



**OVERBY
DESCAMPS
ENGINEERS**

June 28, 2006

11815 WARFIELD
SAN ANTONIO, TX 78216
TEL: (210) 828-3520
FAX: (210) 828-3598
ode@overbydescamps.com

Mr. Bobby Caldwell
Water Section Manager
San Antonio Regional Office
Texas Commission on Environmental Quality
14250 Judson Road
San Antonio, Texas 78233

Transmitted via hand delivery

Re: Edwards Aquifer, Medina County
NAME OF PROJECT: Vulcan Materials Quarry; Located north of County Road 353 and east of County Road 351; Medina County, Texas
TYPE OF PLAN: Request for Approval of a Water Pollution Abatement Plan (WPAP); 30 Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer; Edwards Aquifer Protection Program ID No. 2502.00, Investigation No. 462519, Regulated Entity No. RN104921630

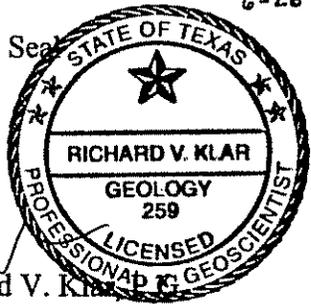
Dear Mr. Caldwell:

This letter is transmitting one (1) original and three (3) copies of our responses to your June 12, 2006 letter (see copy attached), which we received on June 14, 2006. Said TCEQ has confirmed that this response is due to TCEQ June 28, 2006.

As you requested, our responses are "numbered to correspond to the numbered items" in your letter.

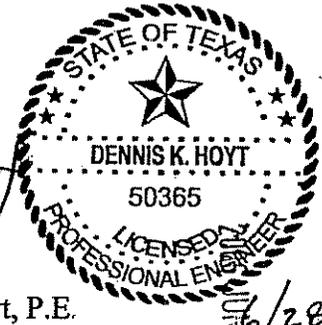
Should you have any questions or need any additional information, please do not hesitate to call me.

6-28-06



Richard V. Klar
Raba-Kistner Consultants, Inc.

Seal



Dennis K. Hoyt, P.E.
Overby Descamps Engineers, Inc.

RECEIVED JOE Q
SAN ANTONIO
REGION I
JUN 28 2006
PM 3:42

DKH:ds

c: Aleisha Knochenhauer, Vulcan Materials Company, 524-3553

Attachment(s): TCEQ June 12, 2006 Questions
Vulcan Answers

0623-01.DKH 0557.00 ltr to Bobby Caldwell re Vulcan Medina Quarry Responses.doc

Kathleen Hartnett White, *Chairman*
R. B. "Ralph" Marquez, *Commissioner*
Larry R. Soward, *Commissioner*
Glenn Shankle, *Executive Director*



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TEXAS COMMISSION ON ENVIRONMENTAL QUALITY JUN 16 2006

Protecting Texas by Reducing and Preventing Pollution

FILE 0557.00

June 12, 2006

TCEQ-R13

JUN 28 2006

SAN ANTONIO

Mr. Dennis Hoyt, P.E.
Overby Descamps Engineers, Inc.
11815 Warfield
San Antonio, Texas 78216

Re: Edwards Aquifer, Medina County
NAME OF PROJECT: Vulcan Materials Medina Quarry; Located north of County Road 353 and east of County Road 351; Medina County, Texas
TYPE OF PLAN: Request for Approval of a Water Pollution Abatement Plan (WPAP); 30 Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer; Edwards Aquifer Protection Program ID No. 2502.00, Investigation No. 462519, Regulated Entity No. RN104921630

Dear Mr. Hoyt:

We are in the process of technically reviewing the water pollution abatement plan (WPAP) application you submitted on the above-referenced project. Before we can proceed with our review, the following comments relating to the application must be addressed.

FORM 0587:

1. #7A. Railroad tracks are shown on the site plan, but not addressed in the project description. Provide a description of the railroad and railroad tracks.
2. #7B. The project description provides details for the plant area, but not the quarrying operations. Provide a description of the quarrying operations.
3. #7C. The project description notes that vehicles will be parked on the quarry site but off the Recharge Zone. The parking area is not shown on the site plan. Pursuant to 30§213.3(30), "site" is defined as:

The entire area included within the legal boundaries of the property described in the application. Regulated activities on a site that is located partially on the recharge zone and transition zone, where the natural drainage in the transition zone flows back to the recharge zone, will be treated as if the entire site is located on the recharge zone.

Clarify that the parking area is on a separate property, or provide a site plan which includes the parking area.

REPLY TO: REGION 13 • 14250 JUDSON RD. • SAN ANTONIO, TEXAS 78233-4480 • 210/490-3096 • FAX 210/545-4329

P.O. Box 13087 • Austin, Texas 78711-3087 • 512/239-1000 • Internet address: www.tceq.state.tx.us

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FORM 0585:

4. Features WZ-S71, WZ-S72 and WZ-S73 are faults that were reported to be observed in the field but displayed on the geologic map as inferred faults. Please explain.

FORM 0584:

5. #5A. A statement is made that material processing removes more than 80% of the sediment load created by mining. Calculations provided later in the application are based on sediment load from increased impervious cover, and not on a 40 year supply of mined material transported to the plant area.
 - A. Describe the methodology by which sediment load created by mining is measured, calculated or otherwise derived.
 - B. Provide specific loads and units of measure for the subject site.
 - C. Explain how the processing removes more than 80% of the sediment load created by mining.
6. #5B. Provide elevations above mean sea level for the average mining depth of 130'.
7. #5C. Provide the elevation above mean sea level for the water table in the Edwards Aquifer, and the source of or reference for this information.
8. #5D. Provide an estimate of the quantities for each type of hydrocarbon or hazardous substance to be used/stored on the plant/quarry site.
9. #5E1. Explain why and how the proposed water quality basins are appropriate methods of mitigation for hydrocarbons and other chemicals.
 - #5E2. Revise the Sequence of Major Activities to include when will the water quality basins be installed and operational.
 - #5E3. Prior to the excavation creating a quarry pit, what measures or treatment will be provided to prevent contaminated stormwater runoff from leaving the site?
 - #5E4. The mining plan shows that the two most northeastern quarry areas will be connected. This appears to direct upgradient stormwater flow into the quarry pit, and not maintain surface flows as indicated elsewhere in the application. Please clarify.
10. #5F. Describe how the covered conveyor belts will prevent leakage by gravity.
11. #5G. Identify the referenced disposal areas and settling ponds for the very fine sediments from the quarry operations.

12. #5H. Provide a published study to support the statement that "very fine limestone particles and clay materials . . . self-seal any surface they are placed on."
13. #5I. Provide a description of the wash water recycle plant process.
14. #5J. Provide a description of potential sources of pollution associated with the proposed railroad, both during and after construction. Include the expected maintenance near Basin A3.

FORM 0602:

15. #2. Revise as necessary to provide spill response plans equivalent to Section 1.4.16 of RG-348.
16. #7A1a. Include quarry plant, and quarry pits, in response to items 7A2, 7B, 7C, 7D and 7E below.
 - #7A2. Format the response provided to answer 7b, 7c, and 7d. Provide more information where necessary.
17. #7B. No TBMPs are discussed or illustrated on the plan sheet for the proposed railroad.
18. #7C. Describe the long-term TBMPs for the stockpile area on the west side of the plant area, adjacent to Polecat Creek (construction & operation).
19. #7D. Describe the long-term TBMPs for the road and conveyors crossing Polecat Creek (construction & operation).
20. #7E. Describe the long-term TBMPs for the railroad crossing Elm Creek (construction & operation).
 - #8. Provide explanation.
21. #10A. More than 10 acres in a common drainage area will be disturbed at one time. Explain why a sediment basin is not provided.
22. #10B. The drainage area map provided only illustrates the plant area. Include the entire site at an appropriate scale (Not necessary to use 1" = 400'). **Provided in Form 0600 as Attachment B (PBMP section).**
- 23A. #11 It is unclear why temporary sediment ponds will not be used for the plant site and the pits. Please explain, and include calculations as necessary, per 30 TAC 213.5(b)(4)(B)(vii) and 213.5(b)(4)(D)(i)(II)(a).
- 23B. #12 Provide inspection & maintenance plan for the plant site, and the quarry pits, as necessary, per 23A (#11) above.

- 23C. #15 Provide, as necessary, per 23A (#11) above.
24. #17A. Itemize the soil stabilization practices proposed.
25. #17B. Provide a schedule per 213.5(b)(4)(D)(i)(I)(b).
26. #21. The answer provided fails to comply with the requirements of 213.5(f)(2). An exception, based on equivalent water quality protection, may be submitted for consideration.

FORM 0600:

27. #7A. A statement is made that material processing removes more than 80% of the sediment load created by mining. Calculations provided later in the application are based on sediment load from increased impervious cover, and not on a 40 year supply of mined material transported to the plant area.
- A. Describe the methodology by which sediment load created by mining is measured, calculated or otherwise derived.
- B. Provide specific loads and units of measure for the subject site, and each watershed.
- C. Explain how the processing removes more than 80% of the sediment load created by mining.
28. #7B. Provide elevations above mean sea level for the average mining depth of 130'.
29. #7C. Provide the elevation above mean sea level for the water table (not potentiometric surface) in the Edwards Aquifer, and the source of or reference for this information.
30. #7D. Provide the quantities for each type of hydrocarbon or hazardous substance to be used/stored on the plant/quarry site.
31. #7E. Explain why and how the proposed water quality basins are appropriate methods of mitigation for hydrocarbons and other chemicals.
32. #7F. Describe how the covered conveyor belts will prevent leakage by gravity.
33. #7G. Identify the referenced disposal areas and settling ponds for the very fine sediments from the quarry operations.
34. #7H. Provide a published study to support the statement that "very fine limestone particles and clay materials . . . self-seal any surface they are placed on."
35. #7I. Provide a description of the wash water recycle plant process.

Mr. Dennis Hoyt, P.E.

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36. #7J. Provide a description of potential sources of pollution associated with the proposed railroad, both during and after construction. Include the expected maintenance near Basin A3.
37. #8A. The permanent BMP of covered conveyors across Polecat Creek is insufficient. The haul road should be addressed, as well as the expected future haul roads and conveyors across other existing channels.
38. #8B. The discussion in the Geologic Assessment related to the Potential for Fluid Migration to the Edwards Aquifer states that the overall potential for fluid movement (i.e. surface derived runoff) to the Edwards Aquifer across the majority of the site acreage is considered to be low. However, the Geologic Assessment has assessed seven on-site faults, two wells, one sinkhole, and one cave as sensitive features.

Pursuant to 30 TAC§213.1:

The purpose of this chapter is to regulate activities having the potential for polluting the Edwards Aquifer and hydrologically connected surface streams in order to protect existing and potential uses of groundwater and maintain Texas Surface Water Quality Standards. The activities addressed are those that pose a threat to water quality.

Describe the permanent "BMPs and measures that prevent pollutants from entering surface streams, sensitive geologic features or the aquifer . . ." and include long-term temporary BMPs.

39. #10A. The site plan shows that a rail track is provided for maintenance. The application stated elsewhere that vehicle maintenance would be performed off the Recharge Zone. Please clarify.
40. #10B1. Two detention basins (A1 & A3) are proposed for treatment of TSS in stormwater runoff. Question #2 of Form 0600 indicates that the TCEQ's Technical Guidance Manual was used to design the permanent BMPs. Extended detention basins and retention/irrigation basins are listed in the manual. Detention basins are not listed in this manual. Provide a copy of the design criteria used.

#10B2. Explain how retention basins A1 and A3 meet the design criteria for a retention /irrigation system or extended detention system described in RG-348.
41. #10C. On the basin calculation sheets, the Ai value for each permanent BMP should be the impervious area of the BMP catchment. The Ap value should be the pervious area of BMP catchment. (It appears that approximately 22 acres of stockpile materials is included in the "site" acreage but outside the catchment area.)
42. #10D. The pounds of TSS from each treatment device must sum to the Lm value.
43. #10E. The plan & profile for Basin B. **Provided on Sheet 8 of 8.**

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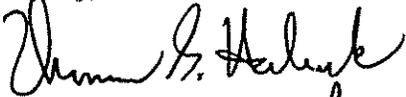
44. #10F. It is unclear what area is captured by Basin B. Highlight on plan sheet.
45. #10G. Basin A4: Provide TSS & water quality volume as discussed in #10C above. Provide sand size, clean-outs, schedule 40 PVC underdrains, safety considerations, maintenance ramp, per RG-348. Describe the protocol for the contractor to determine how to set, and reset, the underdrain valve for minimum drawdown time of 24 hours.
46. #10H. Basins A1, A3 and B will not be evaluated until the additional requested information is received.
47. #11. The inspection, maintenance and repair plan does not address detention basins.
48. #13. Describe the measures to be taken to "address increased stream flashing, the creation of stronger flows, and in-stream velocities, and other in-stream effects. . . ."
49. Identify disposal sites for sediments? Why no movement: wettability, capillary action, etc.?
50. On-site water levels – measured?
51. 5/26/06 SAI – confirmed & completed.
52. Comments from the site assessment investigation (SAI):
 1. Explain why the boings observed at the site were not included in the Geologic Assessment.
 2. Describe how and when Vulcan will comply with 30 TAC 213.7.
 3. The WPAP does not appear to address the removal and disposal of the vegetation on the site.
 4. If the vegetation is to be mulched, how will composting that produces a reducing environment be prevented?
 5. The WPAP does not appear to address the removal, relocation, and erosion control of the topsoil.
 6. Provide the name, address and phone number of the landowner, and his assistant, present during the site investigation for inclusion in the investigation report.
53. Provide responses to comments from Mr. Joseph F. Manak. Vulcan Materials' response to comments from the Gardner Law Firm and from Medina County Environmental Action Association (MCEAA), have been received.
54. Response to these comments should be numbered to correspond to the numbered items listed above.

Mr. Dennis Hoyt, P.E.
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We ask that you submit one original and three copies of the amended materials to supplement the (type of plan) application to this office by no later than **14 days from the date of this letter**, to avoid the denial of the plan. If the response to this notice is not received, is incomplete or inadequate, or provides new information that is incomplete or inadequate, a second notice will be sent to you requiring a response within 7 days from the notice date. If the response to the second notice is not received, is incomplete or inadequate, or provides new information that is incomplete or inadequate, the application will be denied unless you provide written notification that the application is being withdrawn. Please note that the application fee will be forfeited if the plan is not withdrawn.

If you have any questions or require additional information, please contact John Mauser of the Edwards Aquifer Protection Program of the San Antonio Regional Office at 210/403-4024.

Sincerely,



Bobby D. Caldwell
Water Section Manager
San Antonio Regional Office
Texas Commission on Environmental Quality

BDC/JKM/eg

fc: Aleisha Knochenhauer, Vulcan Construction Materials, LP
Dennis Hoyt, PE, Overby Descamps Engineers, Inc.