Department of Environmental Protection

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DEVAL L PATRICK Governor

TIMOTHY P. MURRAY Lieutenent Gevernor

February 10, 2012

James R. Merriam, Town Administrator Town of Harwich

732 Main Street Harwich, Massachusetts 02184

Dear Mr. Merriam:

RE: HARWICH

RE: 5 Bells Neck Road

Request for Regulatory Guidance

REPENSE PRICHARDS

HITCHEN!

AGMINISTRATOR'S OFFICE

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SULLIVAN JR.

Secretary

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The Massachusetts Department of Environmental Protection, Bureau of Waste Site Cleanup (MassDEP) sends this letter to you in response to your request for regulatory guidance relative to groundwater contamination identified at property owned by the Town of Harwich (Town) located at 5 Bells Neck Road in Harwich (the Town Property). In addition, you have requested information on the status of response actions being conducted under the Massachusetts Contingency Plan (MCP) at the Dennisport Automatic Coin Laundry, 13 Hall Street, Dennis, Release Tracking Number [RTN] 4-0012832 (the Laundry Site) and information relative to the potential risks associated with exposure to the citizens of Harwich from contamination at the Town property and the potential impacts to natural resources in the area.

Historically, (since 1997) MassDEP has overseen response actions performed under the MCP by others and has conducted publicly-funded response actions to address groundwater contamination identified in the vicinity of the Town Property. This contaminated groundwater has been determined to be migrating from a release that occurred at the Laundry Site which is located approximately 2,000 feet southwest (upgradient) of the Town Property. Chlorinated solvents, including but not limited to tetrachloroethylene (PCE) and trichloroethylene (TCE) were released at the Laundry Site and have impacted the groundwater. A plume of groundwater contaminated with PCE and TCE is migrating in a northeasterly direction from the Laundry Site, ultimately discharging into the Herring River near the intersection of Smith Street and North Road.

POTENTIAL LIABILITY

The Massachusetts Oil and Hazardous Material Release Prevention and Response Act, M.G.L. c. 21E, Section 5, makes current owners or operators of a site from or at which there is or has been a release or threat of release of oil and/or hazardous material liable for response action costs. Therefore, since contamination has come to be located on the Town property, the Town of Harwich has liability under M.G.L. c. 21E, and the Town can be considered a Potentially Responsible Party (PRP). However, MassDEP recognizes that the owners of property that has been impacted by contamination from an upgradient or upstream source, although strictly liable under M.G.L. c. 21E, may not be able to meet the requirements of the MCP because they do not control the source of contamination. To address this, MassDEP has established Downgradient Property Status (DPS) provisions to allow property owners in this circumstance the ability

to provide MassDEP with information demonstrating that contamination on their property is coming from an upgradient property. If a PRP receives a Notice of Responsibility (NOR) from MassDEP for the contamination on their property and the recipient of the NOR can demonstrate that the contamination is solely coming from an upgradient/upstream source, a DPS Submittal in accordance with the MCP could be made to MassDEP. As soon as this submittal is received by MassDEP, the DPS becomes effective. Deadlines for Tier Classification and Comprehensive Response Actions under the MCP and the assessment of annual compliance fees (ACFs) are suspended.

Since MassDEP did not issue a NOR to the Town for the contamination at the Town Property, the Town is not required to provide a DPS submittal to MassDEP. However, there may be reasons for the Town to voluntarily file a DPS submittal. Please note that a one-time fee of \$1,000 must accompany any DPS Submittal to MassDEP.

Downgradient Property Status includes requirements for downgradient property owners to follow to maintain compliance with this status. These requirements are outlined below. Failure to comply with these requirements may result in the termination of Downgradient Property Status.

REQUIREMENTS FOR DOWNGRADIENT PROPERTY STATUS

The general requirements for establishing and maintaining Downgradient Property Status are as follows:

- Downgradient property owners/operators must comply with MCP notification requirements;
- Downgradient property owners/operators must submit a Licensed Site Professional Opinion indicating that the source of contamination is located upgradient or upstream of the property and, through groundwater migration or surface water, has come to be located at the downgradient property;
- Downgradient property owners/operators must certify that they have not contributed to the release, nor done anything to make release conditions worse;
- Downgradient property owners/operators must certify that they have no affiliation with the
 upgradient property owner(s)/operator(s) who may have been the owners/operators of the
 source of the release;
- Any prior response actions taken by the entity filing the DPS Submittal must have been performed in compliance with the requirements and procedures in M.G.L. c. 21E and the MCP;
- Entities providing a Downgradient Property Status Submittal to MassDEP must use a
 Downgradient Property Status transmittal form; provide a copy of the Downgradient Property
 Status Submittal to abutting upgradient and downgradient property owners/operators, and to
 any owner(s)/operator(s) known or suspected to be a source of the release; and inform local
 officials of the availability of the Downgradient Property Status Submittal; and
- Downgradient property owners/operators must provide reasonable site access to persons conducting response actions in order to maintain Downgradient Property Status.

Although one of the requirements listed above is to comply with the notification requirements of the MCP, notification is not required for the contamination detected on the Town Property pursuant to 310 CMR 40.0317(16) since the contamination is related to and consistent with the types, nature, exposure potentials and quantities of the contaminants associated with the release at the Laundry Site for which notification has previously been provided to MassDEP.

However, the Town must comply with the MCP notification requirements if new environmental conditions that require Notification pursuant to 310 CMR 40.0300 at the Town Property, (i.e. <u>Releases Which Require Notification Within Two Hours</u> or 310 CMR 40.0313, <u>Releases Which Require Notifications Within 72 Hours</u>) are discovered.

STATUS OF RESPONSE ACTIONS

The Laundry Site has had two documented releases of oil and /or hazardous materials, a release of chlorinated solvents (RTN 4-12832) and a release of petroleum (RTN 4-22941). A description of each release is provided below:

Petroleum Release (RTN 4-0022941): On September 30, 2010, a 0.125-inch thick layer of non-aqueous-phase liquid (NAPL) was measured in monitoring well MW-4(I). The NAPL was later identified as a petroleum product. Based on the configuration of the monitoring well in which the NAPL was measured, pump-tests of the well and groundwater quality testing in this and other wells in the area, it was concluded that the NAPL entered the monitoring well from a release on the ground surface in the vicinity of the well. It was observed that the parking lot was seal-coated prior to the gauging event in which the NAPL was discovered.

The NAPL was removed and a Class B-1 Response Action Outcome (RAO) was submitted to MassDEP. A Class B-1 RAO applies to sites where remedial actions have not been conducted because a Level of No Significant Risk exists and an Activity Use Limitation is not necessary to maintain a level of No Significant Risk. MassDEP is currently conducting an audit of the Class B-1 RAO submittal to ensure that the response actions were conducted following the requirements of the MCP:

Chlorinated solvent release (RTN 4-0012832): On February 11, 1997, MassDEP issued a Notice of Responsibility (NOR) to the Dennisport Coin Operated Laundry for a release PCE and TCE to the groundwater in the vicinity of the Laundry. Extensive hydrogeologic assessments, including assessment activities conducted by MassDEP, delineated an area of contaminated groundwater extending from the Laundry property to the Herring River along the eastern boundary of the Town of Harwich. During these assessment activities, an attempt was made to identify sensitive receptors such as private water supply wells and occupied residential dwellings and schools at which the indoor air may be impacted by the contaminated groundwater. At the time of the assessment, no impacted sensitive receptors were identified.

On April 20, 2006, a Class C-1 RAO was submitted to MassDEP for the Laundry Site. A Class C-1 RAO applies to any disposal site where, after the Identification, Evaluation and Selection of Comprehensive Remedial Action Alternatives, a condition of No Substantial Hazard exists and it is concluded that response actions to achieve a Permanent Solution are not technically and economically feasible. A condition of No Substantial Hazard means a level of control of each identified substance of concern at a site or in the surrounding environment such that no such substance of concern shall pose a significant risk of harm to health, safety, public welfare or the environment if it continued to be present for several years. MassDEP is currently conducting an audit of the Class C-1 RAO submittal to ensure that the RAO submittal complies with the requirements of the MCP.

A Notice of Audit was issued to the owner of the Laundry Site on January 3, 2012. Copies of the Notice of Audit Findings letters will be sent to the Town of Harwich Chief Municipal Officer and Board of Health upon completion of the audits.

POTENTIAL RISKS TO HUMAN HEALTH AND THE ENVIRONMENT

The releases of chlorinated solvents and petroleum at the Laundry Site could only pose a risk to human health if people were exposed to the contamination. The potential exposure routes for volatile organic compounds released to the groundwater are through drinking water or through the impact to indoor air of occupied buildings.

The extent of the petroleum released at the Laundry Site was localized and does not impact drinking water or indoor air of occupied buildings. The area of groundwater contaminated with PCE and TCE is not within a Zone II for a Public Water Supply Well, therefore there is no potential impact to any Public Water Supply Wells. An inventory of private water supply wells was compiled as part of the assessment activities conducted by MassDEP and no private drinking water supply wells were identified within the contaminant plume. Irrigation wells were identified within the areal footprint of the groundwater plume. It is unclear from the information submitted to MassDEP whether the irrigation wells are screened to intercept contaminated groundwater. However, since solvents readily volatilize and disperse, the use of these irrigation wells would not likely pose a risk.

The potential impact to indoor air through vapor intrusion was also evaluated as part of the assessment activities conducted by MassDEP. Throughout most of the area where the groundwater is impacted by chlorinated solvents, the contamination is at depth within the aquifer, with a clean groundwater lens above the contaminated groundwater. This clean groundwater lens prevents volatile organic compounds, such as PCE and TCE from impacting indoor air.

As the contaminated groundwater migrates towards Herring River, the contaminated groundwater rises as groundwater discharges to the river and the shallow portion of the aquifer becomes impacted (the clean lens no longer exists). Therefore, in the area around the Herring River (primarily along North Road and Smith Street), indoor air samples were collected from several residences to evaluate the potential impact. At that time it was determined that there was no impact to the indoor air of residences within this area of groundwater contamination.

MassDEP will review more current information during the audits conducted on the Laundry Site to confirm that private drinking water supply wells and the indoor air at occupied residential dwellings is not being impacted by this release.

Please contact me at (508) 946-2871 or Jan Drake at (508) 946- 2841 if you have any questions related to this letter.

Sincerely

Leonard Pinaud, Chief State & Federal Site Management Section Bureau of Waste Site Cleanup

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ec: Millie Garcia-Serrano, BWSC Deputy Regional Director

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