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Office of Proceedings

JUL 11 2003

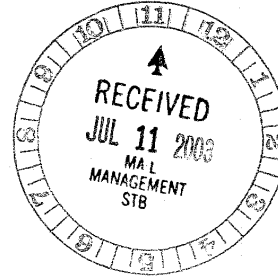
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Public Record

July 10, 2003

**VIA FACSIMILE AND
FEDERAL EXPRESS**

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

208343



**RE: Petition to Stay Exemption for New England Transrail, LLC
Finance Docket Number: 34365**

Dear Mr. Vernon:

On behalf of the Town of Wilmington, whose Petition to Stay Exemption is before the Board in the above proceeding, we respectfully submit the original and ten (10) copies of the following:

Supplement to Town of Wilmington's Petition to Stay Exemption, with attachment, and Report of GeoInsight, Inc., with its Attachments A-D.

We understand that, at the proponent's request, the objection period has been extended to Friday, July 11, 2003.

Please do not hesitate to contact us with any questions you may have. Thank you.

Very truly yours,

Paul R. DeRensis
Daniel R. Deutsch

DRD:lsc

cc: Town of Wilmington
Attn: Michael A. Caira, Town Administrator
Service List

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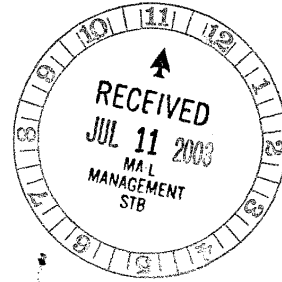
DEUTSCH | WILLIAMS | BROOKS | DERENSIS & HOLLAND, P.C. Attorneys at Law

BEFORE THE
SURFACE TRANSPORTATION BOARD

FINANCE DOCKET NO. FD34365

NEW ENGLAND TRANSRAIL, LLC, EXEMPTION FOR OPERATION
AS A CLASS III CARRIER OVER LINES OWNED BY
BOSTON AND MAINE RAILROAD

**SUPPLEMENT TO TOWN OF WILMINGTON'S
PETITION TO STAY EXEMPTION**



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Public Record

The Town of Wilmington ("Wilmington") submits this supplement to its June 25, 2003 Petition to Stay Exemption. Wilmington incorporates by reference herein the Report of GeoInsight, Inc. submitted herewith. GeoInsight is a multi-disciplinary environmental consulting and engineering firm which Wilmington has retained to evaluate and comment on matters relating to this file. That firm has particular experience and expertise in the site assessment, remediation, and project siting issues which are relevant here.

The Railroad's Reply Demonstrates the Need for a Stay of Exemption.

Through its Reply to the Petition to Stay Exemption, New England Transrail ("the Railroad") makes a compelling case to stay its own requested exemption. That 17-page, single-spaced Reply attempts to respond, albeit selectively, to the many issues raised by the Town's Petition to Stay. The mere fact that the Railroad offers so many technical comments and broad assertions on complex hydrogeological and engineering matters speaks forcefully to the need for meaningful environmental review of the proposed development at this troubled site.

As GeoInsight discusses in depth in the enclosed report, the Railroad's statements and conclusions are controvertible, as well as controversial. Crucial environmental points are directly in dispute, among them: the impact of the proposed development on the on-going mandatory environmental assessment and remediation at the Olin Site, including areas which the Railroad proposes to use; the appropriateness of a new industrial use at a site that has not been fully investigated or remediated and therefore is not stable, much less closed; and the vulnerability of the surrounding human and ecological receptors to the proposed industrial activities.

Moreover, in several important respects, the Railroad's recent submission contradicts statements made previously by the Railroad itself (regarding the transloading of hazardous materials, for example, which it now acknowledges will occur) and by its proposed seller, Olin Corporation (regarding groundwater flow toward the Ipswich Watershed, the source for the Town's drinking water wells).

The Railroad's Position, and Its Development Plans, Keep Changing and Are Unsupported by Essential Information.

The proponent's position not only is contradicted by previous documentation and otherwise subject to debate, but it clearly is subject to change. For the first time, the Railroad now states that "[t]he installation of a permanent cap over the DAPL containment area is planned as part of the redevelopment of the Property by the Railroad." Likewise, for the first time, and in response to the Town's legitimate concerns with the suspected transportation and transloading of hazardous materials, the Railroad proposes to take certain steps to "minimize the risk posed by these activities." Similarly, the proponent offers to escrow "up to \$50,000" toward the cost of acquiring land to modify a street intersection that otherwise is not suitable for its proposed trucking operations. Predictably, the Railroad provides none of the detail that would be

necessary to evaluate these activities. As GeoInsight remarks, the design specifications and installation of a permanent cap at a site like this ordinarily are subject to considerable scrutiny and oversight by State and local agencies; whereas the Railroad gives absolutely no details. The proponent also provides no useful information concerning specifications for other proposed structures (including impervious surfaces, berms and other containment devices that it claims are so obviously adequate to prevent adverse consequences from any release of hazardous or other materials), basic employee training, or operation and maintenance plans (including those related to the proposed transloading of hazardous materials). The Railroad offers to undertake mitigating steps but only on the basis that it not disclose the particulars, not be required to implement them, and not be monitored. Such ill-defined and unenforceable commitments are of no practical benefit. This is especially so because the development would lie within and over a site whose existing chemical contamination is not yet fully understood or remediated.

The Legal Standard for the Petition to Stay Exemption Is Not What the Railroad Suggests.

In arguing against a stay, the Railroad also takes liberties with legal authorities. It cites one decision of a state trial court concerning the substantive standard for review of a site assignment decision involving a solid waste landfill. The Railroad asserts that state law requires evidence of a “danger” in fact. Yet, as that court observes, state law also requires an extended series of public hearings on a proposed site assignment at which evidence and expert testimony are received on a variety of environmental issues. See 310 C.M.R. 16.40, *et seq.* By contrast, the Railroad seeks to avoid meaningful disclosure under the licensing provisions of the ICC Termination Act, much less a comprehensive review process of the sort mandated by State law. It is wholly inappropriate for the proponent to argue a State law standard that is applied only

following comprehensive environmental review. The standard for a threshold determination that fundamental disclosure and review are needed is not as rigorous.

The Railroad Has Not Communicated With Town Officers As Represented.

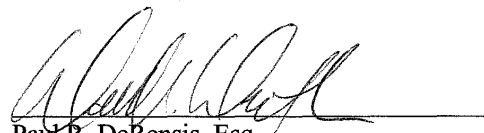
Finally, it is hypocritical for the Railroad to state that it has "continued to meet with elected officials" and fully engaged the Wilmington community. As noted in his July 9, 2002 letter to New England Transrail, Wilmington Town Manager Michael Caira made substantive inquiries to the Railroad but the Railroad has failed to respond to those inquiries, to disclose "more detailed" project information, or to fulfill its announced commitment to cooperate with local officials. See letter at Tab 2.

In sum, the exemption should be stayed and this project subjected to further environmental review. Doing so is necessary to serve the legislative purpose that railroads not be operated to the detriment of public health and safety.

Respectfully submitted,

TOWN OF WILMINGTON,

By their attorneys,



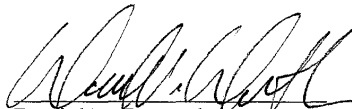
Paul R. DeRensis, Esq.
Daniel R. Deutsch, Esq.
DEUTSCH WILLIAMS BROOKS
DeRENSIS & HOLLAND, P.C.
99 Summer Street
Boston, MA 02110-1235
(617) 951-2300

Date: July 10, 2003

DWLJB 136557v1
7605/00

CERTIFICATE OF SERVICE

I hereby certify that a true copy of Supplement to Town of Wilmington's Petition to Stay Exemption, with attachment and Report of GeoInsight, Inc. with attachments, were served this day via first-class mail upon the following: Paul Jacobi, Esq., Jacobi and Case, P.C. 300 Bic Drive, Milford, CT 06560-3055 and Michael J. Newhouse, Esq., 20 Middlesex Avenue, Wilmington, MA 01887.



Daniel R. Deutsch, Esq.

Date: July 10, 2003

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TOWN OF WILMINGTON

121 GLEN ROAD
WILMINGTON, MA 01887

OFFICE OF THE
TOWN MANAGER
(978) 858-3311

July 9, 2003

FAX (978) 858-3334
TTY (978) 894-1417

Ronald Klempner, Managing Principal
New England Transrail, LLC
843 Red Road
Teaneck, NJ 07666

Dear Mr. Klempner:

You will recall that when we met on May 28, 2003, a date selected to accommodate your associate, Mr. Jones, you were going to get back to me to discuss arrangements to meet with other town officials and to further define with much greater specificity your proposal to construct a bulk and container rail reload center at the 51 Eames Street location in Wilmington, MA. Despite your assurance that you would work cooperatively with town officials and more fully disclose your plans with members of the town's governing boards and administrative staff, you have failed to do so.

I received a message from your office at 9:30 a.m. on Monday, June 2, 2003 indicating that you were "out of town" and you would contact me on Wednesday, June 4, to discuss "in more detail" issues raised at our meeting of May 28, 2003. I returned your phone call and left a message on your voice mail that I was anxious to speak with you. You never returned my call or initiated a call to any member of Wilmington's town government to either respond to our concerns or to arrange a meeting in order for you to provide more substantive information about your proposal.

I am again inviting you to meet with town officials as soon as possible to discuss the town's concerns relative to the construction of the reload facility. I await your reply.

Sincerely,

Michael A. Cairra
Town Manager

MAC/dan

2



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www.geoinsightinc.com

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GeoInsight, Inc.
Corporate Ten Center
1781 Highland Avenue, Suite 207
Cheshire, CT 06410
TEL 203-271-8036
FAX 203-271-8038

July 10, 2003

GeoInsight Project 3754-001

Daniel Deutsch, Esq.
Deutsch, Williams, Brooks, DeRensis and Holland, PC
99 Summer Street
Boston, MA 02110-1213

RE: New England Transrail Surface Transportation Board Exemption Filing
Olin Site, Wilmington, MA

Dear Mr. Deutsch:

At the request of Jeffrey Hull, Assistant Town Administrator for the Town of Wilmington, Massachusetts (the Town), GeoInsight, Inc. (GeoInsight) prepared this letter to summarize its independent evaluation of environmental issues associated with a proposed rail re-load center located on the Olin Corporation (Olin) property at 51 Eames Street in Wilmington. GeoInsight is a multi-disciplinary environmental consulting and engineering firm with offices located in Londonderry, New Hampshire, Westford, Massachusetts, and Cheshire, Connecticut. GeoInsight and the staff that performed this review have technical experience and expertise in a number of environmental practice areas with specific relevance to this evaluation including:

- site investigations, remedial design, and remedial action under the Massachusetts Contingency Plan (MCP) including registration as Licensed Site Professionals (LSPs);
- registration as Professional Engineers in Massachusetts;
- design and licensing of transfer stations;
- performance of hydrogeological investigations at contaminated sites;
- water supply investigation and development;
- brownfields redevelopment; and
- remedial investigations, feasibility studies, and remedial design for Comprehensive Environmental Response, Compensation, and Liability (CERCLA, or Superfund) sites.

FUNDAMENTAL CONCLUSIONS

The applicant, New England Transrail, LLC (NET), has filed a Notice of Exemption from the detailed federal disclosure requirements for establishment of rail facilities (i.e. its proposed development of the Olin site), including review of environmental issues. The applicant presents very limited and, in some instances, contradictory information regarding the location, design, operation of its proposed facilities and the nature of materials to be handled at the facilities. Redevelopment and reuse of contaminated industrial sites (brownfields) is a worthy objective. However, the standard of practice for such redevelopment projects is to initiate them only after a full characterization of site impacts is completed, allowing coordination of remedial activities with the redevelopment plan to avoid ineffective and inefficient remediation. Recent discovery of previously unknown impacts associated with the Olin site has caused the Massachusetts Department of Environmental Protection (MADEP) to suspend its review of certain elements of the Phase III Remedial Action Plan pending completion of additional site investigation and source identification. Because of the evident uncertainties regarding environmental issues associated with the redevelopment proposed by NET, as currently documented, exemption from typical federal review processes designed to ensure protection of human health and welfare would be imprudent because it can result in construction of facilities and structures that will inhibit investigation and remediation of as-yet unidentified contamination sources.

BACKGROUND

In performing its evaluation, GeoInsight reviewed a number of documents including:

- New England Transrail (NET), Notice of Exemption, Boston and Maine Railroad (and enclosed exhibits), dated June 18, 2003;
- an Environmental Assessment Form prepared by NET, dated May 9, 2003;
- a Petition to Stay Exemption for New England Transrail, LLC, Finance Docket Number: 34365 (and enclosures), dated June 25, 2003;
- a Town of Wilmington Inter-Departmental Communication, dated May 15, 2003;
- a letter from Wilmington Town Counsel to NET and enclosed memoranda from various Town officials and departments commenting upon the proposed exemption filing, dated June 4, 2003;
- a letter to Olin Corporation from the MADEP regarding the site's Tier 1A status, dated July 2, 2003; and
- a reply to the Town's petition prepared for NET, dated July 8, 2003.

In addition, GeoInsight used information available in:

- a Supplemental Phase II Report prepared for the Olin site, dated June 1997; and

- an Environmental Notification Form (ENF) and Request for Waiver for the Olin site, dated May 31, 2000.

SITE HISTORY

As reported in several sources, industrial activity (primarily chemical manufacturing) began at the site in the early 1950s and continued through its acquisition by Olin in 1980. Olin operated a manufacturing facility at the site until 1986, at which time the existing facilities were closed. Since that time, the site has not been used for manufacturing, and much of the manufacturing equipment and many buildings have been dismantled and removed.

Investigations of environmental conditions at the site were initiated in the middle to late 1980s. The results of early investigations led to its inclusion in 1989 on the MADEP's list of non-priority sites to be investigated under a Waiver of Approvals for investigation and remediation at the site. Based upon the results of a Comprehensive Site Assessment completed in 1993, MADEP revoked the Waiver of Approvals and re-classified the site as a priority site, issuing a Tier I permit in 1994. Supplementary investigations were performed after 1994, culminating in a Supplemental Phase II Report issued in June 1997. Additional investigation and regular monitoring have continued at the site to further the evaluation of subsurface conditions. Recently, N-nitrosodimethylamine (NDMA) was detected in ground water affected by site conditions and in downgradient Town water supply wells; investigation of the extent of the NDMA impacts and their source(s) is currently in progress. The presence of NDMA and the discontinued use of the municipal wells will require reevaluation of the currently selected remedial alternative for the site and this reevaluation is in its early stages, focused on characterizing the extent and sources of the observed impacts. The new remedial evaluation is expected to require additional investigation and monitoring activities that have not yet been identified.

GENERAL SITE CONDITIONS

Conditions at the Olin site and in downgradient areas are complex, as indicated by the historical identification of a number of potential contamination sources that include unlined pits formerly used for chemical disposal, a former (Plant B) tank farm and nearby production area, subsurface drum disposal areas, former lined lagoons, and a former industrial waste landfill. In addition, several surface drainage ditches were contaminated as a result of liquids discharged during manufacturing operations. Also, migration to the west of released materials in ground water from the Olin site has resulted in a contaminated dense aqueous layer located off the property that serves as a continuing source of dissolved impacts in ground water. The fact that over 200 monitoring wells have been installed at multiple depth intervals over an area of approximately 250 acres on and downgradient of the Olin site illustrates the magnitude of environmental impacts associated with the site.

The Olin site is located southeast and, based upon ground water flow direction and quality data, directly upgradient of the Maple Meadow aquifer; it is located within the protective Zone II of Town supply wells drawing from this aquifer. The Town formerly withdrew approximately 60

percent of its water supply from five pumping wells located in the aquifer. Ground water flow and quality data obtained for the investigations performed to date identified significant impacts to the aquifer and at the supply wells by a number of contaminants as a result of releases from the Olin contamination sources. These impacts have led to temporary shutdown of the wells drawing from this aquifer and an agreement between Olin and the Town for Olin to fund a temporary connection to the Massachusetts Water Resources Authority (MWRA) water supply system, pending remediation of the Olin site and associated impacts on the aquifer. It is clear that this aquifer is an important and sensitive Town drinking water resource with a direct effect on public health and welfare, an assessment that is underscored by the fact that an investigation currently in progress of a potential cancer cluster in the Town is evaluating, among other possible causative factors, exposures associated with the presence of contamination detected in the aquifer originating from sources on the Olin site.

SITE STATUS

The complexity and sensitivity of the site conditions is underscored by the fact MADEP assigned this site a Tier 1A classification under the MCP (see Attachment A). This classification requires MADEP review and approval of all site characterization and remedial design/action plans, and other documents identified in 310 CMR 40.0550(2) and 40.0550(4)(a)(1). In a letter dated July 2, 2003 (Attachment B), MADEP affirmed that the site was still subject to the full range of review and approval requirements despite recent changes to the MCP lifting certain requirements for Tier 1A sites, further indicating the sensitivity and severity of conditions at the site and in downgradient areas.

Investigations were, until recently, considered complete and the site was moving into Phase III under the MCP, which is the development of a remedial action plan; a draft Phase III report was completed in early 2003. As previously discussed, however, additional investigations were recently undertaken at the site to address the detection of NDMA, a contaminant related to former operations at the Olin site, in the Town's aquifer. Extensive monitoring efforts are currently in progress to evaluate the extent of NDMA contamination in the aquifer and, presumably, assist in the identification of NDMA source areas on the Olin site; investigation reports to date have not identified such source areas. It should also be noted that GeoInsight, under contract to the Town, has been tasked with assessing the possible presence of other target contaminants associated with former operations at the Olin site that have not yet been investigated. If such contaminants are identified and found to pose an unacceptable human health risk in ground water or soil, monitoring and source identification efforts similar to those for NDMA will be undertaken.

MADEP has deferred review of certain elements of the draft Phase III report, pending the results of the NDMA investigations. Based upon this information, it is clear that planning for remedial action at the site is incomplete, particularly given the as-yet unidentified locations of sources of NDMA and, possibly, other contaminants, as well.

PROPOSED REDEVELOPMENT

The applicant (NET) proposes to construct a terminal railroad to serve a re-load facility on the site and seeks exemption from typical federal disclosure requirements for establishing rail facilities, which include National Environmental Policy Act reviews of environmental issues. It is important to note that the complexity and level of State and local review of environmental issues associated with a development of the type proposed would otherwise be significant because of the combination of site location and conditions and the nature of the proposed use. The documentation prepared by NET provides little information regarding the proposed redevelopment of the site to support evaluation of environmental issues associated with the proposed uses, particularly with regard to adverse effects on human health and welfare.

NET's description of the site in its Environmental Assessment Form (EAF) contains several inaccuracies regarding site history and indicates a misunderstanding of the site's remediation status. NET states that a "Remedial Action Plan" or "RAM" (sic) has been approved for the site. As previously discussed, final remedial decisions for the site have not yet been made or approved by MADEP. This misunderstanding is not a trivial issue because site redevelopment that is not closely coordinated with a comprehensive remedial plan can result in ineffective, inefficient remedial action as a result of premature disturbance of site media or construction of structures that limit access to impacted areas. NET apparently recognizes this issue based upon its discussion of an earlier redevelopment proposal at the end of the "Alternatives" sub-section of Section 1 of the EAF, although it is not clear why it does not recognize the same issue with regard to its own proposal.

There are substantial inconsistencies in NET's statements regarding the materials and commodities that it intends to handle at the proposed re-load center. Section 7(ii) of the EAF states that hazardous materials will not be transported to the re-load center, but Section 4 of NET's response to the Town's petition for stay of the requested exemption explicitly acknowledges that "hazardous materials will be transported through and reloaded" at the site, and that these materials "could include wastes generated by remediation of the Olin site." In addition, trains traveling to and through the site will be fueled with petroleum products. It should also be noted that NET apparently contemplates future operation of a break-bulk facility that will result in on site storage of whatever materials it processes through the facility. Releases of hazardous materials and railroad equipment fuels associated with re-loading operations and possible future on-site storage offer the prospect of adverse consequences to human health because of the location within the Zone II of the five supply wells drawing from the Town aquifer west of the Olin site and the possibility that spilled materials will impact ground water in the aquifer. NET's EAF and other documents related to the Notice of Exemption do not describe the design, operation and maintenance of containment systems with sufficient specificity to evaluate the adequacy of protective structures and systems. Section 7 (iii) of the EAF simply refers to the Section 1 site history discussion and does not describe spill containment structures, systems, and practices.

NET represents that the site is not located within a public water supply source area; this statement is factually incorrect based upon the identified Zone II for the Town wells drawing from the Maple Meadow Aquifer, which extends to the area of the Olin site. Regardless of the

facility's location relative to the Zone II for the Town well field, historical and current ground water data indicate that impacted ground water flows from the Olin property to the aquifer in which the Town wells are constructed, as evident from maps of ground water contamination plumes originating at sources on the Olin property. Accordingly, uncontrolled spills of fuels, chemicals, and other hazardous materials at the proposed re-load center pose direct danger to the Town aquifer. NET also reports conclusions of another consultant (GEI Consultants, Inc. in the ENF) that ground water at the Olin site flows to the Aberjona River watershed, not toward the Maple Meadow aquifer used by the Town. However, GEI identifies a ground water flow divide in the area of the Olin site with at least a portion of ground water on the site flowing to the west, toward the Town well field. In addition, GEI identified seasonal variability in ground water flow directions at the site, raising uncertainty regarding the possible consequences of spills that reach site ground water. In any event, NET does not identify with sufficient specificity the location of its proposed facilities on the site or the portion of the site that it intends to use, relative to the ground water flow divide location, to allow evaluation of the accuracy of its statements.

Although not discussed in its EAF, NET indicates in its reply to the Town's petition that it plans to cap the portion of the site on which it will operate and to install spill containment structures and systems and to institute specific procedures to prevent and respond to spills and releases of hazardous materials. However, the general description of these measures does not rise to the level that is typically required by local and state environmental regulatory programs for facilities of this type and, more specifically, those located in the sensitive environmental setting of this site. In particular, capping of contaminant sources is subject to a high level of regulatory review in significant detail regarding the construction materials and methods to be used to ensure protection of the public health and welfare.

SUMMARY

Because of its rail operations, NET seeks exemption from the level of federal scrutiny that would otherwise govern the location of a rail facility and that would certainly apply to a commercial facility at the Olin site. Any lack of a detailed review process removes the programs that are designed to protect public health and welfare associated with use of the Maple Meadow Aquifer, and puts the community at risk. Among these requirements are the Ground Water Protection section of the Town of Wilmington Zoning Bylaw (Attachment C) and the Massachusetts requirements for activities within the Zone II of a public water supply well (Attachment D). The community of Wilmington has already been significantly affected adversely by the historical impacts to the Maple Meadow Aquifer that have caused it to remove 60 percent of its water supply from use. Careful review of the uses proposed by NET is warranted to ensure protection the public health and welfare of the community from exposure to additional impacts. The documentation presently available from NET does not provide sufficient detail for such a review with regard to:

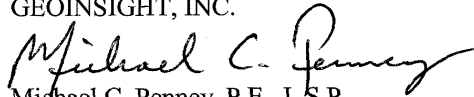
- the nature and location of new facilities to be constructed with regard to ground water flow systems at the site;

- the nature of materials to be handled, re-packaged, re-loaded and transshipped and, particularly, a definitive statement as to whether hazardous materials will be handled or stored or otherwise transit environmentally sensitive areas of the site;
- the construction, operation, and maintenance of spill containment structures and systems; and
- plans and training for spill prevention and response.

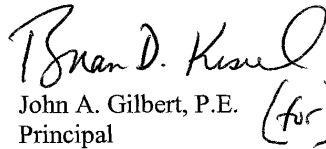
As stated previously, redevelopment of impacted sites is typically a positive event in the eyes of a community. However, redevelopment of the Olin site must carefully consider site impacts and close coordination with remedial planning. This approach ensures that development does not proceed in a manner that impairs full and appropriate remediation of the site. The recent discovery of NDMA impacts associated with the Olin site and the potential for identification of other as yet unknown impacts indicate that site conditions and contamination sources are not yet sufficiently characterized to support development of a comprehensive remedial action plan for the site; indeed, MADEP has suspended review of certain elements of the Phase III Remedial Action Plan pending completion of the NDMA investigations. Given the evident uncertainties regarding environmental issues associated with the redevelopment proposed by NET, which, as currently documented, is premature, exemption from regulatory processes and requirements designed to ensure protection of human health and welfare would be imprudent.

Please contact us at (603) 434-3116 if you have any questions or comments regarding the contents of this letter.

Sincerely,
GEOINSIGHT, INC.



Michael C. Penney, P.E., L.S.P.
Senior Associate Engineer


(for)

John A. Gilbert, P.E.
Principal

Enclosures

ATTACHMENT A

SUBPART E: TIER CLASSIFICATION AND RESPONSE ACTION DEADLINES

40.0500: Tier Classification and Response Action Deadlines

The regulations published at 310 CMR 40.0500 through 40.0599, cited collectively as 310 CMR 40.0500, establish requirements and procedures for the rendering of LSP Tier Classification Opinions, and deadlines for completing response actions at disposal sites. LSP Tier Classification Opinions are considered by the Department in determining the appropriate level of Departmental oversight for response actions conducted by RPs, PRPs and Other Persons at disposal sites.

40.0501: Scope and Applicability

- (1) 310 CMR 40.0500 establishes requirements and procedures for the performance of response actions at Tier I disposal sites, including, but not limited to, requirements for re-scoring such disposal sites and submittal requirements. For Tier I disposal sites, the specific deadlines for RPs, PRPs and Other Persons to achieve a Response Action Outcome pursuant to 310 CMR 40.1000 are determined in accordance with 310 CMR 40.0550 and any other applicable deadlines established in a Tier I Permit issued pursuant to 310 CMR 40.0700.
- (2) 310 CMR 40.0500 also establishes requirements and procedures for the performance of response actions at Tier II disposal sites, including, but not limited to, requirements for re-scoring such disposal sites and submittal requirements. For Tier II disposal sites, the specific deadlines for RPs, PRPs and Other Persons to achieve a Response Action Outcome are determined in accordance with 310 CMR 40.0560.
- (3) Except as provided in 310 CMR 40.0501(4) or 310 CMR 40.0501(8), all sites for which the Department receives notification of a release or threat of release of oil and/or hazardous material pursuant to 310 CMR 40.0300 on or after October 1, 1993, or has discovered or discovers that a release or threat of release of oil and/or hazardous material has occurred, shall be classified by RPs, PRPs or Other Persons as either a Tier I or Tier II disposal site in accordance with 310 CMR 40.0500. A Tier Classification Submittal and, if applicable, a Tier I Permit application, shall be submitted to the Department by the following deadlines:
 - (a) within one year of the earliest date computed in accordance with 310 CMR 40.0404(3); or
 - (b) as otherwise specified by the Department in an Interim Deadline pursuant to 310 CMR 40.0167 or order pertaining to such release or threat of release. In the event that multiple deadlines for Tier Classification would be established by 310 CMR 40.0501(3) with respect to any specific disposal site, the earliest of the applicable deadlines shall apply for the purposes of Tier Classification.
- (4) Notwithstanding any provision of 310 CMR 40.0501(3) or 310 CMR 40.0501(8) to the contrary, Tier Classification shall not be required for any disposal site for which a Response

Action Outcome Statement pursuant to 310 CMR 40.1000 is submitted to the Department within one year of the earliest date computed in accordance with 310 CMR 40.0404(3).

(5) Any person undertaking response actions at a Location To Be Investigated, unclassified disposal site, or non-priority disposal site without a Waiver listed in the 1993 Transition List, or any addendum thereto, shall submit to the Department a Tier Classification Submittal by the applicable deadline established by the Transition Provisions, 310 CMR 40.0600.

(6) An individual Tier Classification Submittal may be for a single discrete disposal site located on one or more parcels of land or to address multiple discrete disposal sites located on a single parcel of land.

(7) An RP, PRP or Other Person may undertake Phase II and Phase III Comprehensive Response Actions pursuant to 310 CMR 40.0800 prior to Tier Classification without the Department's prior approval, unless prohibited by the Department.

(8) The deadline for submittal of a Tier Classification Submittal or a Response Action Outcome Statement established by 310 CMR 40.0500 shall be extended to the date that is 90 days after the effective date of the first revision to the definition of the term "Potentially Productive Aquifer" in 310 CMR 40.0006 and to 310 CMR 40.0932(5)(b) promulgated after December 15, 1995, provided that the following conditions are met:

(a) Such deadline shall be extended where:

1. The groundwater at such disposal site is defined as Category GW-1 solely because it is within a Potentially Productive Aquifer pursuant to 310 CMR 40.0932(4)(b); and/or

2. The soil at such disposal site lies above groundwater which is defined as GW-1 solely because the groundwater is within a Potentially Productive Aquifer, pursuant to 310 CMR 40.0932(4)(b).

(b) To extend a deadline based on the conditions of 310 CMR 40.0501(8), the RP, PRP or Other Person subject to the deadline shall submit a written statement to the Department on or before such deadline, indicating his or her intention to submit a Tier Classification Submittal or Response Action Outcome Statement (as appropriate) by the extended deadline.

40.0510: Tier Classification Process

(1) The Tier Classification process consists of:

(a) the completion of a Phase I Report in accordance with 310 CMR 40.0480;

(b) the completion of a Numerical Ranking System Scoresheet in accordance with 310 CMR 40.1500;

(c) a comparison of conditions at a disposal site with the Tier I Inclusionary Criteria set forth

in 310 CMR 40.0520(2);

(d) the preparation and filing with the Department of a Phase II Scope of Work completed in accordance with 310 CMR 40.0834 for all Tier I and Tier II disposal sites; and

(e) the preparation and filing with the Department of one of the following for all Tier I or Tier II disposal sites:

1. a Phase II Scope of Work completed in accordance with 310 CMR 40.0834; or
2. a Conceptual Scope of Work which, at a minimum, includes a general plan for assessing contaminants of concern, potential receptors and potential exposure pathways, identifying the likely technical approach(es) to be used, estimating an overall schedule or timeline, including interim milestones and estimating overall cost.

(2) A Tier I or Tier II Classification Submittal shall consist of the following:

(a) a completed Tier Classification transmittal form using the form established by the Department for such purposes;

(b) an LSP Tier Classification Opinion;

(c) the certification required by 310 CMR 40.0009;

(d) the certification required by 310 CMR 40.0540(1) for a Tier II disposal site; such certification shall be provided in a Permit Application pursuant to 310 CMR 40.0703(9) for a Tier I disposal site; and

(e) the compliance history required by 310 CMR 40.0540(2) for a Tier II disposal site; such compliance history shall be provided in a Permit Application pursuant to 310 CMR 40.0703(9) for a Tier I disposal site.

(3) An LSP Tier Classification Opinion shall consist of:

(a) a completed Phase I Report, as described in 310 CMR 40.0480;

(b) a Numerical Ranking System (NRS) Scoresheet completed in accordance with 310 CMR 40.1500;

(c) on the basis of the Tier I Inclusionary Criteria or the score a disposal site receives using the Numerical Ranking System, an LSP Opinion as to whether a disposal site should be classified by the Department as Tier I or Tier II; and if such LSP Opinion indicates that a disposal site should be classified by the Department as Tier I, an LSP Opinion as to whether such disposal site should be categorized as Tier IA, Tier IB or Tier IC for the purposes of permitting pursuant to 310 CMR 40.0700; and

(d) any other information required by 310 CMR 40.0520 or 40.0530, including, but not limited to, any other Phase Reports, Status Reports and Completion Statements material to the LSP Tier Classification Opinion.

(4) In the event that an LSP Tier Classification Opinion indicates that, on the basis of the Tier I Inclusionary Criteria or the disposal site's NRS score, a disposal site should be classified as Tier I, the person submitting the Tier Classification Submittal shall include therein a completed application for a Tier I Permit in accordance with 310 CMR 40.0700.

(5) For the purposes of 310 CMR 40.0500,

(a) the effective date of a Tier I Classification shall be the effective date of a Tier I Permit issued pursuant to 310 CMR 40.0700; and

(b) the effective date of a Tier II Classification shall be the date a Tier II Classification Submittal is received by the Department or, when downgrading a Tier I disposal site through a Major Permit Modification, the date the Department approves the Major Permit Modification application.

40.0520: Basis for Tier Classification

(1) Disposal Site Scoring.

(a) Any person performing Tier Classification for a disposal site shall score such disposal site using the Numerical Ranking System described in 310 CMR 40.1500. The disposal site score shall be based upon data, facts and other information obtained during Phase I, and any

other relevant data, facts or information known by the person performing Tier Classification, including, but not limited to, any data, facts or information obtained during a Phase II - Comprehensive Site Assessment, if Phase II work has been performed at such disposal site.

(b) All relevant data, facts and other information considered during Tier Classification shall be documented in the applicable Phase Report(s) and the LSP Tier Classification Opinion. LSPs shall use the Response Action Performance Standard in 310 CMR 40.0191 to develop an LSP Tier Classification Opinion.

(c) Any person performing Tier Classification may account for risk reduction measures, if any, that have been completed at the disposal site pursuant to 310 CMR 40.0400 prior to performing such Tier Classification, including Immediate Response Actions, Release Abatement Measures and Utility-related Abatement Measures.

(2) Tier I Inclusionary Criteria.

(a) Any disposal site which meets any of the following criteria shall be categorically classified as Tier I, regardless of the score such disposal site receives using the Numerical Ranking System:

1. any disposal site at which:

a. there is evidence of groundwater contamination with oil and/or hazardous material at concentrations equal to or exceeding the applicable RCGW-1 Reportable Concentration set forth in 310 CMR 40.0360 at the time of Tier Classification, and

b. such groundwater is located within an Interim Wellhead Protection Area or Zone II; or

2. any disposal site at which an Imminent Hazard is present at the time of Tier Classification.

(b) Any disposal site that is classified as Tier I only because such disposal site meets the criteria set forth in 310 CMR 40.0520(2)(a)2. may be reclassified as Tier II upon the Department's determination, pursuant to 310 CMR 40.0426, that an Imminent Hazard is no longer present at the disposal site. Such reclassification shall be conducted as follows:

1. if the Department has issued a Tier I Permit for the disposal site, by re-scoring pursuant to 310 CMR 40.0530, and submitting an application for a Major Modification of a Tier I Permit in accordance with 310 CMR 40.0707; or

2. if an application for a Tier I Permit is pending, by withdrawing that application and submitting a revised Tier Classification Submittal pursuant to 310 CMR 40.0500.

(c) Each disposal site for which the Department does not receive one of the following by the applicable deadline for Tier Classification shall be categorically classified as a Tier IB disposal site on the date of the applicable deadline:

1. a Response Action Outcome Statement, or

2. a Tier Classification Submittal, and, if applicable, an application for a Tier I Permit.

(d) The Department may deem any disposal site at which the person undertaking response actions is in noncompliance with M.G.L. c. 21E, 310 CMR 40.0000 or any other applicable requirement to be a Tier IB disposal site.

(e) Any disposal site that is classified as Tier IB pursuant to 310 CMR 40.0520(2)(c) may be reclassified pursuant to 310 CMR 40.0510.

(f) Any disposal site that is deemed Tier IB pursuant to 310 CMR 40.0520(2)(d) may be reclassified as follows:

1. if the disposal site was previously classified, the previous classification shall resume when the person undertaking response actions comes into compliance with the requirements violated; or

2. if the disposal site was not previously classified, the disposal site may be reclassified when the person undertaking response actions comes into compliance with the requirements violated

and meets the requirements in 310 CMR 40.0510.

(g) Each disposal site for which the deadline for Tier Classification pursuant to 310 CMR 40.0501(3) is prior to February 1, 1995, and for which the Department has not received a Tier Classification Submittal or a Response Action Outcome Statement by February 24, 1995, shall be categorically classified as Tier IB, effective February 24, 1995.

(3) NRS Cut-off Scores. The score a disposal site receives using the Numerical Ranking System shall serve as the basis for the LSP Tier Classification Opinion as follows:

(a) any disposal site receiving a total score equal to or greater than 350 shall be considered Tier I;

(b) any disposal site receiving a total score of less than 350 shall be considered Tier II, unless such disposal site meets any of the Tier I Inclusionary Criteria specified in 310 CMR 40.0520(2).

(c) any disposal site receiving a total score equal to or greater than 550 shall be considered Tier IA;

(d) any disposal site receiving a total score less than 550 and equal to or greater than 450 shall be considered Tier IB;

(e) any disposal site receiving a total score less than 450 and equal to or greater than 350 shall be considered Tier IC; and

(f) any disposal site receiving a total score less than 350 and that meets any of the Tier I Inclusionary Criteria specified in 310 CMR 40.0520(2)(a) shall be considered Tier IC.

40.0530: Re-scoring During Response Actions

(1) Any person performing response actions at a disposal site following Tier Classification shall re-score such disposal site using the Numerical Ranking System if he or she obtains new or additional data, facts or other information which is reasonably likely to result in a score which would cause reclassification of the disposal site from Tier II to Tier I, from Tier IC to Tier IA or Tier IB, or, from Tier IB to Tier IA.

(2) Any person performing response actions at a Tier II disposal site that receives a total score equal to or greater than 350 upon re-scoring shall submit to the Department a Tier Classification Submittal and an application for a Tier I Permit in accordance with 310 CMR 40.0700 within 60 days of obtaining knowledge of such score.

(3) Any person performing response actions at a Tier IC disposal site that receives a total score equal to or greater than 450 upon re-scoring shall submit an application to the Department for a Major Modification of a Tier I Permit in accordance with 310 CMR 40.0707 to upgrade the permit category to Tier IB or Tier IA within 60 days of obtaining knowledge of such score.

(4) Any person performing response actions at a Tier IB disposal site that receives a total score equal to or greater than 550 upon re-scoring shall submit an application to the Department for a Major Modification of a Tier I Permit in accordance with 310 CMR 40.0707 to upgrade the permit category to Tier IA within 60 days of obtaining knowledge of such score.

(5) An RP, PRP or Other Person may downgrade the Tier Classification category of a disposal site after re-scoring. To do so, an RP, PRP or Other Person for a Tier IA, Tier IB or Tier IC disposal site shall submit a revised Tier Classification Submittal and an application for a Major Permit Modification to the Department in accordance with 310 CMR 40.0707.

40.0540: Demonstration of Ability and Willingness

(1) Each person filing a Tier Classification Submittal for a Tier II disposal site with the Department shall include the certification required by 310 CMR 40.0009 and the following written declaration:

"I attest under the pains and penalties of perjury that (i) I/the person(s) or entity(ies) on whose behalf this submittal is made has/have personally examined and am/is familiar with the requirements of M.G.L. c. 21E and 310 CMR 40.0000; (ii) based upon my inquiry of the/those Licensed Site Professional(s) employed or engaged to render Professional Services for the disposal site which is the subject of this Transmittal Form and of the person(s) or entity(ies) on whose behalf this submittal is made, and my/that person's(s') or entity's(ies') understanding as to the estimated costs of necessary response actions, that/those person(s) or entity(ies) has/have the technical, financial and legal ability to proceed with response actions for such site in accordance with M.G.L. c. 21E, 310 CMR 40.0000 and other applicable requirements; and (iii) that I am fully authorized to make this attestation on behalf of the person(s) or entity(ies) legally responsible for this submittal. I/the person(s) or entity(ies) on whose behalf this submittal is made is aware of the requirements in 310 CMR 40.0172 for notifying the Department in the event that I/the person(s) or entity(ies) on whose behalf this submittal is made am/is(are) unable to proceed with the necessary response actions."

(2) Each person filing a Tier II Classification Submittal with the Department shall include therein a statement detailing such person's history of compliance with the Department's regulations, including, but not limited to, M.G.L. c. 21E, 310 CMR 40.0000, and other laws for the protection of health, safety, public welfare and the environment administered or enforced by the Department or other federal, state and local government agencies, that are relevant to conditions at the disposal site.

(3) Each person filing a Tier Classification Submittal for a Tier I disposal site shall provide the certifications required with a Tier I Permit Application in accordance with 310 CMR 40.0703(9).

(4) Each person filing a Tier II Extension Submittal pursuant to 310 CMR 40.0630(4) for a Waiver site, and each person who is the transferee for a Waiver Site pursuant to 310 CMR 40.0550(8), shall include the certification required by 310 CMR 40.0009 and either the written

declaration in 310 CMR 40.0540(1) or the following written declaration:

"I attest under the pains and penalties of perjury that (i) I/the person(s) or entity(ies) on whose behalf this submittal is made has/have personally examined and am/is familiar with the requirements of M.G.L. c. 21E and 310 CMR 40.0000; (ii) based upon my inquiry of the Consultant-of-Record for the disposal site which is the subject of this Transmittal Form and of the person(s) or entity(ies) on whose behalf this submittal is made, and my/that person's(s') or entity's(ies') understanding as to the estimated costs of necessary response actions, such disposal site, I believe that I that/those person(s) or entity(ies) has/have the technical, financial and legal ability to proceed with response actions for such site in accordance with M.G.L. c. 21E, 310 CMR 40.0000 and other applicable requirements; and (iii) that I am fully authorized to make this attestation on behalf of the person(s) or entity(ies) legally responsible for this submittal. I/the person(s) or entity(ies) on whose behalf this submittal is made is aware of the requirements in 310 CMR 40.0172 for notifying the Department in the event that I/the person(s) or entity(ies) on whose behalf this submittal is made am/is(are) unable to proceed with the necessary response actions."

40.0550: Response Action Deadlines and Requirements for Tier I Disposal Sites

(1) Deadlines for Response Action Outcomes. Except as expressly provided by 310 CMR 40.0000 or as otherwise ordered or agreed to in writing by the Department, any person undertaking response actions at a Tier I disposal site pursuant to a Tier I Permit, as described in 310 CMR 40.0700, shall achieve a Response Action Outcome pursuant to 310 CMR 40.1000 within five years of the effective date of such permit.

(2) Deadlines for Submittals. Except as provided in 310 CMR 40.0550(3), or as expressly provided by 310 CMR 40.0000, or as otherwise ordered or agreed to in writing by the Department, any person undertaking response actions at a Tier I disposal site pursuant to a Tier I Permit shall submit the following documents to the Department by the following deadlines:

(a) a Phase II Report, and, if applicable, a Phase III Remedial Action Plan within two years of the effective date of such permit;

(b) a Phase IV Remedy Implementation Plan within three years of the effective date of such permit;

(c) a Response Action Outcome Statement pursuant to 310 CMR 40.1000 within five years of the effective date of such permit; and

(

d) any other submittal as required by the terms and conditions of a Tier I Permit pursuant to 310 CMR 40.0740.

(3) Notwithstanding any provision of 310 CMR 40.0550(2) to the contrary, submittal to the Department of those documents described in 310 CMR 40.0550(2)(a) through (c) shall not be required at any disposal site for which a Response Action Outcome Statement is submitted to the Department prior to an applicable document submittal deadline.

(4) Approvals for Tier I Disposal Sites.

(a) Tier IA disposal sites.

1. Except as expressly provided by these regulations or as otherwise ordered or agreed to in writing by the Department, any person undertaking response actions pursuant to a Tier IA Permit shall obtain Departmental approval of each of the submittals required by 310 CMR 40.0550(2), any Release Abatement Measure pursuant to 310 CMR 40.0400, any Downgradient Property Status Submittal pursuant to 310 CMR 40.0180 and other applicable response actions conducted pursuant to Phases IV and V under 310 CMR 40.0800.

2. As a result of Departmental review of proposed Tier IA response action plans and/or submittals, the Department may set Interim Deadlines or extend any of the deadlines in 310 CMR 40.0550(2). The extended deadline may be incorporated into a Tier IA Permit issued pursuant to 310 CMR 40.0700.

(b) Tier IB and Tier IC disposal sites. Unless otherwise required by the Department pursuant to a permit, order or determination, any person undertaking response actions pursuant to a Tier IB or Tier IC Permit may perform the response actions which are the subject of the submittals required by 310 CMR 40.0550(2) without the Department's prior approval thereof after a Tier I Permit is issued.

(5) Notification of Delay in Compliance With Deadlines for Tier IB and Tier IC Disposal Sites. Except as provided by 310 CMR 40.0025 and 40.0167, if any delay in compliance with any deadline or time period required:

(a) by 310 CMR 40.0550(2)(a),(b), or (c);

(b) in conditions in a Permit issued pursuant to 310 CMR 40.0700; or

(c) in a determination issued by the Department, occurs after issuance of a Tier IB or Tier IC Permit, the person who is responsible for performing the response action shall notify the Department in writing prior to the running of any such deadline or time period, and state the reason for such delay, the measure or measures to be taken to minimize the delay and a proposed schedule for implementing those measures, and shall take appropriate measures to minimize the delay.

(6) Notifications. After permitting pursuant to 310 CMR 40.0700, an RP, PRP or Other Person for a Tier IA, Tier IB or Tier IC disposal site shall make the following notifications to the Department within the following timeframes:

(a) notification of the commencement of initial field activities related to Phase II for any work not previously completed prior to permitting, and Phases III through V pursuant to 310 CMR 40.0800, at least seven days prior to their initiation. Upon such notification, the Department may arrange to observe the conduct of field work including, but not limited to, the installation

of monitoring wells, the excavation of test pits, field sampling of environmental media, soil removal, installation of groundwater recovery systems, the start of Phase IV construction activities, and observation of Phase V monitoring activities; and

(b) any other notifications specified in a Tier I Permit within the required timeframes.

40.0560: Response Action Deadlines and Requirements for Tier II Disposal Sites

(1) Deadlines for Response Action Outcomes. Except as expressly provided by these regulations or as otherwise ordered or agreed to in writing by the Department, any person undertaking response actions at a Tier II disposal site shall achieve a Response Action Outcome within five years of the effective date of initial Tier Classification.

(a) A Tier II Classification for a disposal site shall expire five years from the effective date of the initial Tier Classification of such disposal site; and

(b) An RP, PRP or Other Person shall not conduct Comprehensive Response Actions pursuant to 310 CMR 40.0800 at a disposal site for which a Tier II Classification has expired unless a Tier II Classification Extension is obtained pursuant to 310 CMR 40.0560(7).

(2) Deadlines for Submittals. Except as provided in 310 CMR 40.0560(3), or as expressly provided by 310 CMR 40.0000 or as otherwise ordered or agreed to in writing by the Department, any person undertaking response actions at a Tier II disposal site shall submit the following documents to the Department by the following deadlines:

(a) a scope of work for a Phase II - Comprehensive Site Assessment pursuant to 310 CMR 40.0834 prior to the implementation of Phase II field work, unless the Phase II field work had been implemented prior to Tier Classification;

(b) a Phase II Report, and, if applicable, a Phase III Remedial Action Plan, within two years of the effective date of Tier Classification;

(c) a Phase IV Remedy Implementation Plan within three years of the effective date of Tier Classification; and

(d) a Response Action Outcome Statement pursuant to 310 CMR 40.1000 within five years of the effective date of Tier Classification.

(3) Notwithstanding any provision of 310 CMR 40.0560(2) to the contrary, submittal to the Department of those documents described in 310 CMR 40.0560(2)(a) through (c) shall not be required at any disposal site for which a Response Action Outcome Statement is submitted to the Department prior to an applicable document submittal deadline.

(4) Approvals and Notice.

(a) Except as expressly provided by 310 CMR 40.0000 or as otherwise required by the Department, any person undertaking response actions at a Tier II disposal site may perform the

response actions which are the subject of the submittals required by 310 CMR 40.0560(2) without the Department's prior approval thereof; and

(b) No person shall perform Phase IV response actions unless and until 20 days have passed from the date of publication of the notice required by 310 CMR 40.1403(6).

(5) Notification of Delay in Compliance With Deadlines for Tier II Disposal Sites. Except as provided by 310 CMR 40.0025 or 40.0167, if any delay in compliance with any deadline or time period required by 310 CMR 40.0560(2)(a), (b) or (c) occurs after a disposal site is classified as Tier II, the person who is responsible for performing the response action shall notify the Department in writing prior to the running of any such deadline or time period, and state the reason for such delay, the measure or measures to be taken to minimize the delay and a proposed schedule for implementing those measures, and shall take appropriate measures to minimize the delay.

(6) Notifications. RPs, PRPs or Other Persons conducting response actions at Tier II disposal sites shall provide the Department with notifications in accordance with the provisions of 310 CMR 40.0550(6)(a).



COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
ONE WINTER STREET, BOSTON, MA 02108 617-292-5500

MITT ROMNEY
Governor

KERRY HEALEY
Lieutenant Governor

ELLEN ROY HERZFELDER
Secretary

EDWARD P. KUNCE
Acting Commissioner

TOWN OF
WILMINGTON, MASS

03 JUL -7 AM 11:42

TOWN MANAGER

JUL 02 2003

Olin Corporation
P.O. Box 248
Charlestown, TN

Re: RTN 3-0471
Olin Corporation Site
51 Eames Street

Attention: Stephen Morrow

**THIS IS AN IMPORTANT NOTICE. CHANGES ARE BEING MADE TO THE
MASSACHUSETTS CONTINGENCY PLAN THAT WILL AFFECT THE PERFORMANCE OF
RESPONSE ACTIONS AT TIER IA DISPOSAL SITES**

Dear Mr. Morrow:

As you know, staff from the Massachusetts Department of Environmental Protection (the Department) have been systematically overseeing and approving cleanup activities at the above referenced site. Such a level of comprehensive oversight has been required at this site pursuant to 310 CMR 40.0550(4)(a) of the Massachusetts Contingency Plan (MCP), due to its designation as a "Tier IA" disposal site.

The purpose of this letter is to advise you of revisions that are being made to the MCP that will change the scope of the Department's involvement at many Tier IA disposal sites. Specifically, effective June 27, 2003, pursuant to the (amended) provisions of 310 CMR 40.0550 (4), Tier IA sites will no longer be required to obtain Department approval of comprehensive response actions, Release Abatement Measures (RAMs), or Downgradient Property Status (DPS) Submittals - unless the Department provides written notice to the contrary. The purpose of this letter is to provide you with that written notice, and specify that all activities completed at this site will still require oversight and approval by the Department.

There are other changes being made to the MCP that may affect cleanup activities at this site. In addition, there are changes being made to 310 CMR 4.00, *Timely Action Schedule and Fee Provisions*, relative to the assessment of annual compliance fees and other response action fees. You can download a copy of these changes, and the revised MCP, by visiting the *BWSC News and Updates* web site at <http://www.state.ma.us/dep/bwsc/news.htm>.

This information is available in alternate format. Call April McCabe, ADA Coordinator at 1-617-556-1171. TDD Service - 1-800-298-2207.

DEP on the World Wide Web: <http://www.mass.gov/dep>

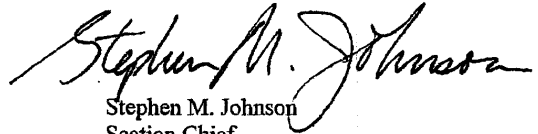
Printed on Recycled Paper

If you have any questions regarding this matter, please contact Christopher Pyott at (617) 654-6654 or at the letterhead address.

Sincerely,



Christopher J. Pyott
Environmental Analyst
Site Management



Stephen M. Johnson
Section Chief
Site Management

cc via e-mail:

Wilmington Board of Health, Attn: Greg Erickson
Wilmington Water Department, Attn: Mike Woods
Jack Fralick, Board of Health, City Hall, 10 Common Street, Woburn, MA 01801
DEP/NERO/Water Supply, Attn: Jim Persky
DEP/Boston/Legislative Liaison: Marc LaPlante
Sleeman, Hanley & DeNitto, 50 Congress Street, Boston, MA 02109
Attn: Margret Hanley
MACTEC Engineering and Consulting, 107 Audubon Road, Wakefield, MA 01880
Attn: Michael Murphy
Foley, Hoag & Eliot LLP, 155 Seaport Boulevard, Boston, MA 02210
Attn: Laurie Burt
Kathleen & Winifred Barry, 14 Powder House Circle, Wilmington, MA 01887
Senator Bruce Tarr, Room 507, State House, Boston, MA 02133
Rep. James Miceli, Room 167, State House, Boston, MA 02133
Rep. Charles Murphy, Room 166, State House, Boston, MA 02133
Rep. Carol Donovan, Room 473-B, State House, Boston, MA 02133

cc via mail:

DEP/Data Management: C&E/INTLET
Chairman, Board of Selectmen, 121 Glen Road, Wilmington, MA 01887
Mayor John Curran, City Hall, 10 Common Street, Woburn, MA 01801
Public Library, 175 Middlesex Avenue, Wilmington, MA 01887
Attn: Olin Site Repository



ATTACHMENT C

TOWN OF WILMINGTON ZONING BY-LAW

6.6 Ground Water Protection District

- 6.6.1 **Purpose** - The groundwater underlying the Town is an important resource supplying drinking water to inhabitants of Wilmington. Surrounding communities rely upon Wilmington to protect their groundwater resources as well.

Accidental spills and discharges of petroleum products, other hazardous materials and sewage discharge have repeatedly threatened the quality of groundwater supplies throughout Massachusetts, posing potential public health and safety hazards as well as threatening economic losses to affected communities.

The purpose of this Groundwater Protection District is to:

- a) Promote the health, safety, and general welfare of the community by ensuring an adequate quality and quantity of drinking water for the residents, institutions, and businesses of the Town of Wilmington.
- b) Preserve and protect existing sources of drinking water supplies;
- c) Conserve the natural resources of the Town; and
- d) Prevent temporary and/or permanent contamination of the environment.

- 6.6.2 **Groundwater Protection District** - The Groundwater Protection District (GWPD) shall be delineated on the Zoning Map of the Town of Wilmington and shall be superimposed over any other district established by the Bylaw. The GWPD is the Zone II approved by the Department of Environmental Protection for Wilmington and surrounding communities. It is based upon a detailed compilation of subsurface data, a limited field program and development of a Town-wide groundwater flow model. Where the lots are split by the Groundwater Protection District boundary, this Bylaw shall apply only to that portion of the lot that is within the district.

- 6.6.3 **Applicability** – The Groundwater Protection district shall apply to all new construction, reconstruction, or expansion of existing buildings and new or expanded uses. Applicable activities/uses in a portion of one of the underlying zoning districts which fall within the Groundwater Protection District must additionally comply with the requirements of this district. Uses prohibited in the underlying zoning districts shall not be permitted in the Groundwater Protection District.

- 6.6.4 **District Boundary Disputes** - If the location of the District boundary in relation to a particular parcel is in doubt, resolution of boundary disputes shall be through a Special Permit application of the Special Permit Granting Authority (SPGA). Any application for a special permit for this purpose shall be accompanied by adequate documentation.

- 6.6.5 **Prohibited Uses** - Within a Groundwater Protection District, the following uses are specifically prohibited:

- 6.6.5.1 Sanitary landfills and open dumps. Nothing in these regulations shall prevent the operation of a municipal recycling facility.
- 6.6.5.2 Land application, landfilling and above ground storage of sludge and septage, unless such storage is in compliance with 310 CMR 32.30 and 310 CMR 32.31.
- 6.6.5.3 Automobile graveyards and junkyards.
- 6.6.5.4 Stockpiling and disposal of snow and ice containing deicing chemicals if brought in from outside the Groundwater Protection District.
- 6.6.5.5 Dry cleaning establishments where the dry cleaning is done on the premises.
- 6.6.5.6 Facilities that generate, treat, store or dispose of hazardous waste subject to M.G.L. 21C and 310 CMR 30.000, except for the following:
 - a) Very small quantity generators as defined under 310 C.M.R. 30.000;
 - b) Household hazardous waste centers and events under 310 CMR 30.390;
 - c) Waste oil retention facilities required by M.G.L. Chapter 21, Section 52A;
 - d) Water remediation treatment works approved by DEP for the treatment of contaminated ground or surface waters.
- 6.6.5.7 Non-sanitary wastewater treatment or disposal works that are subject to 314 CMR 5.00 including privately owned sewage treatment facilities, except the following:
 - a) The replacement or repair of an existing system that will not result in a design capacity greater than the design capacity of the existing system;
 - b) Treatment works approved by the Massachusetts Department of Environmental protection designed for the treatment of contaminated groundwater;
- 6.6.5.8 Siting of petroleum, fuel oil and heating oil bulk stations and terminals, including, but not limited to, those listed under Standard Industrial Classification (SIC) Codes 5171 and 5983. SIC Codes are established by the U.S. Office of Management and Budget and may be determined by referring to the publication, Standard Industrial Classification Manual and any subsequent amendments thereto.
- 6.6.6 **Conditional Prohibited Uses and Activities** – The following land uses and activities are prohibited unless designed in accordance with the specified performance standards.
 - 6.6.6.1 Storage of deicing chemicals unless such storage, including loading areas, is within a structure designed to prevent the generation of contaminated run-off or leachate.

- 6.6.6.2 Storage of pesticides unless such storage is within a building or structure that will prevent an accidental release onto or below the land surface.
- 6.6.6.3 Storage of commercial fertilizers and soil conditioners, in amounts greater than for normal household use, unless such storage is within a structure with an impermeable cover and liner designed to prevent the generation of contaminated run-off or leachate.
- 6.6.6.4 Commercial stockpiling of animal manure unless within a structure with an impermeable cover and liner designed to prevent the generation of contaminated run-off or leachate.
- 6.6.6.5 Earth removal, unless the final grading is greater than four (4) feet above the historical high groundwater mark as determined from monitoring wells and historical water table fluctuation data compiled by the United States Geological Survey within forty-five (45) days of removal. This does not include excavations for the construction of building foundations or the installation of utility works. All earth removal shall comply with Chapter 5, Section 32 of the Bylaws of the Inhabitants of the Town of Wilmington Revised and other applicable regulations.
- 6.6.6.6 Spill control provisions must be installed in the vicinity of chemical or fuel delivery points.
- 6.6.6.7 Storage of liquid hazardous materials, as defined in M.G.L. c. 21E, and liquid petroleum products, unless such storage is:
- a) above ground level; and
 - b) on an impervious surface; and
 - c) either
 - (i) in container(s) or above ground container(s) within a building; or;
 - (ii) outdoors in a covered container(s) or above ground tank(s) in an area that has a containment system designed to hold either 10% of the total possible storage capacity of all containers, or 110% of the largest container's storage capacity, whichever is greater.
- However, these storage requirements shall not apply to the replacement of existing tanks or systems for the keeping, dispensing or storing of gasoline provided the replacement is performed in a manner consistent with state and local requirements.
- 6.6.6.8 Storage of corrodible or dissolvable materials, unless in a structure with an impermeable cover and liner designed to prevent the generation of contaminated run-off or leachate.
- 6.6.6.9 A closed vapor recovery system is required for each structure which allows

the evaporation of hazardous materials into its interior to prevent discharge of contaminated condensate into the groundwater.

- 6.6.6.10 Disposal of hazardous wastes to be generated in quantities greater than those associated with normal household use (except as prohibited in Section 6.6.5.6), unless the applicant for a building permit can demonstrate the availability and feasibility of disposal methods which are in conformance with M.G.L., Chapter 21C, amended.
- 6.6.6.11 Drainage. All runoff from impervious surfaces shall be drained in a manner designed to prevent the contamination of groundwater and to recharge on site, to the extent possible. All runoff prior to discharge shall be preceded by oil, grease and sedimentation traps in accordance with the standard design of the Department of Public Works, to facilitate the removal of contaminants, where, in the opinion of the Town Engineer, such traps are warranted by reason of site conditions and design considerations. Dry wells shall be used only where other methods are not possible and shall also be preceded by oil, grease and sedimentation traps to facilitate removal of contaminants. Roof runoff from buildings may be drained into dry wells without traps unless the roof contains exposed mechanical equipment or is coated with asphalt.
- 6.6.6.12 Car and truck washes, unless connected to municipal sewers.
- 6.6.6.13 Self-service laundries, unless connected to municipal sewers.
- 6.6.7 **Special Permit Uses** - With the Groundwater Protection District the following uses shall be allowed only upon receipt of a special permit (unless prohibited in the underlying zoning district):
 - 6.6.7.1 Golf courses, either private or public.
 - 6.6.7.2 Uses whose principal activity is medical, testing and research laboratories that dispose of biological, radioactive, or chemical wastes.
 - 6.6.7.3 Metal plating, finishing or polishing establishments, electronic circuit boards manufacturing, and furniture refinishing establishments.
 - 6.6.7.4 Commercial photographic processing and commercial printing involving the use of volatile chemicals (other than xerographic reproduction).
 - 6.6.7.5 Enlargement or alteration of existing uses that do not conform to the Groundwater Protection District.
 - 6.6.7.6 Those activities that involve the handling of toxic or hazardous materials in quantities greater than those associated with normal household use, permitted in the underlying zoning (except as prohibited under Section 6.6.5.6). Such activities shall require a special permit to prevent contamination of groundwater.
 - 6.6.7.7 Any use that will render impervious more than 15% or 2,500 square feet of any lot, whichever is greater. A system for groundwater recharge must be provided which does not degrade groundwater quality. For non-residential

uses, recharge shall be by stormwater infiltration basins or similar system covered with natural vegetation, and dry wells shall be used only where other methods are infeasible. For all non-residential uses, all such basins and wells shall be preceded by oil, grease, and sediment traps to facilitate removal of contamination. Any and all recharge areas shall be permanently maintained in full working order by the owner.

- 6.6.7.8 The construction of dams or other water bodies or courses, created for swimming, fishing, or other recreational or agricultural uses. Such activities shall not adversely affect water quality or quantity.

6.6.8 **Special Permits**

- 6.6.8.1 **Special Permit Granting Authority.** The special permit granting authority (SPGA) under this By-Law shall be the Zoning Board of Appeals. Special permits shall be granted in accordance with M.G.L. Chapter 40A, Section 9 and Section 8.5 of the Zoning Bylaw. Such special permits shall be granted if the SPGA determines, in conjunction with the other Town agencies indicated in Section 8.5.9, that the intent of this By-Law, as well as its criteria, are met. In making such a determination, the SPGA shall give consideration to the simplicity, reliability and feasibility of the control measures proposed and the degree and threat to water quality which would result if the control measures fail.

- 6.6.8.2 **Special Permit Criteria.** Special permits under Section 6.6.6.1 shall be granted only if the SPGA determines that groundwater quality at the down gradient boundaries of the site will not be lowered in quality.

- 6.6.9 **Violations** - Written notice of any violations of this By-Law shall be provided by the Building Inspector to the owner of the premises with said notice specifying the nature of the violation(s) and a schedule of compliance, including cleanup of any spilled materials. This compliance schedule must be reasonable in relation to the public health hazard involved and the difficulty of compliance. In no event shall more than thirty (30) days be allowed for either compliance or finalization of a plan for longer-term compliance.

Enforcement - This By-Law shall be enforced by the Building Inspector or designated agent.

6.6.10 **Definitions -**

- 6.6.10.1 **Aquifer:** A geologic formation, group of formations or part of a formation which contains sufficient saturated permeable material to yield potable groundwater to public or private wells.
- 6.6.10.2 **Automobile Graveyard:** Any establishment or place of business which is maintained, used, or operated for storing, keeping, buying, or selling wrecked, scrapped, ruined, or dismantled motor vehicles or motor vehicle parts.
- 6.6.10.3 **Commercial Fertilizer:** Any substance containing one or more recognized plant nutrients which is used for its plant nutrient content and which is

designed for use, or claimed to have value in promoting plant growth, except unmanipulated animal and vegetable manure, marl, lime, limestone, wood ashes, and gypsum, and other products exempted by regulation of the commissioner.

- 6.6.10.4 **Cooling Water:** The water discharged from any system of condensation, air conditioning, cooling, refrigeration, or other system of heat transfer. Non-Contact Cooling Water shall mean water used for cooling that does not come into direct contact with any raw material, intermediate product, and waste product or finished product. Contact Cooling Water shall mean waste used in a process for cooling purposes which has come in direct contact with the process reactants or products.
- 6.6.10.5 **Deicing Chemicals:** Sodium chloride, calcium chloride, chemically treated abrasives or other chemicals used for the removal of snow or ice on roads.
- 6.6.10.6 **Groundwater:** All water beneath the surface of the ground in a saturated zone, including perched groundwater.
- 6.6.10.7 **Groundwater Protection District:** The zoning district defined to overlay other zoning districts in the Town of Wilmington. The groundwater protection district may include specifically designated recharge areas.
- 6.6.10.8 **Hazardous / Toxic Material:** Any substance or mixture of physical, chemical, or infectious characteristics posing a significant, actual, or potential hazard to water supplies or other hazards to human health if such substance or mixture were discharged to land or water in the Town of Wilmington. Toxic or hazardous materials include, without limitation; synthetic organic chemicals, petroleum products, heavy metals, radioactive or infectious wastes, acids and alkalis, and all substances defined a toxic or Hazardous under Massachusetts General Laws (M.G.L.) Chapter (c.) 2qC and 21E and 310 CMR 30.00, and also include such products as solvents and thinners in quantities greater than normal household use.
- 6.6.10.9 **Household Hazardous Waste Collection Centers:** Events operated pursuant to 310 CMR 30.390.
- 6.6.10.10 **Impervious Surface:** Material or structure on, above, or below the ground that does not allow precipitation or surface water to penetrate
- 6.6.10.11 **Industrial Waste:** Any solid, liquid or gaseous wastes and wastewater exclusive of sanitary sewage, resulting from an industrial or manufacturing process or discharged from a commercial, governmental or institutional facility or from the development, recovery or processing of natural resources.
- 6.6.10.12 **Junkyard:** Any establishment or place of business which is maintained, used, or operated for storing, keeping, buying, or selling junk, or for the maintenance or operation of an auto-mobile graveyard dumps.
- 6.6.10.13 **Land Application:** (1) applying to the surface of soil by spreading, spraying, or other similar means, and/or (2) mixing or working into the soil or beneath the surface of the soil within the root zone of the crop by

harrowing, plowing, rototilling, injecting, or other similar means.

- 6.6.10.14 **Leachable Wastes:** Waste materials, including solid wastes, sewage, sludge and agricultural wastes, that are capable of releasing waterborne contaminants to the surrounding environment.
- 6.6.10.15 **Normal household use:** Quantities of hazardous materials, as determined by the Building Inspector, which will require special handling and storage considerations.
- 6.6.10.16 **Open Dump:** The consolidation of waste from one or more sources at a common disposal site.
- 6.6.10.17 **Pesticide:** A substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, and any substance or mixture of substances intended for use as a plant regulator, defoliant, or desiccant.
- 6.6.10.18 **Principal Activity:** Any activity carried on as part of a principal use, which is defined in Section 1.3.16.
- 6.6.10.19 **Publicly Owned Wastewater Treatment Plants:** Any device or system used in the treatment (including recycling and reclamation) of municipal sewage or industrial wastes of a liquid nature which is owned by a public entity.
- 6.6.10.20 **Recharge Area:** Any porous, permeable geologic deposits, especially, but not exclusively, deposits of stratified sand and gravel, through which water from any source drains into and replenishes an aquifer, and includes any wetland or body of surface water surrounded by or adjacent to such area, together with the watershed of any wetland or body of surface water adjacent to such area.
- 6.6.10.21 **Sanitary Landfill:** A method of disposing of solid wastes on land.
- 6.6.10.22 **Septage:** The liquid, solid, and semi-solid content removed from privies, portable toilets, cesspools, holding tanks, or other sewage waste receptacles.
- 6.6.10.23 **Sludge:** The solid, semi-solid, and liquid residue that results from a process of wastewater treatment or industrial process by-product. This residue does not include grit, screening, or grease and oil which are removed to the headworks of a facility.
- 6.6.10.24 **Soil Conditioner:** Any manipulated substance or mixture of substances whose primary function is to modify the physical structure of soils so as to favorably influence plant growth. This does not include unmanipulated natural substance.
- 6.6.10.25 **Solid Wastes:** Useless, unwanted or discarded solid materials with insufficient liquid content to be free flowing, including, but not limited to, rubbish, garbage, scrap materials, junk, refuse, inert fill material and landscape refuse.

- 6.6.10.26 **Very Small Quantity Generators:** An operation that does limited generation of hazardous materials. The threshold quantities for a very small quantity generator are set forth in 310 CMR 30.353.
- 6.6.10.27 **Waste Oil Retention Facilities:** These are facilities for collecting waste oil that are required for businesses that sell motor oils. They are required by M.G.L., Chapter 21, Section 52A, with standards set forth in 310 CMR 22.22(2)(a)(4).
- 6.6.10.28 **Zone of Contribution:** The area surrounding a pumping well that encompasses all areas or features that supply groundwater recharge to the well.

ATTACHMENT D

MASSACHUSETTS GROUND WATER SUPPLY PROTECTION REGULATIONS

Zone II means that area of an aquifer that contributes water to a well under the most severe pumping and recharge conditions that can be realistically anticipated (180 days of pumping at approved yield, with no recharge from precipitation). It is bounded by the groundwater divides that result from pumping the well and by the contact of the aquifer with less permeable materials such as till or bedrock. In some cases, streams or lakes may act as recharge boundaries. In all cases, Zone II shall extend upgradient to its point of intersection with prevailing hydrogeologic boundaries (a groundwater flow divide, a contact with till or bedrock, or a recharge boundary).

Zone III means that land area beyond the area of Zone II from which surface water and groundwater drain into Zone II. The surface drainage area as determined by topography is commonly coincident with the groundwater drainage area and will be used to delineate Zone III. In some locations, where surface and groundwater drainage is not coincident, Zone III shall consist of both the surface drainage and the groundwater drainage areas.

22.21: Groundwater Supply Protection

The following requirements shall apply to all persons to protect groundwater used as sources of public drinking water supply from contamination:

(1) Source Approval

(a) No public water supply well or wellfield shall be constructed, expanded or replaced, and no water supply well or wellfield shall be placed on-line in a public water system, without the prior written approval of the Department. Persons seeking such approval are directed to follow the procedures set forth in the Drinking Water Program's "Guidelines and Policies for Public Water Systems," as amended. All requests for source approval, or approval of Zone II and III delineations, shall be submitted to the Department's Regional Office serving the area where the proposed well or wellfield is located. In determining whether to grant such approval, the Department shall apply the criteria set forth in 310 CMR 22.21 and the "Guidelines and Policies for Public Water Systems." Copies of the "Guidelines and Policies for Public Water Systems" are available for a nominal fee from the State Book Store, State House, Room 116, Boston, Massachusetts and 21 Elm Street, Springfield, Massachusetts.

(b) No public water supply well or wellfield designed to pump less than 100,000 gallons per day shall be constructed, expanded or replaced, or placed on-line, unless the Department finds in writing:

1. that the proponent has satisfactorily complied with the Drinking Water Program's "Guidelines and Policies for Public Water Systems," as amended;
2. that the source of water supply for the well or wellfield will achieve all applicable water quality standards set forth in the Massachusetts Drinking Water Regulations, 310 CMR 22.00;
3. that the proponent has properly determined the Zone I of the proposed well or wellfield;
4. that the Zone I of the proposed well or wellfield is owned or controlled by the supplier of water; and
5. that current and/or future land uses within the Zone I are limited to those directly related to the provision of public drinking water or will have no significant adverse impact on water quality. In addition, the Department may require the proponent to delineate

Zones II and III, and submit a groundwater monitoring well program plan for approval if the Department finds that existing or proposed land uses within the Interim Wellhead Protection Area of the proposed well or wellfield, determined in accordance with 310 CMR 22.21(1)(i), may pose a threat to water quality.

(c) No public water supply well or wellfield designed to pump 100,000 gallons per day or more shall be constructed, expanded or replaced unless the Department finds in writing:

1. that the proponent has met all the requirements set forth in 310 CMR 22.21(1)(b) 1. through 310 CMR 22.21(1)(b) 5.;
2. that the proponent has properly delineated the Zones II and III of the proposed well or wellfield;
3. that the proponent has submitted a groundwater monitoring well program plan designed to evaluate the water quality impacts of land uses within the Zone II of the proposed well or wellfield; and
4. that the proponent has drafted wellhead protection zoning or nonzoning controls that prohibit siting within the Zone II the land uses set forth in 310 CMR 22.21(2)(a) and 310 CMR 22.21(2)(b) unless designed in accordance with the performance standards specified therein, and has complied with the nitrate management requirement of 310 CMR 22.21(2)(d).

(d) No public water supply well or wellfield designed to pump 100,000 gallons per day or more shall be placed on-line unless:

1. a groundwater monitoring well program plan approved by the Department has been fully implemented (i.e. the monitoring wells are operational and the sampling frequency and parameters have been approved by the Department); and
2. the cities and towns in which any part of the Zone II of the proposed well or wellfield is located have wellhead protection zoning or nonzoning controls in effect that prohibit siting within the Zone II the land uses set forth in 310 CMR 22.21(2)(a) and 310 CMR 22.21(2)(b) unless designed in accordance with the performance standards specified therein. If the public water system is owned or controlled by an entity other than a municipality, the proponent must demonstrate to the Department's satisfaction that it has used its best efforts to have all cities and towns in which the Zone II is located establish such zoning or nonzoning controls.

(e) Notwithstanding 310 CMR 22.21(1)(d)(2), no public water supply well or wellfield designed to pump 100,000 gallons per day or more that will be used in a public water system owned or operated by a municipality, and is located within that municipality, shall be placed on-line unless the municipality has wellhead protection zoning or nonzoning controls in effect that prohibit siting within the Zone II the land uses set forth in 310 CMR 22.21(2)(a) and 310 CMR 22.21(2)(b) unless designed in accordance with the performance standards specified therein. If the Zone II of a municipal public water system extends into another municipality, the water supplier must also demonstrate to the Department's satisfaction that it has used its best efforts to have all cities and towns into which the Zone II extends establish such zoning or nonzoning controls within the Zone II.

(f) Notwithstanding any other regulatory provision to the contrary, the Department may waive the requirement that the proponent of a public water supply well or wellfield delineate the Zone II, provided:

1. the proponent has properly delineated the Zone III;

2. each city and town in which the Zone III of the proposed well or wellfield is located has wellhead protection zoning or nonzoning controls in effect that prohibit within the Zone III the land uses set forth in 310 CMR 22.21(2)(a) and 310 CMR 22.21(2)(b) unless designed in accordance with the performance standards specified therein;

3. the proponent has submitted a groundwater monitoring well program plan designed to evaluate the water quality impacts of land uses within the Zone III of the proposed well or wellfield; and

4. the desired relief can be granted without substantial detriment to the public good. In the event the Department waives the requirement that the proponent delineate the Zone II of a proposed public water supply well or wellfield, the supplier of water shall fully implement the groundwater monitoring well program plan approved by the Department before placing the well or wellfield on-line (i.e. the monitoring wells shall be operational and the sampling frequencies and parameters shall have been approved by the Department).

(g) In determining whether a proponent has properly determined the Zone I or delineated the Zones II or III of a well or wellfield, or adequately designed a groundwater monitoring well program plan, the Department shall apply the criteria set forth in the Drinking Water Program's "Guidelines and Policies for Public Water Systems", as amended.

(h) Any person who receives Department approval for a public water supply well or wellfield designed to pump 100,000 gallons per day or more that is not a replacement withdrawal point shall obtain a permit for any withdrawal, in accordance with the Water Management Act, M. G. L. c. 21G, and 310 CMR 36.00.

(i) If the Department has not approved the Zone II for a public water supply well or wellfield, the Department will utilize the Interim Wellhead Protection Area as defined in 310 CMR 22.02.

(j) The proponent may meet the requirements set forth in 310 CMR 22.21(1)(d) 2. by demonstrating that existing rights in perpetuity or for a specific period of years stated in the form of a restriction, easement, covenant or condition in a deed or other instrument prohibit the siting of the land uses set forth in 310 CMR 22.21(2)(a) and 310 CMR 22.21(2)(b) within the Zone II.

(k) The proponent may meet the requirements set forth in 310 CMR 22.21(1)(f) 2. by demonstrating that existing rights in perpetuity or for a specific period of years stated in the form of a restriction, easement, covenant or condition in a deed or other instrument prohibit the siting of the land uses set forth in 310 CMR 22.21(2)(a) and 310 CMR 22.21(2)(b) within the Zone III.

(l) No public water supply well or wellfield designed to pump 100,000 gallons per day or more approved after the effective date of 310 CMR 22.21 shall remain on-line following the amendment or repeal of a wellhead protection zoning or nonzoning control pertinent to that well or wellfield, or the expiration of any such period of years stated in a deed or other instrument approved pursuant to 310 CMR 22.21(1)(j) or 310 CMR 22.21(1)(k), unless the Department finds in writing that the supplier of water meets the requirements set forth in 310 CMR 22.21(1)(d) or 310 CMR 22.21(1)(e), whichever is applicable, or grants a variance in accordance with 310 CMR 22.21(5). Any source of supply removed from service shall be maintained by the supplier of water as an emergency source of water supply unless the Department finds in writing that the source is not needed by the supplier of water for present or future water supply.

(m) Notwithstanding any other regulatory provision to the contrary, the Department may exempt a supplier of water from any of the requirements set forth in 310 CMR 22.21(1)(d) while a state of water emergency declared pursuant to M. G. L. c. 21G, § 15, is in effect. In the event that the Department grants such an exemption, the well or wellfield shall remain on-line only for the

(2) Wellhead Protection Zoning and Nonzoning Controls

(a) Wellhead protection zoning and nonzoning controls submitted to the Department in accordance with 310 CMR 22.21(1), shall collectively prohibit the siting of the following land uses within the Zone II, or Zone III if the criteria of 310 CMR 22.21(1)(f) have been met, of the proposed well or wellfield, whichever is applicable:

1. landfills and open dumps, as defined in 310 CMR 19.006;
2. landfills receiving only wastewater residuals and/or septage (wastewater residuals "monofills") approved by the Department pursuant to M. G. L. c. 21, § 26 through 53; M. G. L. c. 111, § 17; M. G. L. c. 83, §§ 6 and 7, and any regulations promulgated thereunder.
3. automobile graveyards and junkyard, as defined in M. G. L. c. 140B, § 1;
4. stockpiling and disposal of snow or ice removed from highways and streets located outside of Zone II that contains sodium chloride, chemically treated abrasives or other chemicals used for snow and ice removal;
5. petroleum, fuel oil and heating oil bulk stations and terminals, including, but not limited to, those listed under Standard Industrial Classification (SIC) Codes 5171 and 5983. SIC Codes are established by the U. S. Office of Management and Budget and may be determined by referring to the publication, Standard Industrial Classification Manual and any subsequent amendments thereto;
6. treatment or disposal works subject to 314 CMR 5.00 for wastewater other than sanitary sewage. This prohibition includes, but is not limited to, treatment or disposal works related to activities under the Standard Industrial Classification (SIC) Codes set forth in 310 CMR 15.004(6) (Title 5), except the following:
 - a. the replacement or repair of an existing system(s) that will not result in a design capacity greater than the design capacity of the existing system(s); and
 - b. treatment works approved by the Department designed for the treatment of contaminated ground or surface waters and operated in compliance with 314 CMR 5.05(3) or 5.05 (13); and c. publicly owned treatment works, or POTWs.
7. facilities that generate, treat, store or dispose of hazardous waste that are subject to M. G. L. c. 21C and 310 CMR 30.000, except for the following:
 - a. very small quantity generators, as defined by 310 CMR 30.00;
 - b. household hazardous waste collection centers or events operated pursuant to 310 CMR 30.390; c. waste oil retention facilities required by M. G. L. c. 21, § 52A; and d. treatment works approved by the Department designed in accordance with 314 CMR 5.00 for the treatment of contaminated ground or surface waters.
8. any floor drainage systems in existing facilities, in industrial or commercial process areas or hazardous material and/or hazardous waste storage areas, which discharge to the ground without a DEP permit or authorization. Any existing facility with such a drainage system shall be required to either seal the floor drain (in accordance with the state plumbing code, 248 CMR 2.00), connect the drain to a municipal sewer system (with all appropriate permits and pre-treatment), or connect the drain to a holding tank meeting the requirements of all appropriate DEP regulations and policies.

(b) Wellhead protection zoning and nonzoning controls submitted to the Department in accordance with 310 CMR 22.21(1), shall collectively prohibit the siting of the following land uses within the Zone II, or Zone III if the criteria of 310 CMR 22.21(1)(f) have been met, of the proposed well or wellfield, whichever is applicable, unless designed in accordance with the performance standards specified below in 310 CMR 22.21(2)(b) 1. through 7.:

1. storage of sludge and septage, as defined in 310 CMR 32.05, unless such storage is in compliance with 310 CMR 32.30 and 310 CMR 32.31;
2. storage of sodium chloride, chemically treated abrasives or other chemicals used for the removal of ice and snow on roads, unless such storage is within a structure designed to prevent the generation and escape of contaminated runoff or leachate;
3. storage of commercial fertilizers, as defined in M. G. L. c. 128, § 64, unless such storage is within a structure designed to prevent the generation and escape of contaminated runoff or leachate;
4. storage of animal manures, unless such storage is covered or contained in accordance with the specifications of the Natural Resource Conservation Service;
5. storage of liquid hazardous materials, as defined in M. G. L. c. 21E, and/or liquid petroleum products unless such storage is: a. above ground level, and b. on an impervious surface, and c. either
 - (i) in container(s) or above-ground tank(s) within a building, or
 - (ii) outdoors in covered container(s) or above-ground tank(s) in an area that has a containment system designed and operated to hold either 10% of the total possible storage capacity of all containers, or 110% of the largest container's storage capacity, whichever is greater; however, these storage requirements shall not apply to the replacement of existing tanks or systems for the keeping, dispensing or storing of gasoline provided the replacement is performed in a manner consistent with state and local requirements;
6. the removal of soil, loam, sand, gravel or any other mineral substances within four feet of the historical high groundwater table elevation (as determined from monitoring wells and historical water table fluctuation data compiled by the United States Geological Survey), unless the substances removed are redeposited within 45 days of removal on site to achieve a final grading greater than four feet above the historical high water mark, and except for excavations for the construction of building foundations or the installation of utility works, or wetland restoration work conducted in accordance with a valid Order of Condition issued pursuant to M. G. L. c. 131, § 40;
7. and land uses that result in the rendering impervious of more than 15% or 2500 square feet of any lot, whichever is greater, unless a system for artificial recharge of precipitation is provided that will not result in the degradation of groundwater quality.

(c) The proponent shall give written notice to the Department of any and all local by-laws, ordinances, rules and regulations that allow for the grant of a variance, waiver or exemption from any of the wellhead protection zoning or nonzoning controls submitted to the Department for approval in accordance with 310 CMR 22.21 before placing the proposed well or wellfield on-line.

(d) The Department may require as part of the Source Approval process requirements of 310 CMR 22.21(1) (c), the completion of a nitrogen loading analysis for the new well's Zone II. A nitrogen loading analysis shall be required when, in the Department's judgement, the type and

level of land use within the Zone II or other information reasonably indicates that nitrate concentrations in the well may or will exceed five mg/l nitrate.

Public water systems required by their Water Management Act permits issued under 310 CMR 36.00 to define Zone IIs and implement land use controls shall be required to conduct a nitrate loading analysis as part of the Zone II delineation for wells that have exceeded five mg/l nitrate. Public water systems whose required nitrate loading analysis predicts >five mg/l nitrate or whose well has exceeded five mg/l nitrate must prepare a nitrate management plan, subject to the Department's approval, which seeks to maintain nitrate levels below five mg/l for the subject well in the long-term.

(3) Requirements for all New and Existing Groundwater Sources

(a) Sources for Community Systems. Any person who obtains Department approval for a community public water system that relies entirely upon groundwater sources shall provide additional wells and pumping equipment, or the equivalent, capable of producing the same volumes and quality of water as the system's primary well or wellfield at all times, or shall provide the storage capacity equivalent to the demand of at least two average days if approved by the Department, unless an interconnection with another public water system has been provided which can adequately provide the quantity and quality of water needed water.

(b) Zone I. All suppliers of water shall acquire ownership or control of sufficient land around wells, infiltration galleries, springs and similar sources of ground water used as sources for drinking water to protect the water from contamination. This requirement shall generally be deemed to have been met if all land within Zone I is under the ownership or control of the supplier of water. Current and future land uses within the Zone I shall be limited to those land uses directly related to the provision of the public water system or to other land uses which the public water system has demonstrated have no significant impact on water quality. The Department may require greater distances or permit lesser distances than the Zone I distances set forth at 310 CMR 22.02, if the Department deems such action necessary or sufficient to protect public health. No new underground storage tanks for petroleum products shall be located within Zone I

(4) Inspection and Enforcement

(a) Each supplier of water shall annually survey the land uses within Zones I, II and III, or within the Interim Wellhead Protection Area, for each well and wellfield under its control.

(b) A supplier of water shall submit to the Department an annual report that identifies for each well and wellfield under its ownership and control the presence of new land uses within the Zones I, II and III, or within the Interim Wellhead Protection Area, that could adversely impact water quality. The annual reports shall be submitted on Department approved forms by January 31 for the preceding calendar year. The annual reports shall be submitted to the Department's Office of Water Supply at the Regional Office that serves the area where the well or wellfield is located.

(c) A supplier of water shall notify the local board of health or health department within 48 hours of detection of any violation of a statutory or regulatory requirement that may adversely effect its water supply or distribution system, and shall notify the inspector of buildings, building commissioners or local inspector, or the person charged with enforcement of local zoning and nonzoning controls, within 48 hours of detecting any violation of applicable land use restrictions that may adversely effect its water supply or distribution system. Such notices should include the following information:

1. the name of the person in violation;
2. the location where the violation is occurring;

3. the date when the violation was observed;
4. a description of the violation;
5. the legal citation of the requirement or restriction violated; and
6. a description of the actions necessary to remove or remedy the violation and the deadlines for taking such actions. In addition, the supplier of water shall notify the Department's Office of Water Supply at the appropriate Regional Office upon giving any notice required by 310 CMR 22.21(4)(c). (d) A supplier of water shall take appropriate action to determine whether the violation has been removed or remedied and shall notify the Department's Office of Water Supply at the appropriate Regional Office upon finding that the violation has been removed or remedied.

(5) Variances

- (a) The Department may grant a variance from the requirements of 310 CMR 22.21(1)(e) to a proponent that, despite its best efforts, is unable to adopt one or more of the requirements set forth in 310 CMR 22.21(2)(a) and 310 CMR 22.21(2)(b) if the Department finds that strict compliance with such requirements would result in an undue hardship and would not serve to further the intent of 310 CMR 22.21.
- (b) The Department shall consider the following factors in making the finding necessary to grant a variance pursuant to 310 CMR 22.21(5):
 1. the reasonableness of available alternatives to the proposed well or wellfield;
 2. the overall effectiveness of existing land use controls and other protective measures on the proposed well or wellfield and any other water supply sources used by the supplier of water;
 3. the nature and extent of the risk of contamination to the proposed well or wellfield that would result from the granting of the variance; and
 4. whether the variance is necessary to accommodate an overriding community, regional, state or national public interest. These factors need not be weighed equally, nor must all of these factors be present for the Department to grant a variance. The presence of any single factor may be sufficient for the granting of a variance.
- (c) A variance granted pursuant to 310 CMR 22.21(5) shall be conditioned on such monitoring or other requirements as the Department may prescribe.
- (d) Requests for variances shall be made in writing and clearly state the provision or requirement from which the variance is sought and the reasons and facts that support the granting of a variance, and shall include an evaluation of the reasonableness of alternatives to the proposed well or wellfield.
- (e) Within 14 days of filing a request for variance under 310 CMR 22.21(5)(a), the person filing the request shall notify persons served by the supplier of water by direct mail and by publication on not less than three consecutive days in a newspaper of general circulation in the service area of the supplier of water. The notice shall include:
 1. the provision or requirements from which the variance is being sought;
 2. the identity of the proponent of the well or wellfield;

3. the identity of the person requesting the variance, the address where a copy of the request for variance will be available for public inspection, and the times it will be available; and

4. a statement that the Department will receive written comments concerning the request from the public for a 30 day period commencing on the last date of newspaper publication.

(f) Each person submitting a request for variance shall submit to the Department a copy of the public notice required by 310 CMR 22.21(5)(e) and affidavits attesting to the fact that the notices have been given. The Department will receive written comments concerning the request from the public for a 30 day period commencing on the last date of newspaper publication.

(g) Within 30 days of the close of the comment period, each person requesting a variance under 310 CMR 22.21(5)(a) shall respond in writing to all reasonable public comments received by the Department.

(h) The Department may schedule a public hearing on any request for variance submitted in accordance with 310 CMR 22.21(5) if it determines on the basis of the public comments received that such a hearing is in the public interest. In the event that the Department schedules a hearing, the person filing the request shall notify persons served by the supplier of water of the hearing by publication on not less than three consecutive days in a newspaper of general circulation in the service area of the supplier of water. In addition, the person filing the request shall notify each person who submitted written comment concerning the request to the Department by direct mail. The person filing the request shall submit to the Department a copy of the public notices required by 310 CMR 22.21(5)(h), and an affidavit attesting to the fact that the notices have been given, prior to the hearing. Persons filing a request for a variance under 310 CMR 22.21(5) shall pay the full the cost of all notifications and public hearing scheduled.

(i) Within 30 days of the grant of a variance under 310 CMR 22.21(5), any person that receives a variance shall notify persons served by the supplier of water of the granting of the variance, including any conditions imposed by the Department, by direct mail and by publication on not less than three consecutive days in a newspaper of general circulation in the service area of the supplier of water. The person that receives the variance shall submit to the Department a copy of the public notices and an affidavit attesting to the fact that the notices have been given upon completion of the public notification.