cox, cont.

-2-

(b) if such sites are found, sufficient shovel testing and controlled hand and mechanical excavations should then be conducted to determine their National Register eligibility;

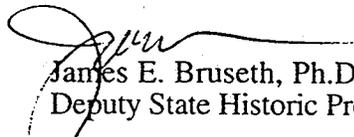
(c) site 41MV135 should be revisited by the professional archeologist to evaluate the extent of the road damage, if any, to assess whether new information is available to warrant a reevaluation of National Register status.

(d) these investigations should be described in a report submitted to EPA, the Railroad Commission, our office, the Advisory Council on Historic Preservation, and interested parties for review and comment, that meets the standards and guidelines of the Secretary of the Interior.

When these investigations are completed, and the documentation compiled for review, the consulting parties to the Programmatic Agreement for the proposed mine will be in a better position to assess site impacts, and determine what treatment measures may need to be implemented to minimize the impacts of this road construction. We look forward to hearing from EPA about this matter.

If you have any questions, please contact Dr. Timothy K. Perttula of our staff at 512-463-5866.

Sincerely,



James E. Bruseth, Ph.D.
Deputy State Historic Preservation Officer

TKP/JEB/tp



Timothy K. Perttula, Ph.D.
Assistant Director for Antiquities Protection

cc:Scott Royder, Sierra Club
Jane Saginaw, EPA, Region 6
Melvin Hodgkiss, RCT
Andrew Sansom, TPWD
Claudia Nissley, ACHP

SEP 14 1994

Timothy K. Perttula, Ph.D.
Assistant Director for Antiquities Protection
Texas Historical Commission
P.O. Box 12276
Austin, Texas 78711-2276

Re: Road Construction Activities at the Eagle Pass Mine

Dear Dr. Perttula:

By letter dated September 9, 1994 (copy enclosed), Dos Republicas Resources Company, Inc. has agreed to comply fully with the recommendations contained in your letter of August 26, 1994, to the Environmental Protection Agency (EPA). The Company will conduct a 100 percent pedestrian survey of the entire road improvement route, conduct subsurface tests as necessary and submit a complete report of the survey results to this office. The EPA will coordinate the report with you to insure the implementation of appropriate treatment measures to minimize the impacts of road construction.

Should you have any questions concerning this matter, please contact Darlene Coulson or Joe Swick at (214) 665-7455 and 665-7456, respectively.

Sincerely,

William L. Cox, Chief
Federal Assistance Section

Enclosure

cc: Lisa Kost, Marston & Marston
Ms. Claudia Nissley, ACHP
Scott Royder, Sierra Club



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

NOV 14 1994

Ms. Claudia Nissley
Advisory Council on Historic Preservation
730 Simms St. Suite 401
Golden, CO 80401

Subject: Programmatic Agreement
Eagle Pass Mine Project
Maverick County, Texas

Dear Ms. Nissley:

The U.S. Environmental Protection Agency (EPA) is pleased to provide the enclosed Programmatic Agreement (PA) for signature by the Advisory Council on Historic Preservation (ACHP). The PA, when executed by the ACHP, evidences the EPA has satisfied its Section 106 responsibilities under the National Historic Preservation Act for this undertaking.

The PA has been signed by the EPA and Historic Preservation Officer of Texas, and concurred on by Dos Republicas Resources Company, Inc. As requested, the EPA consulted with interested parties, including Native Americans, in the development of the PA. The Kickapoo, Comanche, and Mescalero Apache Tribal Councils were invited by letter to participate in the consultation process as "interested parties" on the subject undertaking. For your information, the Kickapoo Tribe accepted, indicating tribal lands of interest in Maverick County, Texas. The Comanche Tribal Council declined, indicating no tribal lands were affected, and the Mescalero Apache Tribal Council did not respond. In addition to the Kickapoo Tribe, the Sierra Club, Lone Star Chapter, will also participate in the consultation process under the PA as an interested party.

The Final Environmental Impact Statement (FEIS) on the EPA's proposed National Pollutant Discharge Elimination System permit for the Eagle Pass Mine will include a discussion on, and a copy of, the PA. A paragraph will explain the PA provides the procedural framework under which cultural properties eligible for inclusion to the National Register of Historic Places will be identified and protected prior to their disturbance or destruction in the course of mining operations. The EPA will also, through the FEIS, invite other interested persons, as follows, to participate in the Section 106 process:

- 1) the head of a local government when the undertaking may affect historic properties within the local government's jurisdiction;



Recycled/Recyclable
Printed with Soy/Canola Ink on paper that
contains at least 50% recycled fiber

- 2) the representative of an Indian tribe in accordance with 36 CFR Part 800.1(c)(2)(iii);
- 3) owners of affected lands; and
- 4) other interested persons when jointly determined appropriate by the EPA, the Historic Preservation Officer of Texas, and the ACHP.

The EPA appreciates the ACHP's assistance in the development of the PA. Please provide three (3) copies of the executed PA to Mr. William L. Cox, Chief of the Federal Assistance Section (6E-FF). If there are any questions, please contact Mr. Cox at 214-665-2258.

Sincerely yours,

Allyn M. Davis

for Jane N. Saginaw
Regional Administrator

Enclosure

cc: Curtis Tunnell
Executive Director
Texas Historical Commission

APPENDIX E

SURFACE MINING AND RECLAMATION PERMIT



APPENDIX E

SURFACE MINING AND RECLAMATION PERMIT

This appendix presents the Railroad Commission of Texas' order approving Dos Republicas Resources, Inc. application for a Surface Mining and Reclamation permit.

RAILROAD COMMISSION OF TEXAS
SURFACE MINING AND RECLAMATION DIVISION

RE: APPLICATION BY DOS REPUBLICAS)
RESOURCES CO., INC. FOR A SURFACE) DOCKET NO.
COAL MINING AND RECLAMATION) C3-0025-SC-00-A
PERMIT IN MAVERICK COUNTY, TEXAS)

ORDER APPROVING APPLICATION
FOR SURFACE MINING AND RECLAMATION PERMIT

The Railroad Commission of Texas, having considered the Examiner's Report and Proposal for Decision issued on December 15, 1993 and the Examiner's Report on Reopened Record and Amended Proposal for Decision, and the exceptions and replies thereto, hereby adopts the following Findings of Fact and Conclusions of Law, and issues the following Order. All findings and conclusions proposed by the examiner or by the parties, but not specifically adopted below, are rejected.

FINDINGS OF FACT

1. Dos Republicas Resources Co., Inc., 5797 Dietrich Rd., San Antonio, Texas 78820-0350 (Applicant) applied to the Railroad Commission of Texas (Commission) for a Surface Coal Mining and Reclamation permit for a 2,700 acre site in Maverick County, Texas, by letter dated March 6, 1992. Amendments and supplements to the application were submitted on May 19, 1992, October 21, 1992, and February 4, 1993. The application was declared "administratively complete" by the Director, Surface Mining and Reclamation Division, on March 8, 1993, and filed in the Legal Division.
2. Applicant filed the following supplements to the application after the application was filed in the Legal Division:
 - a. Supplement I (April 13, 1993);
 - b. Supplement II (June 22, 1993);
 - c. Supplement III (August 23, 1993);
 - d. Supplement IV (August 30, 1993);
 - e. Supplement V (September 9, 1993); and,

- f. Supplemental Filing (October 8, 1993).
3. The application and supplements were verified under oath by various corporate officers of the Applicant in accordance with §771.107(g) of the Commission's "Coal Mining Regulations", Tex. R. R. Comm'n, 16 TEX. ADMIN. CODE §11.221 (West April 1, 1993) (Regulations). Each supplement was accepted into the record.
 4. Applicant paid an application fee of \$5,000.00, as required by §771.108 of the Regulations, on March 6, 1992.
 5. Proper notice of the application was published at least once a week for four consecutive weeks in the Eagle Pass News-Guide, a newspaper of general circulation in Maverick County, Texas, on April 29, 1993, and on May 6, 13, and 20, 1993. The notice contained the information about the application required by §786.207 of the Regulations. A publisher's affidavit dated May 24, 1993, was filed in the record of this proceeding, and demonstrated compliance with §786.207. [Regulations §778.123]
 6. Proper notice of the application was mailed on April 20, 1993, by the Commission to the owners of record of the land in, and contiguous to, the proposed permit area, and to the federal and State agencies listed in §786.207 of the Regulations, the City of Eagle Pass (City), the Maverick County Commissioners' Court (County), and to the U.S. Army Corps of Engineers. Copies of the same notice were mailed by the Commission on April 27, 1993, to all persons who had written or called the Commission with questions or comments about the application.
 7. Copies of the application and of all supplements to, and timely comments on, the application were filed with the Maverick County Clerk and in the offices of the Commission in Austin and in Floresville for public review during normal business hours, in compliance with §786.207(d) of the Regulations.
 8. Written comments on the application were filed by Mr. and Mrs. James E. O'Donnell (dated April 27, 1993, June 14, 1993, July 17, 1993, and October 19, 1993), Texas State Soil and Water Conservation Board (May 3, 1993), Texas Historical Commission (May 5, 1993), Dan Riskind (May 17, 1993, October 14, and 19, 1993), Texas Parks and Wildlife Department (May 27, 1993, July 6, 1993, July 21, 1993, and September 9, 1993), U.S. Department of the Interior - Fish and Wildlife Service (May 26, 1993, and September 13, 1993), Josh W. Oden (June 14, 1993), Alonzo Gonzalez D.(June 14, 1993), Mr. and Mrs. Humberto Gamez (June 3, 1993), U.S. Department of Agriculture - Soil Conservation Service (June 30, 1993), Maverick Soil and Water Conservation District #228 (July 16, 1993), Senator Frank Madla (September 27, 1993), and U.S. Department of the Interior - National Park Service (November 1, 1993). Copies of all timely comments were filed for public inspection with the Maverick County Clerk and were sent to the applicant, and to all parties, in accordance with §786.208 of the Regulations. All comments filed prior to the close

of record (November 1, 1993) were accepted into the record and considered in preparation of the Order. Some comments filed after the close of record were filed with the Maverick County Clerk and were distributed to the Applicant and to all parties. No party requested that the record be reopened for inclusion of the post-November 1, 1993, comments. Upon reopening of the record of the proceeding in response to Petitions in Intervention filed by Theodosia Coppock and the Texas Parks and Wildlife Department, post-November 1, 1993 comments were considered in preparation of this Order. These comments include approximately 300 letters presented at the reopened hearing in favor of the application.

9. The Technical Staff of the Surface Mining and Reclamation Division (Staff) filed its Staff Technical Analysis document (TA) dated July 5, 1993; TA Addendum No. 1, dated September 16, 1993; and TA Addendum No. 2, dated October 19, 1993. The three TA documents comprise the Staff's formal written analysis of the application and were accepted into the record without objection.
10. Requests for a hearing and party status, filed in compliance with §786.211 of the Regulations, were made by Mr. and Mrs. James E. O'Donnell, Mr. and Mrs. Humberto Gamez, Ms. Ladye Herring, and Mr. Dan Riskind, all persons living in the immediate vicinity of the proposed mine site. Party status also was requested by the City of Eagle Pass, the Sierra Club, and Maverick County. These individuals and entities were designated as parties in accordance with §§1.61-.65 of the Commission's "General Rules of Practice and Procedure", Tex. R. R. Comm'n, 16 TEX. ADMIN. CODE §§1.1 et seq. (West Oct. 1, 1993) (General Rules) and a hearing on the application was set for July 13, 1993, in Eagle Pass, Texas, the county seat of Maverick County.
11. Proper notice of the hearing, as required by §786.212 of the Regulations, was published by the Commission in the Eagle Pass News-Guide, a local newspaper of general circulation in the locality of the proposed surface coal mining and reclamation operation, at least once a week for three consecutive weeks prior to the scheduled hearing date, on June 24, 1993, and on July 1, and 8, 1993.
12. The hearing on the application commenced on July 13, 1993, in Eagle Pass, a date within 30 days of the close of the period of time in which a hearing may be requested, in compliance with §786.211 of the Regulations. Upon motion of all parties, the hearing was continued as provided by §786.213 of the Regulations. The Examiner announced continuation of the hearing to September 14, 1993. Upon an August 5, 1993, motion by the Staff, the hearing was continued to September 21, 1993. Notice of the date, time, and location of the hearing was mailed to all parties by the Commission on August 27, 1993. Notice of the continued hearing was published by the Commission in the Eagle Pass News-Guide on September 16, 1993.
13. The hearing on the application was conducted in Eagle Pass, Texas, from September

21 through September 24, 1993 and, upon agreement of all parties present, was continued for one day of hearing at the offices of the Commission in Austin, Texas, on September 29, 1993. Upon the granting of Petitions in Intervention filed by Theodosia Coppock and the Texas Parks and Wildlife Department, the record of the proceeding was reopened by the examiner's ruling dated February 15, 1994 to take additional evidence related to groundwater issues, the status of licenses and permits needed, a jaguarundi sighting, impacts to potential habitat for the jaguarundi and ocelot, a cat-trapping study, alternate sources of water, and right-of-entry. The reopened hearing commenced on April 7, 1994 and ended on April 8, 1994. All parties were provided notice of the reopened hearing and the issues for which additional evidence would be received. Pursuant to § 1.121(d), the Commission did not decide to hear the interlocutory appeal of the examiner's ruling to reopen the record and to grant the Petitions in Intervention.

14. A request for leave to intervene in the hearing, stated as a request for party status, was filed by Mr. Hayward Rigano, of Paris, Texas, representing the Texas Citizens Coal Council, on September 22, 1993, during the course of the hearing. Mr. Rigano did not provide five days notice of his request prior to commencement of the hearing. The request was denied for failure to comply with §1.64 of the General Rules. No grounds for intervention were set out in the request.
15. A verbatim transcription was made of each part of the public hearing by certified court reporters and filed for public review in the records of the Commission, in compliance with §786.214 of the Regulations. A verbatim transcription was made of each part of the reopened public hearing by certified court reporters and filed for public review in the records of the Commission.
16. The U.S. Department of Interior - Office of Surface Mining (OSM) is the agency with jurisdiction over abandoned mine reclamation fees required by Subchapter R of the Regulations and also is the agency that provides reports of each company's compliance with the federal program and with programs in other states. OSM's Applicant-Violator System (AVS) report substantiates that Applicant, and those persons or entities that own or control Applicant, have no pending or uncorrected violations and are not delinquent in payment of reclamation fees. [Regulations, §786.216(h)]
17. Applicant, and persons and entities that own or control Applicant, do not control, and have not controlled, mining operations with a demonstrated pattern of willful violations of the Act or Regulations, of such nature, duration, and with such resulting irreparable damage to the environment as to indicate an intent not to comply with the provisions of the Act or Regulations. [Regulations §§786.215(e), 786.216(g)]

18. The evidence presented after the issuance of the initial proposal for decision and at the reopened hearing shows that the Applicant has the right to enter all the lands identified for the proposed permit area and perform surface coal mining and reclamation operations, in compliance with §§778.117 and 786.216(f) of the Regulations.
 - a. The application contains the names and addresses, as shown in the real property records of Maverick County, Texas, of the owners of land and mineral interests located within and adjacent to the proposed permit area, as required by §778.116(e and f) of the Regulations. The application also contains a property map, Exhibit 778.116 dated January 1993, that illustrates the proposed permit boundaries and the approximate outlines of the various tracts of land within and in the proximate area of the permit boundaries.
 - b. The application contains descriptions of the documents upon which Applicant alleges its legal right to enter and begin surface mining activities. The documents are identified by type and date of execution, identify the specific lands to which the documents pertain, and state whether or not any rights are the subject of pending litigation, as specifically required by §778.117(a) of the Regulations (Section .117 of application, memoranda of leases and assignment of leases, testimony of Kenneth Huebner, TR, Vol. I. Reopened Hearing, pp. 159-160).
 - c. The application adequately represents that there exists a current right to enter and extract coal by surface mining methods granted by the owner of the land and conveyed, directly or by assignment, to Applicant for Tract No. 1, Tract No. 11, Tract No. 4 and Tract No. 19.
 - d. The application explains the legal rights claimed by the Applicant to enter and commence surface mining activities in all other tracts of land within the proposed permit boundary that are proposed for mining during the applied-for permit term.
19. Portions of the permit area are leased. The Applicant has current leases to these properties to January, 1995.
20. The application, as supplemented, contains the ownership, control, and compliance information regarding the Applicant required by §778.116 of the Regulations. The Applicant is wholly-owned by Mexican-American Holding Co., Inc. which is owned by QIC, a Mexican investor-owned corporation organized in the British Virgin Islands, a Mexican individual investor, and by MARCCC, a corporation owned by American investors.
21. Applicant complied with payment of corporation franchise taxes, as required by TEX.

BUS. CORP. ACT, art. 2.45 (Vernon Supp. 1994), with taxes paid through May 16, 1994. With its filing on July 7, 1994, Applicant has provided a Certificate of Account Status dated July 1, 1994 from the Texas Comptroller of Public Accounts to show evidence that its account for payment of corporation franchise taxes is up to date through November 15, 1994, with no reports due or tax payments due. This certificate has been admitted into the record. Prior to issuance of the approved permit, the Applicant shall file updated information to show currency of payment of corporate franchise taxes.

22. The proposed permit area is not within an area designated as prohibited or limited for surface coal mining operations under Part 761 of the Regulations, or designated as unsuitable for surface mining activities under Part 764 of the Regulations, nor is it in an area under study for either such designation in an administrative proceeding. The application does not propose to conduct surface mining activities within 300 feet of an occupied dwelling. [Regulations §§778.118, 786.216(d)]
23. The proposed permit term is five years from the date of issuance. Approximately 1,550 acres are proposed for disturbance during the permit term, of which 955 acres are to be mined and the remaining 595 acres otherwise disturbed by related operations. The anticipated life of the mine is 19 years. [Regulations §778.119]
24. The application contains an ACORD certificate of insurance that evidences liability insurance coverage in amounts equal to, or exceeding, those required by §806.311 of the Regulations. This certificate does not indicate that damage as a result of the use of explosives and damage to water wells is covered by the insurance. This certificate has been replaced by the certificate dated July 5, 1994 filed by the Applicant on July 7, 1994 which has been admitted into the record. This section of the application, as it has been supplemented with this revised certificate which shows that damage as a result of the use of explosives and damage to water wells is covered by the insurance, is in compliance with § 778.120 of the Regulations.
25. The application contains information relating to other licenses and permits for conducting the proposed surface mining activities including the following: the Texas Natural Resources Conservation Commission (coal-handling facility emissions permit, surface water discharge permit), U.S. Environmental Protection Agency (NPDES permit), U.S. Army Corps of Engineers (Nationwide 21 permit), and the Texas Parks and Wildlife Department (scientific collecting/threatened species handling permit). [Regulations §778.121] At the reopened hearing, the applicant presented evidence that Hicks and Company, originally planned as the entity to obtain the handling permit from the Texas Parks and Wildlife Department, is now the former consultant of Dos Republicas Resources, Inc. The application does contain a statement that qualified persons will conduct this activity. Additional evidence shows that the Environmental Protection Agency is proceeding with an Environmental Impact Statement for the proposed operation, that the Applicant has been taking part in

informal consultation with the U.S. Fish and Wildlife Service, has begun the formal consultation process, and that the Texas Parks and Wildlife Department submitted comments to an initial draft plan before the Service in regard to proposed impacts to the endangered jaguarundi and ocelot and wildlife habitat in the area. (TR, Vol. I, Reopened Hearing, pp. 223-225). (Filings on July 7, 1994 by the Texas Parks and Wildlife Department and Dos Republicas Resources Co., Inc. admitted into the record).

26. Copies of the application and of all supplements were filed with the Maverick County Clerk and with the Railroad Commission offices in Austin and in Floresville for public inspection. Notices of the application and the availability of copies for public inspection were included in the public notices published in accordance with §778.123 of the Regulations and in the notices mailed to the owners of record of property located in, and adjacent to, the proposed permit area. Placement of the copies was identified in the application. [Regulations §778.122]
27. In accordance with §779.125(a) of the Regulations, the application contains a description and identification of the size, sequence and timing of the subareas of the mine over the anticipated life of the mine. The application contains a "Life of Mine Map" Exhibit 778.119, dated January 1993, that illustrates the proposed areas for each annual phase of mining over the first five year permit term, and over each succeeding five-year permit term.
28. The application describes and identifies the cultural and historic resources information required by §§779.125(b) and 780.151 of the Regulations. The application contains steps to protect and mitigate any potential damage to all cultural sites that are identified prior to mining and that may be discovered during mining operations. [Regulations §786.216(e)] The status of many sites as eligible or ineligible for listing in the National Register of Historic Places (NRHP) from the Phase III investigation have not been determined and impacts to most of these sites are proposed. (Section 125 and 151 of the application, as supplemented) No disturbance shall occur to a site until it has been determined ineligible for listing in the NRHP or has been adequately mitigated.
29. There are three minable coal seams within the proposed permit area, averaging 2 feet, 3 feet, and 4 to 6 feet in thickness. The coal is high-volatile B bituminous coal with an average 1.14% sulfur and high ash content. A description of the geology of the permit area down to the stratum immediately below the lowest minable coal seam is contained in the application in compliance with §§779.126 and 779.127 of the Regulations that is an adequate representation of the subsurface geology of the areas proposed for mining.
30. The application contains a description of the hydrology and water quality and quantity of the area surrounding the proposed mine. Information is included on any

water that will flow into, or receive discharges from, the general area. Based on the information which is contained in the application, vertical thickness of the alluvium in the area varies from 0 to 20 feet, with the channel at Elm Creek being incised from 5 to 15 feet. Based on the information contained in the application, the alluvium aquifer is partly saturated in the proposed permit area, with most of the saturation coming from seepage from Lateral 21, an irrigation lateral in the area, and from 148 acre stock pond southeast of the area discharging onto the proposed mine area. No private water wells are known to exist within the proposed permit area. Private wells exist on Theodosia Coppock's property as set out in Coppock Exhibit No. 1 received into evidence at the reopened hearing. Windmills exist in the northern part of the proposed permit area and to the north of the proposed permit area on adjacent lands. Three windmill wells exist, one within the northern part of the permit area and two just to the north of the northern permit boundary. These were plopped with a measuring tape and concave cup to see if there was water and at what depth. For two of them water was found. In this test by the applicant on the third well, the tape was obstructed and would not go farther down the well. An additional drilling program was conducted by the applicant during discovery for the reopened hearing and an exhibit prepared to show locations of the drillholes, whether water was encountered and at what depth. Water flow was encountered in the Olmos formation from the logs of the three drillholes, Nos. 7, 2, and 14. Good quality water for the use of the stock and wildlife of Ms. Coppock is produced by wells on the southern part of the Burr Ranch section of the Coppock property adjacent to lands for which the Applicant has right-of-entry and located just to the north of the proposed permit area.

31. The groundwater information contained in the application as supplemented is complete.
 - a. Baseline water quality monitoring data is included in the application. Additional water quality information was presented at the reopened hearing. Alluvium water is slightly saline, with a total dissolved solids (TDS) content in excess of 2,000 mg/L. The application, as supplemented, adequately describes the groundwater baseline for the mine plan area and adjacent area. Evidence received at the reopened hearing establishes that good quality water for stock and wildlife on Ms. Coppock's ranch is produced by several wells in the southern portion. (Testimony of Theodosia Coppock and Jerry Allen, Reopened Hearing).
 - b. No alluvial valley floor exists in the areas contained within the permit area, mine plan area, and adjacent areas (§ 785.202). The application's report submitted to the Commission in the early 1980's by Espey-Houston and Associates, Inc. in regard to an earlier proposed mining project (Maverick County Coal Project Dahlstrom Corporation) and the information contained in the description of the geology and hydrology of the mine plan and adjacent

area which, with the Staff analysis is sufficient to show [§ 786.216(1)] the absence of an alluvial valley floor within the permit area, mine plan area, and adjacent areas.

32. Locations of all pre-mining surface water features and baseline water monitoring stations are illustrated on "Environmental Monitoring Location Map" Exhibit 779.126, dated January 1993. The proposed permit area is located within the Elm Creek watershed, that lies mostly north of the mine area. Elm Creek joins the Rio Grande about 6 miles southwest of the proposed mine site.
33. Surface water information in the application, as supplemented, is included in compliance with §779.129 of the Regulations. Water flow in Elm Creek is ephemeral upstream from the proposed permit area, changing to perennial in one area and intermittent where seepage occurs from Lateral 21 and the 148 acre stock tank, plus contributions of surface flow from the stock tank. Twelve consecutive months of surface water monitoring data is included in the supplemented application. Surface water monitoring sites are located on Elm Creek upstream from the proposed mine site, at two locations downstream from the proposed mine site, and at two locations on Lateral 21 between the proposed permit area and the Maverick County Canal to provide effective monitoring of all surface waters that enter and leave the site.
34. The Commission's Staff prepared and filed its "Cumulative Hydrological Impact Assessment" (CHIA) required by §786.216(c) of the Regulations. The CHIA contains an assessment of the aggregate effects of the anticipated surface mining activities on the hydrological environment within the affected watershed system, concluding that the proposed operations will have an insignificant effect on the hydrological balance outside the proposed mine plan area. The probable hydrologic consequences (PHC) determination included in the application and the Staff's cumulative hydrologic impact assessment (CHIA) set out in the Technical Analysis document were based on the assumption that the only significant aquifer in the area is the Elm Creek Quaternary alluvium. The CHIA states that the Olmos and San Miguel formations are not considered aquifers in that they are poorly permeable and highly mineralized water. The ultimate findings included in the CHIA are based on quite large areas and are adequate to show no significant aggregate effects on the hydrological environment. The CHIA does not include a consideration of groundwater information from the Coppock wells and does not include any information from the windmills which exist in the northern part of the proposed permit area which have not been tested. Permit Provision No. 1 set out in the Appendix is needed as an additional measure to adequately monitor for any adverse effects on groundwater by mining-related activities. [§ 816.339(a)]
35. A significant water supply from the five groundwater wells located on the southern part of the property owned by Theodosia Coppock and used to water cattle and deer may be affected by the proposed mining operations. Windmill-powered and diesel-

powered groundwater wells have existed on Ms. Coppock's property for many years. In 1991, Ms. Coppock undertook an extensive drilling program to attempt to locate additional sources of groundwater for her ranching operation and trophy deer operation. Forty-two holes were drilled; eight of these in the southern portion of the property ("Burr Ranch") which is adjacent to Tract No. 1. Of these eight, water was found in the five locations. Water produced from wells on this part of the ranch are used in a reservoir/trough system to water approximately 2281 cattle in the West Leoncita pasture, East Leoncita pasture, Highway pasture, and Sauz pasture. They also provide water for some cattle to the west of Highway 131 and to the wildlife. Some wells are pumped with windmills; some with diesel, and some use a combination. Approximately 35,000 gallons per day produced from water wells are used to water livestock and deer. This water source is unique in this part of Maverick County. These wells have not been located on maps or otherwise depicted in the application as supplemented. The application sets out suggested alternative water supplies to those water supply sources that may be contaminated, diminished, or interrupted by mining activities. § 15(13) of the Act requires that a detailed description be provided which is to include alternative water sources to replace any water supply affected by the operation. The information included in the application is a listing of potential sources with a showing that the sources have been obtained or could be used for the purpose of providing water to the Coppock property. Water rights held by the Applicant have not been approved for industrial use. Pit water routed to sedimentation ponds and stock pond water has not been shown to be an adequate source of water, and they are proposed to be used to water roads within the permit area for dust suppression. Trucking water in would require 6-8 truckloads per day and could require surfacing roads within the Coppock property. No existing Applicant water wells have been shown to be available as a source to replace water which may be affected. No specific volume of water has been shown to be obtained or readily available for use on specific tracts. Water rights are for sale in the area but have not been purchased. The Applicant has contracted with the City of Eagle Pass to provide potable water to the mine site and has offered to provide connections between the City water main and all residences along State Highway 1588 (Thompson Road) at no cost to the landowners.

36. The application contains the information required by §779.131 of the Regulations relating to average annual and monthly precipitation, temperatures, and evaporation levels, and the prevailing wind direction and magnitude for each season. Average annual precipitation is 20.09 inches (for the 118 year period from 1871 through 1988), with the greatest monthly average of 3.1 inches in May; average annual evaporation is 79.30 inches over the period of record 1964-1988. Predominant wind direction is from the southeast; average wind speed is 3.3 miles per hour. The proposed mining operation is located west of the 100th meridian west longitude. This area of the State is dry and subject to drought, has high evaporation, and sources of water are few.
37. The supplemented application contains information relating to the vegetation within

the proposed permit area. Vegetative surveys of the area were conducted in Fall 1991, Spring 1992, and in Winter 1992/1993. No threatened or endangered plant species are known to occur, or were reported, within or near the proposed permit area. Plant communities are identified and described. Transects were traversed with quantitative analyses performed and included in the application.

38. The supplemented application, in compliance with §779.133(a)(2)(B) of the Regulations, identifies U.S. Army Corps of Engineers (COE) jurisdictional areas as including 23 acres of wetlands consisting of the main channel of Elm Creek, and proposes to disturb approximately 5 acres of the jurisdictional area. The application further identifies that a "Nationwide 21 Permit" application, in compliance with §404 of the federal Clean Water Act, has been filed and is pending with COE. The application provides adequate information on wetlands within the proposed permit area.
39. The application demonstrates that the proposed permit area land use is predominately undeveloped rangeland that is not significant to farming in the area. The Applicant has shown that the proposed operations will not materially damage the quantity and quality of water in surface and underground systems within the permit area, mine plan area and adjacent area with the inclusion of Permit Provisions Nos. 1 and 2 set out in the Appendix. [Regulations §§785.202 and 786.216(1)]
40. In compliance with §779.133 of the Regulations, the application identifies 5 threatened species as likely to occur in the proposed permit area: reticulate collared lizard, Texas tortoise, Texas horned lizard, Texas indigo snake, and zone-tailed hawk. The application was reviewed by the Commission's Staff, by the Texas Parks and Wildlife Department, and by the U.S. Fish and Wildlife Service, all of which provided detailed comments on the application, but no negative comments on the information about the five identified threatened species. Information in the application regarding these species is sufficient to design the protection and enhancement plan required by §780.144 of the Regulations.
41. Pursuant to §779.133 of the Regulations, the U.S. Fish and Wildlife Service (USFWS) cited the possible occurrence of one endangered species, the ocelot (*felis pardalis*), in the proposed permit area. A wildlife biologist reported sighting a jaguarundi (*felis yagourundi cacomitli*) in or near the permit area.
42. The supplemented application, as further supplemented by evidence at the public hearing and the reopened hearing contains site-specific resource information regarding the endangered cats (ocelot and jaguarundi) showing that the proposed mine site includes habitat appropriate for the jaguarundi and the ocelot.

43. The proposed surface coal mining and reclamation activities may affect habitat appropriate for the ocelot and jaguarundi but the proposed activities will not adversely affect the continued existence of these endangered species.
- a. A jaguarundi was reported as sighted near Elm Creek by a wildlife biologist (TR, Vol. 2 of Reopened Hearing, pp. 330-337). Testimony by Dr. Michael Tewes, an acknowledged expert on the ocelot and other Texas felines, shows that proof of use of the permit area by jaguarundi or ocelot is inconclusive.
 - b. Testimony at the September 29, 1993, hearing by Dr. Michael Tewes, an acknowledged expert on the ocelot and other Texas felines, established that oil and gas drilling and associated trucking on a ranch not within the permit area has had no adverse effects on two endangered ocelots living on the ranch.
 - c. Creek drainage such as Elm Creek serve as travel corridors for the ocelot and jaguarundi, providing water and cover for the animals. Since the issuance of the initial PFD and because the U.S. Fish and Wildlife Service has taken its position that the ocelot may be affected by the proposed activities, the Applicant has taken the position that it assumes the presence of ocelot habitat which may be affected by the proposed activities. Because the two cats utilize essentially the same type of habitat, this position assumes jaguarundi habitat may be affected. Disturbance will occur on 57% of the 2700-acre proposed permit area, with the largest contiguous blocks and disturbances to habitat resources occurring within the Elm Creek drainage. The application includes protection and mitigation measures for parts of the Elm Creek corridor and adjacent areas. The application proposes to reclaim to 7 acres of developed water resources and to 1543 acres of pastureland. The mitigation plan proposed by the applicant includes 204 acres in five separate areas termed by the applicant "preservation" and "protection" areas. The application includes areas termed "riparian bottomland habitat" by the applicant to mitigate 180 acres of main Elm Creek channel and all the tributaries to be disturbed during the permit term. Three "protection areas" include areas of 11, 17, and 74 acres. A mitigation area of 25 acres is also included outside the proposed permit boundary. The other five areas are nearer the creek (about 137 total acres). Somewhat less than one-third of this acreage is approximately 500 feet from the creek.
44. There is no designated critical habitat for the ocelot and jaguarundi determined under the Endangered Species Act of 1973 (16 U.S.C. §1531 et seq.). [Regulations §786.216(o)]
45. The application contains a soils map depicting the soil series within the proposed permit area, and adequate information for soil series descriptions and potential

productivity for the permit area. The requirements of § 779.134 have been met.

46. The site contains approximately 65.5 acres of industrial and commercial land use (existing road and 3.5 miles of railroad), 18.0 acres of developed water resources (stock ponds), 2574 acres of grazingland, and 42.5 acres of pastureland.
47. The supplemented application includes drawings, cross-sections and plans required by §§ 779.136-.137 of the Regulations.
48. Land proposed for mining operations and ancillary activity has not been historically used for cropland and is not considered as prime farmland in accordance with §§779.138 and 786.216(1) of the Regulations:
 - a. The application contains affidavits of use that the lands proposed for disturbance have not been used as cropland, other than for forage, for at least five years out of the ten years immediately preceding the acquisition of the land for surface coal mining and reclamation operations [§701.008(37)]; and,
 - b. The historic use of land for cropland specifically excludes use of the land for forage by §3(15) of the Act.
49. The supplemented application contains an adequate description of the proposed operations plan for the mine, in compliance with §780.139 of the Regulations. Mining is proposed in four separate mine blocks. Average annual production of coal is expected to be 2,204,000 tons.
50. The applicant shall not use existing structures in conjunction with the proposed mine operations.
51. The supplemented application contains a blasting plan in compliance with §780.141 of the Regulations. Blasting is proposed for all mine blocks. Overburden material proposed for blasting is sandstone, siltstone, and shale. All blasting will be conducted by a blaster certified in accordance with Part 850 of the Regulations. Storage, handling, and use of explosives will be in accordance with applicable regulations of the federal Mine Safety and Health Administration, and of the Bureau of Alcohol, Tobacco, and Firearms.
52. No blasting is proposed closer than 2000 feet to the nearest protected structure. A detailed blast design has been submitted (Supplement III; TA Addendum No. 1) in accordance with §816.357(d)(2) of the Regulations prior to initiation of blasting. Pre-blast surveys will be conducted on any structure or dwelling within one-half mile of a blasting area upon written request from the resident or owner. The applicant will notify by mail all residents and owners of structures within one-half

mile of the proposed blasting areas of the procedure to request a pre-blast survey.

53. The application contains a proposed blasting schedule that allows blasting from sunrise to sunset, Monday through Sunday. The southwest portions of the C and D areas encroach a populated area. Permit Provision No. 3 is needed to limit blasting within one mile of Thompson Road to the hours of 7:00 a.m. to 6:00 p.m., Monday through Friday to reduce the adverse effects of blasting operations on residents living in close proximity to the mine in accordance with §780.141(h) of the Regulations.
54. The Mitigation and Protection Map, Supplement V, September 1993, Exhibit 779.133-4, illustrates that 206 acres of riparian bottomland habitat will be mitigated or protected. Three areas to be protected (not disturbed) are proposed for the north-central (11 acres), northwest (17 acres), and west-central (74 acres), portions of the permit area. The rest of the 206 acres are primarily areas proposed for mining disturbance and the main Elm Creek channel and several tributaries. (Mitigation and Protection Map, Exhibit 779, 133-4, Supplement V)
55. The application contains a fugitive dust monitoring and control plan. Five air monitoring stations will be installed relative to the seasonal prevailing wind direction: one upwind and four downwind stations along the northwestern and southwestern boundaries. Approximate locations are illustrated in the application on Exhibit 780.139, revised June 1993.
56. The proposed mine is located west of the 100th meridian west longitude, and proposes annual production in excess of 1,000,000 tons of coal. The application contains a fugitive dust control plan that complies with §§780.143 and 816.379 of the Regulations. Most proposed dust-suppression measures anticipate periodic watering of areas and conditions that may contribute dust to the atmosphere. Available sources of water for dust-suppression include sedimentation ponds, pit water, purchased water, and water from Lateral 21 if the applicant is able to secure such usage. Chemical stabilization and oil sprays are also proposed for use if needed.
57. The Regulations, at §780.144 require that the application describe how the applicant will minimize disturbances and adverse impacts on fish and wildlife and related environmental values, including compliance with the Endangered Species Act (16 U.S.C. §§1532-1538), during the surface coal mining and reclamation operations and how the enhancement of resources will be achieved. The fish and wildlife protection and enhancement plan proposed by the application complies with §§ 780.144 and 786.215(a)(2) with the inclusion of Permit Provision No. 4 requiring an annual survey of lands to be disturbed for endangered and threatened fish and wildlife species.
58. The application proposes a reclamation plan for all areas disturbed by the proposed surface mining and reclamation activities during the proposed permit term. The reclamation plan complies with §23 of the Act and Subchapter K of the Regulations

with the inclusion of the Permit Provisions contained in the Appendix.

59. The reclamation plan contains the following:
- a. A reclamation timetable and schedule is included describing seasonal sequences and phases of each major step in reclamation of disturbed areas.
 - b. A detailed reclamation cost estimate with supporting calculations is included. In compliance with §§780.145, 786.216(k), and 800.301 of the Regulations, the application estimates that a reclamation performance bond amount of \$3,873,884.00 is sufficient to guarantee completion of the reclamation plan as proposed in the event of forfeiture.
 - c. A plan for backfilling, soil stabilization, compacting, and grading, with contour maps or cross-sections that illustrate the anticipated final surface configuration of the proposed permit area are included in accordance with §§816.334-389 of the Regulations.
 - d. A plan for removal, storage, and redistribution of topsoil, subsoil, and other material is included to meet the requirements of §§816.334-338 of the Regulations. An average of 20 inches of topsoil is available for distribution over reclaimed areas.
 - e. An adequate plan for revegetation of disturbed areas is contained within the reclamation plan which complies with §816.390 of the Regulations. The requirements of § 816.399 have been met for approval of alternative land uses.
 - f. A description of measures to be used to maximize extraction of the coal resource is included in compliance with §816.356 of the Regulations. The three economically recoverable coal seams are proposed for recovery to six inches or less.
 - g. A description of measures to be employed to ensure that all debris, acid-forming and toxic forming (AFM/TFM) materials, and materials constituting a fire hazard, are disposed of in accordance with §§816.375 and 816.386 of the Regulations, including a contingency plan to preclude sustained combustion of such materials is included in compliance with the Regulations.
 - h. A drill-hole casing and sealing proposal to comply with §§816.331-333 of the Regulations. No known oil or gas wells are included in the areas proposed for mining. The application proposes to notify the Commission Floresville Regional Office at least five working days prior to initiation of any well drilling or plugging operations.

P009, P010, P011, P012, P013, P015, and P016 are included in the application, but detailed design plans are not included.

64. Mining is not proposed within 500 feet of any known underground mine, in compliance with §780.149 of the Regulations. The Lamar Mine, the closest known mine to the proposed permit area, is an inactive underground mine located approximately 600 feet outside the proposed permit boundary. The Lamar Mine may be closer than 500 feet from the areas proposed for mining in mine years 11-15; these areas are not included within the proposed permit boundary. Testimony at the reopened hearing questioned whether there may be tunnels reaching into the life-of-mine area in mine years 11-15. The information presented in the application is sufficient for the proposed permit term.
65. In compliance with §780.150 of the Regulations, the application contains descriptions, including maps and cross-sections, of stream channel diversions proposed for construction within the proposed permit area to achieve compliance with §§816.341-.342 of the Regulations. Eight diversion structures are proposed. Four stream-channel diversions will route fresh water around mine block A from Elm Creek and its tributaries to Elm Creek downstream. Two interceptor ditches are proposed to prevent overland flow from entering the mining-disturbed areas, and to route the overland flow water to the stream-channel diversions. Two disturbed-area diversions are proposed to intercept any overland flow from areas disturbed by mining operations into sedimentation ponds. The stream channel diversions are proposed to route water from intermittent and ephemeral streams.
66. No surface mining and reclamation activities are proposed within 100 feet of the outside right-of-way of any public road except where mine-access road E1-E1' (the main gate) enters Thompson Road. No public roads are proposed for relocation. [Regulations §§761.071-.072, 778.118, and 780.152]
67. The application proposes to use materials removed from box-cuts to construct roads and facilities within the permit area, and in final reclamation of the final pits. Spoil from subsequent pits will be placed in the previous mined-out pit. No excess spoil is anticipated. [Regulations §780.153]
68. The application proposes to construct 8 Class I haul roads and 7 Class II access roads during the proposed permit term. The application contains detailed design plans for the roads, with associated culverts and bridges, in compliance with §§816.400-.413 of the Regulations.
69. The application as supplemented is accurate and complete and complies with all requirements of the Act and the Regulations with the inclusion of the Permit Provisions set out in the Appendix. [Regulations §786.216(a)]

- i. A description of compliance measures to meet requirements of the Clean Air Act (42 U.S.C. §§7401 et seq.) and the Clean Water Act (33 U.S.C. §§1251 et seq.).
 - j. A reclamation plan which will result in adequate protection and mitigation for endangered species.
60. The application proposes a maximum gradient on post-mine slopes of 3h:1v. Section 816.385 of the Regulations limits the gradient of slopes to the lesser of the original pre-disturbance grade, 3h:1v as proposed by the application, or a gradient determined by the Commission. The application states that slopes in final pit areas will be reduced to 3:1; pre-mine slopes in portions of these areas are less than 3:1. If slopes in these areas are reduced to 3:1, these areas will not meet approximate original contour. Permit Provision No. 5 is needed to provide that final graded slopes shall not exceed in grade the least of : (1) the approximate pre-disturbed slope; (2) a gradient of 3 horizontal to 1 vertical inclination; or, (3) such lesser slope approved by the Commission (§816.385)
61. The application contains a description of methods proposed for protection of the hydrologic balance for ground water. Mine pit inflow in the southwestern part of the mine, C and D areas, is estimated will be less than one cubic foot per second (cfs). Pit water and disturbed area runoff will be routed through sedimentation ponds and used in the dust-suppression program or discharged into Elm Creek. Permit Provision No. 6 is required to include the monitoring of discharges at all final-discharge sedimentation ponds for all parameters listed in the Texas Natural Resource Conservation Commission (TNRCC) wastewater discharge permit, and in the U.S. Environmental Protection Agency (EPA) NPDES permit, and to include reporting of the monitoring of the results it sends to TNRCC and EPA simultaneously to the Commission. Additional monitoring wells north of the permit area and monitoring as set out in Permit Provision No. 1 are needed. (§ 780.146)
62. Pastureland is an appropriate alternative postmine land use. Major portions of the permit area are proposed to be reclaimed to the alternative postmine land use of pastureland. Proposed alternative postmine land uses to pastureland are in compliance with §§ 780.147, 786.216(m), and 816.399 and are approved.
63. The application proposes 16 sedimentation ponds for the permit area. Detailed design plans, in compliance with §§780.148, 816.344, and 816.347 of the Regulations, are included for ponds P001, P002, P003, P004, P005, P006, and P014. Ponds P001 and P004 are designed as permanent structures, in compliance with §§780.147 and 816.399 of the Regulations. General design and location plans for Ponds P007, P008,

70. The surface mining and reclamation operations can be feasibly accomplished under the mining and reclamation plans contained in the supplemented application and in compliance with the Act and Regulations with the inclusion of the Permit Provisions set out in the Appendix.
71. The application demonstrates compliance with the permanent program performance standards required by Subchapter K of the Regulations as set out in the above Findings of Fact and with the inclusion of the permit provisions set out in the Appendix. [§786.216(n)]
72. Any extra-record materials submitted were not admitted as evidence in the proceeding and are not considered.

CONCLUSIONS OF LAW

1. Proper notice of application, notice of hearing, and all other required notice was provided on this application. The Commission is authorized by the Texas Surface Coal Mining and Reclamation Act, TEX. REV. CIV. STAT. art. 5920-11 (Vernon Supp. 1994) (Act) §§5, 14 to require, or to allow, an applicant to supply information, data, and maps that are necessary to demonstrate compliance with the Act and the "Coal Mining Regulations" Tex. R. R. Comm'n, 16 TEX. ADMIN. CODE §11.221 (West April 1, 1993) (Regulations).
2. The Commission's "General Rules of Practice and Procedure", Tex. R. R. Comm'n, 16 TEX. ADMIN. CODE §§1.1 et seq. (West April 1, 1993) (General Rules), §1.64(a) authorizes denial of a motion for leave to intervene that has not been filed at least five days prior to the hearing date and which does not state any grounds for intervention or party status. § 1.121 (d) of the General Rules provides that an interlocutory appeal of an examiner's rulings "may be heard by the Commission" which provides discretion to the Commission on whether to hear an interlocutory appeal.
3. Overlapping jurisdiction by another public agency of an activity regulated by the Commission does not diminish the Commission's authority to regulate that activity. Concurrent jurisdiction by another governmental entity of an activity regulated by the Commission does not require the Commission to defer to the other entity. The Act and Regulations require that the views of the Texas Parks and Wildlife Department and the U.S. Fish and Wildlife Service be considered.

4. The Commission may grant a negative determination for prime farmland when the land has not been historically used for production of cultivated crops, other than for forage, in at least five out of the last ten years immediately preceding acquisition of land for surface coal mining and reclamation purposes. [Act §3(15)]
5. § 23(A) of the Act provides that a permit issued under the Act to conduct surface coal mining operations shall require that the operations meet all applicable performance standards of the Act. § 786.216(a) specifies that no permit shall be approved unless the application affirmatively demonstrates and the Commission finds that the application is accurate and complete and that all requirements of the Act and Regulations have been met. The Commission has authority under § 21(A) of the Act to grant, require modification of, or deny the application for a permit, and § 21(A) places the burden on the applicant of establishing that the application is in compliance with all the requirements.
6. The Regulations, at §816.385(a), do not allow a final graded slope to exceed in grade the lesser of: (a) the approximate premine slope; or, (b) any lesser slope approved by the Commission.
7. The application as supplemented and with the inclusion of the permit provisions contained in the Appendix meets the criteria set out in § 786.216 of the Regulations.
8. Based upon the Findings of Fact and Conclusions of Law adopted by the Commission in this Order and as adopted in the Findings of Fact set out above, the application by Dos Republicas Resources Co., Inc. meets all requirements of the Act and Regulations.
9. The Commission appropriately considered the materials submitted as responses to the examiner's and the Staff's draft permit provisions.
10. Pursuant to § 2001.141 of the Administrative Procedure Act, findings must be based on evidence in the record and materials officially noticed. The Commission's exclusion of all extra-record evidentiary materials from consideration is in accordance with the Administrative Procedure Act.

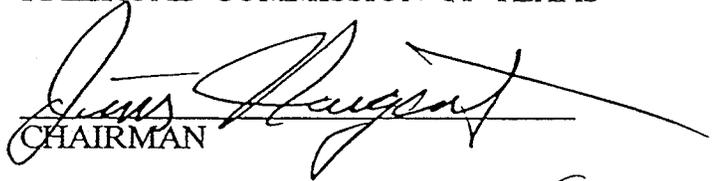
THEREFORE BE IT ORDERED BY THE RAILROAD COMMISSION OF TEXAS that the application by Dos Republicas Resources Co., Inc. is hereby approved with the permit provisions set out in the Appendix to this Order; and

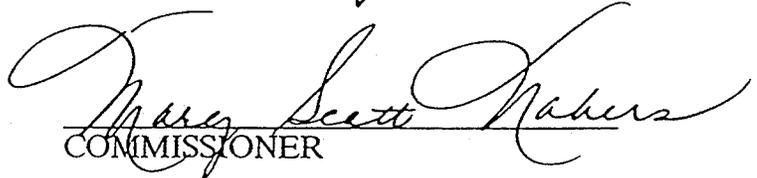
BE IT FURTHER ORDERED that the approved permit is hereby designated as Permit No. 42; and

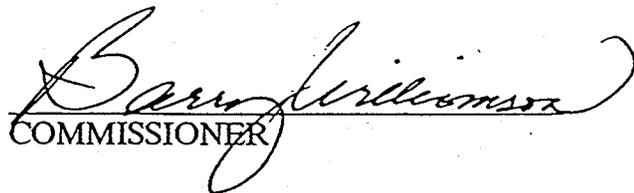
BE IT FURTHER ORDERED that issuance of Permit No. 42 is contingent upon evaluation of payment of corporate franchise taxes due, evaluation of compliance with §786.215 of the Regulations, and acceptance of a reclamation performance bond approved by Commission Order.

SIGNED this 3rd day of October, 1994.

RAILROAD COMMISSION OF TEXAS


CHAIRMAN


COMMISSIONER


COMMISSIONER

ATTEST:



Secretary

Railroad Commission of Texas

APPENDIX

PERMIT PROVISIONS

1. The permittee shall monitor the following wells:
 1. 8 wells to be drilled as near as practicable to the Burr Ranch fence line on property of Dos Republicas Resources Co., Inc. (DRRC) at locations agreeable to Ms. Coppock or her successor-in-interest.
 2. DRRC Monitor Wells DRRC 1, DRRC 2, DRRC 3 and DRRC 4 as noted in its application.
 3. All water wells on DRRC property within two miles of the Burr Ranch, specifically including, but not limited to, the three existing windmill wells, WM-1, WM-2, WM-3; and DRRC Borehole #23.
 4. Wells 2B, 3B, 4B, and 5B on the Burr Ranch and any other producing water well(s) on the Burr Ranch within one-half mile of the common boundary between the Burr Ranch and DRRC's property.
 5. Four additional wells, a minimum of four-inches in diameter, which shall be constructed north of the mine plan area prior to any mining-related disturbance commencing. These four wells shall be designated as follows and shall be located at approximately the following Texas State Plane Coordinates;

DRRC-5 (San Miguel Formation)	E1,541,700 N368,100
DRRC-6 (Olmos Formation)	E1,536,300 N367,300
DRRC-7 (San Miguel Formation)	E1,535,300 N367,900
DRRC-8 (San Miguel Formation)	E1,530,500 N363,700

The completion depth (screened interval) shall be determined by Commission Staff after evaluation of the well borehole data.

Water level monitoring shall be performed monthly. Chemical analysis of water sampling shall be performed as provided below. A representative of Ms. Coppock or her successor-in-interest shall be permitted to witness all monitoring activities. No monitoring of wells by DRRC on the Burr Ranch shall occur without specific permission from Ms. Coppock or her successor-in-interest or her authorized representative.

Chemical analyses for the following parameters shall be performed: Ca, Mg, Na, K, Fe (total), Fe (dissolved), Mn (total), Mn (dissolved), HCO₃, CO₃, SO₄,

her successor-in-interest's water supply is not being interrupted or otherwise adversely affected by DRRC mining activities. Ms. Coppock or her successor-in-interest shall have the right to be a party to any proceeding involving Commission consideration of any such agreement, unless prohibited by law.

DRRC shall submit to the Commission within 90 days after permit issuance a plan for delivery of replacement water to the Burr Ranch in case of diminution in well yields of the Burr Ranch wells caused by mining. If water-level monitoring reveals a drop in potentiometric levels inconsistent with historic pre-mining potentiometric levels and current climactic conditions (rainfall), or chemical analyses reveal a water quality deterioration which could reasonably be attributable to mining activities, installation of the planned delivery system shall begin immediately. Ms. Coppock or her successor-in-interest shall have the right to be a party to any proceeding involving Commission consideration of plans for any water-delivery system by permittee on or within the Burr Ranch, unless prohibited by law.

3. Blasting within one mile of Thompson Road is limited to the hours of 7:00 a.m. to 6:00 p.m. Monday through Friday.
4. The permittee shall report an annual survey of lands to be disturbed for the presence of any endangered and/or threatened fish and wildlife species.
5. Final graded slopes shall not exceed in grade the least of: (1) the approximate pre-disturbed slope; (2) a gradient of 3 horizontal to 1 vertical inclination; or, (3) such lesser slope approved by the Commission.
6. The permittee shall monitor discharges at all final-discharge sedimentation ponds for all parameters listed in the supplemented application, and for any additional parameters required in the Texas Natural Resource Conservation Commission (TNRCC) wastewater discharge permit, and in the U.S. Environmental Protection Agency (EPA) National Pollutant Discharge Elimination System (NPDES) permit, and the permittee shall report the monitoring results it sends to TNRCC and EPA simultaneously to the Commission.

Cl, F, NO₃, and TDS. Each well shall be monitored monthly for a period of one year following permit issuance and quarterly each year thereafter. Initial monitoring shall commence within 30 days after completion of all monitoring wells and an initial monitoring report shall be submitted to the Commission prior to any mining-related disturbance. An initial analysis and annual analyses shall be provided for each well for the following trace elements: Al, As, B, Cd, Pb, Hg, Mo, and Se. In all sampling, field measurements of water level, electrical conductance, and pH shall also be taken and reported.

The results of water level monitoring shall be reported within five working days to the Railroad Commission and to Ms. Coppock or her successor-in-interest. The results of chemical analyses shall be reported within 30 calendar days following the monitoring period to the Commission and to Ms. Coppock or her successor-in-interest.

Upon completion of the first five years of mining, Ms. Coppock or her successor-in-interest or its authorized representative, DRRC, and the Railroad Commission staff will meet to review the monitoring results.

If water-level measurements reveal a significant drop of potentiometric level in any of the monitor wells, the reasons for that significant drop in potentiometric level of that well shall immediately be evaluated in an effort to determine whether mining caused to potentiometric level drop and what action should be taken to minimize or mitigate any adverse effect determined to have been caused by mining.

Ms. Coppock or her successor-in-interest shall have the right to be a party to any proceeding involving Commission consideration of issues relating to groundwater monitoring, unless prohibited by law.

2. DRRC shall provide documentation to the Commission within 90 days after permit issuance that it has purchased or otherwise secured the right (1) to transport and/or receive and (2) to utilize on the Burr Ranch for watering of livestock and wildlife and for human consumption a supply of water that is comparable in quality to that now available from affected wells, and in the minimum quantity of 115-acre feet per year (approximately 102,660 gallons per day). Ms. Coppock or her successor-in-interest shall be a third-party beneficiary to any agreement under which DRRC obtains such rights until such time that mining has ceased and the reclamation performance bond is released by the Railroad Commission with a specific finding that Ms. Coppock or

APPENDIX F

USFWS' BIOLOGICAL OPINION

APPENDIX F
USFWS' BIOLOGICAL OPINION

This appendix presents the U.S. Fish and Wildlife Service's biological opinion of no jeopardy for Dos Republicas Resources, Inc. Eagle Pass Mine.



United States Department of the Interior

FISH AND WILDLIFE SERVICE

ECOLOGICAL SERVICES
C/O CCSU, CAMPUS BOX 338
6300 OCEAN DRIVE
CORPUS CHRISTI, TEXAS 78412



November 23, 1994

Jane N. Saginaw, Regional Administrator
United States Environmental Protection Agency
Attn: Norm Thomas, Chief
Federal Activities Branch (6E-F)
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733

Consultation No. 2-11-93-F-127

Dear Ms. Saginaw:

This responds to Mr. Norm Thomas's request of June 8, 1994 for formal consultation pursuant to Section 7 of the Endangered Species Act (ESA) of 1973, as amended, on your proposed issuance of an NPDES permit to Dos Republicas Resources Company, Inc. (DRRC). The permit applicant wishes to construct and operate the proposed Eagle Pass Coal Mine in Maverick County, Texas. This consultation was initiated on June 9, 1994, the date the request was received.

CONSULTATION HISTORY

The U.S. Fish and Wildlife Service (Service) originally became aware of this project through a March 17, 1993 species list request by Ms. Lisa Kost of Marston and Marston, Inc. On April 13, 1993, the Service issued her an informational letter, including a species list. The Service has also been involved with this proposed project through the permitting process of the Railroad Commission of Texas (RCT), beginning with a letter from the Service to the RCT dated May 26, 1993. Two additional letters to the RCT from the Service were dated September 13, 1994.

On November 29, 1993, the Service received a Notice of Intent by the Environmental Protection Agency (EPA) to prepare an Environmental Impact Statement (EIS) on the proposed Eagle Pass Coal Mine. On January 14, 1993, the Service responded with a letter to Mr. Norm Thomas of the EPA acknowledging receipt of the Notice of Intent to prepare an EIS and stating its intent to participate in the scoping process. This letter also requested that the EPA enter into formal consultation on the basis that "as far as the Service is concerned, this habitat is currently occupied by at least one jaguarundi, and the habitat's preservation may be essential to the recovery of the ocelot". On June 9, 1994, the Service received a letter from the EPA dated June 8, 1994, acknowledging that the proposed mine was likely to adversely affect two listed endangered species, the ocelot and jaguarundi. This letter also requested the initiation of formal consultation with the Service with regard to this issue. Accompanying this letter were copies of the Draft EIS and the Biological Assessment (BA) submitted on behalf of DRRC specifically addressing the coal mine's impacts to listed species. On July 5, 1994 the Service received a letter dated June 30, 1994 from the EPA, deleting subsections 3 and 4 from Section V of the BA. An amended BA (ABA) dated August 26, 1994 was sent to the Service by DRRC.

The 90-day period for the period of consultation ended September 7, 1994. The Service sent copies of a draft of this biological opinion to EPA and DRRC on October 21, 1994. In response to an October 17, 1994 letter to EPA from DRRC, EPA wrote to the Service to request an extension of the 45-day period for preparation of the biological opinion to allow DRRC and EPA additional time to review and comment on this draft. Those comments, in letters each dated November 4, 1994, were submitted to the Service by FAXFORM of the same date. DRRC also transmitted a copy of its comment letter and five sets of some figures for the biological opinion via express mail that the Service received on November 7, 1994. These comments were the subjects of lengthy telephone conversations between Service Biologist Johnny French and William Cox of EPA beginning on November 7, 1994 and among DRRC representatives Martin Rochelle and Lisa Kost and Mr. French beginning on November 9, 1994. The major issues addressed and discussed in the comment letters and telephone conversations concerned incidental take numbers, completing an ocelot survey after the biological opinion,

conditions requiring reinitiation of consultation, quantifying brush habitat density, and conditioning the NPDES permit to include reasonable and prudent measures.

This biological opinion is based upon information provided by EPA in its June 1994 Draft Environmental Impact Statement, DRRC's June 1994 BA, DRRC's August 1994 ABA, other documents and materials provided by DRRC to the Service and to the Texas Railroad Commission, many field trips and meetings, attendance at public hearings, available literature, data in Service files, and consultation with experts.

BIOLOGICAL OPINION

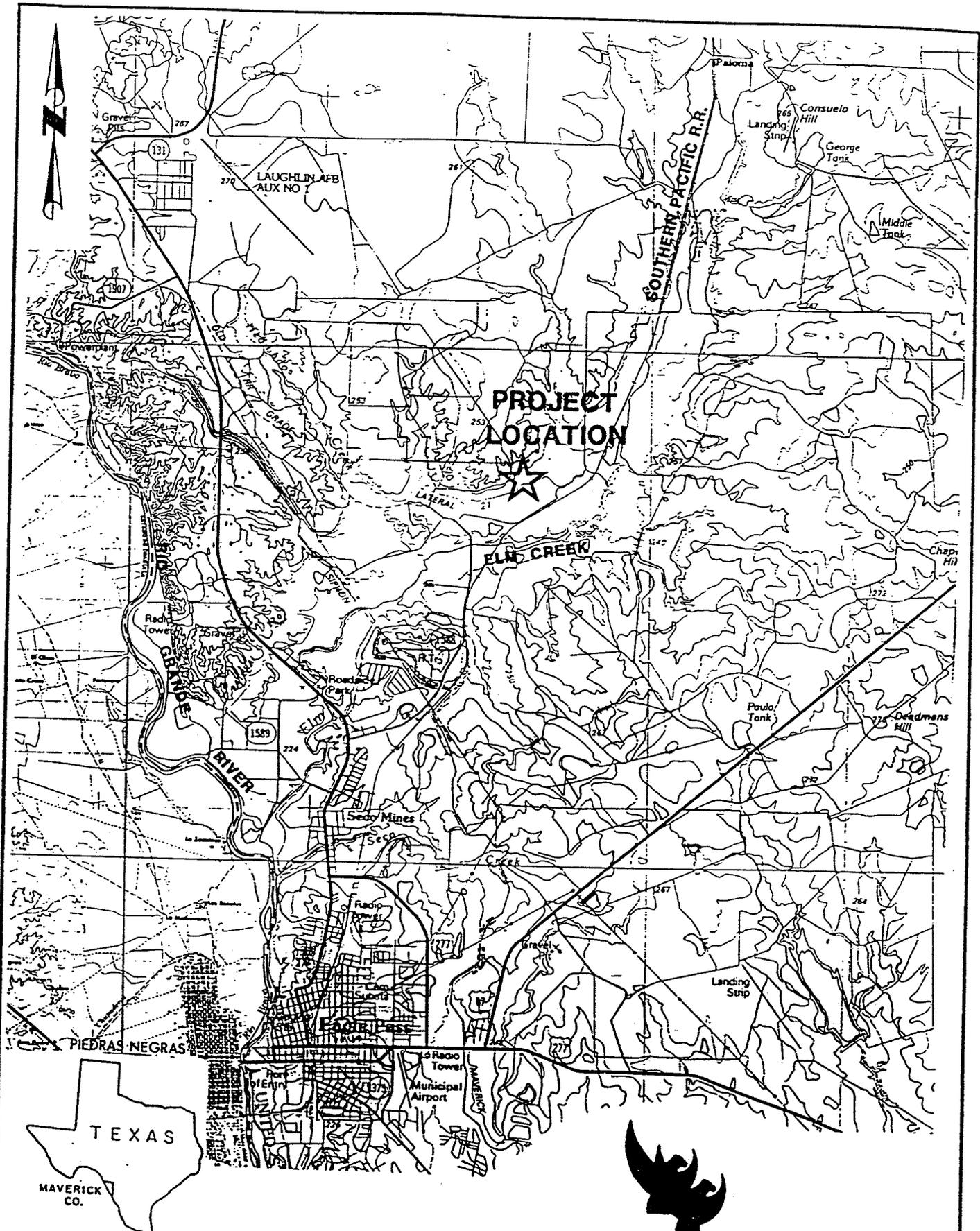
It is my biological opinion that the proposed action will not jeopardize the continued existence of the endangered Texas populations of the ocelot and jaguarundi. It is also my biological opinion, in view of the degrees of uncertainty surrounding the statuses of the populations, the continuing lack of scientific data regarding the possible use of the project site as habitat by these species, and the potentially severe consequences of an unanticipated taking, that EPA should use its authority to insure, through the implementation of reasonable and prudent measures, that the project's likelihood of taking is further reduced.

BACKGROUND INFORMATION: PROJECT DESCRIPTION

As described in the August 26, 1994 ABA:

DRRC is a joint U.S./Mexican venture formed to develop coal reserves located in Maverick County, Texas, for sale into Mexico. The Eagle Pass Project is to be a \$50 million, 2.0 to 3.0 million ton per year surface mine complex designed to provide a fuel supply for at least 19 years to the Rio Escondido electric power plants in Coahuila State, Mexico. Though much of the proposed project area is currently undeveloped, the 5,900 acres within the DRRC life-of-mine proposal is currently used intensively throughout the year for ranching, hunting, access to other parcels, and railroad transport.

Figure 1 shows the area of Eagle Pass and the project site. The project area is divided into two unequal segments by Elm Creek and the tracks of the Southern Pacific Railroad. DRRC proposes to further divide the site into four mining areas and a central area containing the railcar loading machinery, railroad siding, storage, and other infrastructure areas. Mining would commence on four separate fronts near the middle of the site and work towards the site's boundaries. Likewise, restoration of the mining areas would commence near the



SCALE 1:100,000
 CONTOUR INTERVAL = 10 meters



Marston & Marston, Inc.
 St. Louis, Missouri



DOS REPUBLICAS RESOURCES CO., INC.

EAGLE PASS MINE
 REGIONAL PROJECT LOCATION
 MAVERICK COUNTY, TEXAS

FIGURE 1
 OCTOBER 1994

center and work toward the four mining areas' outer perimeters throughout the life of the project.

The project site was subjected to several biological surveys, including one survey by Tewes and Hicks & Co. (1993) to locate potential ocelot habitat within 1500 feet of an early 2700-acre version of DRRC's project site, and one uncompleted survey for the ocelots themselves (Tewes, pers. comm. 1994). Figure 2-1, the first of a series of six related figures produced for this opinion by DRRC, depicts the general locations of the dense shrub cover (>75% horizontal cover) found within the much more common scattered to thin brush cover of the rangeland in the project area. The majority of this dense vegetation, which Tewes and Hicks & Co. (1993) found very similar to optimal and suboptimal habitats occupied by ocelots in other areas of South Texas, was found in a riparian corridor adjoining Elm Creek's main channel, braided subchannels, and tributaries.

The ABA states this Elm Creek riparian brush corridor is 284.2 acres in size, including the acreage of Elm Creek itself and many small areas of <75% horizontal cover (Tewes and Hicks & Co. 1993; Tewes pers. comm. 1994). The ABA, using different techniques and transects than Tewes and Hicks & Co. (1993), found somewhat lower average densities of vegetation within the same corridor. The Service chooses to assume roughly 220 acres of dense brush is a suitable estimate, to use merely for the sake of demonstrating the relative merits of DRRC's proposed mitigation for the mine's impacts to this habitat. DRRC (Lisa Kost, pers. comm. 1994) estimates that after mining and reclamation there would be 512.9 acres of dense brush habitat arrayed in three corridors on or adjacent to the project site, including approximately 108 acres of the original brush habitat.

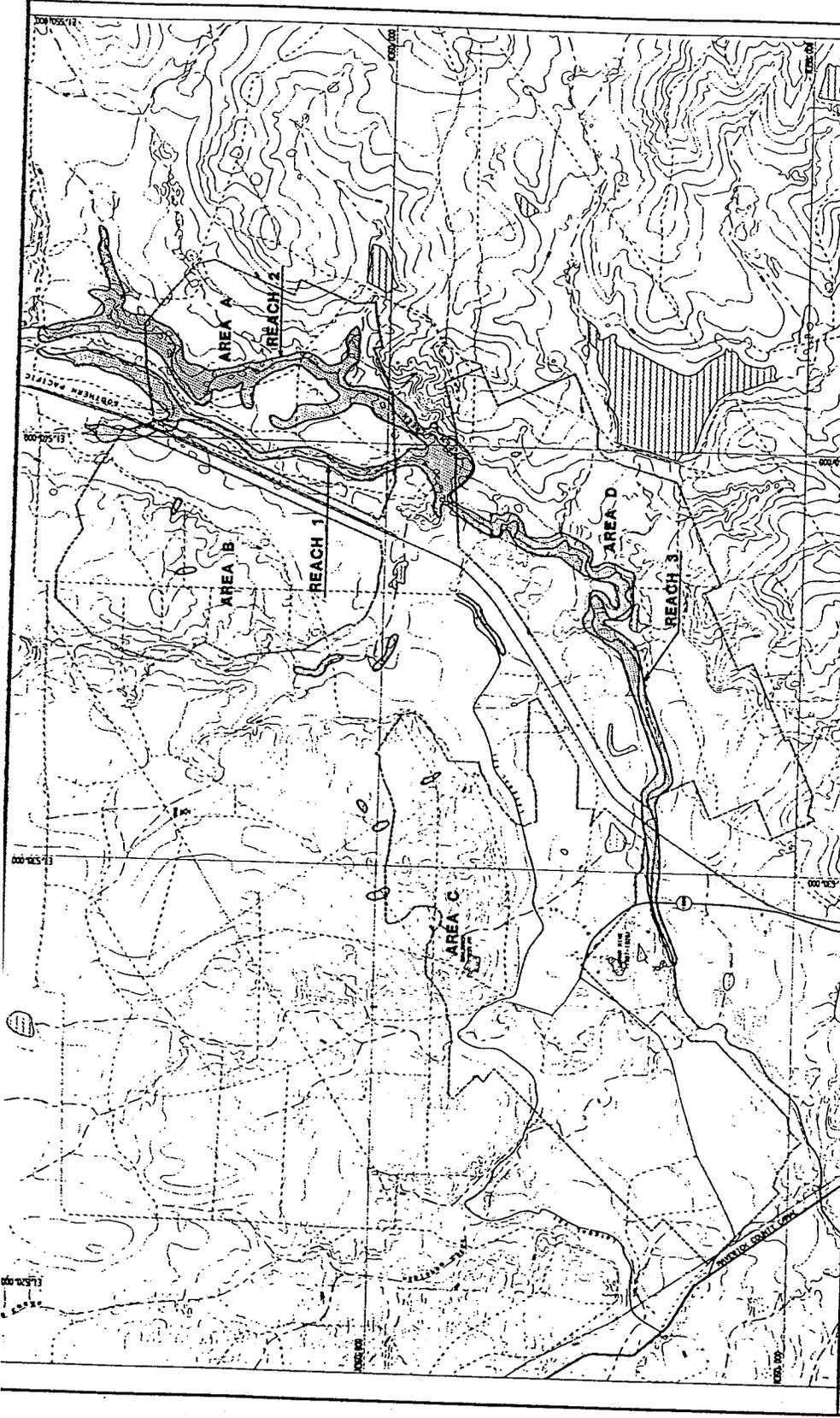
While the proposed action would almost double the site's dense brush corridor habitat in the long run, the activity would expose the project area's wildlife to the noise, lights, smells, and general human presence of a major industrial development carrying on 24-hour-a-day operations, including blasting during some portion of 12 hours of each day. Furthermore, after 19 years of such disturbance, the majority of the 5900-acre-site would be reclaimed not as the rangeland once found there, but as pasture.

Ocelot and Jaguarundi

The ocelot and jaguarundi are treated together here, as in many publications (e.g., USFWS 1987; USFWS 1990), because, although very little is known about the ocelot, and even less about the jaguarundi, the two are thought to exhibit similar habitat preferences in South Texas, to have suffered from similar causes of population decline, and to benefit from similar recovery efforts.

Habitat Requirements

The ocelot and jaguarundi require dense brushy cover, especially that occurring as a thick understory between ground level and a height of approximately 1.5 meters (Tewes 1987). The Service's recovery plan for the cats, Listed Cats of Texas and Arizona Recovery Plan (USFWS 1990) classifies optimal ocelot habitat as consisting of 95% or greater canopy cover in the shrub layer, suboptimal habitat as having 75% to 95% canopy cover in the shrub layer, and inadequate habitat as having less than 75% such cover. Both cats are reported from such habitat where it occurs along watercourses, and both will readily enter the water (Goodwin 1970; Tewes 1987), but is unclear if this proximity to water is a habitat requisite or simply an indication of where dense cover is most likely to occur. Tewes (1987) states such vegetation is most likely to occur on clay soils in the Lower Rio Grande Valley, but also in the sandy soils to the north. He adds the optimal habitat is now very scarce in South Texas. Tewes (pers. comm. 1994) states he knows of no ocelot in South Texas for which a home range was



LEGEND

- TOPOGRAPHY (CONTOUR INTERVAL 10 FEET)
- INTERMITTENT STREAM
- PERMANENT STREAM
- WATER
- EXISTING RAILROAD
- EXISTING PIPELINE
- EXISTING POWERLINE
- PRIMARY HIGHWAY
- SECONDARY HIGHWAY
- IMPROVED ROAD
- UNIMPROVED ROAD
- STATE ROUTE
- U.S. ROUTE
- PERMANENT FLOOD

- AREA A MINING AREA
- AREA B MINING AREA
- AREA C MINING AREA
- AREA D MINING AREA
- BRUSH HABITAT

U.S. GEOLOGICAL SURVEY
 DEPARTMENT OF THE INTERIOR
 GEOLOGIC DIVISION
 1974



DO NOT SCALE

FIGURE 2-1

DATE: JUNE 1984
 DRAWN BY: L. W. HARRIS
 CHECKED BY: J. W. HARRIS
 SCALE: 1" = 200'

DO NOT SCALE



DO NOT SCALE



DO NOT SCALE



DO NOT SCALE



DO NOT SCALE



DO NOT SCALE



DO NOT SCALE



DO NOT SCALE



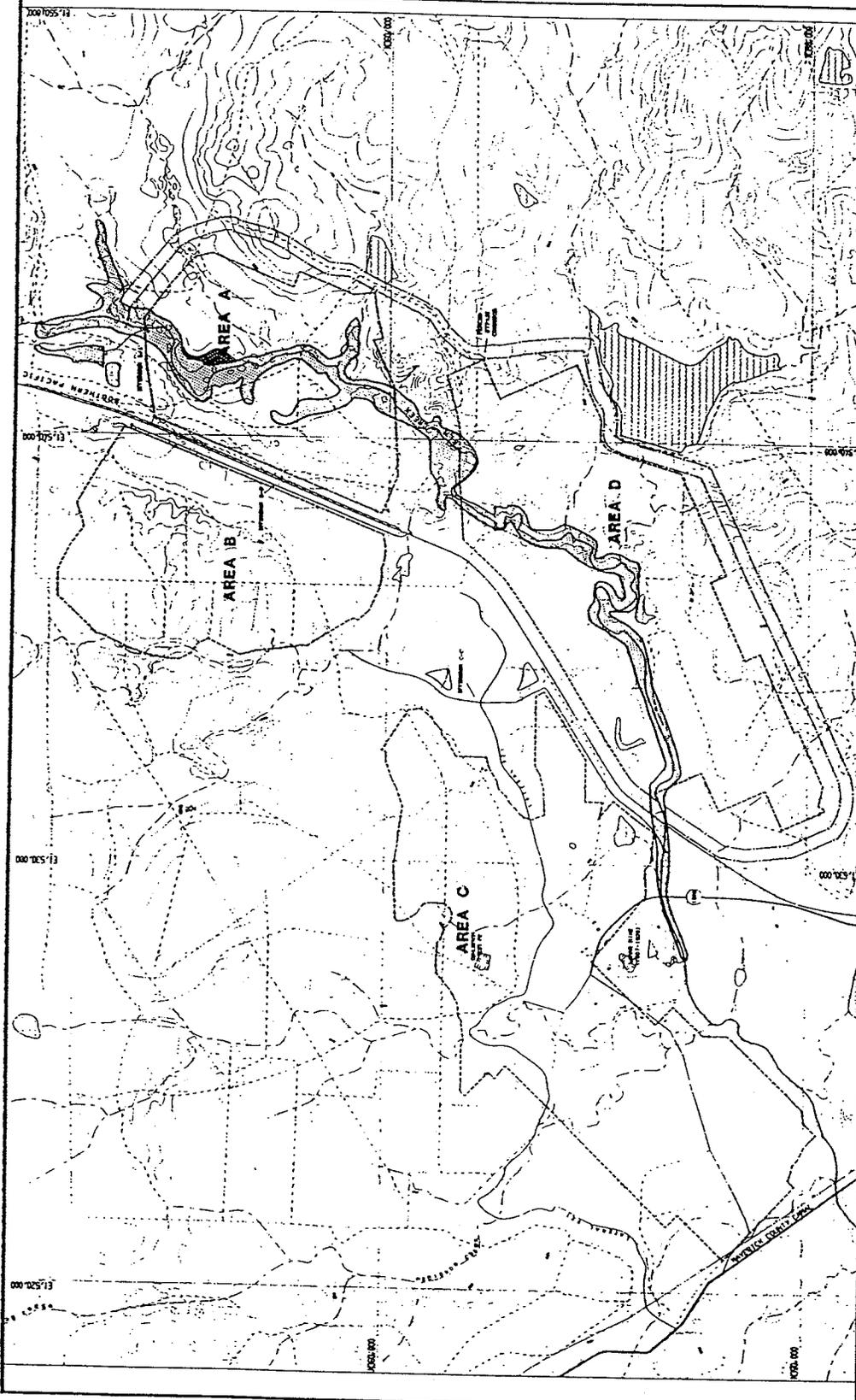
DO NOT SCALE



DO NOT SCALE



DO NOT SCALE



Dos Republicas Resources Co., Inc.

EAGLE PASS MINE

MITIGATION PLAN MAP FOR BRUSH HABITAT

END OF YEAR 1

DATE	1/15/2003
BY	W. J. MURPHY
FOR	WESTERN COUNTY CANAL
SCALE	1" = 200'
SHEET	2 OF 5

FIGURE 2-2

Merrison & Merrison, Inc.
10000000

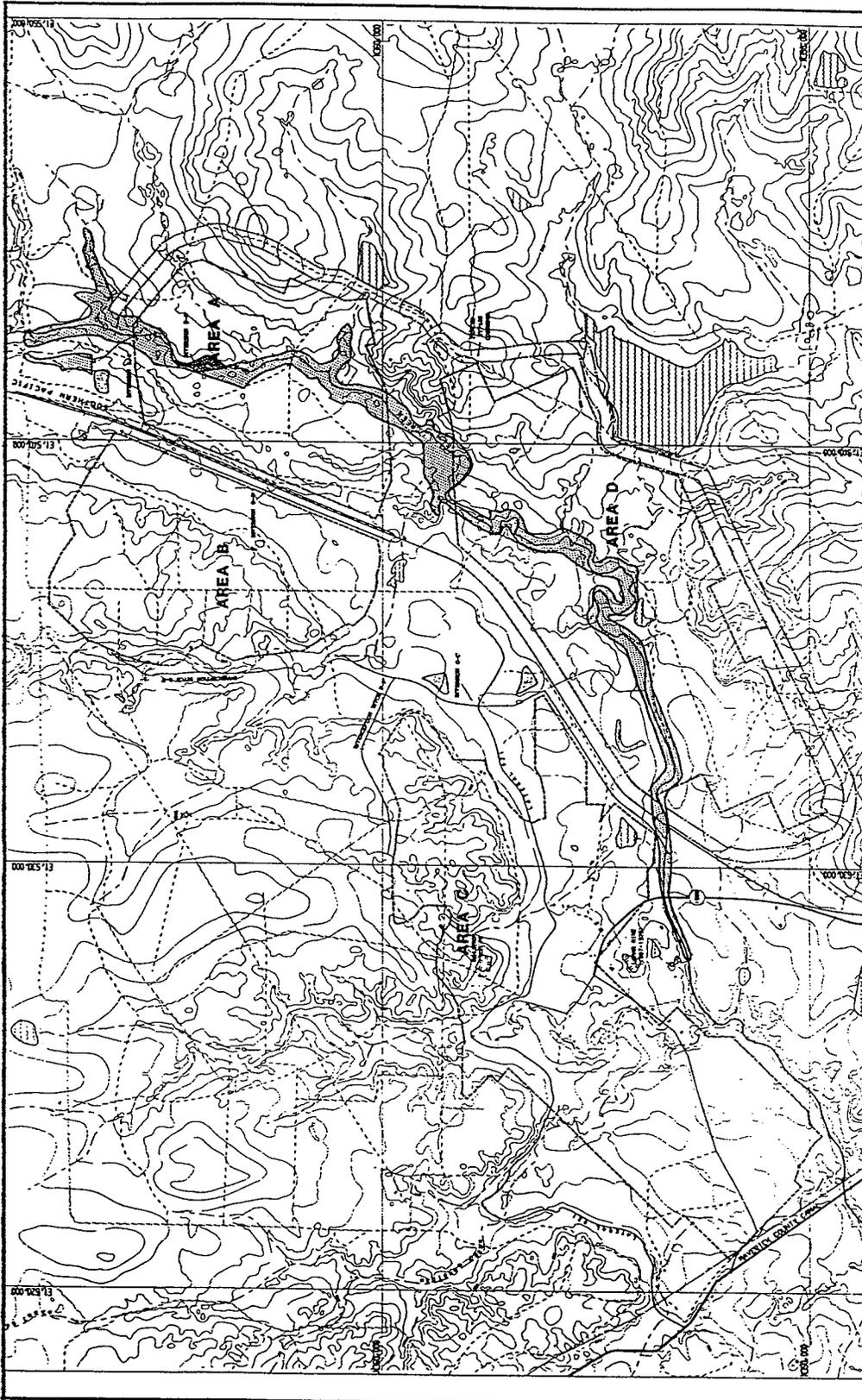
- LEGEND**
- HORIZONTAL CONTROL INTERVAL 10 FEET
 - - - INTERMITTENT STREAM
 - - - PERMANENT STREAM
 - WATER
 - EXISTING MAILROAD
 - EXISTING PIPELINE
 - EXISTING POWER LINE
 - PALMWAY HIGHWAY
 - HIGHWAY
 - IMPROVED ROAD
 - UNIMPROVED ROAD
 - ⊙ STATE ROUTE
 - ⊙ U.S. ROUTE
 - ⊙ PREVIOUSLY RIMED

- FRESH WATER DIVERSION DITCH
- WINDING AREA
- CREATED HABITAT
- FENCE LINE
- BRUSH HABITAT
- TEST PLOT FOR BRUSH HABITAT

U.S. GEOLOGICAL SURVEY
DAVIDSON'S METHOD - TEXAS QUADRANGLE
MAGNETIC DECLINATION 8' 00"
1974

SCALE METERS
0 100 200 300 400 500

SCALE FEET
0 100 200 300 400 500



Dos Republicas Resources Co., Inc.

EAGLE PASS MINE

MITIGATION PLAN MAP FOR BRUSH HABITAT

END OF YEAR 3

DATE	JUNE 1984	REVISION	
DRAWN BY	L. W. WILSON	DESIGNED BY	
CHECKED BY		APPROVED BY	
PREPARED BY	MARSHALL & MARSHALL, INC.		
SCALE	1" = 2,000'		
SHEET	3 OF 3		

FIGURE 2-3

Marshall & Marshall, Inc.

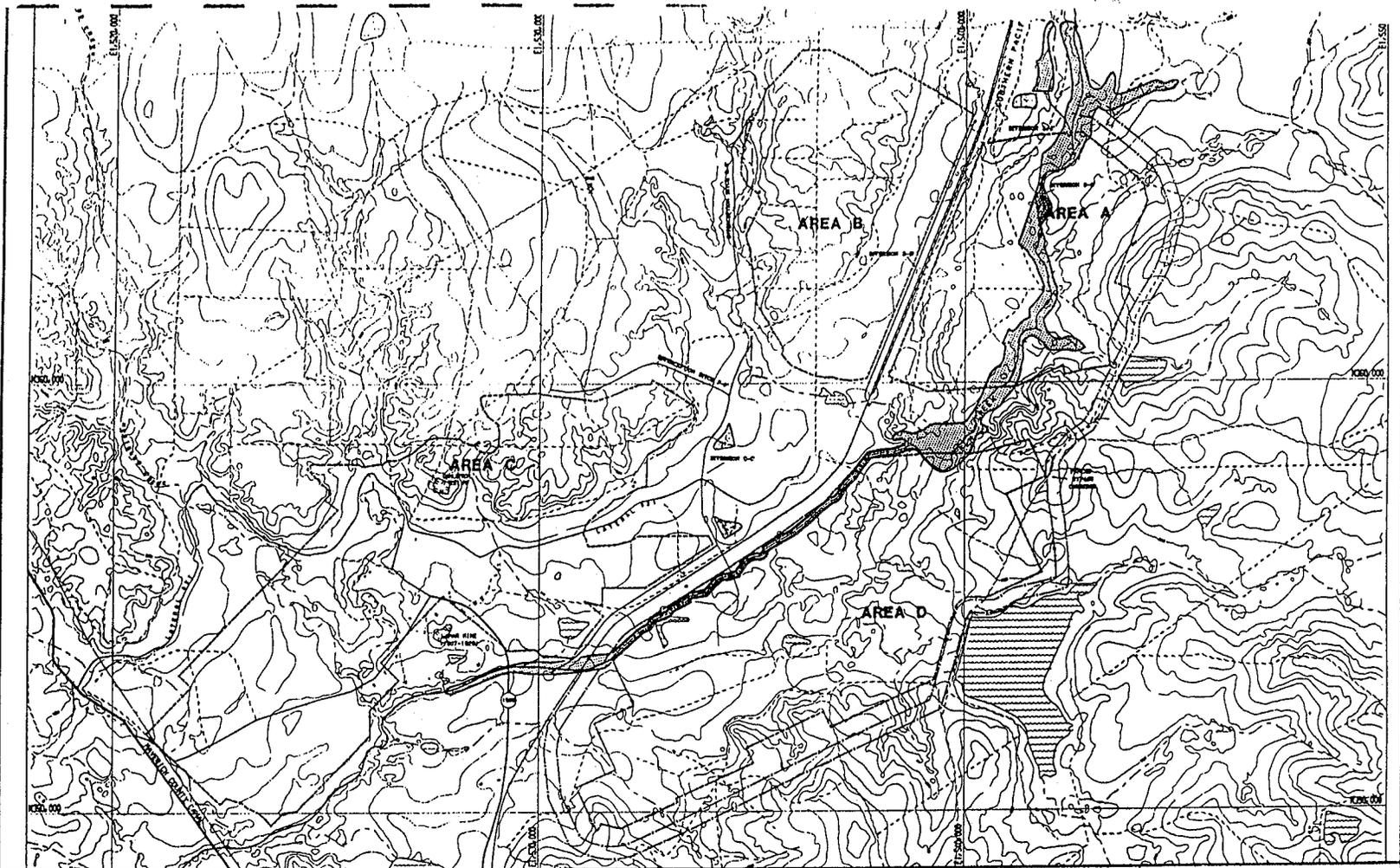
LEGEND

<ul style="list-style-type: none"> --- FRESH WATER DIVERSION DITCH --- INTERCEPTION DITCH --- AREA A RIPPING AREA --- CREATED HABITAT --- FENCE LINE --- BRUSH HABITAT --- TEST PLOT FOR BRUSH HABITAT 	<ul style="list-style-type: none"> --- TOPOGRAPHY (CONTOUR INTERVAL 10 FEET) --- INTERCEPTION STREAM --- PERMANENT STREAM --- WATER --- EXISTING RAILROAD --- EXISTING PIPELINE --- EXISTING POWERLINE --- PRIMARY HIGHWAY --- SECONDARY HIGHWAY --- IMPROVED ROAD --- UNIMPROVED ROAD --- STATE ROUTE --- U.S. ROUTE --- PREVIOUSLY MINED
---	--

U.S. GEOLOGICAL SURVEY
DAVID M. HILL, TEXAS QUADRANGLE
MAGNETIC DECLINATION 9° 00'
1974

SCALE IN METERS

SCALE IN FEET




 U.S. GEOLOGICAL SURVEY
 DEADMAN'S HILL, TEXAS QUADRANGLE
 MAGNETIC DECLINATION 8' 00"
 1974
 SCALE IN METERS
 0 500 1000 1500
 SCALE IN FEET
 0 1000 2000 3000 4000

LEGEND

- | | |
|--|---|
| <ul style="list-style-type: none"> — FRESH WATER DIVERSION DITCH — INTERCEPTION DITCH — AREA A MINING AREA — CREATED HABITAT — FENCE LINE ○ BRUSH HABITAT ○ TEST PLOT FOR BRUSH HABITAT | <ul style="list-style-type: none"> — TOPOGRAPHY (CONTOUR INTERVAL 10 FEET) — PERENNIAL STREAM — WATER — EXISTING RAILROAD — EXISTING PIPELINE — EXISTING POWERLINE — PRIMARY HIGHWAY — SECONDARY HIGHWAY — IMPROVED ROAD — UNIMPROVED ROAD ⊕ STATE ROUTE ⊕ U.S. ROUTE ○ PREVIOUSLY MINED |
|--|---|



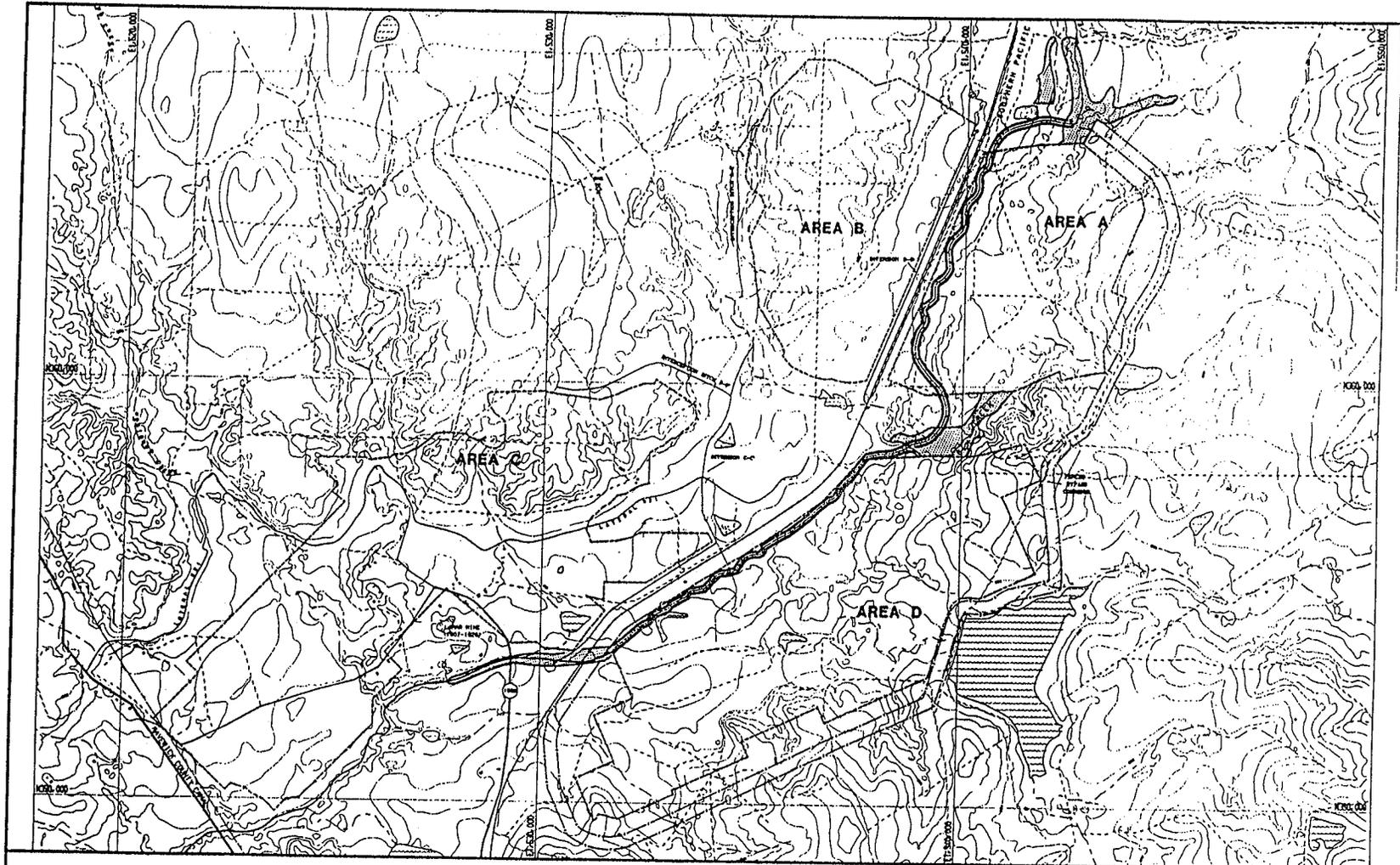
DOS REPUBLICAS RESOURCES CO., INC.

EAGLE PASS MINE
 MITIGATION PLAN MAP FOR BRUSH HABITAT
 END OF YEAR 6
 HAVELICK COUNTY, TEXAS

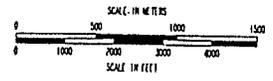
DATE	JUNE 1994	REVISION	
DRAWN BY	LIVUPPEL/DJS	CHECKED BY	STUBBS/ML
TREKPATH	0001-0002-0003-0004		
SCALE	1" = 2500'		
SHEET	4 OF 8		

FIGURE 2-4


Marston & Marston, Inc.
A Lusk, Kansas



U.S. GEOLOGICAL SURVEY
 DEADMAN'S HILL, TEXAS QUADRANGLE
 MAGNETIC DECLINATION 0°00'
 1974



LEGEND

- FRESH WATER DIVERSION DITCH
- INTERCEPTION DITCH
- THINKING AREA
- AREA A
- AREA B
- AREA C
- AREA D
- CREATED HABITAT
- FENCE LINE
- BRUSH HABITAT
- TEST PLOT FOR BRUSH HABITAT
- TOPOGRAPHY (CONTOUR INTERVAL, 10 FEET)
- INTERMITTENT STREAM
- PERENNIAL STREAM
- WATER
- EXISTING RAILROAD
- EXISTING PIPELINE
- EXISTING POWERLINE
- PRIMARY HIGHWAY
- SECONDARY HIGHWAY
- IMPROVED ROAD
- UNIMPROVED ROAD
- STATE ROUTE
- U.S. ROUTE
- PREVIOUSLY MINED

Dos REPUBLICAS Resources Co., Inc.

**EAGLE PASS MINE
 MITIGATION PLAN MAP FOR BRUSH HABITAT
 END OF YEAR 10**

HAYES COUNTY, TEXAS

DATE: JUNE 1994	REVISION:
DRAWN BY: LAURIE P. [unclear]	DESIGNED BY: [unclear]
CHECKED BY: [unclear]	SCALE: 1" = 2500'
SHEET 3 OF 5	FIGURE 2-5

Marston & Marston, Inc.

determinable which did not include at least some optimal and/or suboptimal habitat in its home range.

Tewes and Everett (1986) estimated only 25,936 acres (10,496 hectares) of optimal cat habitat remained in the State's southernmost 13 counties. Tewes (per comm. 1994) recently completed an updated estimate covering a 16-county area of South Texas and confirmed that less than 1% of the habitat in these counties remains optimal. Including suboptimal habitat, the Service (USFWS 1990) still believes less than 50,000 acres (20,000 hectares) of total habitat are still available, and at least 100,000 acres (40,000 hectares) of brush must be properly managed along the Rio Grande Valley to salvage this important resource. In an unpublished report of the survey results from 16 counties in South Texas, Tewes (1993) identified 18,678 acres of optimal habitat and 26,434 acres of suboptimal habitat.

Distribution and Population

Based on recent sightings, trapping, radio-collaring, roadkills, and photographic evidence, the ocelot is known to exist in Cameron, Duval, Hidalgo, Jim Wells, Kenedy, Kleberg, Live Oak, Nueces, San Patricio, Starr and Willacy Counties, Texas (USFWS 1990). Tewes and Hicks & Co. (1993) also refer to documented reports from Webb and Edwards Counties. In 1969 one jaguarundi was killed near Raymondville, Willacy County (Goodwin 1970), and two jaguarundis were trapped and photographed elsewhere in that county (USFWS 1987). A fourth was found roadkilled on S.H. 4 in Cameron County in 1986 (Earnest 1987). A fifth was photographed not far from the roadkill location at the Sabal Palm Grove Sanctuary in 1989 (Perez 1992). Sightings of both cats are reported throughout much of South Texas, including, in the case of the ocelot, sightings from as far north as McMullen, Live Oak, and Nueces Counties and as far west as Webb and Zapata Counties. Tewes (1989b) believes these unconfirmed sightings of ocelots sufficiently credible, along with the confirmed ones, to postulate relatively large ocelot population concentrations along the coast near Laguna Atascosa National Wildlife Refuge (NWR) and in South Central Texas, with isolated small populations occurring westward along the Lower Rio Grande Valley. Similar coastal cat populations are suspected in Mexico from the Rio Grande south to the State of Vera Cruz (Tewes 1987). Tewes (1987 and 1990) and the Service (USFWS 1990) believe it to be highly likely that the continued existence of the isolated populations along the Rio Grande makes it necessary to infer, and therefore to protect, a travel corridor connecting these populations along the river. Tewes and Everett (1986) based a "crude estimate" of the total ocelot population size in South Texas of 80 to 120 individuals upon an aerial survey of brush habitat and knowledge gained from following the movements of radio-collared ocelots trapped in or near Laguna Atascosa NWR.

Tewes (1989b) believes Laguna Atascosa NWR contains about 35 ocelots, but his crude estimate of the total population remains unchanged for want of sufficient vegetational surveys and trapping programs outside the heavily studied Laguna Atascosa NWR area (Tewes, pers. comm. 1994).

Tewes and Everett (1986) and Tewes (1989b) could make no estimate of the jaguarundi population in South Texas, although its population is presumably smaller than that of the ocelot, because confirmed sightings are rare. Goodwin (1970) reported from interviews he conducted in 1969 that jaguarundis were thought to occur in seven specific areas: Santa Ana NWR; Laguna Atascosa NWR; "Paso Real", an area along the lower Arroyo Colorado on the border between Cameron and Willacy Counties; the southern part of the El Sauz Ranch in northeast Willacy County; a small area west of Olmito in southern Cameron County; an area east of Villa Nueva; and an area near the Port Isabel Airport in Cameron County. Unconfirmed sightings, some from as far north as Brazoria County, are common (USFWS 1987), but Tewes (1989 a and b) suspects that the vast majority of such sightings are of feral housecats or other animals and concludes that historically as well as at present the jaguarundi's actual distribution was in Hidalgo,

Willacy, and Cameron Counties. Tewes (1987) believes that the jaguarundi is no longer found anywhere in the United States outside the Lower Rio Grande Valley of Texas. Despite frequent reports of sightings, the Service believes the species may be nearly extirpated even there (USFWS 1987).

Figure 3 depicts both the northern boundary of the ocelot's range in Texas (Tewes and Everett 1986; USFWS 1987) and those areas that are known to contain occupied ocelot habitat (Tewes and Laack 1989; USFWS 1990). According to the recovery plan (USFWS 1990), "Any area south of that boundary line is considered potential habitat if it contains suitable brush." Of course, if only 120 or fewer ocelots exist in the present range, most of that range is unoccupied permanently. The actual area of occupancy is very roughly approximated and probably exaggerated by Figure 3, which depicts as occupied habitat not only the known results of trapping and collaring studies but also suspected cat travel corridors and areas within 10 miles of known occupied cat territories and confirmed sightings.

It is difficult to document the presence of either endangered cat in South Texas. This circumstance is true even in areas where experts consider the ocelot's presence likely. Live-trapping efforts at Laguna Atascosa NWR, with the greatest known concentration of ocelots in South Texas, produced over the 1982-1984 period 44 captures from a total of 7,180 nights of trapping (Tewes and Everett 1984; Rappole 1985), for an average of 163 nights of trapping per capture. The jaguarundi is notoriously hard to trap (Goodwin 1970) and has not been confirmed as having been trapped in South Texas in decades. After conducting an examination of a 12,400-acre project area near the mouth of the Rio Grande, Tewes (1987) estimated that to adequately assess the ocelot's presence or absence and to quantify the available habitat would require at least a year to cover the project site and the cats' potential dispersal area within a 15- to 20-mile radius. By comparison, Tewes states (pers. comm. 1994) he knows of no one, including himself, who could estimate how much effort would be required to adequately assess the jaguarundi's presence or absence at a given Texas location.

Table I provides information on the reports of ocelot and jaguarundi sightings in the Maverick County Area. Most of this information was gathered by Roy Frye (1994), Texas Parks and Wildlife Department Biologist; supplemental data was added by Service Biologist Karen Meyer.

OCELOT HABITAT IN TEXAS
U.S. FISH AND WILDLIFE SERVICE, JUNE 1990

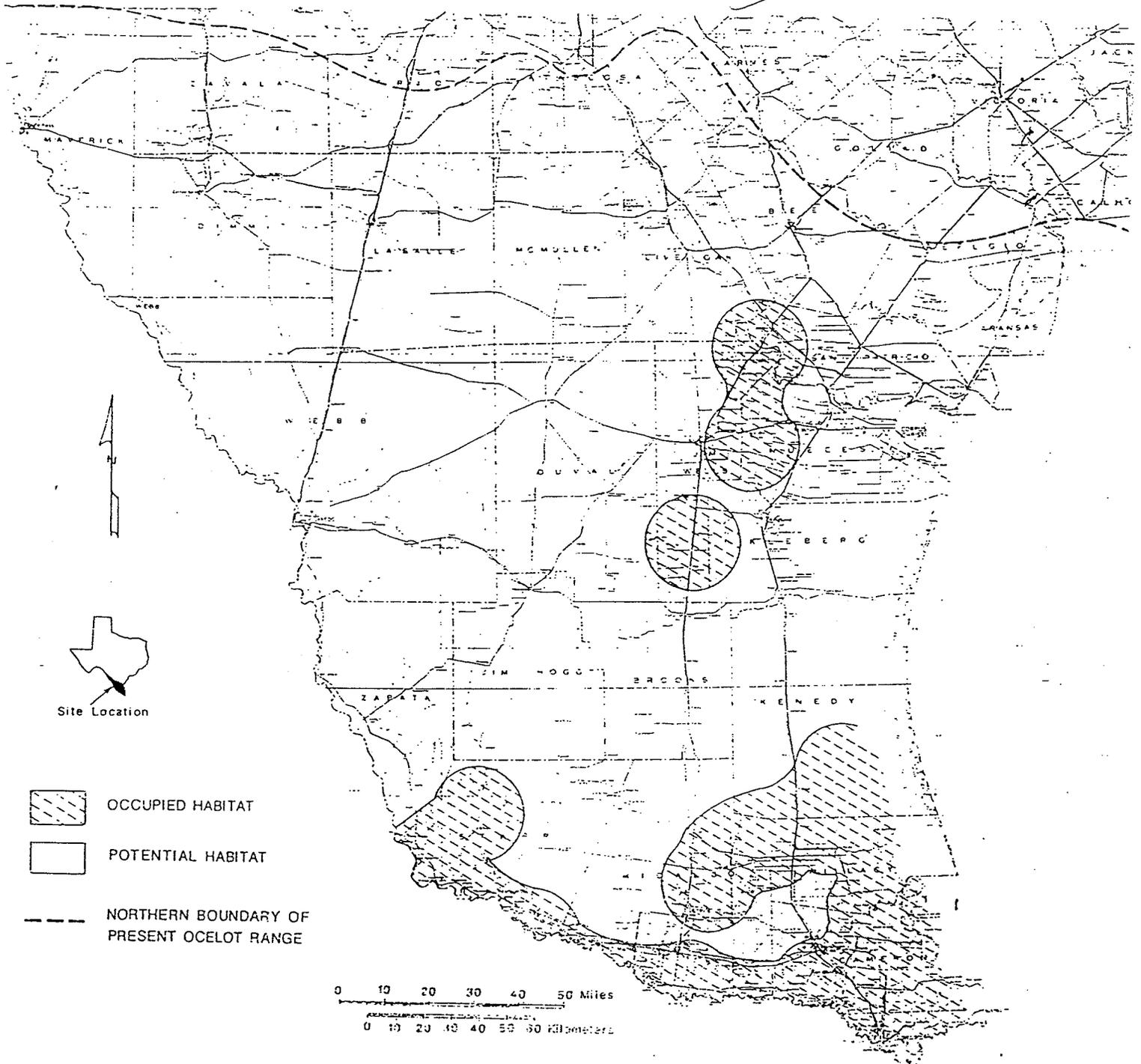


FIGURE 3

TABLE I

ENDANGERED CAT SIGHTINGS IN MAVERICK COUNTY, TEXAS

<u>Date</u>	<u>Species</u>	<u>Location</u>	<u>Observer/Source</u>
1957 or 1958	Ocelot	12 miles E. of Eagle Pass near Hwy 227 along creek	USFWS Files
Early 1970's	Ocelot	10 miles N of Eagle Pass on Hwy 277, 1/2 mile from Hwy 131 intersection	USFWS Files
1980	Jaguarundi with 2 kittens	Near the Maverick County Coal Project study area (similar to DRRC mine area)	Reference to Masters (1981) in Espey, Huston, & Associates (1981)
1991	Ocelot	Farm road between Uvalde and Eagle Pass	Mrs. Ann Alejandro and her husband
March, 1991	Jaguarundi	Roadkilled and removed to side of road by driver NW of Elm Creek on Hwy 277	Laurence Murtagh, M.D.
December, 28, 1991	Jaguarundi	30 miles S. of Eagle Pass near El Indio	Mark Hicks in Federal Aid Report, TPWD (1993)
Mid-Winter,	Ocelot	Several miles N of DRRC mine area	Texas Parks & 1991/92 Wildlife Dept. game warden
July 1993	Jaguarundi with 2 kittens	5 miles NE of Eagle Pass about 1 mile from Elm Creek	Candelario Montalvo as told to Roy Frye, TPWD
July 1993	Jaguarundi with 2 kittens	Same as Above	Son of Candelario Montalvo as described by letter to Roy Frye, TPWD
September 1993	Ocelot	Same as Above	Candelario Montalvo as told to Roy Frye, TPWD
October 7, 1993	Jaguarundi	On tank dam adjacent to Elm Creek at DRRC mine site	Mark Kainer as described in Oct. 28, 1993 letter to Roy Frye, TPWD
October 17, 1993	Ocelot	On Elm Creek 1/2 mile E of Hwy 277	Terry Fogalo in Federal Aid Report, TPWD (1994)
February 8, 1994	Jaguarundi	AT KVAW-TV station in Eagle Pass	Kristian Wheeler in Federal Aid Report, TPWD (1994)

Reasons For Decline

Both the ocelot and the jaguarundi are listed as endangered in Texas, Arizona, and Central and South America (USFWS 1987). Historic private and government predator control activities were among the reasons for their decline (USFWS 1987). Habitat alteration and loss due to brush clearing also contributed and continue to contribute to their depressed state. Never abundant and seldom trapped or killed intentionally in South Texas, these cats were at least historically taken incidentally during the hunting, trapping, and poisoning of coyotes, bobcats, and other predators (Tewes and Everett 1986; USFWS 1990). However, none of the sources citing predator control activities as contributing to the historic decline of the endangered cats indicates the significance of these activities to that decline.

Brush clearing is an ongoing activity in South Texas. Tewes (1987) claims that only a fraction of the less than five percent of original native vegetation remaining in the Lower Rio Grande Valley is optimal habitat for the cats. Rappole (1986) states only 4,942 acres (2,000 hectares) of the dense thickets preferred by ocelots remain in Texas. The average home range of ocelots, as determined from monitoring radio-collared individuals, is 4,366 acres (1,767 hectares) for adult males and 2,728 acres (1,104 hectares) for adult females (Tewes 1986).

Optimum ocelot habitat outside the Laguna Atascosa NWR occurs in widely separated tracts that are frequently smaller than 247 acres (100 hectares) each. Likely, most ocelot use occurs in less than optimal and suboptimal habitat. Most of these less than optimal habitats are utilized as travel corridors between "islands" of optimal habitat, and are becoming increasingly important as routes for dispersal and genetic exchange among the population centers in South Texas and across the Rio Grande in Mexico (Tewes 1987; USFWS 1988). Tewes (pers. comm. 1994) reports another situation in which eight collared ocelots established adjacent home ranges utilizing small portions of two 175-acre tracts of optimal and suboptimal habitats; each home range was roughly 10% optimal or suboptimal habitat and the rest lay in inadequate habitat. Monitoring of collared individuals has shown that only dispersing ocelots will move as much as 10 miles outside their home ranges temporarily (Tewes 1990). Non-dispersing individuals seldom stray more than 3 miles from their home ranges (Tewes, 1992; Laack 1992). Ocelots will seldom cross an open field, even at night, and thus in the heavily agriculturalized parts of the Lower Rio Grande Valley its travel corridors are often along fence lines (Tewes 1990). Tewes and Miller (1987) suggested that several factors, including habitat islands saturated with resident ocelots, frustrated dispersal, and offspring that fail to leave parental home ranges, may indicate the potential for inbreeding to occur.

Although habitat loss in South Texas is mainly attributable to agricultural and urban expansion (Tewes 1987), other contributing factors include drainage projects which, because they frequently follow watercourses, often remove the dense brush associated with the watercourses. Flood control projects affect riparian brush that is cleared mainly because it impedes flood flow. Dams have been another major cause of riparian brush destruction. Road construction and associated improvements destroy brush through right-of-way clearing and the borrowing of fill material. Improved roads increase human presence (Jahrsdoerfer and Leslie 1988).

Another effect of habitat loss and motor vehicle traffic increases in South Texas has been ocelot roadkills. Tewes (1987) reported an annual average ocelot mortality in South Texas of 29 percent, with automobile collisions causing three out of four mortalities. At least five ocelots occupying marginal areas had been killed at the time of his June 1987 report. Between June 1987 and August 1990, four more roadkills had been discovered (Tewes 1989b). Two more were discovered by March 1992 (Laack 1992). Tewes and Miller (1987) concluded that most

dispersal by ocelots is unsuccessful and often ends in death, typically as a result of automobile collisions. However, not all roadkilled ocelots were dispersing individuals (Tewes 1990).

Very little is known about the incidence of diseases in wild populations of ocelots and jaguarundis. The USFWS (1990) and Tewes (undated) both cite the potential for catastrophic impact to the endangered cat population from highly contagious and frequently fatal diseases such as feline panleucopenia (distemper). Bobcats, raccoons, and feral housecats carry the disease and could pass it on to ocelots and jaguarundis (USFWS 1990). As the human population increases within the range of the listed cats, so do the populations of the free roaming pets that may encounter them. The endangered cats probably also sustain mortalities from predators and in intraspecific disputes, but the extent of these losses to the cats' populations is unknown (Tewes 1992).

Vulnerability To Extinction

The fragmentation of ocelot habitat in the U.S. has resulted in several disjunct ocelot populations. All populations are in a precarious situation because of limited habitat and because a large amount of this area is being adversely modified and further fragmented. Some habitat is managed for the ocelot, but in general the carrying capacity of Texas habitat is on a downward trend and most likely supports a smaller population than that of the 1980's.

The Service's recovery plan (USFWS 1990) paints a very grim picture for these cats:

Habitat loss and fragmentation in Texas, especially along the Rio Grande, critically threaten the long-term survival of the ocelot and jaguarundi in this area. A coordinated effort at recovery of these species must be developed and implemented as soon as possible. Hesitation may result in loss of key habitat and biological corridors necessary for survival of the entire ocelot population (Tewes and Schmidly 1987). Thorough and continued field investigation must continue for many years to approach a complete understanding of the biology of this species.

The survival of this species will depend on the intense and multifaceted cooperation of Federal, state, and private organizations, and private land owners. Early emphasis of this concept will aid implementation of a recovery effort for the ocelot.

* * *

The current, although incomplete, understanding of habitat requirements suggests that full recovery and delisting may not be a practical objective, although downlisting to threatened may be attainable.

In summary, the endangered cats are very scarce and their limited dense brush habitat is very fragmented (Tewes and Schmidly 1987). Having to depend on brush fragments makes them highly vulnerable to being killed by motor vehicles, reduces genetic viability, and may leave them with too little habitat to permit their full recovery and removal from protection under the Act. Ideker (1984) concluded the only hope for the continued survival of both cats in Texas lay in the preservation of its rapidly vanishing brush habitat and conversion of cleared connecting habitat back to dense brush. The most significant issues about the ocelot and the jaguarundi are that there are no firm data available on the present size of their South Texas populations and on whether their numbers are growing, stable, or declining. Consequently, the Service cannot state that the loss of a single individual would not be likely to jeopardize the continued existence of those populations.

Program Impacts

DRRC and the Service worked closely during consultation to avoid the loss of and/or the use of the project site's potential cat habitat. Several alternatives were addressed (moving all or part of the mining operation away from the Elm Creek corridor) that would have preserved the habitat, but none were found to be economically feasible. Another mitigation goal addressed was the creation of a new corridor for the passage of listed cats, since retaining the existing corridor was infeasible. This goal proved almost as elusive as corridor preservation because the Service raised the issue of whether the cats would use either an existing or a created brush corridor for travel if mining operations approached or even crossed the corridor boundaries. Tewes (pers. comm. 1994) gives these accounts of the ocelot's varying reaction to disturbance: a denning female on a resaca south of Laguna Atascosa National Wildlife Refuge (LANWR), moved her den 1000 yards or more as the result of human presence and brush clearing with a machete, whereas in other areas ocelots do not move from dense habitat while trucks pass by every 30 minutes only 100-200 yards away, and at the LANWR they sometimes nap close to the parking lot. The solution put forward in the DRRC proposed plan of operations is a complexly choreographed sequence of habitat loss, mining activities; and habitat restoration. Tables 2 and 3 and Figures 2-1 through 2-6 provide DRRC's own chronology of the essential details.

In Project Year 1, DRRC would begin to create its proposed bypass brush corridor, which would extend through the uplands east of the life-of-mine areas (See Figure 2-2).¹ The upland bypass corridor's route would be selected to follow the densest available brush habitat, some of which already approaches suboptimal habitat in quality, and connect at each end to the Elm Creek riparian brush upstream and downstream from the mining site. According to the ABA, the upland bypass corridor would be 300 feet wide, fenced to exclude livestock, and include a maximum of 15 unvegetated gaps no more than 50 feet wide to be left in the corridor to allow passage of ranch equipment and livestock. The ABA also states the upland bypass corridor's vegetative volume would not average less, in any transect segment longer than 250 feet, than the lowest volume of any 15 transects measured in the dense brush habitat (apparently meaning within the existing Elm Creek riparian corridor). The Service has had repeated difficulty in comparing the application and the results of DRRC's brush assessment technique to its own field methods, and favors the use of the more subjective but familiar visual estimation of the >75% shrub canopy cover definition for suboptimal and optimal ocelot habitat. Since the purpose of the upland bypass corridor would be to replace the existing Elm Creek riparian corridor during the first half of the project's life, it should consist of habitat, aside from gaps, at least equal to sub-optimal cat habitat in quality. A photographic inventory of the Elm Creek brush corridor before project construction, as well as 108 acres of the corridor which would remain intact, would serve as references to settle disputes over replacement brush quality. The Service will identify what the vegetative goal should be, and let the EPA arbitrate any differences in how DRRC and the Service perceive that the goal is met.

The ABA states that DRRC would leave at a minimum a 100-foot-wide corridor within the original Elm Creek brush habitat until either the upland bypass corridor or

¹DRRC at one time proposed a fourth corridor, which would have followed the course of a runoff diversion ditch west of and roughly parallel to the railroad. However, it would not have connected to Elm Creek at its ends like the other corridors and, except for serving as a potential site for testing revegetation methods, would not have benefited DRRC's major goal of replacing the Elm Creek corridor. Although it might have added approximately 50 acres of dense brush to the project site when restored, creating this fourth corridor would have diverted resources while DRRC was also striving to create the upland bypass corridor, a project feature the successful and timely completion of which is essential to minimizing incidental take or preventing jeopardy.

Table 2 Summary of brush habitats and corridors during various stages of mining. This table replaces Table 4 in the June 1994 BA.

Time Period	Acreage of Brush Habitat ¹	Acreage in Protected Upland Bypass Corridor	Number of Brush Habitat Corridors	Acreage of Created Brush Habitat	Total Acreage of Brush Habitat and Protected Upland Corridor
Existing Condition	284.2	0	1 ²	0	284.2
End of Year 1	215.3	218.0	2 ³	0	433.3
End of Year 3	179.1	218.0	2 ³	0	397.1
End of Year 6	152.7	218.0	2 ⁴	40.3	411.0
End of Year 10	107.7	218.0	2 ⁵	79.0	404.7
End of Reclamation	107.7	218.0	3 ⁶	187.2	512.9

¹ Within area to be disturbed by mining activity. This includes acreage for the Elm Creek channel which averages approximately 47 feet in width.

² The brush corridor consists of the Elm Creek corridor.

³ The brush corridors will consist of the main Elm Creek corridor and the bypass corridor.

⁴ The brush corridors will consist of the original Reach 2, the recreated Reach 3 of Elm Creek and the bypass corridor.

⁵ The brush corridors will consist of the recreated Reaches 1 and 3 of Elm Creek and the bypass corridor.

⁶ The brush corridors will consist of the two recreated Elm Creek corridors and the bypass corridor.

Table 3 Summary of revegetation and habitat enhancement efforts.

Area	Year First Disturbed	Year Revegetation/ Enhancement Work Begins	Estimated Year Revegetation/ Enhancement Goals Met
Upland Bypass Corridor	NA	1	5
Reach 1	1	2	8
Reach 2	10 ¹	10	16
Reach 3	6	6	12
New Elm Creek Channel (Area D)	NA	15	21

¹ A small portion of the channel will be disturbed in year one, but a continuous brush corridor will remain until year ten.

a recreated Elm Creek brush corridor was established and the minimum vegetative density goals were met. The Service sees two problems with this statement. First, it implies that parts of the Elm Creek riparian area's optimal and suboptimal cat habitat would be cleared, much less approached by men and machines, before the brush in alternative corridors has matured to at least suboptimal habitat. Second, as may be seen from Figures 2-2 and 2-3, these impacts to the existing Elm Creek riparian brush would occur before the end of Project Year 3, at which time Figure 2-3 shows no recreated Elm Creek corridor to have been established. In fact, Figures 2-4 and 2-5 do not show Elm Creek's lower and upper main segments within the project site (Reaches 3 and 2, respectively; see Figure 2-1), to have been recreated until the ends of Project Years 6 and 10, respectively. Thus, even though the recreated creek segments would each be associated with the establishment of 100-foot widths of brush corridor, they would not be in place, much less be able to match Elm Creek's riparian brush quality, soon enough to substitute fully for the original corridor.

Although this is an apparent flaw in DRRC's plans, it is far from fatal. The Elm Creek corridor lies near the middle of two elongate mining areas. The recreated Elm Creek corridor would be approximately 1500 feet west of the existing Elm Creek corridor, while the upland bypass corridor would be over 2000 feet to the east of the existing corridor. Assuming the mining proceeds at a steady rate from west to east, the recreated Elm Creek corridor brush would be 5 to 10 years old by the time the mining operations approached within 1000 feet of the upland bypass corridor, at which time those activities would also be over 2500 feet away from the recreated Elm Creek corridor. Thus, during the life of the project there would always be at least one alternative corridor with brush no less than five years old and with a buffer zone between the corridor and the major mining operations, including blasting, of over 1000 feet.

The activity which would impact the existing Elm Creek corridor before the upland bypass corridor's brush could reasonably match the quality of the former's brush is associated with the diversion of one of the creek's braids or tributaries (Reach 1; See Figure 2-1) and part of one of its meanders (in Reach 2) away from the proposed mining activities. As this activity is necessary to prevent flooding of the mine's open pit during the very earliest phase of the mine's operations, the Service does not see how its impacts can be avoided or delayed. However, since a minimum width of 100 feet of the corridor would remain near the diversion, and only a few thousand feet of corridor would be narrowed, the Elm Creek corridor should remain usable for cat movements. The Service believes that if the diversion were constructed only during the daylight hours and done as quickly as possible, the diversion's impact on those mainly nocturnal movements would be minimized to an acceptable level.

Once the mining is complete, Elm Creek would be restored more or less to its old location, leaving the recreated Elm Creek brush corridor in place, and another 100-foot-wide brush corridor would be established along the banks of the restored creek. Establishment of this last corridor, like the other, is to be considered complete when its vegetative density composition matches that of the original Elm Creek riparian brush corridor. Unlike the others, this restored corridor should also be like the original in vegetative species diversity. Particularly crucial is the replacement of the sacaton, a species of grass forming dense bunches and thickets very similar to habitat used at the Laguna Atascosa NWR by denning ocelots (Tewes pers. comm. 1994).

According to the ABA, other features of the mitigation include leaving no more than six unvegetated gaps, each no more than 200 feet wide, through the recreated Elm Creek brush corridor (Reach 3) to allow movement of equipment and vehicles, and placing culverts beneath the gaps "as necessary" for drainage and to allow wildlife movement. Since these gaps would carry a lot of traffic and the roadkill is the commonest known form of ocelot mortality, the Service not only finds the culverts necessary, but also finds it prudent to install fine-mesh

fencing at the gaps to direct wildlife movement away from the roadways and into the culverts. Another potential mitigation measure cited by the ABA is the use of irrigation to establish the proper vegetative density in portions of the upland bypass corridor. Since this density is also a critical issue, the Service strongly supports the use of irrigation.

Other potential impacts to the listed cats include those to the project site's water and air quality. However, the Draft EIS does not predict significant deterioration of either parameter. A more serious consideration must be given to the permanent loss of the majority of the project site's brush. Upon completion of restoration, three brush corridors (viewed from west to east, these would be the recreated Elm Creek brush corridor, the restored Elm Creek riparian brush corridor, and the upland bypass corridor) and an unquantified acreage of experimental brush plots and untouched occurrences of native brush with densities of <75% to the shrub canopy level would remain, but the rest of the site would be revegetated with grass. Although it is far more likely judging from the site's distance to known subpopulations of ocelots in the Lower Rio Grande Valley, and from the configuration of the optimal and suboptimal habitat on site, that the site serves only as a travel corridor and does not contain an ocelot's home range, the latter possibility is disturbing enough to warrant researching it further.

The Service is not aware of any other coal mining or similar action in the area that would add significantly to the Service's mandatory duty to consider cumulative impacts. Aerial observations did reveal, however, that west of the Rio Grande the project vicinity has almost no brush. Ranch management practices on this side of the border have fortunately been less destructive of wildlife habitat. In recent months the Service has reviewed only three construction projects in the Eagle Pass vicinity (a gravel pit operation, a water intake, and a bingo parlor), and their net impact to brush has been extremely small. Information on land use changes available in the DEIS was very scanty, particularly with regard to the intentions of adjacent ranchers regarding brush management, but the Service observed few signs of recent conversions of brush in the surrounding area. The only potential land use change which the Service finds likely to affect the cats cumulatively is by project-induced expansion of Thompson Road and by the encroachment of human habitation near the road and the reach of Elm Creek between the project site and the Rio Grande. The DEIS gives accounts of how the City of Eagle Pass would attempt to discourage this encroachment while DRRC is shown as encouraging it by offering free taps into a proposed potable waterline through the area. If the City wishes to curb development along Elm Creek, and thus maintain a potential cat travel corridor by eliminating the impact of induced housing development, the City would make the mine project more environmentally acceptable. DRRC has qualified the DEIS language about the taps by stating the offer would be made to existing property owners to offset project impacts, and would not provide inducements to new developments (Lisa Kost, pers. comm. 1994).

Much has been discussed concerning the proposed mine's indirect effects, due to the combustion of its coal at the Rio Escondido power plants in Mexico. The DEIS does not quantify the anticipated air quality changes this action would cause at the project site or elsewhere in the path of the emission plume, although it does note an expected combined level of sulfur dioxide emissions from an existing plant (Carbon I) and another under construction (Carbon II) as great as that of the seventh largest air emission source of sulfur dioxide in the United States. The BA cited possible impacts from the potential plume of the Carbon I/II complex to the majority of the listed plants and animals in Texas by way of adverse effects of toxins in water courses and to plants which are listed or which could support habitat in turn for listed species. The ocelot and jaguarundi were among the species cited by the BA. However, based in part upon the inability of the BA's authors to uncover any literature documenting adverse effects of acid rain on the Southwest, including damage to Southwestern waters, Southwestern forests, and Southwestern fish and wildlife, and partly because western soils were

characterized as having high acid neutralizing capacities, the BA concluded no significant indirect impacts to listed species in Texas or to their habitats were expected from the sulfur dioxide plume of Carbon I/II. The Service does not dispute these conclusions, but notes that just because the documentation was not found renders its non-existence neither certain nor permanent. What may be a surer consideration is that because the prevailing winds at the project site are from the southeast and north, acid rain from Carbon I/II, which lie to the west, is not likely to affect any cats using the site.

The Service notes for the record here that as a member of two organizations, the Border Environmental Cooperation Commission and the North American Development Bank, recently formed through side agreements associated with the North American Free Trade Agreement, the EPA has just expanded its authority to identify and to respond to environmental problems along the border. Section 7 (a)(1) of the ESA specifies that all Federal agencies shall, in consultation with and with the assistance of the Secretaries of the Departments of the Interior and of Commerce, utilize their authorities in furtherance of the purposes of the ESA by carrying out programs for the conservation of listed endangered and threatened species. The Service believes it would, under the circumstances here, be entirely appropriate for EPA to authorize the research necessary to predict, more accurately than in the DEIS and BA, the air quality impacts on listed species to which the DRRC project would indirectly contribute through the combustion of its coal at the Rio Escondido power plants. That research should be directed toward predicting specific acid precipitation levels at specific map locations in the power plants' plumes and then toward extrapolating, based on the individual sensitivities of the species and their habitats to expected exposure levels, the potential impacts of the acid releases. If these impacts are found to be significant, EPA should reconsult. Finally, EPA should consider whether to authorize the financing of the installation of scrubbers to combat these impacts to threatened and endangered species and their critical habitats at the source.

Conclusions

The Service concludes that if the mitigative measures built into DRRC's actions are carried out, access by an ocelot or jaguarundi along the potential corridor represented by the Elm Creek riparian brush will, except for a few encroachments, not be diminished significantly during the life of the project. Perhaps more importantly, there would be more optimal and suboptimal ocelot habitat on the project site, when the project is done, than there was before the project began. In fact, when the project area is reclaimed, DRRC predicts an increase in the acreage of this ocelot habitat from 284.2 acres, mostly along a single corridor, to a total of 512.9 acres, established along three corridors. Each of these goals, maintenance of travel and dispersal corridors, preservation of existing optimal and suboptimal cat habitat, and the increase of the extent of such habitat, are consistent with the Service's recovery plan goals (USFWS 1990). However, this consultation has not been consistent with the Service's recovery plan's call for a stepwise approach to assessing project impacts in those areas of the ocelot's range, including the vast majority of South Texas, where no current information of the ocelot's presence, number, and activities is available. To comply with the mandatory requirement at Section 7 (a)(2) of the ESA that a consultation utilize the best scientific and commercial information available, the Service's recovery plan (USFWS 1990) states:

If an activity is proposed within the potential habitat that could impact the ocelot, a visual inspection should be made of the activity area. If there is a reasonable potential for the ocelot to occur there, a professionally regulated live-trapping project should be conducted to assess ocelot occurrence, with overview provided by the Fish and Wildlife Service. The trap effort should include the activity area and a ten-mile radius from this area. The magnitude of live-trapping will be guided minimally by the location of known ocelot populations relative to the proposed activity, the presence of ocelot sightings

and amount of ocelot habitat present, and the judged impact of the proposed activity.

During previous consultations involving this office where ocelot habitat is present on the project site, the Service has allowed the action agency or applicant the choice of arranging for this trapping survey to be conducted, or of carrying on the consultation without the survey but, giving the species the benefit of the doubt, under the assumption that the project site was occupied by the ocelot. In this case, an ocelot survey was begun but not completed before the cat expert involved and the Service were satisfied that the ocelot was unlikely to occupy the proposed coal mine site. This poses a dilemma, for, if the Service assumes the site is occupied, it must also assume, still giving the species the benefit of the doubt, that the site could be used as a travel corridor, as home range, or both. If used only as a travel corridor, the project has mitigative measures to address that possibility and reduce the likelihood of taking to the non-jeopardy level. If also used in more continuous fashion as a home range, the loss of the Elm Creek riparian brush habitat would mean significant interference with the feeding, breeding, and sheltering of each occupant, since no collared ocelot is known to exist in a home range without at least a little such habitat, and the proposed mitigative measures might not be adequate to assure non-jeopardy. Clearly, it would not be prudent to proceed without learning whether DRRC's site has any resident ocelots.

In EPA's comments on the draft of this biological opinion, EPA supplied a lengthy argument in support of a position that the Service should not in this biological opinion require as a reasonable and prudent measure that additional information be gathered by completing the ocelot trapping survey after the opinion has been completed. For example, EPA's November 4, 1994 letter stated emphatically that: "The Service cannot now "sidestep" its obligation to render a complete and timely biological opinion on the basis of an alleged information inadequacy." (Emphasis theirs). EPA's letter goes on to suggest that the Service must request an extension of the formal consultation period if necessary to alleviate an informational inadequacy before completing the biological opinion. Of course, the Service's position is that it may call for post-opinion studies in search of adequate information. The following citation from the legislative history (House Conference Report No. 96-697, Dec. 11, 1979, p. 12) demonstrates the Service's position is supported by long agency practice, judicial decisions, and Congressional intent. As may be seen from that citation, Congress considered, and rejected, EPA's interpretation of the ESA:

SECTION 4

Section 4 (1)

The conference report adopts the language of the House amendment to Section 7 (a) pertaining to consultation by Federal agencies with the Fish and Wildlife Service and the National Marine Fisheries Service. The amendment, which would require all Federal agencies to ensure that their actions are not likely to jeopardize endangered or threatened species or result in the adverse modification of critical habitat, brings the language of the statute into conformity with existing agency practice, and judicial decisions, such as the opinion in National Wildlife Federation v. Coleman.

Section 7 (b) of the Act requires the Fish and Wildlife Service and the National Marine Fisheries Service to render biological opinions which advise whether or not proposed agency actions would violate Section 7 (a)(2). Courts have given substantial weight to these biological opinions as evidence of an agency's compliance with Section 7 (a). The amendment would not alter this state of the law or lessen in any way an agency's obligation under Section 7 (a)(2).

As currently written, however, the law could be interpreted to force the Fish and Wildlife Service and the National Marine

Fisheries Service to issue negative biological opinions whenever the action agency cannot guarantee with certainty that the agency action will not jeopardize the continued existence of the listed species or adversely modify its critical habitat. The amendment will permit the wildlife agencies to frame their Section 7 (b) opinions on the best evidence that is available or can be developed during consultation. If the biological opinion is rendered on the basis of inadequate information then the Federal agency has a continuing obligation to make a reasonable effort to develop that information.

This language continues to give the benefit of the doubt to the species, and it would continue to place the burden on the action agency to demonstrate to the consulting agency that its action will not violate Section 7 (a)(2). Furthermore, the language will not absolve Federal agencies from the responsibility of cooperating with the wildlife agencies in developing adequate information upon which to base a biological opinion. If a Federal agency proceeds with the action in the face of inadequate knowledge or information, the agency does so with the risk that it has not satisfied the standard of Section 7 (a)(2) and that new information might reveal that the agency has not satisfied the standard of Section 7 (a)(2).

DRRC has informed the Service that delays in project start-up may make the project infeasible. Furthermore, by letters dated August 16, 1994, the Secretary of the Interior and the Director of the Service were assured by both United States Senators and nine United States Congressmen representing the State of Texas that further delay will increase the likelihood that DRRC will lose its contract.

The Service will, therefore, call for the post-opinion completion of the ocelot survey, because EPA requires the missing information to demonstrate to the Service that issuing an NPDES permit to DRRC is unlikely to cause the taking of one or more ocelots by harassing or harming individuals that may use the proposed mine site as home range(s). In addition, the survey will minimize the likelihood of incidental take by providing information on cat habitat use than can be used to improve the habitat reclamation efforts.

Another conclusion must be reached regarding the occurrence of the jaguarundi on the project site. The Service is so unsure of its habits, distribution, and especially its susceptibility to capture by trap or on film that it has no parallel protocol for determining how to survey for the jaguarundi. Throughout the recovery plan and in this consultation the Service has treated the ocelot as the jaguarundi's surrogate, so in this situation the Service finds it reasonable to direct the survey efforts only at capturing, collaring, photographing, tracking, or otherwise seeking physical data on the ocelot. If the survey should, in the process of pursuing the ocelot, turn up conclusive physical evidence of the jaguarundi, so much the better, but it would not be prudent, consistent with the current state of the trapping art, to assume a given level of effort was sufficient to declare the presence of the jaguarundi at any dense brush occurrence in South Texas to be unlikely. Furthermore, since an agency and/or applicant are thus denied the ability to demonstrate via a survey that the jaguarundi is not likely to occupy habitat, it would appear unreasonable to assume that occupancy without the benefit of prior conclusive physical evidence of its presence. Therefore, the Service will in this case formulate a reasonable and prudent measure that does not require DRRC and its contractors even to address the jaguarundi during the ocelot survey unless such survey reveals jaguarundi presence accidentally.

As mentioned earlier, the Service has had difficulty comprehending the method used in the BA and ABA to assess brush density. This is not to say it denies the credibility of that method, but it probably will not be prepared to accept its results prior to completion of this Biological Opinion. The Service does not

rule out the possible use of the BA and ABA brush density methodology at some time in the future, particularly if the Service is allowed to pick the transects used in those measurements. The Service believes it has been fair in assuming that achieving vegetative densities in the brush corridors of at least 75% would fulfill the goal of reproducing at least suboptimal habitat to replace similar habitat occurring near Elm Creek. DRRC has argued that Tewes and Hicks & Co. (1993) have overstated the density of the Elm Creek riparian brush, but the Service believes DRRC did not take into account, as both the Service and Tewes and Hicks & Co. (1993) did, the fact that the corridor outlined in the latter's report included the channel of Elm Creek and numerous other gaps; i.e., no one has inferred that the Elm Creek brush corridor is solid optimal and suboptimal ocelot brush habitat. Consequently, it is not the Service's intention that the created brush habitat be solid suboptimal habitat or better, for that would unfairly exceed the goal of reproducing the Elm Creek corridor's habitat qualities. The Service is satisfied that its biologists or a cat expert of its choosing can identify suboptimal or better ocelot habitat swiftly and efficiently in the field using the standard, if somewhat subjective, methodology, and that either can readily take into account the fact that the Elm Creek corridor never consisted of unbroken brush. If there are any disputes over the attainment of vegetative density goals, 108 acres of that corridor, including some just upstream of the project area where grazing of livestock will presumably continue, will be available as a living model for comparison. The Service also suggests heavily photodocumenting the Elm Creek corridor to assist in future comparisons with other corridors. In the event that by the time brush density measurements become critical this dispute is still unresolved, EPA will be given final decision-making authority.

The last conclusion the Service would like to discuss involves a decision over whether to require the completion of the ocelot survey prior to initiation of construction at the Eagle Pass Coal Mine, or to permit construction to commence while that survey is still under way. Two issues affect that decision. First, it may not be economically feasible to delay construction much longer; DRRC reportedly fears someone else may be able to provide delivery of coal to Mexico before it can. Second, the value of trapping, etc. during the survey will be lessened appreciably if the trapping sites are exposed to a lot of project-related disturbances. The Service concludes that based on the current level of information it is not likely that initiation of work would immediately invalidate the survey results or affect sufficient dense brush to cause harm. The Service therefore finds it would be prudent to recommence the survey immediately in the areas of the project site which must be assessed before disturbance, then to survey farther afield as the development spreads across the site. This would minimize interference and maximize the chances of catching an ocelot. Because Hicks & Co. and Dr. Michael Tewes have already conducted a field season of trapping in the Elm Creek area, where the cats are most likely to occur, and are thus already familiar with which specific trapping sites were fruitless and which still warrant additional trapping effort, the Service believed initially that these consultants were more likely than any new consultant to be able to finish the survey as just described before project activities could affect the survey results or resident cats. However, the Service has learned (Don Blanton, pers. comm. 1994) that Hicks and Co. cannot resume the survey before Christmas, 1994, and would not be interested in performing that survey if the Elm Creek corridor is disturbed by project activities before the end of February, 1995. An EPA spokesperson (Darlene Coulson, pers. comm. 1994) places the probable date of issuance of DRRC's NPDES permit at sometime in early January, 1995. If DRRC should decide to commence construction immediately upon receipt of this permit, then the Service recommends that DRRC put a new consultant to work surveying the project area immediately.

DRRC has stated repeatedly its opinion that the Service's proposal conditions for completing the ocelot survey are, to use the company's words, "too open-ended." To minimize the probability of take, EPA must demonstrate to the Service how ocelots use the area within a 10-mile radius of the proposed project site, and

determine whether any home ranges occur there. To do this, the scientist conducting the survey must be considered competent enough by the Service to be granted a collecting permit, and this surveyor must decide when, in his or her expert opinion, sufficient effort has been exerted to provide this data. The Service knows that this is not impracticable from experience with other surveys, and DRRC knows from its contract with Hicks and Company, Inc. and Dr. Tewes that a surveyor can predict an end to the survey. In fact, the latter estimated the survey he oversaw would require 9000 trap nights (3066 of which were completed). DRRC has therefore demanded, without adequate basis, in the Service's opinion, that Dr. Tewes' successor finish the survey after 5934 trap nights. DRRC's demands give the impression that DRRC, not the scientist finishing the survey, can dictate when there is sufficient data to achieve the surveyor's subjective goal: self-satisfaction that all the ocelots in the area, if any, have been captured and radio-collared, and that any ocelot home ranges have been delineated accurately. Because each survey site is different and each cat expert has a different satisfaction level, the Service does not know how long this would take and will not condone the imposition of any deadlines, even those acceptable to another surveyor, since to do so might prevent the survey data from being the best available. The Service has repeatedly told DRRC that the proposed survey condition only appears open-ended, and that even this appearance will cease when DRRC gets an estimate of survey duration from the new surveyor.

Should the survey uncover proof of ocelot or jaguarundi home range on the project site, the Service, EPA, and DRRC can consult again based upon this new information and take what action is deemed appropriate to prevent jeopardy.

Biological Opinion

It is my biological opinion that the proposed action will not jeopardize the continued existence of the endangered Texas populations of the ocelot and jaguarundi. It is also my biological opinion, in view of the degrees of uncertainty surrounding the statuses of the populations, the continuing lack of scientific data regarding the possible use of the project site as habitat by these species, and the potentially severe consequences of an unanticipated taking, that EPA should use its authority to insure, through the implementation of reasonable and prudent measures, that the project's likelihood of taking is further reduced.

Incidental Take

Section 9 of the ESA, as amended, prohibits any taking (harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or attempt to engage in any such conduct) of listed species without a special exemption. Harass is further defined as an act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering. Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavior patterns such as breeding, feeding or sheltering. Under the terms of ESA Section 7 (b)(4) and Section 7 (0)(2), provided such taking is in compliance with the incidental take statement, taking that is incidental to and not intended as part of the agency action is not considered taking within the bounds of the Act. The Service has concluded in this case that the likelihood of taking a jaguarundi or an ocelot is probably small, but otherwise unquantifiable with the data available.

The proposed coal mine would result in the major modification of approximately 5900 acres of mainly brush habitat, including approximately 220 acres of optimal and suboptimal ocelot habitat which is aligned so that it may serve as a travel corridor. Although this modification would undoubtedly affect cats using this corridor, due to the mitigative measures the DRRC would employ to create brush corridors, it appears that there is a small likelihood that this modification

would result in a significant impairment of an endangered cat's dispersal or travel behavior. Likewise, because the sequencing of construction, restoration, and brush corridor creation would at all times place at least a 1000-foot-wide buffer between at least one of the corridors and the noise, lights, dust, and general human activity of the coal mine operations, there is a small likelihood that endangered felids attempting to transit the project site would be significantly hindered by these disturbances. Thus, these disturbances will result in the probably small but unquantifiable likelihood that there will be impact to the cats using the site as a travel corridor. On the other hand, in the event one or more of the cats occupies a home range including a portion of the project site, there is insufficient data to quantify any incidental take. Carrying out the reasonable and prudent measures provided below should remedy this situation and allow further reduction in the likelihood of taking. However, should an unanticipated taking occur, and the terms and conditions for carrying out the reasonable and prudent measures are shown to have been implemented, such taking shall not be considered a prohibited taking (See Section 7 (0)(2)).

Both EPA and DRRC argued in their comments on the draft of this biological opinion for incidental take numbers greater than zero, and against reinitiating consultation if taking occurred. The foregoing paragraphs explain that there is insufficient information to anticipate and quantify all taking. Nonetheless, the project can go forward because the Service anticipates that with the implementation of the terms and conditions below likelihood of the loss of even a single individual can be reduced. Should the unanticipated take occur, however, the parties must reconsult, based upon new information, including the highly significant prima facie evidence that the anticipation was faulty and that the terms and conditions did not have the desired effect. Most importantly, taking an ocelot would demonstrate that EPA and DRRC have not assured that the project would not jeopardize the population's continued existence.

DRRC has expressed considerable concern about the effects on its project operation if a listed cat were killed at the site or caught during the continuation of the ocelot survey. The Service points out that halting the project or even reinitiating formal consultation are not the only possible actions that might be taken. So long as it does not violate Section 7 (a)(2), that the Service will continue to do everything within its authority, and adjust its recommendations during consultation accordingly, to see that DRRC's interests are neither ignored nor infringed.

Reasonable and Prudent Measures

The Service believes the following reasonable and prudent measures are necessary and appropriate to minimize the anticipated take:

1. Establish mandatory performance standards for the brush corridors.
2. Determine how the ocelot uses the project vicinity and avoid interference with such use.
3. Provide an action plan for endangered species encounters.

Terms and Conditions for Implementation

Compliance with the following terms and conditions, which implement the reasonable and prudent measures above, is necessary for both EPA and DRRC to be exempted from the prohibitions of Section 9 of the ESA:

1. As committed to in the BA, the research design for the vegetation experiments will be reviewed by the Service within two months following completion of this Biological Opinion. Reports regarding vegetation experiments will be provided to the Service as indicated in Table 5 on

page 32 of the-BA. As stated in the BA, a minimum of 500 individual trees and 400 pads of vegetation will be salvaged as an experiment on the effectiveness of plant transplants. Before the mining activity cuts completely across the existing Elm Creek riparian brush corridor, DRRC shall have established, to temporarily take its place, the proposed upland bypass corridor. Prior to the establishment of the upland bypass corridor as functioning suboptimal ocelot habitat, any work done in the existing Elm Creek Corridor, such as in Reaches 1 and 2, shall be done in daylight hours only and as swiftly as possible.

2. At the time the natural corridor along Elm Creek is removed, the upland bypass corridor shall be no less than 300 feet wide, have a brush density and conformation like that of the natural corridor, contain at least as much suboptimal to optimal ocelot habitat, as defined in the Service's endangered cat recovery plan (USFWS 1990), proportionally as the natural corridor, and be fenced to exclude cattle. Existing ranch roads shall be permitted to cross the upland bypass corridor, but may not be wider nor more numerous than are necessary to maintain existing ranch management activities.
3. As soon as possible after Elm Creek is moved, a new Elm Creek brush corridor shall be recreated. This recreated corridor shall have a density and conformation like that of the original natural corridor, contain at least as much as suboptimal ocelot to optimal habitat proportionally as that corridor, be at least 100 feet wide, and be continuous except for a maximum of six unvegetated gaps each no more than 200 feet wide, to allow for crossings by DRRC's equipment and vehicles. Culverts shall be placed beneath each crossing, and fine-mesh fencing will be placed parallel to the crossing areas to divert cats away from the roadways and through the culverts. The recreated Elm Creek brush corridor must be in place and meet the above specifications before the proposed mining operations come within 1000 feet of the upland bypass corridor.
4. Immediately after completion of the proposed mining, Elm Creek will be restored to its approximate original location, leaving the recreated Elm Creek brush corridor to remain in place. During reclamation of the project site, another Elm Creek brush corridor at least 100 feet wide shall be recreated straddling the restored Elm Creek. Reclamation shall continue until the second Elm Creek brush corridor's vegetation has a density and conformation similar to that of the original natural corridor, and contains at least as much suboptimal to optimal ocelot habitat proportionally as that corridor. The vehicle crossings through the first recreated Elm Creek brush corridor shall be reduced in width and number to the minimum necessary to maintain the preproject level of ranch operations, and any additional open space within that corridor shall be allowed to revegetate naturally up to the edges of the ranch roads. All three brush corridors shall be maintained as brush in perpetuity, the only exceptions being minor gaps for the herding of livestock and the movements of ranch equipment. So long as each corridor consists of at least suboptimal habitat at the completion of reclamation, the fences necessary to achieve this goal may be removed, and the landowners may graze and water their livestock at the site as before the project.
5. To ensure conservation of the ocelot in the project area, habitat management plans (HMP's) consistent with the previous Terms and Conditions shall be developed in writing and implemented for:
 - Existing Elm Creek riparian brush corridor
 - Upland bypass brush corridor
 - Recreated Elm Creek brush corridor
 - Restored Elm Creek brush corridor.

The HMP's will be developed with the assistance of the Service to address these activities:

- Management of habitats before, during and after mining
 - Monitoring (beyond surveys) to include annual report
 - Mining activities
 - Roads, culverts, fencing, buffers, etc.
 - Recreation of corridors (how, when, etc.)
6. The ocelot survey that was underway prior to this consultation shall be completed. The Service is allowing this survey to be conducted while preparations for, and the actual commencement of, the proposed mining are allowed to go forward, even though it would be best for the sake of survey accuracy that any trapping or other sampling in the Elm Creek corridor be completed before DRRC's proposed construction activities disturb that habitat. The goal of the survey shall be to provide to the Service a report on the kind, level, and location of ocelot activity on and within a 10-mile radius of the proposed mine site. This information may be used to modify habitat recreation efforts to conform more closely with the needs of the cats and thereby reduce the likelihood of incidental take. The survey methods may include but not be limited to live-trapping by licensed individuals, radio-collaring any endangered felids so taken, use of variously triggered cameras, collection and analysis of scats, fur, etc., or other techniques. The cat expert directing the survey and responsible for reporting on its results to the Service shall be the sole determiner of when to end the survey, and shall do so when he or she no longer feels continued efforts would add additional information about the presence of ocelots in the survey area. In other words, the Service will accept this expert's opinion that there are no ocelots, or no more than those the survey may uncover, in and around the project site. The survey may result in the uncovering of evidence of jaguarundi at the site, and the Service will expect any captured jaguarundi to be collared and monitored just like an ocelot, but the duration of the survey shall not depend upon what would likely be a fruitless attempt to gather physical evidence of the ultra-elusive jaguarundi.
7. If no ocelot or jaguarundi is documented in the project area during the ocelot survey, the incidental taking associated with this project will be considered to be confined to the insignificant impacts to cats using the project site as a travel corridor, and Terms and Conditions Numbers 1 through 5 will be considered adequate to minimize the incidental taking. However, if some or all of the project site is found by the survey to be in continuous use by an individual(s) of either endangered species, further consultation will be required to determine the adequacy of the above Terms and Conditions. Such consultation may be formal or informal depending upon the situation and the alternatives available to minimize or eliminate currently unanticipated impacts. For example, if an ocelot is captured, collared, and found to have a home range that includes habitat outside the proposed brush corridors, additional Terms and Conditions might be added to require extended monitoring of the individual, possible alterations to the mining operations to reduce direct impacts to the cat, and alterations to the reclamation plan so as to restore that home range as brush instead of as pasture.
8. Inform all workers of endangered or threatened species (both Federally listed and State listed) which potentially occur in Maverick County. Devise a plan to handle the possibility of encountering endangered or threatened species on the mine site. Ensure that all workers are aware of this plan. If DRRC or anyone else associated with this project locates a dead, injured, or sick ocelot or jaguarundi, initial notification must be made to the nearest Service Law Enforcement Office. Care should be taken in handling sick or injured specimens to ensure effective treatment, and

in handling dead specimens to preserve biological materials in the best possible state for later analysis of cause of death. In conjunction with the care of sick or injured endangered species or preservation of biological materials from a dead animal, the finder has the responsibility to ensure that evidence intrinsic to the specimen is not unnecessarily disturbed.

Unlike the steps the applicant must take to minimize and mitigate the incidental taking associated with an action permitted subject to a Habitat Conservation Plan in accordance with Section 10 (a), the Terms and Conditions for Implementation of Reasonable and Prudent Measures identified to minimize the incidental taking associated with an action permitted by another Federal agency but carried out by an applicant must be complied with by the agency, the applicant, or both, in accordance with Section 7 (b)(4)(c)(iv). In this case, both the agency and the applicant share in the responsibility for the loss of 5900 acres of habitat, and it is the Service's opinion that both parties should share in the role of preventing that impact from becoming larger. In its draft of this biological opinion, the Service recommended that EPA make the Terms and Conditions conditions of the NPDES permit. EPA's November 4, 1994 letter commenting on that draft gave reasons why EPA found itself unable to comply with this recommendation. However, in his telephone conversation with Johnny French on November 7, 1994, Bill Cox suggested the alternative of revising the NPDES application materials to incorporate the Terms and Conditions into the proposed action. The Service agrees that Mr. Cox's alternative would provide precisely the degree of control over the implementation of the Terms and Conditions which EPA should be able to wield.

Conservation Recommendations

Section 7 (a)(1) of the ESA directs Federal agencies to utilize their authorities to further the purposes of the ESA by carrying out conservation programs for the benefit of endangered and threatened species. The term "conservation recommendations" has been defined as suggestions of the Service regarding discretionary measures to minimize or avoid adverse effects of a proposed action on listed species or critical habitat or regarding the development of information.

The project area has been remarked upon by a number of biologists among agencies and contractors alike as exhibiting unusual levels of diversity of species and abundance of individuals. The traits are attributable to a rare local abundance of water sources in an otherwise arid terrain, and to the site's occurrence within the overlapping influences of the Chihuahuan, the Tamaulipan, and possibly even the Balcones Escarpment ecoregions. For example, one does not often encounter beaver, burrowing owls, and Texas indigo snakes together within such a relatively level terrain. Loss of similarly unique ecosystems has frequently lead to the listing of their occupants as threatened or endangered species; it is no surprise to find the indigo snake on the State protected list. It is therefore recommended that the conservation practices associated with this project not end with the preservation of a few strips of dense brush, albeit to protect two very worthy species, but that they include the restoration of a whole ecosystem, rather than just the brightest fragments. Provided as always that the landowners are willing to accept this management alternative, the Service asks that the project site be restored to its original vegetation regimes, rather than converted largely to a grass monoculture. If the entire site cannot be restored in this fashion, the Service recommends that at least the corridor created along the restored portion of Elm Creek be vegetated similar in scope (at a minimum ratio of 1:1) and in plant diversity to the riparian vegetation that occurred adjacent to that stream before the project began. Furthermore, since so much hangs on the success of maintaining the passage of the listed cats, the Service strongly recommends irrigating during all attempts to establish brush corridors. Finally, it would be highly desirable that work not commence in or near the Elm Creek corridor until the ocelot trapping survey in that corridor is complete.

The Service applauds the City of Eagle Pass's offer to limit development on the Elm Creek corridor below the project site and thus counter a possible induced loss of this essential habitat. The Service offers the City, local ranchers and other private landowners its assistance, through programs such as Partners for Wildlife and Partners in Flight, for possible development of other activities to enhance the habitats of the endangered cats and of other animals and birds in the area. Likewise, the Service encourages the EPA to use its new NAFTA-related authorities to detect and correct impacts to man and his environment on both sides of the border. Addressing the indirect air quality effects of this project on listed species should be among EPA's top priorities in this area.

Conclusion

This concludes formal consultation on the effects of the DRRC Coal Mine. As required by 50 CFR 402.16, reinitiation of formal consultation is required if: (1) new information reveals effects of the agency action that may impact listed species or critical habitat in a manner or to an extent not considered in this biological opinion; (2) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this biological opinion; (3) a new species is listed or critical habitat designated that may be affected by the action; or (4) the anticipated incidental take amount or extent is exceeded.

Sincerely,



JOHNNY D. FRENCH
Acting Field Supervisor

BIBLIOGRAPHY

- Blanton, Don. 1994. Personal communication with J. French, USFWS, Corpus Christi, TX. October 18, 1994.
- Coulson, Darlene. 1994. Personal communication with J. French, USFWS, Corpus Christi, TX. October 19, 1994.
- Earnest, R.D., Acting Director, USFWS [Letter to T. Turner, Sierra Club Legal Defense Fund]. 1987. April 9. Located at : USFWS, Corpus Christi, TX.
- Goodwin, F., Jr. 1970. Behavior, life history and present status of the jaguarundi, *Felis yagouaroundi* (Lacepede), in South Texas. M.A. Thesis, Texas A&I University, Kingsville, TX. 66 pp.
- Homerstad, Gary. 1990. Personal communications with J. French, USFWS, Corpus Christi, TX. February 1990.
- Ideker, J. 1984. Documentation of the status of neotropical felids along the Lower Rio Grande Valley wildlife corridor in South Texas: 10 October 1984 - 30 September 1985. Santa Ana/Rio Grande Valley National Wildlife Refuge Complex, Alamo, TX. 13 pp.
- Jantzen, R.A., Director, USFWS. [Letter to Clayton Bushong, Chief, Ecological Effects Branch, EPA]. 1984. November 9. Located at: USFWS, Washington, D.C.
- Jahrsdoerfer, S.E. and D.M. Leslie, Jr. 1988. Tamaulipan brushland of the Lower Rio Grande Valley of South Texas: description, human impacts, and management option: U.S. Fish and Wildl. Serv., Bio. Rep. 88 (3G). 63 pp.
- Kost, Lisa. 1994. Personal communication with J. French, USFWS, Corpus Christi, TX. October 17, 1994.
- Laack, Linda. 1992. Personal communication with J. French, USFWS, Corpus Christi, TX. March 1992.
- Mendoza, Martin, Jr., Kingsville District Supervisor ADC. [Letter to Johnny French, USFWS] 1992. September 25. Located at: USFWS, Corpus Christi.
- Perez, Chris. 1992. Personal communication with J. French, USFWS, Corpus Christi, TX. March 1992.
- Rappole, J.H. 1985. Study of the endangered ocelot and jaguarundi occurring in Texas: 10 October 1983 - 30 September 1984. Prepared for USFWS, Control No. 14-16-002-81-229. Caesar Kleberg Wildlife Research Inst., Kingsville, TX. 11 pp.
- Spinks, J.L., Jr., Deputy Regional Director USFWS. [Letter to Jim Ackerman, Chief, Ecological Effects Branch, EPA]. 1988. May 25. Located at: USFWS, Washington, D.C.
- SWCA, Inc. Environmental Consultants. 1994a. Biological assessment for the Dos Republicas Resources Company proposed Eagle Pass Coal Mine. June, 1994. Prepared for U.S. EPA on behalf of Dos Republicas Resources Company, Inc. Austin. 37 pp. + append. & figs.
- _____. 1994b. Biological assessment addendum Dos Republicas Resources Company proposed Eagle Pass Coal Mine. August 26, 1994. Prepared for U.S. EPA on behalf of Dos Republicas Resources Company, Inc. Austin. 23 pp. + append. & figs.

- Tewes, M.E. 1986. Status and distribution of the endangered ocelot and jaguarundi in Texas. In *Cats of the World; biology, conservation, and management*. National Wildlife Federation, Wash., D.C. pp. 147-158.
- _____. 1987. Potential effects of the Playa del Rio Project on the endangered ocelot and jaguarundi. Prepared for the U.S. Army Corps of Engineers, Galveston, TX. 31 pp.
- _____. 1988. Personal communication with K. Collins, USFWS, Corpus Christi, TX. October 25, 1988.
- _____. 1989a. Personal communication with J. French, USFWS, Corpus Christi, TX. January 1989.
- _____. 1989b. Personal communication with J. French, USFWS, Corpus Christi, TX. June 1989.
- _____. 1990. Personal communication with J. French, USFWS, Corpus Christi, TX. February, March, April, and July 1990.
- _____. 1992. Personal communication with J. French, USFWS, Corpus Christi, TX. March and November 1992.
- _____. Undated. Report on the relationship of the Riverbend RV Park with the ocelot and jaguarundi. Prepared for Design Five Architects, Brownsville, TX. 20 pp.
- _____. 1994. Personal communication with J. French, USFWS, Corpus Christi, TX. August 24, 1994.
- Tewes, M.E., and Hicks & Co. 1993. An assessment of potential habitat for ocelots on the proposed Dos Republicas Resources Co., Inc.'s Eagle Pass Mine Site. August 1993 draft. Prepared for Marston & Marston Inc. Austin. 14 pp.
- Tewes, M.E., and L.L. Laack. 1989. Status report on ocelot distribution in South Texas. Report to the USFWS; Albuquerque, NM. 2 pp.
- Tewes, M.E., and S.D. Miller. 1987. Future research for the endangered ocelot population of the United States. Proceedings of the 3rd Southeastern ongame and Endangered Wildlife Symposium. Georgia Dept. of Nat. Res. Athens, GA. pp. 164-166.
- Tewes, M.E., and D.J. Schmidly. 1987. The neotropical felids: jaguar, ocelot, margay, and jaguarundi. In *Wild furbearer management and conservation in North America*. Ontario Min. of Nat. Res., Ontario. pp. 697-711.
- U.S. Environmental Protection Agency. 1994. Draft environmental impact statement Eagle Pass Mine, Texas. EPA 906/06-94-002. Dallas, TX. 126 pp. + append.
- U.S. Fish and Wildlife Service. 1987. Endangered and threatened species of Texas and Oklahoma. Endangered Species Office, USFWS. Albuquerque, NM. 128 pp.
- _____. 1988. Intra-Service formal Section 7 consultation - Laguna Atascosa ocelot translocation project. USFWS. Albuquerque, NM. 4 pp.
- _____. 1990. Listed cats of Texas and Arizona recovery plan with emphasis on the ocelot). USFWS, Albuquerque, NM. 131 pp.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

NOV 4 1994

Mr. Rogelio Perez
Ecological Services
U.S. Fish & Wildlife Service
Campus Box 338
Texas A&M University--Corpus Christi
Corpus Christi, Texas 78417

Dear Mr. Perez:

We have reviewed your office's draft biological opinion (DBO) on the proposed Dos Republicas Resources Company, Inc. (DRRC) project. As explained below, it appears to us inconsistent with Section 7(b)(4) of the Endangered Species Act (ESA) and implementing consultation regulations and policies of the U.S. Fish & Wildlife Service (Service). Also, the DBO suggests your office may misunderstand the regulatory methods EPA Region 6 would use for implementing necessary mitigation requirements and the Service's potential role in enforcement of those requirements.

EPA now requests clarifying changes in the final biological opinion and/or supplementary explanation to show that the current approach to the DBO complies with applicable legal and policy requirements. We have also enclosed a copy of DRRC's comments on the DBO. To accommodate the Service's consideration of EPA and DRRC comments, DRRC has agreed in writing to extend the deadline for issuance of a final biological opinion until November 18, 1994.

Reasonable and Prudent Measure 2

Reasonable and prudent measure 2 of the DBO requires EPA and DRRC to "determine how the ocelot uses the project vicinity and avoid interference with such use." DBO, p. 26. To implement that "reasonable and prudent measure," the DBO requires a future trapping study of indeterminate length undertaken by a "cat expert" chosen by the Service (but paid for by DRRC). See DBO, pp. 26-27 ("Terms and Conditions" 6 and 7). The DBO appears to claim such a research effort is required because currently available data is insufficient for determining whether endangered felids use the proposed mining site as home range. If the study shows an ocelot uses the area as part of its home range, "additional Terms and Conditions might be added to require extended monitoring of the individual, possible alterations to the mining operations to reduce direct impacts to the cat, and alterations to the reclamation plan so as to restore that home range as brush instead of pasture." DBO, p. 32. This appears inconsistent with ESA § 7.



Recycled/Recyclable
Printed with Soy/Canola Ink on paper that
contains at least 50% recycled fiber

We do not contend research projects can never be designated reasonable and prudent measures. As explained in the preamble to the Service's consultation regulations, "should the Service believe that the best way to minimize incidental takings is through research, an explanation of how such research will accomplish this will be included [in the biological opinion]." 51 Fed. Reg. 19926, 19962 (June 3, 1986). The DBO does not explain how a trapping effort is necessary or appropriate to minimize such an incidental take, however. It instead claims such a study is necessary because it might show "whether DRRC's site has any resident ocelots," and, thus, whether incidental take may occur. DBO, p. 23. It does not thus appear to be a "reasonable and prudent" measure as described in the preamble language and 50 C.F.R. § 402.12(i)(1)(ii).

We understand DRRC terminated an ongoing 9,000 trap night study after 3,066 trap nights because your office explained, on February 2, 1994, that it would not rule out the presence of endangered felids in the project area no matter how long trapping continued. The DBO now suggests this earlier Service statement was inconsistent with the recommendations of its own Recovery Plan for Ocelots and that your office would now accept a trapping survey of indeterminate duration as conclusive evidence no cats were present in the project area. Data for such purposes cannot be solicited, however, via imposition of a "reasonable and prudent measure" in a biological opinion concluding formal consultation.

ESA § 7 limits consultations both in time and evidentiary scope, requiring that the Service normally render a biological opinion within 90 days of initiation of formal consultation using the "best scientific and commercial data available." See ESA §§ 7(a)(2), 7(b)(1)(A). The Service cannot now "sidestep" its obligation to render a complete and timely biological opinion on the basis of an alleged informational inadequacy. 51 Fed. Reg. 19931. This is why 50 C.F.R. § 402.14(f) requires that requests for additional data occur during consultation. As explained at 51 Fed. Reg. 19951:

The Service must develop its biological opinion based upon the best scientific and commercial data available regardless of the "sufficiency" of that data....In some cases, the Service may determine that additional information would enhance the formulation of its biological opinion. To cover this situation, the final rule adopts the procedure discussed by Congress in the legislative history of the 1979 Amendments. S.Conf. Rep. No. 697, 96th Cong., 1st Sess. 12 (1979) When additional data is believed to be advantageous, the Service will request an extension of formal consultation. When the Service requests such an extension, it will identify

the types of additional data sought for assisting consultation.

EPA received no such request during this consultation. Coming at this untimely date, the DBO's expressions of desire to rule out the presence of listed species in the future thus provide a perception that the Service is simply unwilling to terminate consultation by issuing a complete biological opinion in accordance with its statutory duty. Ruling out the presence of listed species is a process normally used for eliminating consultation requirements and for terminating consultation without issuance of a biological opinion. See 50 C.F.R. §§ 402.12(d)(i) and (k); 402.13(a); 402.14(a), (b)(1), and (1)(3). There is no similar reason to "rule out" species presence in a biological opinion; the Service's issuance of that opinion itself terminates consultation. See 50 C.F.R. § 402.14(1)(1). Moreover, neither ESA § 7 nor the Service's regulations require that the Service "rule out" a species presence, either before or after issuance of a Biological Opinion. They simply require the Service to provide its opinion on whether a proposed project is likely to result in jeopardy to or takes of listed species and require that it do so in a limited time frame on the basis of limited "best available" data.

At page 23, the DBO suggests your office might find additional reasonable and prudent measures necessary if it complies with the Service's statutory obligation to provide an opinion on potential ocelot use of the mining site as home range, stating:

This poses a dilemma, for, if the Service assumes the site could be used...as home range...., the loss of the Elm Creek riparian brush habitat would mean significant interference with the feeding, breeding, and sheltering of each occupant, and the proposed mitigation measures might not be adequate.

EPA requests that the Service provide a supportable basis for imposing additional reasonable and prudent measures, even if the Service now finds (not "assumes") the project area provides ocelot home range. As noted at page 22 of the Opinion, "there would be more optimal and suboptimal ocelot habitat on the project site, when the project is done, than there was before the project began." See also DBO, p. 3 ("almost double"). Your office also concludes DRRC's proposed coordination of habitat replacement and mining operations would allow uninterrupted felid movement between original and replacement habitat at all times. See DBO, pp. 22. At any given time during mining operations, there would be no less than a 10 percent loss of potential optimal and suboptimal habitat than now exists. See DBO, Table 2. Please explain why the temporary "loss of the Elm Creek riparian brush habitat would mean significant interference with the feeding, breeding, and sheltering of each occupant?"

Your office's concern does not appear to lie with the loss of Elm Creek riparian habitat as much as with replacement of existing unimproved rangeland with pasture following mining activities, apparently because ocelot home range may include as much as 90-95% inadequate habitat in isolated areas without viable dispersion corridors. See DBO, pp. 12, 19. Dr. Michael Tewes, the expert the DBO cites as authority for this conclusion, however, pointed out such situations are "unique" and apparently restricted to areas in which there are more ocelots than available optimal and suboptimal habitat. See Service Minutes of August 24, 1994 Meeting (Minutes), p. 2. In pointing out errors in the Minutes, Dr. Tewes indicated that a statement attributed to him, i.e., "the whole area could be used by cats," was a "serious item" on which "an extended discussion could easily be developed." September 26 Letter from Dr. Michael Tewes to Rogelio Perez.

If the final biological opinion contains a finding based on statements at the August 24 meeting, it should also contain such an extended discussion. A fair reading of the Minutes suggests the limiting cover criterion for ocelot home range is "at least some suboptimal habitat," although "they prefer optimal habitat." Minutes, p. 3. When optimal and suboptimal habitat is limited, ocelots possess documented ability to use "farm fields" and jaguarundi possess similar ability to use "pasture land that looks irrigated" as portions of home range. Minutes, pp. 2, 4. Why might it thus be likely that conversion of some of the project area's unimproved rangeland to pasture would result in a take, i.e., detectable injury, to ocelots or jaguarundi? In view of the much larger amount of similar rangeland which will remain contiguous to optimal and suboptimal brush habitat during and after mining, would it not be more probable that such cats would adjust their home ranges, moving their dens, perhaps, but surviving uninjured in the project area? See Minutes, pp. 2, 7-8. How many cats would have to use the project area as home range before such adjustments became so difficult a take would likely result?

The DBO did not consider this issue in any detail, so the Service's views on such questions are as yet unknown. Although it is not thus inconceivable that the final biological opinion might include an incidental take finding premised on conversion of unimproved rangeland on the project site, it is difficult to see how available data might justify that finding. Indeed, the DBO suggests the Service now regards it unlikely (but a "disturbing possibility") endangered felids use any part of the project area as home range. See Draft Opinion, p. 19.

Incidental Take Projection

Pursuant to ESA § 7(b)(4) and 50 C.F.R. § 402.14(i)(1)(ii), no-jeopardy biological opinions must include a Service finding that "specifies the impact, i.e., the amount or extent of...incidental

take." The DBO quantifies modification of potential habitat and replacement habitat DRRC proffers as mitigation, then concludes:

although this modification would undoubtedly affect cats using this corridor, due to the mitigative measures the DRRC would employ to create brush corridors, it appears unlikely that this modification would result in a significant impairment of an endangered cat's dispersal or travel behavior, so no cats are considered likely to be taken....[Other mitigated] disturbances, although they would not be so small as to avoid all impacts to the cats, are not considered likely to approach the point of causing detectable injury to an individual. In summary, the incidental take, in terms of individuals, is zero. DBO, p. 27.

Mere alteration or destruction of potential habitat (other than designated "critical habitat") is not itself a take; there must be some reasonable likelihood the alteration or loss of that potential habitat will result in death, injury, or harm to at least one individual of a listed species. See 50 C.F.R. § 17.3. Nowhere, however, does the DBO unambiguously conclude that even a single ocelot or jaguarundi is likely to be harmed if DRRC fails to replace potential habitat altered or destroyed by its mining activities. Without such a conclusion, there is no basis for specifying any reasonable and prudent measures under ESA § 7(b)(4) and 50 C.F.R. § 402.14(i)(ii).

This appears to be an oversight. On the same day it acknowledged my letter initiating informal consultation, your office also informed EPA that "as far as the Service is concerned, this habitat is currently occupied by at least one jaguarundi." See January 14, 1994 Letter from Johnny French to Russell Rhoades, requesting commencement of formal consultation and initiation of action under Section 404(c) of the Clean Water Act (CWA). We assume the Service has not changed its mind on this issue, but the final biological opinion should provide a specific and unambiguous finding on the issue of whether endangered felids are likely to be taken by the project unless reasonable and prudent measures are implemented.

Also of concern is the DBO's failure to include a numerical projection of incidental takes, if any, which would result from the proposed project without reasonable and prudent measures. We understand it may not always be possible to compute such a number for an incidental take statement, particularly when the Service attributes incidental takes to potential habitat loss. See 51 Fed. Reg. 19953-19954. We fail to see why such computational difficulties should subject EPA or DRRC to possible ESA 9 liability or require them to reinitiate consultation if the take of "a single individual" occurs despite full implementation of reasonable and

prudent measures designed to avoid an unquantifiable number of such takes. But see DBO, p. 33.

We find it difficult to believe that any Service policy would suggest specifying reasonable and prudent measures for minimizing incidental take while implying that EPA decision-makers and DRRC may face possible criminal prosecution if their implementation of those measures achieve less than perfect success. This appears to go far beyond the arguable implications of existing law (including Defenders of Wildlife v. Administrator, EPA, 882 F.2d 1294 (8th Circuit 1989)) or any reasonable theory which might be advanced under ESA §§ 7(b)(4) and 9. Moreover, your office's suggestion that consultation would have to be initiated because of the take of one individual appears to be just one more indication the DBO fails to satisfy the Service's obligation to terminate formal consultation by issuance of a complete biological opinion based on available data within the time frame ESA § 7 allows.

If your office is unable to specify a numerical incidental take projection, it should replace this offensive statement with language fairly applying 50 C.F.R. §§ 402.14(i)(1)(4) and 402.16 (a) in the final biological opinion. Although alternative wording might suffice, we suggest:

If the reasonable and prudent measures identified above are implemented, takes resulting from actions identified and considered in this biological opinion shall not be considered violations of ESA § 9. Nor shall such takes require reinitiation of consultation under 50 C.F.R. § 402.16(a).

Implementation and Enforcement of Reasonable and Prudent Measures

Your office appears to believe EPA may render reasonable and prudent measures enforceable by imposing them as conditions of an NPDES permit. ESA § 7 does not supplement an action agency's statutory authority to impose regulatory measures; it only requires that action agencies use their existing authority to conserve listed species and avoid jeopardizing their continued existence. See ESA §7(a)(1); Platte River Whooping Crane Trust v. F.E.R.C., 962 F.2d 27, 33-34 (D.C. Cir. 1992). The Clean Water Act (CWA) provides EPA no authority to impose non-water quality related mitigation conditions in NPDES permits; the NPDES program's options for compliance with ESA § 7(a)(2) are limited to permit denial or imposition of more stringent effluent limitations than would otherwise be appropriate. See NRDC v. U.S. EPA, 859 F.2d 155, 167-170 (D.C. Cir. 1988).

Because no listed aquatic species are at issue, EPA's only apparent option for conserving listed species in this NPDES action

is potential permit denial. ESA considerations provide no basis for such denial, however, if DRRC commits to implementation of acceptable mitigation measures in its permit application. In the unlikely event DRRC subsequently refused to implement mitigation measures material to the permit decision, EPA could probably terminate the permit under CWA §402(b)(1)(B) and 40 C.F.R. § 122.64 (a)(2). This may not be an ideal method for enforcing reasonable and prudent measures, but it appears to be the only method available to EPA in NPDES permit actions.

Various DBO statements also inaccurately reflect the nature of the Service's potential role in enforcing reasonable and prudent measures via permit termination. The DBO suggests for instance, that "the determination of whether... [replacement habitat] meets the definition of suboptimal ocelot habitat shall be made, as DRRC prefers, either by the Service or by a recognized cat expert selected by the Service." DBO, p. 29. See also DBO, pp. 24-25. CWA authorizes neither the Service nor a "recognized cat expert" to make EPA's NPDES permit termination decisions nor does it authorize EPA to delegate its own authority to make such decisions. The Service's role in EPA's enforcement of DRRC's mitigation obligations would thus be purely advisory. EPA would not ignore Service allegations of inadequate mitigation efforts, but it would also have to consider DRRC's countervailing arguments and supporting information in deciding whether or not to terminate the permit. Your office may thus wish to reconsider elements of the DBO based on inaccurate perceptions of EPA's authority and the Service's role in its exercise.

Thank you for the opportunity to comment on the DBO. I hope these comments are of assistance and look forward to receipt of the Service's timely response in the form of a clarified final biological opinion. Because authoritative legal or policy decisions on ESA § 7 and 50 C.F.R. Part 402 might resolve issues raised by the DBO, I have also forwarded copies of this letter to the Service's Regional Director and the Interior Department's Regional Solicitor. For clarity, I have also forwarded copies of documents referenced in my comments to those offices. Should you or other Service staff wish to discuss this letter or potential provisions of the final biological opinion, please call me at (214) 665-2258 or Assistant Regional Counsel Pat Rankin at (214) 665-2159.

Sincerely yours,



Bill Cox, Chief
Federal Assistance Section

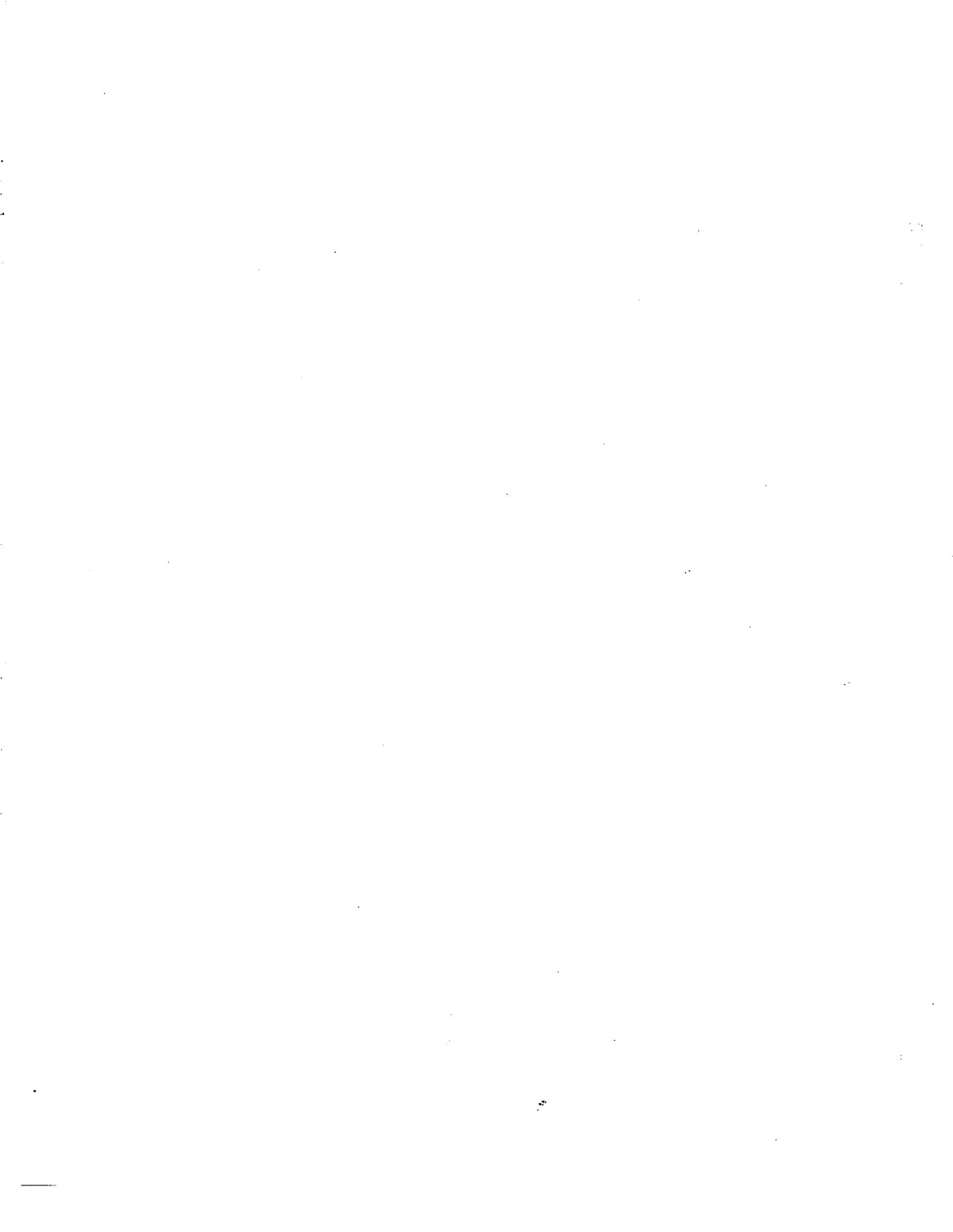
Enclosure

cc: Mr. John G. Rogers
Regional Director
U.S. Fish & Wildlife Service

Tim Vollman, Esquire
Regional Solicitor
Department of the Interior

APPENDIX G

PROGRAMMATIC AGREEMENT ON CULTURAL RESOURCES



APPENDIX G

PROGRAMMATIC AGREEMENT ON CULTURAL RESOURCES

The Programmatic Agreement among the EPA, the Advisory Council on Historic Preservation, and the Historic Preservation Officer of Texas for the Eagle Pass Mine, is presented on the following pages.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

PROGRAMMATIC AGREEMENT AMONG THE
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, REGION 6
THE ADVISORY COUNCIL ON HISTORIC PRESERVATION, AND
THE HISTORIC PRESERVATION OFFICER OF TEXAS ON
THE EAGLE PASS MINE PROJECT, MAVERICK COUNTY, TEXAS

WHEREAS, the Dos Republicas Resources Company, Inc., (hereinafter referred to as the Applicant), has applied to the United States Environmental Protection Agency, Region 6 (hereinafter referred to as EPA) for a New Source National Pollutant Discharge Elimination System permit (hereinafter referred to as the NPDES permit) for the proposed project known as the Eagle Pass Mine in Maverick, County, Texas (hereinafter referred to as the Project) and

WHEREAS, this Programmatic Agreement (hereinafter referred to as the PA) is applicable to the life-of-mine Project as delineated on Figure 4-2 (attached) of the EPA's Draft Environmental Impact Statement, dated June 1994, for the Eagle Pass Mine in Maverick County, Texas and

WHEREAS, EPA has determined that the Project may have an effect upon properties included in or eligible for inclusion in the National Register of Historic Places and has consulted with the Advisory Council on Historic Preservation (hereinafter referred to as the ACHP) and the Texas Historical Commission (hereinafter referred to as the SHPO) pursuant to Section 800.13 of the regulations (36 CFR Part 800) implementing Sections 106 of the National Historic Preservation Act (16 USC 470f) and

WHEREAS, the EPA has consulted with interested parties, including Native Americans, and

WHEREAS, the effects of EPA's proposed issuance of this NPDES permit on properties included in or eligible for inclusion in the National Register cannot be fully determined prior to the final decision to issue the permit.

NOW, THEREFORE, EPA, the ACHP, and the SHPO agree that the Project shall be implemented in accordance with the following Stipulations to satisfy EPA's Section 106 responsibilities.



Recycled/Recyclable
Printed with Soy/Canola Ink on paper that
contains at least 50% recycled fiber

6/11/94

STIPULATIONS

EPA will ensure that the following measures are carried out:

SITE LOCATION

1. Survey and Site Testing Plans. The Applicant shall prepare a Survey Plan for Unsurveyed Areas and a Site Testing Plan to Identify Eligible Properties in consultation with the SHPO. The Survey Plan shall present a phased approach for the identification of historic properties (included in or eligible for inclusion in the National Register of Historic Places) within the proposed EPA NPDES permit disturbance area (i.e. lands physically altered by surface coal mining or reclamation operations) prior to mining activities over the life of the project. When completed, the Applicant shall submit the Survey and Site Testing Plans to EPA for approval, in consultation with the SHPO. The Applicant shall implement the approved Survey and Site Testing Plans in a manner consistent with the Secretary of the Interior's Standards and Guidelines for Identification (48FR 44720-23) and taking into account the National Park Service publication: The Archeological Survey: Methods and Uses (1978: GPO stock #024-016-00091).

2. Surveying, Testing and Evaluation Reports. The Applicant shall prepare reports of the results of the archeological and historical survey that are consistent with the Secretary of the Interior's "Guidelines for Archeological Documentation" (48 FR 44734-37).

The Applicant shall submit two copies of all Survey, Testing and Evaluation Plans and Reports to EPA for approval as follows: a) EPA shall provide a copy of all Survey, Testing and Evaluation Plans and Reports to the SHPO for a 30-day review period; b) in consideration of the SHPO's comments, EPA will provide recommended changes or revisions to the Applicant; c) the Applicant will revise the Plans or Reports in accordance with EPA's recommended changes or revisions and resubmit two copies of the revised Plans or Reports to EPA; d) EPA will provide a copy of the revised Plans or Reports to the SHPO for a 20-day review period; e) in consideration of the SHPO's comments, EPA shall provide approval of final Plans or Reports to the Applicant.

EVALUATION

3. Determination of Eligible Sites. Based on the Plans and Reports submitted by the Applicant under Stipulations 1 and 2 (above), EPA shall determine, in consultation with the SHPO, which properties located within the proposed EPA NPDES permit disturbance area over the life of the project are eligible for inclusion to the National Register of Historic Places.

4. Disputed Sites. If a consensus cannot be reached on National Register eligibility, or if the ACHP so requests, EPA shall request a determination from the Keeper of the National Register of

Historic Places. Eligibility of disputed sites shall be assumed until a formal determination is received and the opinion of the Keeper of the National Register shall be final.

5. Assessing Effects. EPA shall, in consultation with the SHPO, apply the criteria of effect listed in 36 CFR 800.9 to cultural properties that are potentially adversely effected, giving consideration to the views, if any, of interested parties. If adverse effects will occur to eligible or potentially eligible properties, EPA shall, in consultation with the SHPO and ACHP, seek ways to avoid or reduce the effects.

TREATMENT OR MITIGATION OF ELIGIBLE SITES

6. Design Avoidance. Wherever feasible, the Applicant shall avoid, by project design, historic properties listed in or eligible for listing in the National Register. All avoidance measures will be included in the "Plan for the Treatment of Archeological Properties" described in Stipulation 8, below.

7. Construction Avoidance. The Applicant shall not approve or conduct any construction or activity for this undertaking that will affect an historic or archeological property or a potential historic or archeological property until the significance of the property and the effects of the undertaking on the property have been determined by EPA, and any treatment, as deemed necessary by EPA, is complete.

8. Plan for the Treatment of Eligible Properties. The Applicant shall submit to EPA for approval, a "Plan for the Treatment of Cultural Properties" (hereinafter referred to as the Plan) that may be adversely affected by the proposed undertaking. The Plan shall include, as appropriate, plans for avoidance, controlled grading, landscaping, report schedules, monitoring, relocation, preservation, reburial, recordation, curation of artifacts, and/or rehabilitation of cultural properties.

If the treatment of archeological properties requires data recovery, EPA shall ensure that the Applicant develops a Data Recovery Plan in consultation with the SHPO for the recovery of archeological data from historic properties subject to effect. The Data Recovery Plan shall be consistent with the Secretary of the Interior's Standards and Guidelines for Archeological Documentation (48 FR 44734-37) and take into account the Council's Publication, "Treatment of Archeological Properties" [Advisory Council on Historic Preservation, (draft) 1980], subject to any pertinent revisions the Council may make in the publication prior to the completion of the Data Recovery Plan. It shall specify, at a minimum: a) the property or properties where data recovery is to be carried out; b) any property or properties that will be destroyed, altered or transferred without data recovery; c) the research questions to be addressed through the data recovery, with an

explanation of their relevance and importance; d) the methods to be used, with an explanation of their relevance to the research questions; e) the methods to be used in analysis, data management, and dissemination of data, including a schedule; f) the proposed disposition of recovered artifacts, collections, materials and/or records pursuant to 36 CFR Part 79; g) proposed methods for involving the interested public in the data recovery; h) proposed methods for disseminating results of the work to the interested public; i) proposed methods by which relevant Indian tribes, local governments, or other specific interested groups, will be included in the consultation process and kept informed of the work; and j) a proposed schedule for the submission of progress reports to the EPA.

Prior to approval, the EPA shall submit the Data Recovery Plan to the Signatories of this PA for a 30 day review period. If the Data Recovery Plan is revised, the Signatories and Concurring Parties will be provided an additional 20 days from receipt to review and comment on the revised Plan. EPA shall elicit the views of interested parties with regard to the undertaking's effects on cultural properties, including providing copies of Data Recovery Plans to interested parties for review. Following its consultation with, and taking into account the comments of, the SHPO, ACHP and the interested parties, EPA will approve or disapprove the Data Recovery Plan.

9. Plan Implementation. The Applicant shall implement the Data Recovery Plan approved by the EPA in Stipulation 8 (above).

10. Annual Report. The Applicant will submit, in January of each year, to all signatories to the PA, a report summarizing the results of the previous year's work conducted or completed in accordance with the PA.

11. Discovery of Cultural Resources. In areas where EPA has determined (e.g., from background research, survey, and/or testing) a high potential for additional National Register-eligible sites, the Applicant shall provide an archeologist meeting the Secretary of the Interior's Professional Qualifications Standards (48 FR 44738-9) who will monitor the earth disturbing activities for evidence of cultural resources based on guidance from EPA, in consultation with the ACHP and the SHPO. If sites are discovered during mining or construction activities, the Applicant shall cease activities in the vicinity of the discovery and will immediately notify EPA and SHPO. EPA shall consult with the SHPO concerning eligibility of the property. If the property is determined eligible to the National Register of Historic Places, the Applicant shall prepare the Site Treatment Plan for approval and implementation under Stipulations 8 and 9 (above).

12. Curation of Materials and Data from Archeological Sites. EPA shall ensure that the Applicant curates all records resulting from

the survey, testing or data recovery work stipulated in this PA in accordance with 36 CFR Part 79, and that the Applicant curates all material resulting from survey, testing or data recovery work stipulated in this PA in accordance with 36 CFR Part 79.

ADMINISTRATIVE

13. Access. The Applicant shall provide access, whenever possible, to the known archeological and historical sites for EPA, ACHP, and the SHPO to monitor site testing, data recovery or preservation activities.

14. Dispute Resolution. Should the Signatories object within 30 days to any Survey, Testing and Evaluation Plan, Data Recovery Plan, or other Plan, Report or Specification pursuant to this PA, EPA shall consult with the objecting party to resolve the objection. If EPA determines that the objection cannot be resolved, EPA shall forward all documentation relevant to the dispute to the ACHP. Within 30 days after receipt of all pertinent documentation, the ACHP will either:

- i. provide the EPA with recommendation, which EPA shall take into account in reaching a final decision; or
- ii. notify EPA that it shall comment pursuant to 36 CFR 800.6(b), and proceed to comment. Any ACHP comment provided in response to such a request shall be taken into account by EPA in accordance with 36 CFR 800.6(c)(2).

Any recommendation or comment provided by the ACHP shall be understood to pertain only to the subject of the dispute. EPA's responsibility to carry out all actions under this PA that are not the subject's of the dispute shall remain unchanged.

Nothing herein shall preclude the Applicant from exercising any rights it may have to seek appropriate review of any findings, determination or ruling which may be made by any regulatory authority under this PA.

15. Review of Public Objections. At any time during implementation of the measures stipulated in this PA, should an objection to any such measure be raised by a member of the public, EPA shall take the objection into account and consult as needed with the objecting party, the SHPO, or the ACHP.

16. Amendments. Any party to this PA may request that it be amended, whereupon the parties will consult in accordance with 36 CFR 800.13 to consider such amendment. While executing an amendment, the Signatories or Concurring Parties shall not take or sanction any action or make any irreversible commitment which would adversely effect, or preclude consideration by the ACHP of alternatives to avoid or mitigate the adverse effects, on eligible properties.

17. Report Dissemination. EPA shall provide copies of all final archeological reports to the signatories of the PA and other parties (e.g., University libraries, the National Park service, the National Technical Information Service) as deemed appropriate by EPA, in consultation with the SHPO and the ACHP.

18. Termination. Any signatory party to this PA may terminate it by providing thirty (30) days notice to the other parties, provided that the parties will consult during the period prior to termination to seek agreement on amendments or other actions that would avoid termination. In the event of termination, EPA shall comply with 36 CFR 800.4 through 800.6 with regard to individual undertakings covered by this PA.

19. Non-compliance by Applicant. Non-compliance with the terms of this PA may subject the Applicant to enforcement action, as determined by the Regional Administrator in exercising her enforcement discretion.

Nothing herein shall be deemed to confer upon the EPA Regional Administrator enforcement authority beyond that which the Regional Administrator may have at law nor be deemed to be a waiver by the Applicant of any right it may have to challenge any enforcement action which may be taken.

20. Default Compliance by EPA. In the event EPA does not carry out the terms of this PA, EPA will comply with 36 CFR 800.4 through 800.6 with regard to individual undertakings covered by this PA.

SIGNATURES

Execution and implementation of this PA evidences that EPA has satisfied its Section 106 responsibilities for this undertaking.

SIGNATORIES:

1. ADVISORY COUNCIL ON HISTORIC PRESERVATION

BY _____ Date: _____
(name and title of signer)

2. U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION 6

BY AM Davis for JWS: Acting Reg Adm Date: 10/11/94
(name and title of signer)

3. STATE OF TEXAS HISTORIC PRESERVATION OFFICER

BY Curtis J. Munnell Executive Director Date: 10 Oct. 1994
(name and title of signer)

CONCURRING PARTY:

4. DOS REPUBLICAS RESOURCES COMPANY, INC.

BY Sally H PRESIDENT Date: 21/Oct/99
(name and title of signer)

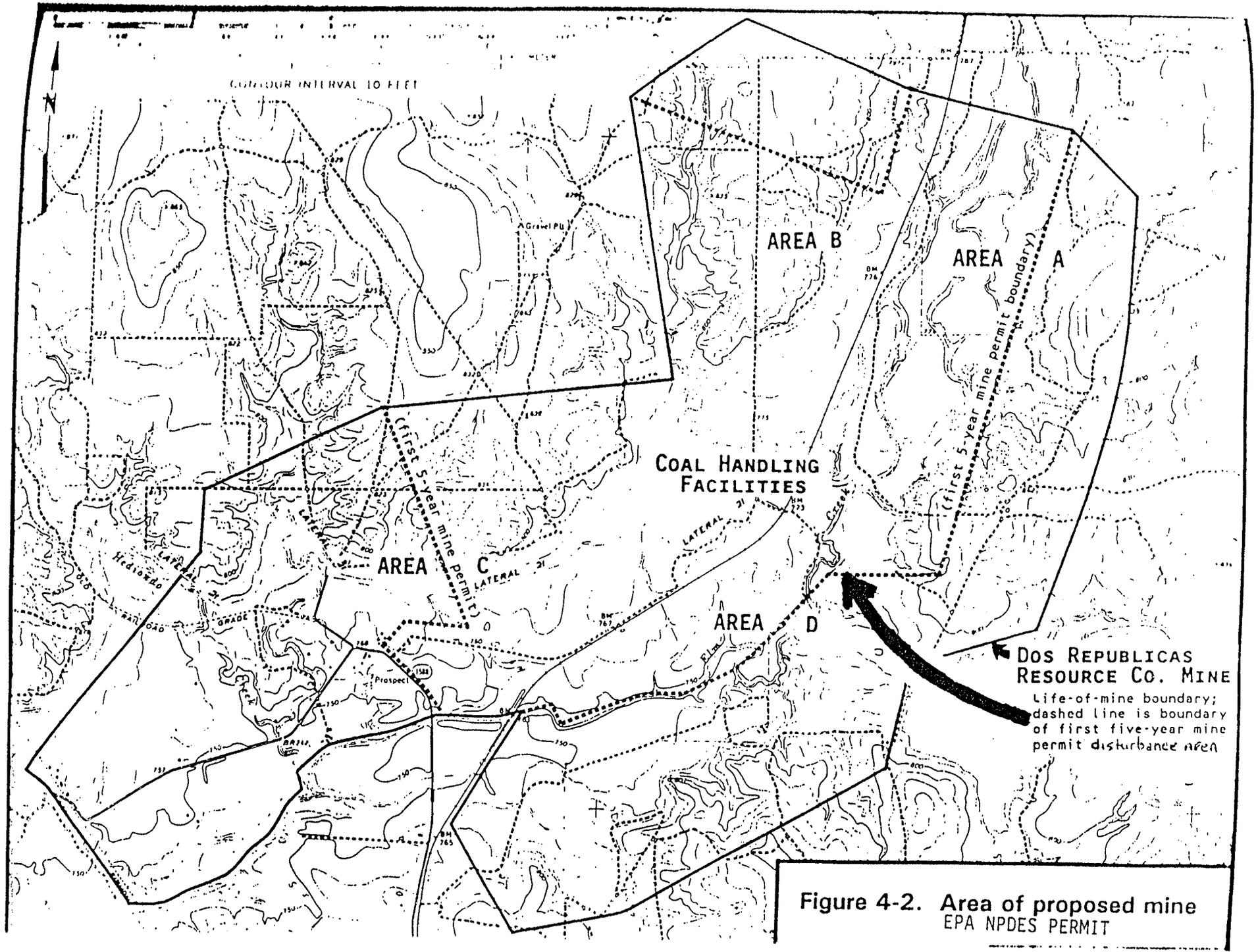
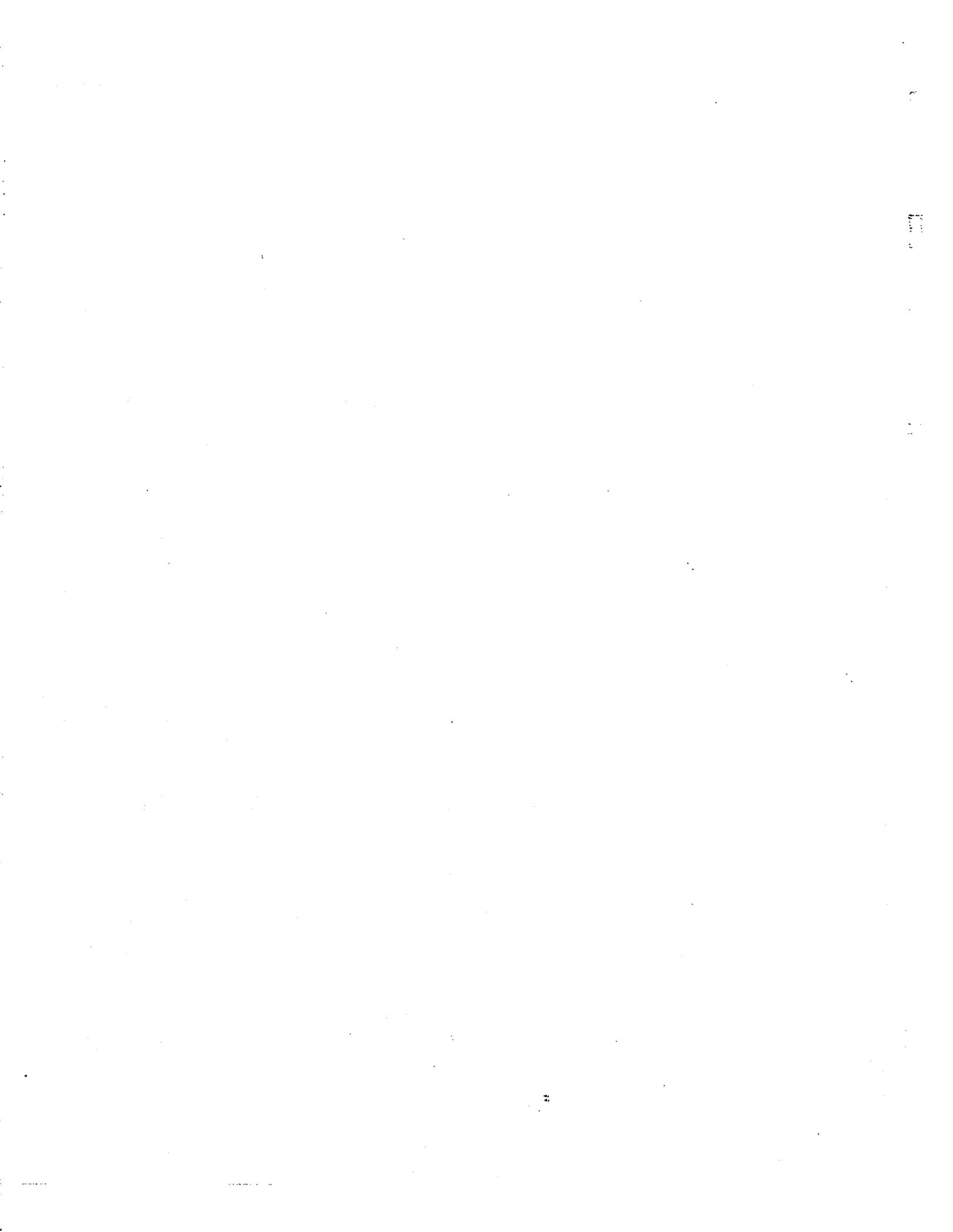
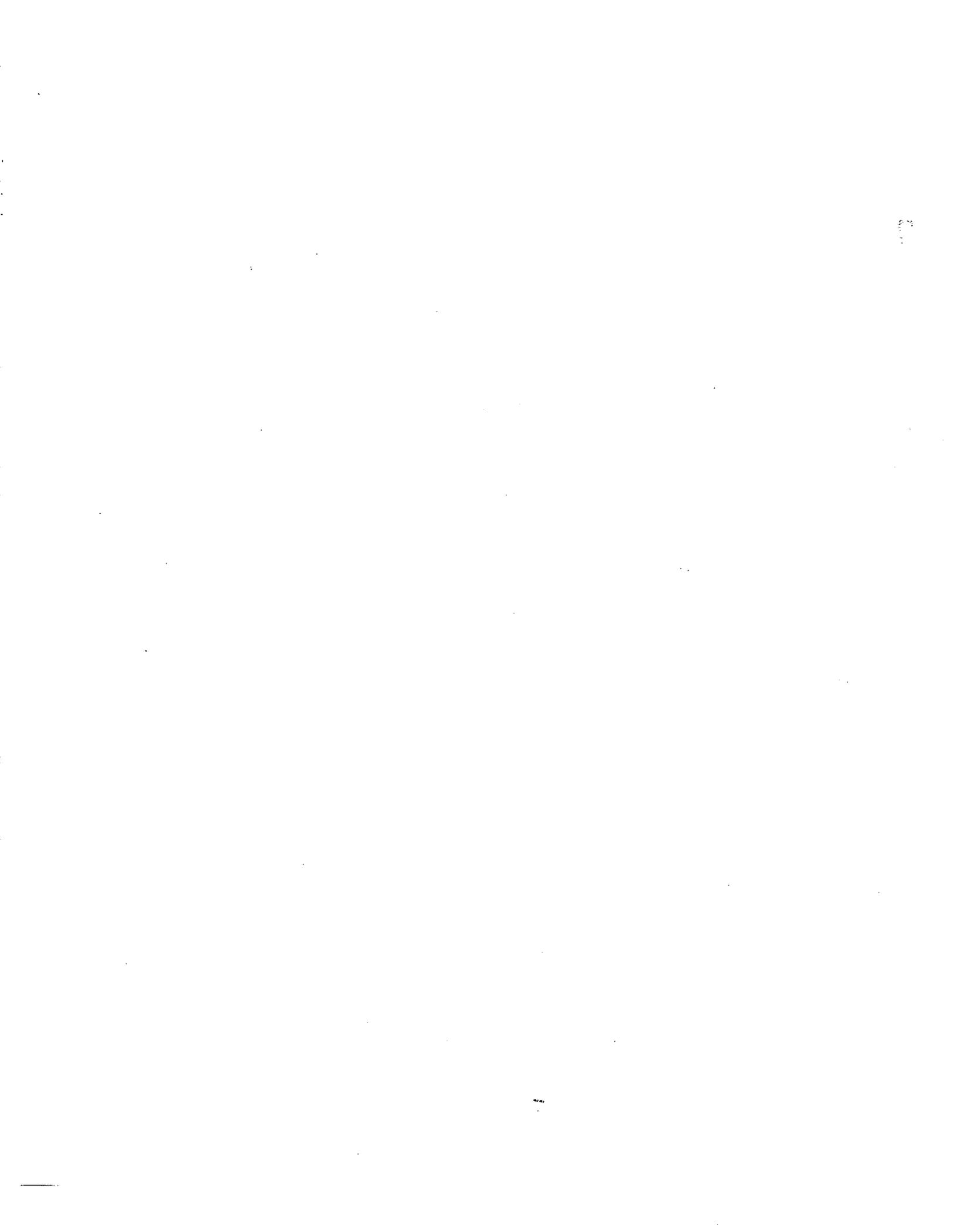


Figure 4-2. Area of proposed mine
EPA NPDES PERMIT



APPENDIX H

TNRCC WASTEWATER PERMIT



APPENDIX H

TNRCC WASTEWATER PERMIT

The Texas Natural Resouce Conservation Commission approved the Hearing Examiner's order to issue the wastewater permit to DRRC on November 29, 1994. The order issuing DRRC's wastewater permit and the draft permit are provided in this appendix. Motions for rehearing on this permit were due by December 22, 1994; if the Commission did not receive a motion for rehearing, the permit will be issued.

TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

I hereby certify that this is a true and correct copy of, a
Texas Natural Resource Conservation Commission document,
the original of which is filed in the permanent records of the
Commission.



Given under my hand and the seal of office on

DEC 02 1994

AN ORDER issuing Permit No. 03511
to Dos Republicas Resources
Company, Inc.

Glenda A. Vasquez
Glenda A. Vasquez, Chief Clerk
Texas Natural Resource
Conservation Commission

On November 16, 1994, the Texas Natural Resource Conservation
Commission (Commission) considered the application of Dos
Republicas Resources Company, Inc. (DRRC) for authority to
discharge effluent from mining operations at an intermittent and
variable rate, depending upon precipitation, pursuant to Chapter 26
of the Texas Water Code.

The application was presented to the Commission with a Proposal
for Decision written by Leslie Craven, Attorney, a Commission
Hearings Examiner, who conducted preliminary hearings on
January 12, March 21, April 25, and June 15, 1994 and an
adjudicative public hearing concerning the application on June 20,
21, and 22, 1994 in the cities of Austin and Eagle Pass, Texas.

The Hearings Examiner designated the following as parties to
the proceeding: the applicant, DRRC; the Executive Director and the
Public Interest Counsel of the Commission; the City of Eagle Pass;
the Sierra Club; Theodosia Coppock; Ladye, Walter, and Virginia
Herring; Dan Riskind; Jesus Rubio; Raymundo Moncada; and Humberto
Gamez.

After considering the Hearings Examiner's Proposal for
Decision and the evidence and arguments presented, the Texas
Natural Resource Conservation Commission makes the following
Findings of Fact and Conclusions of Law:

FINDINGS OF FACT

1. On May 14, 1992, DRRC applied to the Texas Water Commission, predecessor agency to the Commission, for Permit No. 03511 to authorize the discharge of effluent from a coal mining operation in Maverick County, Texas at an intermittent and variable rate, depending upon precipitation.
2. The application was declared to be administratively complete on August 3, 1992 and technically complete on October 19, 1992.
3. Proper notice of the public hearings held on this application was given pursuant to Section 26.022 of the Texas Water Code.
 - a. Notice of the initial public hearing was published on December 2, 1993 in the Eagle Pass News Guide, a newspaper regularly published and generally circulated in Maverick County, Texas, which is the location of the proposed facility.
 - b. Notice of the public hearing was mailed on November 23, 1993, by the Chief Clerk of the Commission to all persons who may be affected by any action taken by the Commission and to each person as required by law.
4. DRRC's proposed mine area is located generally northwest of Eagle Pass, Texas on 2700 acres, approximately 1000 to 1250 acres of which will be mined.
5. Three of four possible mining areas (Areas A, B, and C) have been considered in this application and will be permitted by the Order in this case. Mining Area D, under consideration as

part of the full mining plan before the Railroad Commission of Texas (RCT) is not part of the application in this case.

6. The proposed coal mining operation is expected to generate between 700 and 800 jobs in the Eagle Pass area and to produce an annual mine employment payroll between \$10 to \$12 million with accompanying tax revenues to local, state, and federal taxing entities.
7. DRRC's drainage control system at this facility will contain, direct, and discharge waters associated with its proposed mining operations through the construction and utilization of thirteen sediment control ponds, four diversion and two interceptor ditches. Commission regulations do not specify design criteria for surface mining drainage control facilities.
8. The RCT has jurisdiction under the Texas Surface Mining and Reclamation Act to regulate mining activities and regulates the design of facilities related to surface mining drainage control and stream channel diversions.
9. DRRC has designed its treatment system to meet RCT requirements that the pond facilities provide a minimum ten-hour detention time for the 10-year/24-hour storm event rainfall. The ten-hour detention time is enhanced by the design, which factors in the effect of accumulated sediment in the ponds.

10. Diversion ditches are designed to contain and route the water flow generated during the 10-year/24-hour storm event from Elm Creek and the Elm Creek watershed around the mine site.
11. The sediment pond design further provides that the principal and emergency spillways together can safely pass flows associated with the less frequent, although more extensive, 25-year/24-hour storm event.
12. The sediment control pond design incorporates the RCT requirement that there be three years storage availability for sediment in each pond and are designed so that cleaning activities will not interfere with the ability of ponds to retain water runoff.
13. The sediment ponds do not provide either aerobic or anaerobic effluent treatment but do provide treatment by means of the detention time which allows the settling of sediments.
14. The two primary geologic formations in the mine area are the Olmos formation and the Elm Creek alluvium.
15. The Olmos formation, which underlies the entire project site, outcrops on the surface generally in the south and southeast areas of the site and subcrops under the Elm Creek alluvium farther north on the site. It is composed of a consolidated formation of clays and coals with some sandstone and has a very low permeability of approximately 0.13 to 0.55 millidarcies, essentially that of cured cement or an impervious landfill liner.

16. The Elm Creek alluvium is composed of unconsolidated sands, clays, and gravels deposited by the creek in the floodplain and is more permeable than the Olmos formation.
17. The two primary bodies of water which flow through and around the permit site are Elm Creek and Lateral 21.
18. Elm Creek flows into the permit area from the north, where it has ephemeral flow, and exits the permit area along a south/southwest route. About halfway through the site and roughly in a location south of Lateral 21, Elm Creek flow becomes intermittent-perennial through the remainder of the site and downstream from the project boundary. The alluvium north of Lateral 21 remains unsaturated or dry while the alluvium south of Lateral 21 is saturated, containing and transmitting groundwater.
19. Lateral 21, a portion of the Maverick County Irrigation District canal system, is pumped upvalley from the west/southwest and ends roughly in the middle of the site. Lateral 21 provides the primary infusion of water to the portion of Elm Creek that flows south/southeast of the lateral through groundwater seepage and direct return surface flow from the end of the lateral. Seepage occurs because the lateral is excavated into the permeable Elm Creek alluvium.
20. Besides general monitoring and reporting requirements, the permit contains the following effluent discharge limitations: daily average of 35 milligrams per liter (mg/l) and daily maximum of 70 mg/l for total suspended solids (TSS), daily

average of 3.0 mg/l and daily maximum of 6.0 mg/l for total iron, a daily maximum of 1.0 mg/l total selenium and a Ph requirement of not less than 6.0 and not more than 9.0 standard units.

21. Pursuant to 30 Tex. Admin. Code §321.78, an additional permit limitation to those set out in Finding of Fact No. 20, requires that any discharge caused by a precipitation event within any 24-hour period less than or equal to the 10-year/24-hour precipitation event shall comply with the limitation of daily maximum 0.5 milliliter per liter (ml/l) settleable solids. This latter limitation does not apply when the discharge is caused by a precipitation event greater than the 10-hour/24-hour precipitation event. If the precipitation event is greater than the 10-year/24-hour precipitation event, the discharge shall maintain a Ph range of 6.0 to 9.0 standard units instead of otherwise applicable limitations.
22. The Commission's permit requirements in Section 321, referenced in Finding of Fact No. 21, are generally consistent with the EPA's Coal Mining Point Source Category Effluent Limitations Guidelines and New Source Performance Standards; Final Rule found at Volume 50, Federal Register No. 196, October 9, 1985 and are identical to the EPA's effluent limitations set out in 40 CFR §434.63.
23. The proposed method for treatment of discharges from the mine site through use of sediment ponds complies with the Best Available Technology Economically Achievable (BAT) required by

the EPA and EPA's applicable New Source Performance Standards (NSPS).

24. Selenium testing is consistently imposed in all Commission mining discharge permits as a mechanism to facilitate the general gathering of data on selenium associated with coal mining operations. It is for this reason that the selenium requirement is made a requirement of this permit.
25. The proposed discharge would be to a series of unnamed ditches, thence to Elm Creek, thence to the Rio Grande River in Segment No. 2304 of the Rio Grande River Basin.
26. A discharge in compliance with the final terms and conditions of Permit No. 03511 will be protective of the quality and existing uses of the receiving waters and will comply with all applicable statutory and regulatory criteria.
 - a. The proposed discharge under permit requirements will not cause violations of the general criteria, including aesthetic parameters, that govern stream quality as set out in 30 Tex. Admin. Code §307.4.
 - b. The numerical criteria applicable to Segment No. 2304 of the Rio Grande River Basin, as set out in 30 Tex. Admin. Code §307.10, are 5.0 mg/l dissolved oxygen, Ph between 6.5 and 9.0 standard units, maximum fecal coliform of 200 col/100 ml, and maximum temperature of 95 degrees Fahrenheit. The proposed discharge under permit requirements will not cause violations of these criteria.

c. The proposed discharge under permit requirements will not cause violations of the specific numerical criteria for aquatic life and human health found in 30 Tex. Admin. Code §307.6 or of the allowable concentrations of hazardous metals found in 30 Tex. Admin. Code §319.22.

(1) A water quality study was run taking samples from surface water in Lateral 21 and Elm Creek and groundwater from the alluvium south of Lateral 21. Samples were taken from September 1992 through June 1994.

(2) The minimum analytical level or "MAL" is the lowest level at which concentrations of constituents may be measured with detection equipment by the discharger.

(3) The study results establish that constituents pertaining to water quality standards in 30 Tex. Admin. Code §§307.6 and 319.22 exist at levels either below the MAL or, if they were of amounts capable of measurement, they were within the acceptable range for that constituent as determined by the Commission and set forth in §307.6 and §319.22.

d. Findings in the above subsections (a), (b), and (c) do not take into account further dilution of the effluent that will occur from storm water runoff entering the

ponds or from the discharges commingling with receiving stream waters.

e. The designated uses for Segment No. 2304 of the Rio Grande River Basin, as set out in 30 Tex. Admin. Code §307.10, are contact recreation, high aquatic life, and public water supply. Discharge is made directly to an unclassified water body and, pursuant to 30 Tex. Admin. Code §307.4 (h) and (k), Elm Creek and various ditches in the vicinity of this discharge are determined to have no significant aquatic life use. No impoundments or hydrologic conditions exist to change this determination and seepage from Lateral 21 is not sufficient to change the intermittent nature of the creek.

f. The proposed discharge under permit requirements will not cause impairment of existing uses nor otherwise cause degradation of the quality of the receiving waters in violation of 30 Tex. Admin. Code §307.5.

(1) Downstream flooding will not be increased and will likely be lessened due to the temporary storage and retention time provided by the sediment control ponds, which act as a buffer to allow the release of the water at slightly lower rate.

(2) Anticipated slight stream flow gains and losses will come from increased pit pumpage and losses of some irrigation return runoff and area runoff. The cumulative approximate acreage lost from project

activities is only 1 to 4 percent of the total watershed acreage above the site, causing only a negligible impact on stream flow which is difficult to measure with any precision.

(3) Current Elm Creek water quality meets stock water standards but does not meet drinking water standards and is of poor quality for irrigation.

27. The applicant has appropriately characterized the quality of water inflow to the mining pits which will ultimately flow into and be discharged from the sediment control ponds.

- a. Surface water samples from Lateral 21 and Elm Creek and groundwater collected from Mining Area C located in the alluvium south of Lateral 21, used for analysis, are the best representations of expected mine pit pumpage to the sediment ponds, as is further noted in the Findings of Fact Nos. 17, 18, and 19 regarding the relationships of the water at this site.
- b. Groundwater samples from the Olmos formation and the alluvium north of Lateral 21 (Mining Areas A and B) were not used because, as noted in Findings of Fact Nos. 16 and 18, these formations contain little or no groundwater for later contribution to the mine pits.
- c. The 129 priority pollutant constituents are not found in effluent discharges from coal mine sediment control ponds in significant concentrations to warrant technology-based

effluent limitations as established by extensive sampling and analysis by the EPA.

- d. It is not standard Commission practice to require separate testing of coal leachate and this application presents no special circumstances which might otherwise warrant or necessitate a change in this practice.
 - e. In determining the quality of expected pit inflows, the applicant's study tested for inorganics in the groundwater and organics in the surface waters. Radionuclides and various miscellaneous parameters were tested for in both surface water and groundwater samples.
 - f. Data on organics collected from the surface waters is comparable to organic data from the alluvium and a direct test for organics in the alluvium is not likely to yield any better information than that found from the surface waters of Lateral 21 and Elm Creek, as these waters are the primary contributors to the alluvium groundwater supply.
28. The applicant has appropriately characterized the quantity of the expected water inflow to the mining pits and sediment ponds.
- a. DRRC's facility design assumes pit inflows will primarily flow from the Mining Area C groundwater.
 - b. Contribution to the mining pits inflows from surface rainfall runoff and rainfall directly into the open pits

is too small to be factored into anticipated flow calculations.

- c. As noted in Findings of Fact Nos. 18, 19, and 27(b), the alluvium beneath Mining Areas A and B is generally dry and is unlikely to contain substantial groundwater to contribute to the mine pits.
 - d. The amount of fractures which develop in rock generally correlates to how brittle the formation is.
 - e. The general clay and coal composition of the Olmos formation (Finding of Fact No. 15) which underlies the project site is malleable and is not conducive to allowing the formation of fractures which might transmit groundwater through what is otherwise impermeable material. Should fractures develop, they will generally confine themselves to the boundaries of the clays and coal which make up the Olmos formation.
 - f. There are no known fractures in the Olmos formation at or in the vicinity of this mine site.
29. No special lining material is required for the sediment control ponds at this permit site.
- a. No Commission or EPA regulations pertaining to the coal mining operations call for any special or artificial lining for coal mining sediment control ponds and no showing was made that unique circumstances exist at this site to warrant the installation of a special liner.

- b. In-situ soils provide the lining for the sediment control ponds at this site. When in-situ soils serve as the lining material, the likelihood of leakage depends on the permeability of the ground beneath the ponds.
 - c. The sediment control ponds are either dug directly into the impermeable Olmos formation, which is essentially of liner quality and underlies the entire project site, or into the Elm Creek alluvium, which is underlined by the Olmos formation.
 - d. Even should some leakage from the sediment control ponds occur, the effluent will not contain any harmful constituents that may cause violations of applicable water quality standards.
30. The applicant's sediment control ponds and diversion ditches are adequately designed to control, retain, and route waters generated by the 10-year/24-hour storm event around the mining site, meet all applicable federal and state regulations, and will enable DRRC to meet permit requirements.
- a. It is generally not possible to contain and control all waterflow generated in a major storm event such as the 25, 100, or 500-year storms on a site as large as the applicant's or involving a watershed as large as that which exists north of this site. No state or federal regulations mandate such a requirement.
 - b. Applicable state and federal regulations do set what are essentially identical limitations for discharges that

result from rainfalls greater and less than the 10-year/24-hour storm event. These limitations in 30 Tex. Admin. Code §321 and 40 CFR §434 are set out in Finding of Fact No. 21.

- c. The EPA has determined that the above-referenced limitations found in Finding of Fact No. 21 can be met using EPA's BAT and NSPS.
 - d. The applicant's proposed system of ponds and ditches for discharge treatment complies with the above noted EPA standards and control technologies, referenced in Finding of Fact No. 23.
 - e. Pursuant to Findings of Fact Nos. 7 - 13, 26, and 30, DRRC's proposed system design is appropriate and will enable DRRC to comply with permit requirements.
31. DRRC provided adequate information on area groundwater without having to test three windmill wells and one hand-dug well located north on the permit area.
- a. DRRC has gathered over two years of monitoring data from wells in the same area and has made over 200 boreholes in its efforts to characterize area groundwater.
 - b. DRRC did not specifically test the four noted wells for quality and permeability, but did perform "plop" tests on the three windmill wells to determine whether they contained any water.
 - c. The two of three windmill wells which contained water most likely draw their water from the San Miguel

formation due to their location northwest of the mine site and the fact that they contain water that would not generally be produced from the impermeable Olmos formations.

- c. The one 1931 Getzendaner geologic map that differs from the conclusions reached by DRRC regarding the line of demarcation between the Olmos and San Miguel formations is not reliable or credible data. At least ten other more recently prepared geologic maps disagree with the 1931 Getzendaner map conclusion and support the conclusion reached by the applicant's expert.

32. Updated information related to estimated outfall drainage areas, pond dimensions, and flow data provided during the hearing does not constitute a "major amendment" to DRRC's application under applicable Commission rules.

- a. Commission rule 30 Tex. Admin. Code §281.23 provides that no amendment to an application that constitutes a "major" amendment can be made without new notice.
- b. Section 281.23 uses the definition of a "major" amendment as that term is defined in 30 Tex. Admin. Code §305.62(c) pertaining to major amendments to permits. Substituting the term "application" for "permit," found in Section 305.62(c) defines a "major" amendment to an application as one that changes a substantive term, provision, requirement, or a limiting parameter of the application.

c. The additional information provided in the hearing does not change a substantive term, provision, requirement, or a limiting parameter of DRRC's application.

CONCLUSIONS OF LAW

1. The public hearing regarding the permit application was held under the authority of and in accordance with Chapter 26 of the Texas Water Code and the Texas Natural Resource Conservation Commission Permanent Rules.
2. The Commission has jurisdiction to consider the application and is authorized to issue a permit for the discharge of effluent into the waters of the State.
3. Discharge of effluent in compliance with the terms and conditions of Permit No. 03511 will maintain the quality of water in the State consistent with the public health and enjoyment, the propagation and protection of terrestrial and aquatic life, the operation of existing industries, and the economic development of the State.
4. Discharge of effluent in compliance with the terms and conditions of Permit No. 03511 will not violate the antidegradation policy set forth in 30 Tex. Admin. Code §307.5.
5. In order to effectuate the policies of this state as set forth in Chapter 26 of the Texas Water Code and to administer all powers and duties described therein, the application should be approved and Permit No. 03511 be issued.

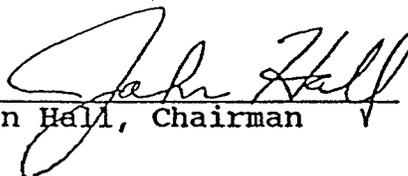
WHEREAS Chairman John Hall and Commissioners Pam Reed and Peggy Garner vote unanimously to issue this Order;

NOW, THEREFORE, BE IT ORDERED BY THE TEXAS NATURAL RESOURCE CONSERVATION COMMISSION THAT:

1. The application of DRRC for Permit No. 03511 be approved in accordance with the terms and conditions contained in the final permit attached to this Order and all exceptions inconsistent therewith be overruled.
2. The Chief Clerk of the Texas Natural Resource Conservation Commission forward a copy of this Order and attached permit to all parties and, subject to the filing of motions for rehearing, issue the attached permit.
3. If any provision, sentence, clause, or phrase of this Order is for any reason held to be invalid, the invalidity of any portion shall not affect the validity of the remaining portions of the Order.

Issue Date: NOV 29 1994

Texas Natural Resource
Conservation Commission


John Hall, Chairman

ATTEST:


Gloria A. Vasquez, Chief Clerk



PERMIT NO. 03511
(corresponds to
NPDES PERMIT NO. TX0)

TEXAS NATURAL RESOURCE CONSERVATION COMMISSION
P.O. Box 13087
Austin, Texas 78711-3087

PERMIT TO DISPOSE OF WASTES
under provisions of Chapter 26
of the Texas Water Code

DOCKET 94-0446-IWD

Dos Republicas Resources Co., Inc.
Eagle Pass Mine

whose mailing address is

P.O. Box 200350
San Antonio, Texas 79220-0350

is authorized to treat and dispose of wastes from a sub-bituminous coal mine (SIC 1211)

located approximately 5 miles northeast of the City of Eagle Pass and may be reached by traveling north on US Highway 277 then north and east on State Highway 1588 or Thompson Road. The mine area is located on "Deadmans Hill", Maverick County, Texas

to a series of unnamed ditches, thence to Elm Creek, thence to the Rio Grande River in Segment No. 2304 of the Rio Grande River Basin

only in accordance with effluent limitations, monitoring requirements and other conditions set forth herein, as well as the rules of the Texas Natural Resource Conservation Commission ("Commission"), the laws of the State of Texas, and other orders of the Commission. The issuance of this permit does not grant to the permittee the right to use private or public property for conveyance of wastewater along the herein described discharge route. This includes property belonging to but not limited to any individual, partnership, corporation or other entity. Neither does this permit authorize any invasion of personal rights nor any violation of federal, state, or local laws or regulations. It is the responsibility of the permittee to acquire property rights as may be necessary to use the herein described discharge route.

This permit and the authorization contained herein shall expire at midnight, five years after the date of Commission approval.

ISSUED DATE:

ATTEST:

For the Commission

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Outfall Numbers 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012, and 013

- During the period beginning upon date of issuance and lasting through date of expiration, the permittee is authorized to discharge alkaline mine drainage from area retention ponds subject to the following effluent limitations:

Effluent Characteristic	Discharge Limitations			Minimum Self-Monitoring Requirements	
	Daily Avg mg/l	Daily Max mg/l	Single Grab mg/l	Report Daily Avg. & Daily Max. Measurement Frequency	Sample Type
Flow (MGD)	(Report)	(Report)	N/A	1/week (*1)	Estimate
Total Suspended Solids	35	70 (*2)	70	1/week (*1)	Grab
Iron, Total	3.0	6.0 (*2)	6.0	1/week (*1)	Grab
Selenium, Total	N/A	0.1 (*2)	0.1	1/month (*1)	Grab

(*1) When discharge occurs.

(*2) Instantaneous maximum.

- The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 1/week (*1), by grab sample.
- There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.
- Effluent monitoring samples shall be taken at the following locations:

Outfall 001 at the spillway of retention pond 001 prior to mixing with any other waters;
 Outfall 002 at the spillway of retention pond 002 prior to mixing with any other waters;
 Outfall 003 at the spillway of retention pond 003 prior to mixing with any other waters;
 Outfall 004 at the spillway of retention pond 004 prior to mixing with any other waters;
 Outfall 005 at the spillway of retention pond 005 prior to mixing with any other waters;
 Outfall 006 at the spillway of retention pond 006 prior to mixing with any other waters;
 Outfall 007 at the spillway of retention pond 007 prior to mixing with any other waters;
 Outfall 008 at the spillway of retention pond 008 prior to mixing with any other waters;
 Outfall 009 at the spillway of retention pond 009 prior to mixing with any other waters;
 Outfall 010 at the spillway of retention pond 010 prior to mixing with any other waters;
 Outfall 011 at the spillway of retention pond 011 prior to mixing with any other waters;
 Outfall 012 at the spillway of retention pond 012 prior to mixing with any other waters; and
 Outfall 013 at the spillway of retention pond 013 prior to mixing with any other waters.

DEFINITIONS AND STANDARD PERMIT CONDITIONS

As required by Title 31 Texas Administrative Code (TAC) Chapter 305 certain regulations appear as standard conditions in waste discharge permits. All definitions contained in Section 26.001 of the Texas Water Code shall apply to this permit and are incorporated herein by reference. Additional definitions of words or phrases used in this permit are as follows:

1. Flow Measurements

- a. Daily average flow - the arithmetic average of all determinations of the daily discharge within a period of one calendar month. The daily average flow determination shall consist of determinations made on at least four separate days. If instantaneous measurements are used to determine the daily discharge, the determination shall be the average of all instantaneous measurements taken during a 24-hour period or during the period of daily discharge if less than 24 hours. Daily average flow determination for intermittent discharges shall consist of a minimum of three flow determinations on days of discharge.
- b. Instantaneous flow - the measured flow during the minimum time required to operate the flow measuring device.
- c. 2-hour peak (domestic wastewater treatment plants) - the maximum flow sustained for a two hour period during the period of daily discharge. Multiple measurements of instantaneous maximum flow within a two-hour period may be compared to the permitted 2-hour peak flow.
- d. Daily maximum flow - the highest total flow permitted for a 24-hour period.

2. Concentration Measurements

- a. Daily average concentration - the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar month, consisting of at least four separate representative measurements. (i) For domestic wastewater treatment plants - When four samples are not available in a calendar month, the arithmetic average (weighted by flow) of all values in the previous four consecutive month period consisting of at least four measurements shall be utilized as the daily average concentration. (ii) For all other wastewater treatment plants - When four samples are not available in calendar month, the arithmetic average (weighted by flow) of all values taken during the month shall be utilized as the daily average concentration.
- b. 7-day average concentration - the arithmetic average of all effluent samples, composite or grab, within a period of one calendar week, consisting of at least three separate measurements.
- c. Daily maximum concentration - the maximum concentration measured on a single day (by composite sample).
- d. Fecal Coliform bacteria - the number of colonies per 100 milliliters effluent.

3. Sample Type

- a. Composite sample - a sample made up of a minimum of three effluent portions collected in a continuous 24-hour period or during the period of daily discharge if less than 24 hours, and combined in volumes proportional to flow collected no closer than two hours; or a sample continuously collected, proportional to flow, in a continuous 24-hour period or during the period of daily discharge if less than 24 hours.
- b. Grab sample - an individual sample collected in less than 15 minutes.

4. Treatment Facility (facility) - Wastewater facilities used in the conveyance, storage, treatment, recycling, reclamation and/or disposal of municipal sewage, industrial wastes, agricultural wastes, recreational wastes or other wastes including sludge handling or disposal facilities under the jurisdiction of the Commission.

5. The term "sludge" shall mean the solids and precipitates separated from wastewater by unit processes, which are not regulated as hazardous waste.

MONITORING AND REPORTING

1. Self-Reporting

31 TAC §305.125(17) Monitoring results shall be provided at the intervals specified in the permit.

Unless otherwise specified in this permit or otherwise ordered by the Commission, the permittee shall conduct effluent sampling and reporting in accordance with 31 TAC §§319.4-319.7.

Unless otherwise specified, a monthly effluent report must be submitted each month by the 20th day of the following month for each discharge which is described by this permit whether or not a discharge is made for that month. Knowingly making any false statement on any such report may result in the imposition of criminal and/or civil penalties as provided by State law.

2. Test Procedures

Test procedures for the analysis of pollutants shall comply with procedures specified in 31 TAC §§319.10-319.11. Measurements, tests, and calculations shall be accurately accomplished in a representative manner.

3. Records of Results

31 TAC §305.125(11) Monitoring and reporting requirements are as follows:

- (a) Monitoring samples and measurements shall be taken at times and in a manner so as to be representative of the monitored activity.
- (b) Monitoring and reporting records, including strip charts and records of calibration and maintenance, copies of all records required by the permit, and the certification required by 40 Code of Federal Regulations §264.73(b)(9) shall be retained at the facility site for a period of three years from the date of the record or sample, measurement, report, or certification. This period may be extended at the request of the executive director.
- (c) Records of monitoring activities shall include the following:
 - (i) date, time and place of sample or measurement;
 - (ii) identity of individual who collected the sample or made the measurement;
 - (iii) date of analysis;
 - (iv) identity of the individual and laboratory who performed the analysis;
 - (v) the technique or method of analysis; and
 - (vi) the results of the analysis or measurement.

The period during which records are required to be kept shall be automatically extended to and through the final disposition of any administrative or judicial enforcement action that may be instituted against the permittee.

4. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit using approved analytical methods as specified above, the results of such monitoring that indicate permit noncompliance shall be included in the calculation and reporting of the value submitted on the required monthly effluent report. The results of such monitoring that indicate permit compliance may also be reported and included in calculations. Increased frequency of sampling shall be indicated on the report.

5. Calibration of Instruments

All automatic flow measuring and/or recording devices and/or totalizing meters required by the permit for measuring permit limited flows shall be accurately calibrated by a trained person at plant startup and as often thereafter as necessary to ensure accuracy, but not less often than annually unless authorized by the Executive Director for a longer period. Such person shall verify in writing that the device is operating properly and giving accurate results. Copies of the verification shall be kept at the plant site for at least three years.

6. Compliance Schedule Reports

31 TAC §305.125(18) Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of the permit shall be submitted no later than 14 days following each schedule date.

7. Noncompliance Notification

- a. 31 TAC §305.125(9) Unless specified otherwise, the permittee shall report any noncompliance to the executive director which may endanger human health or safety, or the environment. Report of such information shall be provided orally within 24 hours from the time the permittee becomes aware of the noncompliance. A written submission of such information shall also be provided within five working days of the time the permittee becomes aware of the noncompliance.

The written submission shall contain a description of the noncompliance and its cause; the potential danger to human health or safety, or the environment; the period of noncompliance, including exact dates and times; if the noncompliance has not been corrected, the anticipated time it is expected to continue; and, steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance, and to mitigate its adverse effects.

- b. Any noncompliance which is 40% over the permitted effluent limitation shall be reported orally within 24 hours and in writing to the District Office within 5 working days of becoming aware of the condition.
- c. 31 TAC §305.125(12) Any noncompliance other than that specified in this section, or any required information not submitted or submitted incorrectly, shall be reported to the executive director as promptly as possible. (This requirement means to report these types of noncompliance on the monthly self-report form)

8. Signatories To Reports

31 TAC §305.125(14) All reports and other information requested by the executive director shall be signed by the person and in the manner required by 31 TAC §305.128 (relating to Signatories to Reports).

PERMIT CONDITIONS

1. General

- a. 31 TAC §305.125(19) Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in an application or in any report to the executive director, it shall promptly submit such facts or information.
- b. This permit is granted on the basis of the information supplied and representations made by the permittee during the application process and in reliance upon the accuracy and completeness of that information and those representations. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked, in whole or in part in accordance with 31 TAC 305.61-305.68, during its term for cause including, but not limited to, the following:
- (i) Violation of any terms or conditions of this permit;
 - (ii) Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
 - (iii) A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
- c. 31 TAC §305.125(6) The permittee shall furnish to the executive director, upon request and within a reasonable time, any information to determine whether cause exists for amending, revoking or, suspending, or terminating the permit. The permittee shall also furnish to the executive director, upon request, copies of records required to be kept by the permit.

2. Compliance

- a. 31 TAC §305.124 Acceptance of the permit by the person to whom it is issued constitutes an acknowledgement and agreement that such person will comply with all the terms and conditions embodied in the permit, and the rules and other orders of the commission.
- b. 31 TAC §305.125(1) The permittee has a duty to comply with all conditions of the permit. Failure to comply with any permit condition constitutes a violation of the permit and the Texas Water Code or the Texas Solid Waste Disposal Act, and is grounds for enforcement action, for permit amendment, revocation or suspension, or for denial of a permit renewal application or of an application for a permit for another facility.

- c. 31 TAC §305.125(3) It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.
- d. 31 TAC §305.125(4) The permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with the permit and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health or the environment.
- e. 31 TAC §305.125(8) Authorization from the commission is required before beginning any change in the permitted facility or activity that would result in noncompliance with other permit requirements.
- f. 31 TAC §305.125(15) A permit may be amended, suspended and reissued, or revoked for cause. The filing of a request by the permittee for a permit amendment, suspension and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- g. There shall be no unauthorized bypasses of wastewater. For purposes of this permit a bypass is considered the discharge of untreated or partially treated wastewater which exceeds the permit limits and is not caused solely by an act of God. Routing wastewater around a treatment unit or units resulting in a discharge which does not exceed permit limits is not a bypass. In the event that a discharge of partially or untreated wastewater is anticipated to cause a violation of permit limits application shall be submitted to the Commission for authorization to discharge untreated or partially treated wastewater pursuant to Section 26.0191 of the Texas Water Code and 31 TAC 305.21-305.30.

3. Inspections and Entry

- a. 31 TAC §305.125(10) Inspection and entry shall be allowed as prescribed in the Texas Water Code, Chapters 26, 27 and 28, and the Texas Solid Waste Disposal Act, Texas Civil Statutes, Article 4477-7, §7.
- b. The members of the commission and employees and agents of the commission are entitled to enter any public or private property at any reasonable time for the purpose of inspecting and investigating conditions relating to the quality of water in the state. Members, employees, or agents acting under this authority who enter private property shall observe the establishment's rules and regulations concerning safety, internal security, and fire protection, and if the property has management in residence, shall notify management or the person then in charge of his presence and shall exhibit proper credentials. If any member, employee, or agent is refused the right to enter in or on public or private property under this authority, the executive director may invoke the remedies authorized in Texas Water Code Section 26.123.

4. Permit Amendment

- a. 31 TAC §305.125(7) The permittee shall give notice to the executive director prior to physical alterations or additions to the permitted facility if such alterations or additions would require a permit amendment or result in a violation of permit requirements.
- b. Prior to any facility modifications, additions and/or expansions of a permitted facility that will increase the plant capacity beyond the permitted flow, the permittee must apply for and obtain proper authorization from the Commission before commencing construction.
- c. 31 TAC §305.125(2) The permittee must apply for an amendment or renewal prior to expiration of the existing permit in order to continue a permitted activity after the expiration date of the permit. Authorization to continue such activity will terminate upon the effective denial of said application.
- d. Prior to accepting wastes which are not described in the permit application or which would result in a significant change in the quantity or quality of the existing discharge, the permittee must report the proposed changes to the Commission. The permittee must apply for a permit amendment reflecting any necessary changes in permit conditions, including effluent limitations for pollutants not identified and limited by this permit.
- e. Texas Water Code §26.029(b) After a public hearing, notice of which shall be given to the permittee, the Commission may require the permittee, from time to time, for good cause, to conform to new or additional conditions. The Commission shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Commission may grant additional time.

5. Permit Transfer

- a. Prior to any transfer of this permit, Commission approval must be obtained. The Commission shall be notified, in writing, of any change in control or ownership of facilities authorized by this permit. Such notification should be sent to the Permit Application Unit in the Water Quality Division.
- b. 31 TAC §305.125(13) A permit may be transferred only according to the provisions of 31 TAC §305.64 (relating to Transfer of Permits) and 31 TAC 305.97 (relating to Action on Application for Transfer).

6. Relationship to Hazardous Waste Activities

This permit does not authorize any activity of hazardous solid waste storage, processing, or disposal which requires a permit or other authorization pursuant to the Texas Solid Waste Disposal Act, Article 4477-7, Vernon's Annotated Texas Civil Statutes.

7. Relationship to Water Rights

Disposal of treated effluent by any means other than discharge directly to the waters in the state must be specifically authorized in this permit and may require a permit pursuant to Chapter 11 of the Texas Water Code.

8. Property Rights

31 TAC §305.125(16) A permit does not convey any property rights of any sort, or any exclusive privilege.

9. Permit Enforceability

The conditions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

OPERATIONAL REQUIREMENTS

1. 31 TAC §305.125(5) The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of the permit.
2. Unless otherwise specified in this permit or otherwise ordered by the Commission, the permittee shall comply with all provisions of 31 TAC §§319.21 - 319.29 concerning the discharge of certain hazardous metals, and upon request of the executive director, the permittee shall take samples of the final effluent and provide proper analysis of such samples in order to demonstrate compliance with these rules.
3. In accordance with 31 TAC §335.6:
 - a. The permittee shall notify the Executive Director in writing of any closure activity or facility expansion at least 90 days prior to conducting such activity.
 - b. Closure activities include those associated with any pit, pond, lagoon, or surface impoundment regulated by this permit.
4. The permittee is responsible for installing prior to plant startup, and subsequently maintaining, adequate safeguards to prevent the discharge of untreated or inadequately treated wastes during electrical power failures by means of alternate power sources, standby generators, and/or retention of inadequately treated wastewater.
5. Unless otherwise specified, the permittee shall provide a readily accessible sampling point and, where applicable, an effluent flow measuring device or a means by which effluent flow may be determined based upon influent measuring.
6. The permittee shall remit an annual waste treatment inspection fee to the Commission as required by 31 TAC 305 (Subchapter M). Failure to pay this fee may result in revocation of this permit.
7. Documentation

For all written notifications to the Commission required of the permittee by this permit, the permittee shall keep and make available a copy of each such notification, upon the same basis as self-monitoring data are required to be kept and made available.

OTHER REQUIREMENTS

1. Sanitary wastewater shall be discharged to a septic tank/drainage field system.
2. The permittee shall maintain a map at the mine site which shows the location of all ponds and discharge routes. The map and pond list shall be available to the Texas Natural Resource Conservation Commission personnel.
3. The pond location map may be revised. Upon revision, the permittee shall submit revised maps to the Permitting Section, Watershed Management Division of the Texas Natural Resource Conservation Commission in Austin and the TNRCC Region 13 office.
4. As each discharge point is developed, the TNRCC Region 13 office shall be notified.
5. Any discharge caused by a precipitation event within any 24 hour period less than or equal to the 10 year, 24 hour precipitation event, or snowmelt of equivalent volume shall comply with the limitations listed below.

ADDITIONAL EFFLUENT LIMITATIONS DURING PRECIPITATION EVENTS

<u>Pollutant or Pollutant Property</u>	<u>Maximum for any 1 Day</u>
Setteable Solids *	0.5 ml/l
pH within range of 6.0 to 9.0 standard units at all times	

* This limit does not apply when the discharge is caused by a precipitation event greater than the 10 year, 24 hour precipitation event.

6. The term "10 year, 24 hour precipitation event" shall mean a rainfall event with the probable recurrence interval of once in ten years as defined by the National Weather Service in Technical Paper No. 40, "Rainfall Frequency Atlas of the United States", and subsequent amendments, or equivalent regional or state rainfall probability information developed therefrom.
7. The term "post mining area" is defined as a reclamation area or the underground workings of an underground coal mine after the extraction, removal, or recovery of coal from its natural deposit has ceased and prior to bond release.
8. The term "reclamation area" is defined as the surface area of a coal mine which has been returned to required contour and on which revegetation (specifically, seeding or planting) work has commenced.
9. The term "bond release" is defined as the time at which the appropriate regulatory authority returns a reclamation or performance bond based upon its determination that reclamation work (including, in the case of underground mines, mine sealing and abandonment procedures) has been satisfactorily completed.

OTHER REQUIREMENTS (Continued)

10. The permittee shall notify the Executive Director of the TNRCC at least 90 days prior to conducting any activity of closure of any pit, pond, lagoon, or surface impoundment regulated by this permit.
11. Discharges from the retention ponds shall be monitored in accordance with the requirements of this permit from the time the overburden removal begins until reclamation of the disturbed soils is complete and the performance bond issued by the appropriate authority has been released. At least 10 days prior to such action, the TNRCC Region 13 office and the TNRCC Permitting Section of the Watershed Management Division in Austin shall be notified in writing of the permittee's intent to close any retention pond or discontinue monitoring.
12. The outfalls, discharge routes, and pond designations are specified below:

<u>OUTFALL</u>	<u>POND</u>	<u>DISCHARGE ROUTE</u>
001	001	From the spillway on the south side of the pond to a ditch, thence to Elm Creek;
002	002	From the spillway on the southwest side of the pond to a ditch, thence to Elm Creek;
003	003	From the spillway on the southwest side of the pond to a ditch, thence to a diversion, thence to Elm Creek;
004	004	From the spillway on the east side of the pond to a culvert, thence to a ditch, thence to Elm Creek;
005	005	From the spillway on the east side of the pond to a ditch, thence to a culvert, thence to Elm Creek;
006	006	From the spillway on the southeast side of the pond to a ditch, thence to the diversion, thence to Elm Creek;
007	007	From the spillway on the east side of the pond to a ditch, thence to Elm Creek;
008	008	From the spillway on the east side of the pond to a ditch, thence to the diversion, thence to Elm Creek;
009	009	From the spillway on the west side of the pond to a ditch, thence to Elm Creek;
010	010	From the spillway on the west side of the pond to a ditch, thence to Elm Creek;
011	011	From the north side of the pond to a series of ditches, thence to Elm Creek;
012	012	From the spillway on the south side of the pond to a ditch, thence to Elm Creek; and
013	013	From the spillway on the south side of the pond to a ditch, thence to Elm Creek.

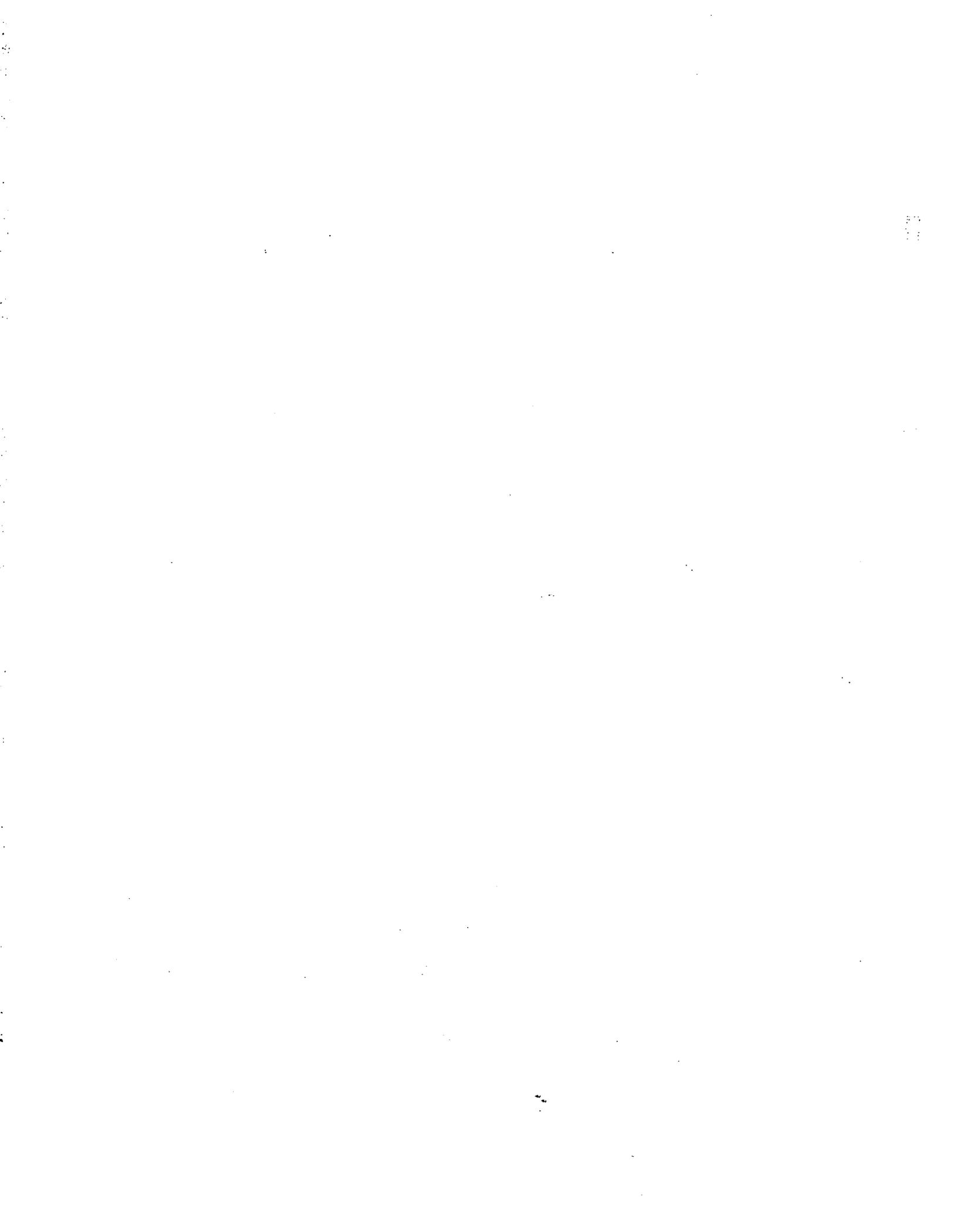
13. The permittee shall provide to the Texas Natural Resource Conservation Commission's Permitting Section of the Watershed Management Division copies of all surface and groundwater quality monitoring results that it is required to send to the Railroad Commission of Texas (RCT) pursuant to its RCT mining and reclamation permit.

OTHER REQUIREMENTS (Continued)

14. On pages 3 through 7 of this permit, Texas Natural Resource Conservation Commission supercedes and replaces Texas Water Commission, TNRCC supercedes and replaces TWC, Region Office supercedes and replaces District Office.

APPENDIX I

NALCO DUST-BAN 8801 DATA



APPENDIX I
NALCO DUST-BAN 8801 DATA

This appendix presents the Product Bulletin and Material Data Safety Sheet for Nalco Dust-Ban 8801, which DRRC proposes to use for dust suppression.



Mining
Chemicals

Product
Bulletin

DUST-BAN™ 8801

DUST CONTROL AGENT

H-8801

Product Benefits

- Agglomerates the micron sized dust particles by reduction of interfacial surface tension
- Lowers surface tension of water to create a more effective spray
- Allows penetration of dust into the water droplet
- Permits less water to do a better job

Principal Uses

DUST-BAN 8801 was developed to be especially active in the suppression of fine coal dust. However, it has also shown excellent activity in controlling dust created from iron ore, coke, limestone, cement, sand,

and many other minerals. Specific areas of application are:

- Underground mining machinery
- Conveyor transfer points
- Breakers and crushers
- Feeders and hoppers
- Dumping and unloading operations

General Description

DUST-BAN 8801 is a specially formulated organic activating agent designed for the control of dust in the mining and handling of minerals. DUST-BAN 8801 is very effective in contacting, confining, and agglomerating dust. It is engineered to be especially active in the control of the microscopic, micron sized, fine dust that creates a health and safety problem in mining operations. Once applied, DUST-BAN 8801 retains its dust suppression characteristics.

Little if any further treatment is necessary unless fresh surfaces are exposed.

Form	Liquid
Color	Clear
Odor	Slight
Density	8.4±0.1 lb/gal
Freeze Point	30°F
Freeze-Thaw Recovery	Complete

Shipping and Handling

DUST-BAN 8801 is shipped in 55-gallon nonreturnable lined steel drums containing approximately 450 pounds net. Undiluted DUST-BAN 8801 may cause eye irritation,

but inhalation studies indicate no toxicity hazard at dilutions of at least 50:1.



Application Information

DUST-BAN 8801 is normally diluted with water 1000:1 by volume, although this may vary from 200:1 to 2500:1 depending upon the application. When applied as recommended in a process, the total moisture added to the material using DUST-BAN 8801 is significantly less than 1%. The use of DUST-BAN 8801 in spray water can reduce by 50% or more the amount of water normally used and still produce more effective dust suppression.

The recommended methods of diluting and feeding DUST-BAN 8801 are:

In-Line Dilution — A chemical metering pump may be used to feed the DUST-BAN 8801 directly into the spray water lines. It may be necessary for a static in-line mixer to be installed after the pump to assure adequate dispersion of the product.

Dilution Tank — The DUST-BAN 8801 may be proportioned into the water line supplying a storage tank. The turbulence in the tank will provide adequate mixing.

More specific information on the above feeding methods as well as recommendations for spray nozzles and equipment necessary to obtain effective dust control are available from your local Naico representative.

NALCO CHEMICAL COMPANY MINING AND MINERAL PROCESSING CHEMICALS 2201 BUTTERFIELD ROAD O OAK BROOK, ILLINOIS 60021

SUBSIDIARIES IN ARGENTINA, AUSTRIA, BRAZIL, CHILE, COLOMBIA, ECUADOR, FINLAND, FRANCE, HOLLAND, HONG KONG, ITALY, PHILIPPINES, SAUDI ARABIA, SPAIN, SWEDEN, VENEZUELA, AND WEST GERMANY • AFFILIATES IN AUSTRALIA, CANADA, JAPAN, MEXICO, SINGAPORE, SOUTH AFRICA, TAIWAN, UNITED KINGDOM, AND THE UNITED STATES



Registered Trademarks of Naico Chemical Company ©1982 Naico Chemical Company
All Rights Reserved Printed in U.S.A. 7-82



MATERIAL SAFETY DATA SHEET

PRODUCT

DUST-BAN 8801 DUST CONTROL

Emergency Telephone Number

Medical (708) 920-1510 (24 hours)

SECTION 1 PRODUCT IDENTIFICATION

TRADE NAME: DUST-BAN 8801 DUST CONTROL

DESCRIPTION: An aqueous solution of an oxyalkylate

NEPA 704M/HMIS RATING: 2/2 HEALTH 1/1 FLAMMABILITY 0/0 REACTIVITY 0 OTHER
0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme

SECTION 2 HAZARDOUS INGREDIENTS

Our hazard evaluation has identified one or more hazardous ingredient(s) under OSHA's Hazard Communication Rule, 29 CFR 1910.1200. Their identity is being claimed a trade secret. Consult Section 14 for the nature of the hazard(s).

INGREDIENT	CAS #	APPROX.%
Oxyalkylate	Proprietary	10-20

SECTION 3 PRECAUTIONARY LABEL INFORMATION

WARNING: Causes eye irritation. Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Do not take internally.

Empty containers may contain residual product. Do not reuse container unless properly reconditioned.

SECTION 4 FIRST AID INFORMATION

EYES: Immediately flush for at least 15 minutes while holding eyelids open. Call a physician at once.
SKIN: Wash thoroughly with soap and rinse with water. Call a physician.
INGESTION: Do not induce vomiting. Give water. Call a physician.
INHALATION: Remove to fresh air. Treat symptoms. Call a physician.

NOTE TO PHYSICIAN: No specific antidote is known. Based on the individual reactions of the patient, the physician's judgment should be used to control symptoms and clinical condition.

CAUTION: If unconscious, having trouble breathing or in convulsions, do not induce vomiting or give water.

SECTION 5 HEALTH EFFECTS INFORMATION

PRIMARY ROUTES OF EXPOSURE: Eye, Skin

MATERIAL SAFETY DATA SHEET



PRODUCT

DUST-BAN 8801 DUST CONTROL

Emergency Telephone Number

Medical (708) 920-1510 (24 hours)

SECTION 5 HEALTH EFFECTS INFORMATION

(CONTINUED)

EYE CONTACT: Can cause moderate to severe irritation.
SKIN CONTACT: Non-irritating.

SYMPTOMS OF EXPOSURE: A review of available data does not identify any symptoms from exposure.

AGGRAVATION OF EXISTING CONDITIONS: A review of available data does not identify any worsening of existing conditions.

SECTION 6 TOXICOLOGY INFORMATION

ACUTE TOXICITY STUDIES: Acute toxicity studies have been conducted on this product. The results are shown below.

PRIMARY SKIN IRRITATION TEST (ALBINO RABBITS): Undiluted product
0.52/8.0 Essentially non-irritating

COMMENTS: A single dermal application of 0.5 ml of product to abraded and intact skin sites on the back of a group of albino rabbits produced, after 24-hours, mild transient redness and occasional slight swelling which cleared by 48-hours after application.

PRIMARY SKIN IRRITATION TEST (ALBINO RABBITS): Diluted product (1:200 and 1:100) Non-irritating

COMMENTS: Diluted product applied as above, failed to produce any irritation at any of the test sites.

PRIMARY EYE IRRITATION TEST (ALBINO RABBITS): Undiluted product
14.6/110.0 @ 1-hour; 25/110.0 @ 48-hours; 35/110.0 @ 72-hours; 40.8/110.0 @ 7-days; 28.7 @ 14-days Moderate to severe irritant

COMMENTS: Instillation of 0.1 ml of product into the conjunctival sac of a group of six albino rabbits produced moderate to severe eye irritation within one hour. The irritation was characterized by redness, swelling and discharge. A mild iritis was also evident 24-hours after instillation.

PRIMARY EYE IRRITATION TEST (ALBINO RABBITS): Diluted product (1:200 and 1:100) 5.0/110.0 @ 1-hour (1:200); 4.3/110.0 @ 1-hour (1:100) Essentially non-irritating

COMMENTS: Both dilutions of product when instilled into the eyes of albino rabbits using the same procedure as utilized for the undiluted product produced



MATERIAL SAFETY DATA SHEET

PRODUCT

DUST-BAN 8801 DUST CONTROL

Emergency Telephone Number
Medical (708) 920-1510 (24 hours)

SECTION 6 TOXICOLOGY INFORMATION

(CONTINUED)

only a mild transient irritation of the conjunctiva which returned to normal within 48-hours. No corneal or iridial involvement was noted.

SECTION 7 PHYSICAL AND CHEMICAL PROPERTIES

COLOR: Colorless	FORM: Liquid	
DENSITY:	8.4 lbs/gal.	
SOLUBILITY IN WATER:	Completely	
SPECIFIC GRAVITY:	1.02 @ 68 Degrees F	ASIM D-1298
FREEZE POINT:	30 Degrees F	ASIM D-1177
BOILING POINT:	212 Degrees F @ 760 mm Hg	ASIM D-86
FLASH POINT:	None	

NOTE: These physical properties are typical values for this product.

SECTION 8 FIRE AND EXPLOSION INFORMATION

FLASH POINT: None

EXTINGUISHING MEDIA: This product would not be expected to burn unless all the water is boiled away. The remaining organics may be ignitable. Use water to cool containers exposed to fire.

SECTION 9 REACTIVITY INFORMATION

INCOMPATIBILITY: Avoid contact with strong oxidizers (eg. chlorine, peroxides, chromates, nitric acid, perchlorates, concentrated oxygen, permanganates) which can generate heat, fires, explosions and the release of toxic fumes.

THERMAL DECOMPOSITION PRODUCTS: In the event of combustion CO, CO₂ may be formed. Do not breathe smoke or fumes. Wear suitable protective equipment.

SECTION 10 PERSONAL PROTECTION EQUIPMENT

RESPIRATORY PROTECTION: Respiratory protection is not normally needed.

For large spills, entry into large tanks, vessels or enclosed small spaces with inadequate ventilation, a pressure-demand, self-contained breathing apparatus is recommended.

VENTILATION: General ventilation is recommended.

PROTECTIVE EQUIPMENT: Use impermeable gloves and chemical splash goggles when attaching feeding equipment or doing maintenance.

MATERIAL SAFETY DATA SHEET



PRODUCT

DUST-BAN 8801 DUST CONTROL

Emergency Telephone Number

Medical (708) 920-1510 (24 hours)

SECTION 10 PERSONAL PROTECTION EQUIPMENT

(CONTINUED)

If clothing is contaminated, remove clothing and thoroughly wash the affected area. Launder contaminated clothing before reuse.

SECTION 11 SPILL AND DISPOSAL INFORMATION

IN CASE OF TRANSPORTATION ACCIDENTS, CALL THE FOLLOWING 24-HOUR TELEPHONE NUMBER (708-920-1510)

SPILL CONTROL AND RECOVERY:

Small liquid spills: Contain with absorbent material, such as clay, soil or any commercially available absorbent. Shovel reclaimed liquid and absorbent into recovery or salvage drums for disposal. Refer to CERCLA in Section 14.

Large liquid spills: Dike to prevent further movement and reclaim into recovery or salvage drums or tank truck for disposal. Refer to CERCLA in Section 14.

DISPOSAL: If this product becomes a waste, it does not meet the criteria of a hazardous waste as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261, since it does not have the characteristics of Subpart C, nor is it listed under Subpart D.

As a non-hazardous liquid waste, it should be solidified with stabilizing agents (such as sand, fly ash, or cement) so that no free liquid remains before disposal to an industrial waste landfill. A non-hazardous liquid waste can also be deep-well injected in accordance with local, state, and federal regulations.

SECTION 12 ENVIRONMENTAL INFORMATION

If released into the environment, see CERCLA in Section 14.

SECTION 13 TRANSPORTATION INFORMATION

DOT PROPER SHIPPING NAME/HAZARD CODE - PRODUCT IS NOT REGULATED DURING TRANSPORTATION

SECTION 14 REGULATORY INFORMATION

The following regulations apply to this product.

FEDERAL REGULATIONS:



MATERIAL SAFETY DATA SHEET

PRODUCT

DUST-BAN 8801 DUST CONTROL

Emergency Telephone Number

Medical (708) 920-1510 (24 hours)

SECTION 14 REGULATORY INFORMATION

(CONTINUED)

OSHA'S HAZARD COMMUNICATION RULE, 29 CFR 1910.1200:
Based on our hazard evaluation, the following ingredient in this product is hazardous and the reason is shown below.

Oxyalkylate - Severe eye irritant

CERCLA/SUPERFUND, 40 CFR 117, 302:
Notification of spills of this product is not required.

SARA/SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986
(TITLE III) - SECTIONS 302, 311, 312 AND 313:

SECTION 302 - EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355):
This product does not contain ingredients listed in Appendix A and B as an Extremely Hazardous Substance.

SECTIONS 311 and 312 - MATERIAL SAFETY DATA SHEET REQUIREMENTS (40 CFR 370):
Our hazard evaluation has found this product to be hazardous. The product should be reported under the following EPA hazard categories:

- XX Immediate (acute) health hazard
- Delayed (chronic) health hazard
- Fire hazard
- Sudden release of pressure hazard
- Reactive hazard

SECTION 313 - LIST OF TOXIC CHEMICALS (40 CFR 372):
This product does not contain ingredients (at a level of 1% or greater) on the List of Toxic Chemicals.

TOXIC SUBSTANCES CONTROL ACT (TSCA):
The chemical ingredients in this product are on the 8(b) Inventory List (40 CFR 710).

RESOURCE CONSERVATION AND RECOVERY ACT (RCRA), 40 CFR 261 SUBPART C & D:
Consult Section 11 for RCRA classification.

FEDERAL WATER POLLUTION CONTROL ACT, CLEAN WATER ACT, 40 CFR 401.15
(formerly Sec. 307), 40 CFR 116 (formerly Sec. 311):
None of the ingredients are specifically listed.

CLEAN AIR ACT, Sec. 111 (40 CFR 60), Sec. 112 (40 CFR 61, 1990 Amendments):
This product does not contain ingredients covered by the Clean Air Act.

PAGE 5 OF 7



MATERIAL SAFETY DATA SHEET

PRODUCT

DUST-BAN 8801 DUST CONTROL

Emergency Telephone Number

Medical (708) 920-1510 (24 hours)

SECTION 14 REGULATORY INFORMATION

(CONTINUED)

STATE REGULATIONS:

CALIFORNIA PROPOSITION 65:

None of the chemicals on the current Proposition 65 list are known to be present in this product.

MICHIGAN CRITICAL MATERIALS:

This product does not contain ingredients listed on the Michigan Critical Materials Register.

STATE RIGHT TO KNOW LAWS:

This product does not contain ingredients listed by State Right To Know Laws.

SECTION 15 ADDITIONAL INFORMATION

None

SECTION 16 USER'S RESPONSIBILITY

This product material safety data sheet provides health and safety information. The product is to be used in applications consistent with our product literature. Individuals handling this product should be informed of the recommended safety precautions and should have access to this information. For any other uses, exposures should be evaluated so that appropriate handling practices and training programs can be established to ensure safe workplace operations. Please consult your local sales representative for any further information.

SECTION 17 BIBLIOGRAPHY

ANNUAL REPORT ON CARCINOGENS, U.S. Department of Health and Human Services, Public Health Service, PB 33-135855, 1983.

CASARETT AND DOULL'S TOXICOLOGY, THE BASIC SCIENCE OF POISONS, Doull, J., Klaassen, C. D., and Admar, M. O., eds., Macmillian Publishing Company, Inc., N. Y., 2nd edition, 1980.

CHEMICAL HAZARDS OF THE WORKPLACE, Proctor, N. H., and Hughes, J. P., eds., J. P. Lipincott Company, N.Y., 1981.

DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS, Sax, N. Irving, ed., Van Nostrand Reinhold Company, N.Y., 6th edition, 1984.