

Concerned Citizens Network
Kathleen M. Barry, President
14 Powder House Circle
Wilmington, MA 01887



The Honorable Vernon A. Williams
Surface Transportation Board
Section on Environmental Analysis
1925 K Street, NW
Washington, DC 20423

June 25, 2003

FD-34365

Re: New England Transrail, LLC
Notice of Exemption seeking to establish a
Class III rail carrier and construction of a bulk re-load center
At 51 Eames Street, Wilmington, MA 01887

Dear Secretary Williams,

This correspondence is by way a letter of opposition to the intended above referenced submittal by New England Transrail, LLC of Teaneck, New Jersey with specific references cited hereto.

The Concerned Citizens Network is a network of many citizens within the Town of Wilmington who have been concerned and extensively involved in the Olin Chemical Corporation's 51 Eames Street property and its long history pertaining to contamination and migratory chemical impacts of constituents on and off the site.

A. The Proposed Site: 51 Eames Street, Wilmington MA

- The Olin Chemical Corporation property poses severe health and environmental threats. With a most recent revelation, a human carcinogen known as n-nitrosodimethylamine (NDMA) from this property has migrated into our aquifer and into our drinking water wells. This chemical is not tested for under the standard water testing guidelines and it is unknown as to how long the citizens of Wilmington have been consuming this carcinogen. The federal health agency, ATSDR (Agency for Toxic Substances and Disease Registry) has initiated a water distribution study to determine the extent of exposure to the public. Five out of nine town wells are now closed and 60 % of our water supply has been shut off. This study now corresponds with a Childhood Cancer study which is being conducted by the Massachusetts Department of Public Health-Bureau of Environmental Health Assessment which has determined a greater than 2X the average occurrence in four types of cancer.

- This site is listed as a Tier 1A site; receiving the worst rating in the Massachusetts tier rating listing of contaminated sites.

- The Olin property has contaminated two watersheds: The Aberjona and The Ipswich.

Aberjona: There is a geological divide, which has contamination impacting the South property and East Ditch region, which empties into the Aberjona watershed. At this time, an EPA Human Health Risk Assessment is being conducted and it is expected that a report due out in September 2003 will reference this property as a contributor to the contamination of the Aberjona River.

Ipswich: This watershed is also adversely impacted as a plume of chemicals has migrated west and northwest into our Zone II aquifer of the Maple Meadow Brook and it is within this plume many chemicals in compound and free states exist and it is in this plume where NDMA was found.

- The Massachusetts Office of Research and Standards has stated that Olin has readily dismissed many chemicals of concern in their analyses and thus these chemicals are not addressed in their remediation alternative considerations.
- The EPA continues to include this property its “Watch List” and is now reviewing the chemicals of concern listing to determine which chemicals have been not previously considered by the Olin consultants, and which chemicals need to be included and addressed in their remediation.
- Olin has asked the Wilmington Conservation Commission to extend its Order of Condition issued in the year 2000 for an additional three years to allow them to complete 5 outstanding remedial measures, which should have been already completed. The Conservation Commission has granted them five weeks.
- The Town of Wilmington has, within the past month, hired an Independent Environmental Consultant (GeoInsight) to evaluate the assumptions made by Olin and its consultant on the impact of chemicals and contamination of the Maple Meadow Brook aquifer; providing 60% of the town’s water supply. The fact-finding aspect of this work has just been initiated.
- Residents and citizens have filed a petition with the state Department of Environmental Protection, making this site a **Public Involvement Petitioned** site. The final plan to address the concerns of the residents was just recently filed and accepted by the Olin Corporation and the process to answer and address the many questions and concerns about this site has only just begun. (See attached document titled Olin PIP Final draft)
 In this document you will note the many environmental and public health threat concerns, which have been identified, but not yet addressed.
 In this document as well you will see a reference to surface recontamination of the property regarding Chromium. This is an indication that the previous remediation action measures on the site have failed dismally.

B. The proposed Rail Re-Load Center:

The proposed application and the Environmental Assessment Form submittal are riddled with inaccuracies, vagueness and clerical error.

- In this application, there are many misspelled references and questionable distance recordings. Wilmington is located 14 miles north of Boston, and the town of Tewksbury is located just 3 miles north of Wilmington.
- This submittal does not reference any residential homes, which are and have been in the past, indeed adversely impacted. In fact, many residents were evacuated from their homes in 1985, including those on Eames Street, Woburn Street, and Morse Avenue in South Wilmington due to an ammonia air release from the Olin facility, which hovered over the entire region.
- There has been inadequate notification to principals at the Massachusetts Department of Environmental Protection whose job it is to provide oversight of the Olin property and site pertaining to remediation. In a conversation on Friday, May 30, 2003, the site project manager stated that he had not been aware of any such proposal prior to May 28, 2003. This in part may be due to the list of carbon copy references within the submittal did not have any department or assigned principal to its mailing.
- The proposal lists the following commodities which are expected to be handled at the reload center for bulk and containerized materials as: aggregates, brick, coal, cement, chemical products, construction debris, contaminated soils, liquids, propane, road salt and other products. It also references hazardous materials which the proponent states “are not expected” to be transported. There is no explicit statement that these materials will not be transported. Hazardous materials handling and transportation must be completely and totally prohibited.
- The proponent states that their proposal meets the site plan approval requirements as was obtained by Olin in 2000. This site plan was approved for a warehouse applicant who would warehouse and distribute beer and wine. This proposal is dramatically different and it is unthinkable that such an approval would be granted on this site with the many environmental considerations this property has to contend with and is facing. To infer that it adheres to the same environmental impact is ludicrous. This proposal requires a full environmental review under the Executive Office of Environmental Affairs.

- With regards to Olin and their previous public statement that they would not seek to sell their property to a “Construction and Demolition” facility, and in seeing that they have enter into such negotiations with this proponent whose plans are to transport construction debris and other hazardous and contaminated material to this site, demonstrates a blatant disregard to the wishes of the residents and an outright breach of public confidence. Their consistent misleading public statements with contrary action have done nothing but foster mistrust. Knowing full well the environmental and health threats the present property poses, Olin Chemical Corporation, should be admonished. They rightly deserve their dubious honor as a 2002 Dirty Dozen Award recipient. We now believe that Olin is not at all concerned with the residents and citizens of Wilmington and are all too eager to sell their facility without proper environmental impact review as is required by law and so urgently necessary for such a purchase and sale. Olin should be required to stand by their word in the spirit is was given to assure the public that it has no intention of selling their facility to any company, which would warehouse and distribute contaminated soil, hazardous waste, and construction debris.

C. Environmental Justice:

The EPA defines Environmental Justice as the “fair treatment for people of all races, cultures, and incomes”. It takes into account the impact of environmental pollution on particular segments of our society. The area in question is an area already impacted by serious industrial pollution, which may have serious consequences in public health. It is already compromised and has been the subject of extensive study. The Toxic Use Reduction Industry a subdivision of the EOEA has determined that the South Wilmington industrialized area is overburdened with air pollutants and that a cumulative affect of the many daily releases is worrisome.

The Olin property is within a half-mile distance to the Woburn Landfill, the Maple Meadow Landfill, the Industrial Plex Superfund Site and six major 21 E contaminated industrial sites.

The residents and citizens who abut this area are concerned with:

- Odors associated with such transfer stations
- Noise associated with trains and heavy axle truck traffic
- Truck traffic during nighttime hours, which will raise havoc at such hours.
- Potential industrial accidents within the facility and potential accidents with the 200 plus trucks entering and leaving the facility and local traffic.
- Exposures to hazardous materials with any mishap at the facility and with citizens along the transportation routes
- Environmental impact of potential spillage and releases of said material and further contamination of the already compromised property, with wetland considerations and surface water contamination

D. Conclusion

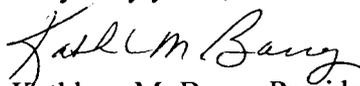
On behalf of the concerned citizens and residents of Wilmington, I would like you to take into consideration all of the above referenced concerns and comments in understanding our opposition to this project. We feel that this project has the potential to affect significantly the quality of health to the environment and to our communities, both in Wilmington and Woburn.

After careful consideration of all of the objections, we ask that the Surface Transportation Board stay any exemption decision, which has been, or will be, requested by New England Transrail, LLC until further evaluation is completed on this site.

We believe that this project is dramatically different from the previous redevelopment proposal and does not conform to the site plan approved by the Wilmington Planning Board in 2000. EOEIA must be notified that this footprint does not apply. This project should not be exempt from a full Environmental Impact Study.

We request that before any revitalization of an existing spur line or construction of a railway spur in order to accommodate this rail re-load center that such an assessment be mandated from your office, so that the citizens, and our independent environmental consultant can comment appropriately with specificity of detail, and within an appropriate timeframe.

Very truly yours,



Kathleen M. Barry, President
Concerned Citizens Network

Enc:

Cc: The Honorable Edward Kennedy, US Senate
The Honorable John Kerry, US Senate
The Honorable John Tierney, US House of Representatives
The Honorable Edward Markey, US House of Representatives
The Honorable Bruce Tarr, Mass. State Senate
The Honorable Robert Havern, Mass. State Senate
The Honorable James Miceli, Mass. House of Representative
The Honorable Charles Murphy, Mass House of Representative
The Honorable Carol Donovan, Mass House of Representative
The Executive Office of Environmental Affairs Secretary Ellen Roy Herzfelder
The Wilmington Board of Selectman, Chairman McCoy
The Wilmington Town Manager, Michael Caira
The Mayor of the City of Woburn, John Curran
Members of the Concerned Citizens Network-Wilmington
Members of the Wilmington-Woburn Collaborative

Final Public Involvement Plan

**Olin Corporation Site
51 Eames Street
Wilmington, MA
DEP RTN 3-0471**

March 20, 2003

PREPARED BY

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March 2003

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1. Introduction

On September 18, 2002, Olin Corporation (Olin) received a petition from 10 residents of the Towns of Wilmington and Woburn. The petition requested that the Olin Site (also referred to herein as "the Site" and the 51 Eames Street Property") be designated as a Public Involvement Plan (PIP) site, under Section 14 (b) of Massachusetts General Laws Chapter 21E (M.G.L. c. 21E), the State "Superfund" Law. On October 8, 2002, Olin officially designated the Site as a PIP site, requiring the preparation and implementation of a PIP.

This Plan has been prepared by Olin, in accordance with the requirements of the Massachusetts Contingency Plan (MCP), 310 CMR 40.0000. The Olin Site is a Tier 1A site. Tier 1A sites are subject to all of the requirements in M.G.L. c.21E and the MCP, including public involvement. DEP retains the authority to ensure that public involvement activities are conducted in accordance with state law and regulations. Olin has undertaken both technical and public involvement activities required under the MCP at these sites.

Under M.G.L. c.21E, DEP is responsible for overseeing remedial actions at Tier 1A sites at which oil or hazardous materials (OHMs) have been released to the environment. Remedial response actions include: determining the nature, source and extent of the contamination; risks posed by the site; whether cleanup actions are necessary and, if necessary, determining and implementing the most appropriate actions. In addition, the remedial response action process provides opportunities for public involvement throughout the process. The remedial response action process is established by the MCP.

Public involvement during the remedial response action process is undertaken to ensure that the public is both informed of and involved in planning for remedial response actions. For sites at which the public indicates interest in becoming involved in this process, the party conducting the response actions designates the site as a PIP site, and the MCP requires the preparation of a plan, which identifies specific activities that will be undertaken to address public concerns to the extent possible. Due to public concerns about the Site, Olin has designated the Site as a PIP site, pursuant to the MCP.

The Plan will be implemented in conjunction with the development and implementation of remedial response actions for the sites. Olin will implement public involvement activities at the Site.

This document is the PIP for Olin Site located at 51 Eames Street in Wilmington Massachusetts. Section 2 contains background information on the Site; including site and environmental assessments, and public involvement histories. Section 3 explains how the

remedial response action process addresses community concerns that have been raised during the development of the PIP. Section 4 explains the public involvement activities. Section 5 contains a schedule for public involvement activities. Section 6 outlines the roles and responsibilities of those involved in implementing the PIP. Section 7 describes how the Plan may be revised in the future.

A draft version of this Plan was presented by Olin and DEP at a public meeting, which was held on Thursday, January 23, 2003, at the DEP's offices at 205A Lowell Street, in Wilmington. No comments on the Draft Plan were submitted at the meeting or in written correspondence, to Olin or DEP as of the close of the public comment period on February 14, 2003. Comments and questions regarding the Site, that were asked during the public meeting on January 23, are included in Exhibit I.

2. Site Background

2.1 Site Description

The Olin Corporation (Olin) Site includes land formerly occupied by chemical manufacturing facility at 51 Eames Street in Wilmington, Massachusetts, and areas to the west and southeast of the Property that are affected by the historical release of waste at the Property. A Plan showing the current, estimated boundary of the Olin site is presented as Figure 1. The areas that are either located within the estimated boundary of the Site, or which are included in the current study areas, includes the following:

- The **51 Eames Street Property (the Property)**, is bordered to the east by the right of way to the Massachusetts Bay Transit Authority (MBTA) commuter rail line, to the north by Eames Street, to the South by land owned by the City of Woburn and occupied by the former Woburn Sanitary Landfill, and to the West by an abandoned rail line and commercial properties along Jewel Drive. The 51 Eames Street Property occupies about 53 acres of land. The developed portion of the Property, which consists of about 30 acres north of the South Ditch, was the location of the historical manufacturing operations of Olin and several predecessor companies. Land to the south of the South Ditch is largely undeveloped, except for the southwest corner of the Property, that is occupied by a closed, three acre landfill (Calcium Sulfate Landfill) that was used to dispose of calcium sulfate sludges generated at the Property, and a lined detention area that was recently used to temporarily stage sediments prior to off-site disposal.
- Portions of the **East Ditch**, a drainage feature that is located to the southeast of the Olin Site, along the MBTA commuter rail line. This drainage feature receives groundwater and surface water discharge from the South Ditch, and discharges to the New Boston Street Drainway, a rip-rapped ditch along the east side of the MBTA right of way that connects the East Ditch and Halls Brook, in Woburn. Because there is a potential that surface water in the East Ditch could have drained into North Pond, south of Presidential Way, in Woburn, this surface water body is also included in the current study area.
- A drainage feature referred to as the **Off Property West Ditch (OPWD)** is located immediately to the west of an abandoned rail line, west of the Property, and east of Jewel Drive. Surface water in the OPWD discharges via a culvert under the abandoned rail line, to the east to the South Ditch on the Olin Property.
- **Main Street Properties** located between the OPWD and the Maple Meadow Brook Aquifer (MMBA) Study Area west of the 51 Eames Street Property. This area is

occupied by numerous commercial entities, including Sanmina Corporation, and residential properties that are located along Main Street.

- **Maple Meadow Brook Aquifer (MMBA) Study Area.** A portion of the water resource areas west of Main Street is located within the estimated Site Boundary. This area includes the mapped Zone II for five of the Town of Wilmington Water Supply Wells (WSWs), and the wetlands associated with the Maple Meadow and Saw Mill Brooks. A portion of the land that is being investigated as part of the Maple Meadow Landfill is located within the MMBA Study Area.

The location of these areas, as well as the street names in the site vicinity, is identified in Figure 1. The hydrogeologic setting of the Olin Site, including the location of major drainage features, and the WSWs, are depicted in Figure 2.

The Site is located within two watersheds. The Ipswich River Watershed, to the west of the 51 Eames Street Property, and the Aberjona River Watershed (also referred to as the Boston Harbor Basin) to the east. The drainage divide between the two watersheds is mapped by the USGS to be located along Main Street, as depicted in Figure 2. However, detailed hydrologic evaluations performed by Olin indicate that the drainage divide is located to the east, in the vicinity of the OPWD, and fluctuates seasonally. In general, surface water flow in the OPWD discharges to the east, to the Aberjona River watershed, under all hydrogeologic conditions. Groundwater flow, however, in the area around the OPWD fluctuates seasonally, as shown on Figure 2.

2.2 History of the Olin Site

The manufacturing facility, initially consisting of a laboratory and one chemical manufacturing plant, was constructed in 1953. From 1953 until approximately 1971, the facility expanded and was operated under the name of National Polychemicals, Inc. (NPI). Between 1953 and 1968, NPI was owned or operated by three different corporations, American Biltrite Rubber Co., Fisons Limited, and Fisons Corporation. In 1968, Stepan Chemical Corporation purchased NPI, and in 1971, NPI was merged into Stepan Chemical Corporation. Stepan continued to own and operate the facility from 1971 until 1980, when the property was purchased by Olin Corporation. Olin submitted closure plans for plant facilities to the DEP and United States Environmental Protection Agency (USEPA) in April 1986. The detailed ownership and operational history of the Olin property are discussed in the June 1993 Comprehensive Site Assessment (CSA) Phase II Field Investigation Report by Conestoga-Rover & Associates (CRA).

The facility historically manufactured chemical blowing agents, stabilizers, antioxidants and other specialty chemicals for the rubber and plastics industry. The raw materials used at the facility included sodium dichromate from around 1957 until 1967. The manufacturing

processes conducted at the facility generated liquid wastes including sulfuric acid, sodium chloride, sodium sulfate, ammonium sulfate, chromium sulfate, and other constituents, including oils and other organic compounds. The environmental contamination at the facility is the result of several different activities that were conducted at the facility prior to Olin's ownership. The major source of the contamination was the on-property wastewater disposal activities.

Prior to 1970, all liquid wastes were discharged into various unlined pits and ponds in the central portion of the property and into an unlined man-made excavation called Lake Poly Liquid Waste Disposal Area (Lake Poly). Some wastewater sank into the porous soil and some overflowed into the ditch system located on the property. Initial plans from the 1950s labeled Lake Poly as a 'filter bed'. This name and the design of Lake Poly to include a porous sand bottom reveal that the intent was to discharge wastewater directly into the soil. The wastes were discharged to these unlined pits and that liquid wastes with high concentrations of dissolved inorganic formed a dense layer, which sank through the aquifer and pooled on top of the bedrock.

In 1970, Stepan constructed an acid neutralization and treatment system, and installed new Lined Lagoons to replace the unlined pits and ponds. The treated wastewater was discharged to the on-property ditch system until the inter-municipal sewer system was completed in 1972. The remaining waste material, consisting primarily of calcium sulfate, was put into the lined settling lagoons. Periodically, these lagoons were dredged and the calcium sulfate was placed in a landfill on the southwest corner of the property, now known as the Calcium-Sulfate Landfill. Use of the Calcium-Sulfate Landfill was approved by the Commonwealth of Massachusetts in 1974. After its purchase of the property, Olin re-lined the lagoons 1981 through 1983. The lagoons and the Calcium-Sulfate Landfill were closed after 1986 when operations at the facility ceased.

The discharge into unlined pits, lagoons, and other industrial disposal areas at the property, beginning in the 1950s, caused subsurface contamination both on and off the Olin property. The most aerially extensive subsurface contamination is associated with a dense layer of inorganic contaminants dissolved in the groundwater that is present at the base of the sand and gravel aquifer. This layer is denser-than-water, occupies the bedrock lows, and is chemically and physically distinct from the overlying much less contaminated groundwater. This layer is characterized by high concentrations of sulfate, chloride, ammonia, chromium, and other inorganics. The estimated extent of the dense layer is shown in Figure 2.

Contamination may have also resulted from several other on-site activities. Drums containing organic chemicals were buried on-property prior to Olin purchasing the property. There are also reports that spills or leaks of chemicals occurred at the property through the years prior to Olin's ownership of the property. One or more of these releases resulted in the presence of a layer of process oil on the groundwater at the northeast corner of the 51 Eames

Street Property, which is the subject of an ongoing groundwater recovery and treatment system.

2.3 Environmental Assessment History of the Olin Site

The Olin Site was originally listed as a Location to Be Investigated by DEP in 1987, as a result of the Massachusetts Field Investigation Team (FIT) Phase I Inspection Report and subsequent scoring using the Hazard Ranking System (HRS). Olin applied for, and was granted, a Waiver of Approvals by DEP in 1989. Under the terms of the Waiver, the Olin Site was classified as a Non-Priority Site.

Conestoga Rovers Associates (CRA) was retained by Olin to perform a Comprehensive Site Assessment, which was completed in a report dated June 1993 (CRA, 1993). A risk assessment was also prepared by ABB Environmental Services, Inc. (ABB-ES) and submitted to DEP in 1993.

Based on the findings of this assessment, and on the new criteria set forth in the Massachusetts Contingency Plan (310 CMR 40.0000), which was promulgated in October 1993. DEP rescinded the Non-Priority status, and the Waiver of Approvals, and re-classified the Site as a Tier 1A Disposal Site on September 20, 1994.

Work conducted at the Site by Olin between 1994 and 1999 was performed under the terms of a Tier 1A Permit that was issued by DEP to Olin in 1994. An extension of this permit was granted by DEP in 1999. The Tier 1 A Permit expires in October 2003. Olin plans to submit a request for a permit extension in June to July 2003.

Extensive investigations have been performed at the Olin Site since 1994. Under the terms of the Tier 1A Permit, all MCP assessment and response actions are performed under the direct supervision of DEP. For all investigations performed after 1994, a Scope of Work (SOW) was prepared, and approved by DEP, prior to performance of the work.

A chronology of the investigations performed by Olin and others at the site since 1987, is presented in Exhibit II of this Plan.

The following work is planned for 2003, pending DEP approval of the related SOW, the acquisition of access agreements with adjacent property owners, or other local permits:

- North Pond Subsurface Investigation
- East Ditch Investigation
- Off Property West Ditch (OPWD) Investigation and Detailed Evaluation of Remedial Alternatives

- Certain inorganic compounds present in the DAPL and in groundwater west of the Property have been detected in the MMBA Study Area and in the Town Water Supply Wells. COCs in the Maple Meadow Brook Drainage Basin that are associated with the Olin Site include Ammonia (NH₃), Sulfate, Chloride, and Sodium, and Chloride. These compounds may also be associated with historical land filling in other known locations near the WSWs, and NH₃ may be associated, in part, with the current use of septic systems in areas to the west of the WSWs that are not serviced by the public sewer system.
- Monitoring data collected by the town and analyzed by Olin indicates that NH₃ concentrations in the water pumped from the WSWs are variable. Increases in the ammonia concentrations at the WSWs are associated with sustained increased pumping rates at the WSWs during the summer and/or periods of extended drought.
- Several COCs that have been detected at the Olin Site, primarily Chromium, have been detected in the upper reaches of the East Ditch. Surface water from the eastern portions of the Olin Site that drain to the East Ditch is known to contain chromium bearing-flocculant. There are also sources of chromium and other compounds, other than the Olin Property, located within the East Ditch Drainage Area. At DEP's request, Olin is evaluating the potential presence of compounds related to Olin in the East Ditch, and in the North Pond, a nearby water body that was potentially hydrogeologically connected to the East Ditch in the past.

2.4.2 Impact of Olin Site on Human Health and the Environment

Human Health and Environmental Risk Assessments were conducted in accordance with the MCP in 1997 as part of the Supplemental Phase II (Smith et al, 1997), and in 2000 as part of the Phase I Construction Related Release Abatement Measure (CRAM), Focused Risk Assessment, Harding ESE, April 2000). A separate Environmental Screening Assessment (ESA) of the Maple Meadow and Sawmill Brooks in the MMBA Study Area was also completed (MACTEC, November 2002). Evaluations of the extent to which conditions could pose an imminent hazard have also been performed for the conditions reported in the West Ditch, the South Ditch, at Sanmina, and in the Lake Poly Study Area.

These risk assessments evaluated the risk of harm to health, safety, public welfare and the environment posed by the conditions at the site, focusing on the types of contaminants and exposures that are reasonably likely, both under current and future conditions. These Risk Assessments will be updated, upon the completion of the supplemental investigations that are planned for 2003. Conclusions regarding the risks to human health and the environment, based on Olin's previous characterization and assessment of the conditions at the Site, are as follows:

On-Property

- No significant risks are posed to persons currently working at the Olin property.
- Elevated VOCs in groundwater and soil, at the Property, in the area to the west of Plant B, could pose an unacceptable risk to occupants of buildings proposed for the area, under some conditions. Additional remediation is underway in this area to reduce or eliminate conditions that could pose an unacceptable risk to building occupants.
- Conditions other than the VOCs in the vicinity of Plant B, will not pose a significant risk to persons working at the Olin property in the future, or to the occasional trespasser. A land use restriction will be imposed so that persons conducting any subsurface work at the property, such as utility personnel, do not excavate in impacted areas without taking adequate protections. The land use restriction will also prohibit certain uses of the property, such as residential use, unless further actions are performed to address the contamination.
- Because concentrations of inorganics in surface water within the South Ditch have been measured at concentrations above Ambient Water Quality Criteria (protective of aquatic life), a condition of no significant risk to the environment has not been achieved.
- Because concentrations of inorganics in groundwater have been measured in groundwater at concentrations above Groundwater Upper Concentration Limits, a condition of no significant risk to the environment has not been achieved.
- Sediments at certain locations within the On-Property West Ditch and South Ditch contained concentrations of inorganics and organics that were not consistent with a condition of no significant risk to the environment. Sediments from those locations and also from contiguous locations were removed and replaced with clean material. The downstream portion of the South Ditch has been further characterized and will be evaluated further.

Off-Property

- No significant risk is posed to an industrial worker at Sanmina Corporation currently exposed to groundwater through Sanmina's use of groundwater in its industrial process.
- No significant risk is posed to the neighborhood resident who could currently be exposed to surface water and sediment in the off-property ditches.
- Olin related COCs that are present in treated drinking water at BRTP do not pose a significant risk to residents of the Town of Wilmington who obtain their drinking

water from the Maple Meadow Brook municipal wells, under current conditions. There is a concern, however, that levels of ammonia in treated water may result in the formation of unacceptable levels of nitrite in the distribution system. DEP has determined that levels of nitrite in the Wilmington distribution system that are greater than the USEPA Maximum Contaminant Level (MCL) of 1 mg/l would pose an unacceptable risk to some populations. Therefore, additional remedial measures are required to address the concentration of ammonia, and the potential formation of nitrite, in the distribution system.

- Because there are portions of the aquifer where contaminant levels exceed Massachusetts's drinking water or other standards, under the MCP, it cannot be concluded that no significant risk exists.
- No significant risk would be posed to visitors, workers, or neighbors of the 51 Eames Street Property, during or after the proposed commercial or industrial redevelopment, provided that an appropriate Activity and Use Limitation (AUL) is maintained.
- A Condition of no significant risk to the environment exists with respect to the MMBA Study Area wetlands, surface water, and sediment and no further evaluation is required for those media.
- Because concentrations of inorganics in surface water within the Off-Property West Ditch and the East Ditch have historically been measured at concentrations above Ambient Water Quality Criteria (protective of aquatic life), a condition of no significant risk to the environment has not been achieved.
- Because concentrations of inorganics in groundwater have been measured in groundwater at concentrations above Groundwater Upper Concentration Limits, a condition of no significant risk to the environment has not been achieved.
- Further characterization of surface water and sediment is planned for the East Ditch Study Area, including North Pond.

2.5 Remedial Actions Performed To Date

The findings of the extensive investigations performed to date have supported the selection and implementation of remedial action at the Property. These remedial actions include:

- Installation of a Groundwater Recovery and Treatment System at Plant B. This system is designed to capture contaminated groundwater and process oils that are present as a separate phase layer on the groundwater surface, and to prevent the discharge of contaminated groundwater and oil to the nearby East Ditch. This system has been in continuous operation at the Property since 1982, and is currently managed as an Immediate Response Action (IRA) under the MCP. IRA Status Reports on the operation of Plant B are submitted to DEP every 6 months.

- Installation of Air Sparging and Vapor Extraction (AS/SVE) System in Vicinity of Plant B. In 2001, an AS/SVE system was installed to recover and treat volatile organic compounds that are present in soil and groundwater in the vicinity of Plant B. This system is designed to enhance the effectiveness of the operation of Plant B, and to reduce the period of time that will be required to remediate the area. The effectiveness in the AS/SVE system is monitored monthly, and is reported to DEP every six months in the IRA Status Report for Plant B.
- Drum Removal. Buried Drums and Debris were removed from two locations at the Property in the fall of 2000, under the terms of a DEP Approved RAM. A RAM Completion Statement was submitted to DEP in July 2001.
- Sediment Removal and Management of Flocculant (Floc) in On-Property Ditch System. Chromium-bearing flocculant was removed from the On-Property West Ditch in 1994, and the formation of the Floc was managed through the use of a weir at the confluence of the On Property West Ditch and South Ditch, between 1994 and 2000, as part of a DEP approved IRA. In 1998, Olin established that the conditions in the Ditch System did not warrant an IRA, and an IRA completion statement was filed in October 1998. Approximately 11,000 tons of contaminated sediments were removed from portions of the On Property West Ditch, and the South Ditch, in 2000 and 2001, as part of a Construction Related RAM (CRAM). The sediments were dewatered on the Property, and disposed of as a contaminated, non-hazardous waste at a permitted, off-site disposal facility. A replacement weir (also referred to as a box culvert) was installed at the upper reaches of the South Ditch, to provide a mechanism to control flow and to some extent, the migration of Floc from the OPWD. Following excavations of the sediments, the original grade of the ditch system, and the wetland vegetation was restored under the terms of an Order of Conditions (OOC) and other permits, issued by the Wilmington Conservation Commission, and the U.S. Army Corp of Engineers, respectively. Monitoring of the restored wetland is ongoing.
- Installation of Subsurface Containment Wall (Slurry Wall). A subsurface containment wall was installed around an area of residual dense layer at the Property in 2000. The installation of the wall, which extends to bedrock, and encloses an area of about 4.6 acres, and an overlying cap, resulted in the containment of approximately 80 percent of the mass of contamination in groundwater at the Property. This containment measure is intended to minimize the impact that the residual dense layer at the property has on water quality in the South Ditch, and the downstream water bodies. The work was performed as part of the CRAM. Olin is maintaining the existing cap until a final cap is constructed as part of the redevelopment of the Property. The effectiveness of the containment Wall and cap is monitored under the terms of a DEP-approved PCMP. The findings of the PCMP are submitted to DEP in a RAM Status Report every 6 months.

2.6 Risk Reduction Measures

In addition to the remedial measures described above, Olin has taken further steps to manage, and reduce potential risk at the Site. These measures include:

- Notice of Limitations (NOLs). Olin notified property owners that are located downgradient of the property that used or maintain private water wells, to ensure that they were aware of the conditions at the Site, and of the potential impacts to water that could be pumped from their wells. For each of these properties, Olin has established that the presence of contamination in groundwater at depth does not result in an imminent hazard to the residents or visitors at these properties. Olin entered into agreements with some of the property owners to ensure that (i) the Property is connected to a public water supply system, if applicable; (ii) the closing of any private water supply well(s) located within the Property; and (iii) the prohibition of the use of any private water supply and any installation of new private water supplies within the Property.
- Downgradient Property Status. Olin has established Downgradient Property Status (DPS) for certain commercial properties located downgradient of the Olin Property. DPS requires that the source of the contamination at a property is attributable to an upgradient source, that the property owner has not caused or contributed to the contamination, and that conditions at the downgradient property do not result in an imminent hazard. The owner of a property that is subject to a DPS has limited liabilities for the contamination that is from the upgradient source, under the MCP.

2.7 Active Monitoring

Olin conducts, or funds, the testing of water quality in the town of Wilmington to assess the potential impact that conditions at the Olin Site on public health and the environment. Active monitoring programs for the Olin Site include:

- Funding of Water Quality Monitoring Equipment at the Butters Row Treatment Plant (BRTP). Statistical evaluations performed by Olin, indicated that the concentration of some of the contaminants associated with the historical releases at the Olin site correlate to changes in specific conductivity in water. In 1999, Olin funded the installation of an automated Specific Conductivity Meter at BRTP to enable the Town to monitor real-time changes in specific conductivity on water entering the plant. This equipment is maintained and operated by the Town of Wilmington.
- Funding of the weekly monitoring of Treated Water in Wilmington Water Distribution System. Weekly testing of treated water collected by the Town of Wilmington at Butters Row Treatment Plant (BRTP) and 11 locations within the

water supply distribution system has been performed since April 2000, and is funded by Olin. Samples are tested by an independent laboratory retained by the Town, for ammonia, nitrate, and nitrite, and the results are reported directly to the Water and Sewer Department.

- Monthly Monitoring of the Town of Wilmington Water Supply Wells. Olin has collected water samples from the Town Wells in the MMBA for chemical testing, on at least an annual basis, since the late 1980s. Samples are tested for compounds that are related to the Olin Site (ammonia, chromium, sulfate, chloride, and sodium, as well as several other water quality parameters). Between 1994 and 1996, Olin conducted quarterly monitoring of the WSWs, and reported the results to DEP and the Town in Quarterly Status Reports. Since 1996, Olin has tested the wells monthly, and has submitted monthly reports to DEP, the Wilmington Board of Health, and the Wilmington Water and Sewer Division. These results are continuously evaluated for statistical trends, and are summarized in a statistical evaluation report that is submitted to DEP every 18 months. Potential significant changes in water quality are reported to DEP and the Town of Wilmington.
- Quarterly Monitoring of Sentinel Wells. Olin collects groundwater samples from monitoring wells located within the MMBA Study Area, within the contribution area to the Wilmington Water Supply Wells. Under this program, These results are continuously evaluated for statistical trends, and are summarized in a statistical evaluation report that is submitted to DEP every 18 months. Olin promptly re-samples wells where statistically significant changes in water quality are noted. If confirmed, potential significant changes in water quality must be reported to DEP and the Town of Wilmington.
- Post Construction Monitoring Plan (PCMP). Olin monitors groundwater and surface water quality, and elevation, in the areas that are potentially affected by the containment wall at the Property. The areas monitored include the OPWD and the South Ditch. The findings of the PCMP are submitted to DEP as part of the CRAM Status Report, every 6 months.
- Quarterly Monitoring of Sanmina Production Wells. The water quality at two production wells utilized by Sanmina Corporation (Sanmina), is monitored by Olin on a quarterly basis. Under the terms of a DPS Statement, Sanmina also monitors and performs qualitative monitoring of water quality at the wells on a weekly basis, and provides a record of the monitoring to Olin upon request. The results of the quarterly monitoring are included in the statistical monitoring report for the Sentinel Wells, which is submitted to DEP every 18 months. Potential significant changes in water quality must be reported to Sanmina, DEP and the Town of Wilmington.
- Annual Inductance Logging. Olin performs inductance logging of groundwater at selected wells, to monitor for potential changes in the extent of the dense layer. Inductance logging has been performed since 1997, and is reported annually to DEP.

- Residential Well Sampling. Between 1990 and 1992, Olin sampled private residential wells located to the southwest of the Property, that were used for potable purposes. Subsequently, Olin agreed to perform annual testing of the wells, if requested by the property owner or resident. The results of this testing, and an assessment of the results of the testing, when performed, are provided to the residents, DEP, and the Wilmington Board of Health. A summary of the testing of the residential wells was also provided to the Woburn Board of Health.

2.8 Public Involvement History

Olin has complied with all of the MCP public participation requirements that have applied to the activities at the site since 1993. In addition, Olin has taken the following additional steps to ensure that the public is informed of assessment and remediation activities at the site.

- Public Open Houses have been held at the Olin Facility annually since 1996. Neighbors and other interested parties were informed of these Open House events through the newspapers, and through written notice by Olin.
- Annual presentations on the status of the Olin Site have been given to the Wilmington Board of Selectmen by Olin since 1997.
- A Repository of Key Site Investigation Reports was established at the Olin Facility at 51 Eames Street in Wilmington, and has been open daily for public review since 1997.
- Copies of many of the Olin Reports have been submitted to the Wilmington Board of Health and are available for review.

On September 18, 2002, Olin Corporation (Olin) received a copy of a petition requesting that Olin Corporation (Olin) Site in Wilmington, Massachusetts (the Site), be designated as a Public Involvement Plan (PIP) Site under the provisions of 310 CMR 40.1403(9). The letter was dated September 5, 2002, and was addressed to Ms. Karen Stromberg of the Massachusetts Department of Environmental Protection (DEP) Bureau of Waste Site Cleanup (BWSC). On October 8, 2002, Olin formally designated the Olin Site as a PIP Site, and began to develop the draft Plan in accordance with the MCP

In developing the draft PIP, Olin conducted interviews in October, November 2002 and January 2003 with key Town officials in Wilmington and Woburn, and individuals interested in the site. Concerns that were identified during the interviews are presented in Exhibit I. The draft Plan was presented, for public comment, and a Public Meeting that was held on January 23, 2003. Comments and questions raised during the public meeting, and/ or received in writing since the Site was designated as a PIP Site, are included as part of Exhibit I.

Some of the concerns raised by the petitioners deal with issues, which are not regulated under M.G.L. c.21E and the MCP and, therefore, cannot be addressed under this PIP (i.e., traffic, and real estate development). These concerns are listed under Section E of Exhibit I.

3. Addressing Public Concerns

The process for assessing and cleaning up disposal sites, as set forth in the MCP (310 CMR 40.0000), is designed to address the possible effects of the site on health, safety, public welfare, and the environment.

Once a release of OHMs has been investigated (Phase I of the remedial response action process) and the site has been Tier Classified, the process proceeds to:

- Comprehensive field investigation of the nature and extent of the contamination, and an evaluation of any risks posed to the public and the environment from the site (Phase II).
- Identification and evaluation of remedial response action alternatives and selection of feasible measures that will achieve a permanent cleanup at the site (Phase III).
- Implementation of the selected remedial response actions (Phase IV).
- Operation and Maintenance (O&M) of a remedy and/or monitoring (Phase V).
- Response Action Outcome (RAO).

Physical work at a site where response actions are in progress includes sampling and other environmental field-testing, and the implementation of the selected remedies. It may also include the implementation of measures designed to stabilize conditions at the site to prevent the continued migration of contaminants or eliminate an imminent threat to public health, safety, welfare, or the environment until planning for remedial response is underway (i.e., Release Abatement Measures (RAMs), or Immediate Response Actions (IRAs).

At each step of the remedial response action process, plans for work are developed, the work is conducted, and reports describing results and recommendations for the next step are prepared. The documents which describe each of these steps are the cornerstone of the remedial response action planning process, since they provide the information necessary to make decisions about how a site should be cleaned up.

As noted in Exhibit I, the Petitioners have raised a number of concerns about the Olin Site. The remedial response action planning process is designed to address the concerns about the nature and extent of contamination; possible risks posed by the site to health, safety, public welfare, and the environment; and the adequacy of proposed cleanup measures. Some of these concerns have or are being addressed in Phases II and III of this process.

4. Public Involvement Activities

In accordance with the MCP (310 CMR 40.1400), activities undertaken to involve the public in response actions serve two purposes:

- Inform the public about the risks posed by the site, the status of remedial response actions, and the opportunities for public involvement.
- Solicit the concerns of the public about the site and response actions, and shall consider, address, and where relevant and material to the response action, incorporate these concerns in planning response actions.

To meet each of these objectives, Olin will undertake specific activities during the remedial response process at the Olin Site. These activities are described below.

4.1 Informing the Public

Olin will provide site-specific information to the public by establishing an information repository; developing and maintaining a site mailing list to distribute information about the site; and providing advance notification to local officials and residents about site activities.

4.1.1 Information Repositories

- Publicly Available Site Files: Files on the Olin Site are maintained at the DEP's Northeast Regional Office. The files contain all documents pertaining to the sites with the exception of any enforcement-sensitive material. Appointments to view the site files can be made by contacting Holly Migliachi, DEP Northeast Regional Office, 205A Lowell Street, Wilmington, MA 01887 (978.661.7600).
- Local Information Repository: Olin has established and will maintain a local information repository to provide Wilmington and Woburn residents with easy access to information about the site cleanup process and the results of site investigations. The site information repository contains a complete copy of the DEP site files, and key MCP submittals, including: work plans; sampling and field testing plans; technical reports, and documents summarizing results and recommendations; relevant correspondence; press releases; public information materials; the PIP; public meeting summaries; summaries of responses to comments received; and copies of public notices about the disposal site. Information is sent to the repository by Olin or DEP as it is developed. On a monthly basis, a notice of the availability of new documents will be sent to the site mailing list.

The information repository for the Olin Site is located at:

The Wilmington Public Library
175 Middlesex Avenue
Wilmington, Massachusetts 01887
Tel. 978.658.2967

(Open Monday through Thursday, 9:00 am to 9:00PM, and Friday and Saturday, 9:00 am to 5:00 pm).

The new Information Repository at the Wilmington Library replaces the former repository at the Olin Facility.

4.1.2 PIP Site Mailing List

Olin has established a mailing list for the Site. The site mailing list includes: petitioners, interested residents, local news media, municipal officials, state legislators, DEP, and anyone else indicating an interest in receiving information about the site. The mailing list is used to announce upcoming public meetings, notices of public comment periods on and the availability of documents in the information repositories, and any other information about the Olin Site. Olin maintains the mailing list and updates it as necessary and will provide DEP with a copy of the site mailing list.

Anyone wishing to be added to the mailing list can call or write to:

Steve Morrow, P.E.
Principal Environmental Specialist
Olin Corporation
P.O. Box 248
Charleston, TN 37310
Tel. (423.336.4511),
Toll Free (1.800.295.6141)

4.1.3 Notification to Local Officials and Residents of Major Milestones and Events

The MCP requires community notification of major planning and implementation milestones at disposal sites. Major milestones include the start of field work related to: (1) the use of Level A, B, or C protective clothing or respirators; (2) implementation of Phase IV; (3) residential sampling; (4) implementation of a RAM; and (5) implementation of an Immediate Response Action (IRA) taken to address an imminent hazard, and the completion

of each phase of the remediation process, including Downgradient Property Status (DPS), Activity and Use Limitation (AUL), and Response Action Outcome (RAO).

Notification of field work will include information on the type of work and its approximate duration. Notification will be made by Olin to the people on the Notification List at least one day before the activity is scheduled to begin. Notifications may be made by telephone, email, and/or written correspondence. Notification at the end of a remedial phase will include a summary of the phase report and information on where the report can be reviewed. Those to be notified include:

NOTIFICATION LIST

Name	Affiliation	Address & Phone
Michael A. Caira	Wilmington Town Manger	Town Hall, 121 Glenn Road Wilmington, MA 01887 978.658.3311
John Curran	Mayor, City of Woburn	City Hall 10 Common Street Woburn, MA 01801 781.932.4501
Greg Erikson	Wilmington Board of Health	Town Hall, 121 Glenn Road Wilmington, MA 01887 978.658.4298 boh@town.wilmington.ma.us
Jack Fralick	Woburn Board of Health	Town Hall 10 Common Street Woburn, MA 01801 781.932.4407
Carol A. Donovan	State Representative	State House Room 473B Boston, MA 02133 617.722.2240
James R. Miceli	State Representative	State House Room 167 Boston, MA 02133 617.722.2582

NOTIFICATION LIST

Name	Affiliation	Address & Phone
Robert A. Havern III	State Senator	State House Room 513 Boston, MA 02133 617.721.1432
Kathleen Barry	Key Petitioner	14 Powder House Circle Wilmington, MA 01887 978.658.4725

In addition, the Wilmington and Woburn Fire and Police Departments will be notified in situations where public safety is a concern.

4.2 Soliciting Public Input

Olin and DEP will provide opportunities for public input regarding site cleanup decisions by holding public meetings and comment periods and preparing summaries of all comments received during the public comment period and responses to them.

4.2.1 Public Meetings

Olin will brief the public about the status of the Olin Site during the remedial action process.

Meetings will take place as requested by the petitioners, or as determined by DEP meetings may take place at the following milestones:

- Draft PIP (Public Meeting was held on January 23, 2003)
- Phase II SOWs
- Risk Assessment SOWs
- Phase II CSA Completion Statements
- Remedial Action Plans (RAP) - Phase III
- Remedy Implementation Plans (RIP) - Phase IV
- RAM Plans
- IRA Plans
- RAO Statements

Meetings serve two purposes: (1) to provide community officials and the general public with a progress report regarding remedial response actions at the site, and (2) to provide an opportunity for the public to question and comment on remedial action plans for the site.

Olin will send notices announcing public meetings to individuals on the site mailing list. Olin will prepare meeting summaries, submit the summaries to DEP, and place a copy of the summaries in the local information repository.

4.2.2 Public Comment Periods

Olin will provide specific opportunities for the public to submit comments about documents concerning the Site. When key documents have been submitted to DEP, they will be provided to the information repository. The notice will include the titles of the new documents, where they are available for review, information about how to submit comments regarding each document to DEP, and the length of the public comment period, if applicable. DEP will determine the length of the comment period, which will normally be 20 calendar days, but may be longer if warranted by the complexity of a particular document or if requested by the public. Olin will be responsible for providing document copies to the information repositories and to the DEP site file, as well as sending out periodic notices of the availability of key documents that it prepares.

Documents available for public comment will in the future include:

- Any subsequent revisions to the PIP
- Phase II SOW
- Risk Assessment SOW
- Phase II CSA Completion Statements
- Remedial Action Plan (RAP) - Phase III
- Remedy Implementation Plan (RIP) - Phase IV
- RAM Plans and Completion Statements
- IRA Plans and Completion Statements
- RAO Statements

4.2.3 Response to Comments

DEP or Olin will prepare a summary of comments received on each document available for public comment and a response to those comments. A copy of this response summary will be sent to all those who submitted written , and will be placed in the information repository

and the DEP site file. Olin will send a notice of availability of the response summary to the mailing list. The summary will be made available prior to taking the remedial response action submitted for comment, or prior to moving to the next MCP phase.

5. Schedule For Public Involvement Activities

Olin will issue monthly updates (notifications) to the PIP mailing list, which will include the schedule for pending public involvement activities. The information that will be provided in the monthly updates will include:

- A summary of key milestones, as described in Section 4.2.1, and /or key documents, which have been made available for public review.
- Public Meeting schedule for key project milestones, or new key documents, that have been submitted to MADEP.
- Public Comment periods for key project milestones or new key documents.

6. Responsibility For Implementing The Public Involvement Plan

In accordance with the MCP, the implementation of the public involvement activities has been delegated to Olin. DEP will oversee Olin's implementation of its delegated tasks, and will also conduct the required activities of any of its own technical work concerning this site.

7. Revisions To This Plan

This PIP may be revised as necessary during the course of the remedial response action process. If revisions are proposed, Olin will place copies of any proposed changes in the local information repository, and will send a notice of the availability of recommended changes to the mailing list. Olin will hold a 20-day public comment period (Section 4.1) on the proposed revised Plan. Olin will review any comments received and revise the Plan as appropriate. The final revised Plan will be placed in the information repository.