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**IMMEDIATE RESPONSE ACTION
STATUS REPORT & PLAN MODIFICATION**

**MURPHY'S WASTE OIL SERVICE, INC.
252 SALEM STREET
WOBURN, MASSACHUSETTS
DEP RTN #3-22144**

Prepared for:

**Murphy's Waste Oil Service, Inc.
252 Salem Street
Woburn, MA 01801**

Prepared by:

**Clean Harbors Environmental Services, Inc.
392 Libbey Industrial Parkway
Weymouth, Massachusetts 02189**

February 17, 2003

Superfund Records Center
Wells 68H
INDEX: 002
OTHER: 457912

CHES Job No. EN183186

**Lisa McNeil
Project Scientist**

**Charles J. McCreery, CPG, LSP
Senior Project Manager**

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**MURPHY'S WASTE OIL SERVICE, INC.
252 SALEM STREET
WOBURN, MASSACHUSETTS**

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392 LIBBEY INDUSTRIAL PARKWAY * WEYMOUTH, MA 02189
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IMMEDIATE RESPONSE ACTION STATUS REPORT & PLAN MODIFICATION

Murphy's Waste Oil Service, Inc.
252 Salem Street
Woburn, Massachusetts

INTRODUCTION

This Immediate Response Action (IRA) Status Report and Plan Modification has been prepared by Clean Harbors Environmental Services, Inc. (CHES) to document response actions relative to the presence of separate-phase oil discovered in two monitoring wells at the Murphy's Waste Oil Service, Inc. (Murphy's) facility located at 252 Salem Street in Woburn, Massachusetts (the "site"). The site is owned by Old Oil Realty Trust and is leased by Murphy's, a transfer, storage, and disposal facility for waste oil. Figure 1 shows the location of the site. An IRA Transmittal Form (BWSC-105) to accompany this Plan is presented in Appendix A.

INCIDENT DESCRIPTION

Murphy's Waste Oil Service, Inc. holds a RCRA Part B Permit issued by the Massachusetts Department of Environmental Protection (DEP) Bureau of Waste Prevention pursuant to 310 CMR 30.000, the Hazardous Waste Regulations. Pursuant to requirements of the Part B Permit, Murphy's developed a Groundwater Monitoring Plan (GMP), dated April 8, 2002. The GMP included results of a comprehensive gauging event performed at the Murphy's site on November 5, 2001. Separate-phase oil was detected in three site wells, MW-7 (0.24 foot), MW-16 (0.44 foot), and MR-2SS (0.01 foot). The separate-phase product was considered reflective of historic contamination that had been identified during previous Corrective Action Investigation performed pursuant to the Part B Permit between 1988 and 1998. These data were reported to the DEP Business Compliance Branch consistent with the manner of documenting previous investigation findings.

On August 26, 2002, the DEP Bureau of Waste Prevention issued a Notice of Noncompliance (NON) to CHES (the parent company of Murphy's) for failure to notify the DEP Bureau of Waste Site Cleanup (BWSC) of the new site conditions. Specifically, the measured thickness of oil in wells MW-7 and MW-16 exceeded the 72-hour notification requirement for liquid non-aqueous phase liquid (LNAPL) accumulation greater than ½-inch on groundwater in a monitoring well.

Notification was made to the BWSC on September 25, 2002, and Release Tracking Number (RTN) 3-22144 was issued for the new site condition. Verbal approval was given by the BWSC to conduct an Immediate Response Action (IRA), consisting of gauging of the LNAPL thickness in the wells, initially on a semi-monthly basis, and removal of LNAPL when it is encountered. The notification and approved IRA tasks were documented in an IRA Plan, dated November 22, 2002.

PREVIOUS IMMEDIATE RESPONSE ACTIONS

During the first gauging event on September 30, 2002, samples of LNAPL were collected from wells MW-7 and MW-16 for laboratory analysis of polychlorinated biphenyl compounds (PCBs by EPA Method 8082) and total petroleum hydrocarbon (TPH by GC/FID) to identify the petroleum type. The analytical results were presented in the IRA Plan. PCB compounds (Aroclor 1260) were detected in the oil samples from wells MW-7 and MW-16 at concentrations of 3.7 mg/kg and 19 mg/kg, respectively. The hydrocarbon products found in MW-7 and MW-16 were a close match to each other, and most closely resembled the laboratory's reference standard for lubricating oil.

During the gauging event on October 11, 2002, groundwater samples were collected from wells MW-7 and MW-16 for analysis of PCB, extractable petroleum hydrocarbons (EPH) and volatile petroleum hydrocarbon (VPH). The laboratory results were included in the IRA Plan. PCBs were not detected in either of the samples above the laboratory Practical Quantitation Limit (PQL) of 1 ug/l. VPH were not detected in the sample from MW-7. However, VPH were detected in the sample from MW-16 at a total concentration of 1,961 ug/l, and VPH target compounds were detected at a total concentration of 66 ug/l. EPH were detected in the samples from MW-7 and MW-16 at total concentrations of 618 ug/l and 13,703 ug/l, respectively. EPH target compounds were detected in the sample from MW-16 at a total concentration of 11.6 ug/l. Based on these results, it is possible that the recent samples from MW-16 contained a sheen from the separate-phase product.

STATUS OF IMMEDIATE RESPONSE ACTION

The initial semi-monthly gauging frequency was intended to determine if LNAPL persists in wells MW-7 and MW-16, or if the occurrence was due to the low water table resulting from regional drought conditions. Wells MW-7 and MW-16 are gauged using an electronic oil/water interface probe. Oil is purged from the wells after gauging using a polyethylene bailer. The recovered oil is being accumulated in a dedicated drum staged at the site. Table 1 presents a summary of the gauging data.

Product thickness has been observed to decrease in both wells since the initial event on September 30, 2002. Measurable LNAPL has not been detected in MW-7 since the October 31, 2002 gauging event; and MW-16 has not contained LNAPL since December 2, 2002.

During each gauging event, the wetland adjacent to MW-7 and MW-16 is checked for the possible presence of an oil sheen. Water was not present in the wetland during the site checks on September 30 and October 31, 2002. Water was present during the site check on November 8, and no sheen was observed. Ice had formed on surface water in the wetland by the December 2 site check. During a site check on the afternoon of January 10, 2003, the ice adjacent to wells MW-7 and MW-16 was broken to allow inspection of the underlying surface water. Surface water adjacent to MW-7 was clear with no sheen, however, a slight coalescing sheen was observed in a small area along the wetland bank adjacent to MW-16. The sheen was generated while breaking the ice and was contained by the ice. It is unknown if the sheen would persist in the absence of ice.

Notification of the new site condition was made to BWSC at 2:00 PM on January 10, 2003. BWSC verbally approved deployment of absorbent boom to contain the sheen. Absorbent pads were



placed in the area of the sheen by Murphy's personnel immediately after notification was made to DEP.

On Monday, January 13, 2003, CHES representatives returned to evaluate site conditions and deploy additional absorbent materials. The ice was broken, and surface water was exposed along a 25-foot long section of the wetland bank adjacent to MW-16. However, the sheen was observed only along a 5-foot long section of the bank. As part of the ongoing IRA, three 8-foot sections of 8-inch diameter absorbent boom were placed in the wetland along the bank, centered on the area where the sheen was observed. Photograph 1 in Appendix B shows the wetland, bank, and absorbent boom.

NEED FOR CONTINUING IMMEDIATE RESPONSE ACTIONS

Continuation of the IRA may be required to address conditions specified in Section 40.0400 of the Massachusetts Contingency Plan (MCP). The IRA must be continued if the site conditions which triggered notification (i.e. LNAPL thickness greater than ½-inch and presence of a sheen on surface water) still exist. An IRA must be performed if a condition of Imminent Hazard is determined to exist at the site. An Imminent Hazard, as defined at 310 CMR 40.0006, is a hazard which would pose a significant risk of harm to health, safety, public welfare or the environment if it were present for even a short period of time. An IRA must address Critical Exposure Pathways (CEP). CEPs are exposure pathways via ingestion or dermal absorption of drinking water, or inhalation of vapors, by human receptors at school and daycare facilities or residential dwellings. IRAs must also be performed to address conditions of Substantial Release Migration (SRM), defined in Section 40.0006 of the MCP.

LNAPL accumulations are not presently observed at a thickness greater than ½-inch at the site. However, additional monitoring of the affected wells may be warranted to assess the effect of seasonal fluctuations in water table elevation on LNAPL accumulation. As of the last site visit (January 13, 2003), a slight coalescing sheen was still observed inside the floating absorbent boom adjacent to well MW-16. As such, the IRA must be continued to address the sheen condition. The presence of a sheen on surface water, if attributed to the migration of LNAPL on groundwater, constitutes a condition of SRM also requiring continuation of the IRA.

Neither of the two site conditions subject of this IRA are considered to involve a CEP or otherwise present an Imminent Hazard. It should be noted that public access to the areas of wells MW-7 and MW-16 and the adjacent wetlands is currently restricted by existing chain link fences.

IRA PLAN MODIFICATION

As part of the ongoing IRA, a limited subsurface investigation will be performed to assess the lateral extent of LNAPL around MW-16 and to determine if sheening observed on surface water in the adjacent wetland is associated with the LNAPL accumulation. Four soil borings will be advanced around MW-16 in locations shown on Figure 2. The borings will be advanced using a GeoProbe drill rig mounted on a rubber-track vehicle. The borings will be continuously sampled to a depth of approximately 12 feet below grade. Soil samples from the borings will be examined and field-screened with a photoionization detector. Samples will be selected from the borings for laboratory analysis of EPH and VPH.



The four borings will be completed with installation of small-diameter (1 inch) PVC monitoring well which will be screened across the ground water table to allow for evaluation of the presence of LNAPL. These new wells will be gauged during the periodic site checks as part of the ongoing IRA.

SCHEDULE

Following BWSC approval of this IRA Plan Modification, CHES will proceed with obtaining other necessary permits to conduct the limited subsurface investigation, including Digsafe and review by the Woburn Conservation Commission. It is anticipated that the work will be implemented within 14 days after receiving all necessary approvals and permits.

After completion of the limited subsurface investigation and subsequent well gauging events, CHES will make recommendations to mitigate the adverse site conditions and close the IRA.

In accordance with the NON, a copy of this IRA Status Report and Plan Modification is being submitted to the DEP Bureau of Waste Prevention concurrently with submittal to the BWSC.

C:\My Documents\CJM-Active\Murphy's Active\IRA Status\Text (Rev. 01).doc

TABLES

TABLE 1

WELL MONITORING FIELD DATA

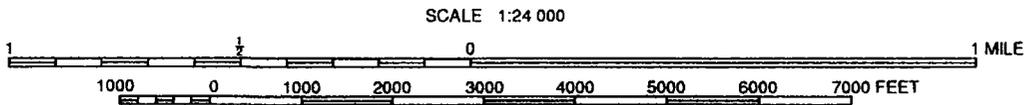
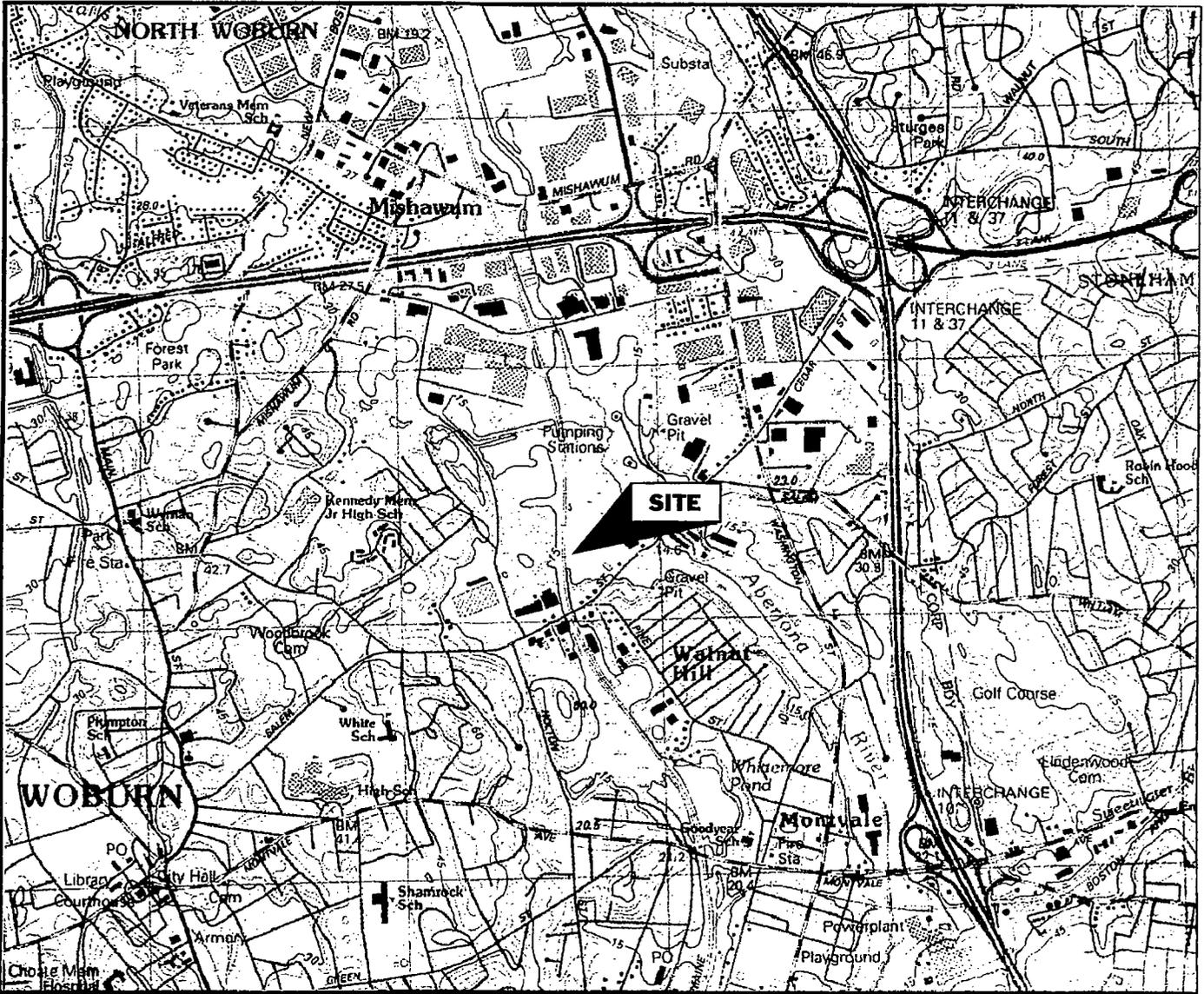
Murphy's Waste Oil Facility
252 Salem Street
Woburn, Massachusetts

Date	MW-7		MW-16	
	Water Level	Oil Thickness	Water Level	Oil Thickness
11/5/01	42.99	0.24	42.75	0.44
9/30/02	43.55	0.59	43.29	0.35
10/11/02	43.81	0.01	43.43	0.40
10/31/02	44.15	0.02	43.92	0.33
11/8/02	44.28	0.00	44.13	0.21
12/2/02	44.58	0.00	44.30	0.02
12/18/02	45.55	0.00	45.17	0.00
1/10/03	---	---	45.05	0.00
1/13/03	45.41	0.00	44.98	0.00

Notes:

1. Water level not corrected for oil thickness.

FIGURES



QUADRANGLE LOCATION

NATIONAL GEODETTIC VERTICAL DATUM OF 1929



COORDINATES		A RAO STATEMENT					
UTM: 324682mE, 4706254mN		ISSUE	DESCRIPTION	DRWN	CHKD	APPR	DATE
LONGITUDE: 71°07' 60" W							
LATITUDE: 42°29' 27" N							

BASE MAP: UNITED STATES GEOLOGICAL SURVEY (USGS), TOPO Wildflower Productions.



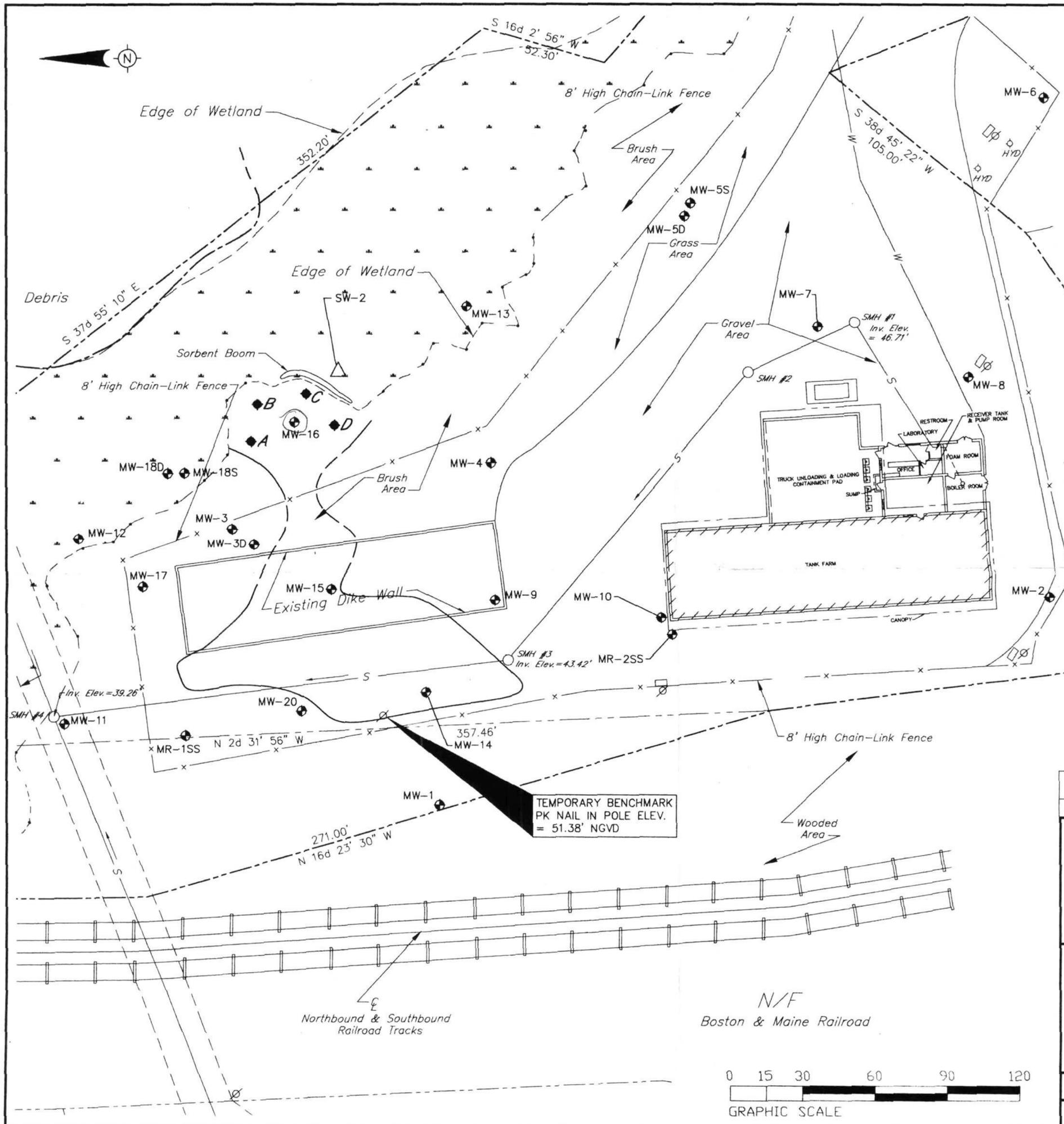
Environmental Services, Inc.
Remedial Technologies Division

392 LIBBEY INDUSTRIAL PARKWAY
WEYMOUTH, MASSACHUSETTS 02189
(781) 849-1800

Murphy's Waste Oil Service
252 Salem Street
Woburn, Massachusetts
LOCUS MAP

PROJECT NO.: EN183186
SCALE: AS SHOWN

DWG. NO. **FIGURE 1**



NOTE:

1. PROPERTY LINE AND FEATURES TAKEN FROM "PLAN OF LAND IN WOBURN, MASSACHUSETTS" BY NORTHEAST SURVEY, INC. 730 BOSTON POST ROAD, SUDBURY, MASSACHUSETTS 01776, SHEET 1 OF 1, JOB NO. 30688, DATED APRIL 1, 1988. WETLAND DELINEATED ON MURPHY'S PROPERTY BY SANFORD ECOLOGICAL SERVICES.

LEGEND

- ◆ A PROPOSED SOIL BORING
- EXTENT OF TPH IMPACTED SOILS
- - - - - EXTENT OF TPH IMPACTED SOILS (INFERRED)
- MR-2SS ● EXISTING MONITORING WELL
- PROPERTY LINE
- S SEWER LINE
- W WATER LINE
- UTILITY POLE
- UTILITY BOX
- E.P. EDGE OF PAVEMENT
- HYDRANT
- SMH SEWER MANHOLE

A	PRELIMINARY	K-MCC	CTM	CTM	2/24/03
ISSUE	DESCRIPTION	DRWN	CHKD	APPR	DATE
<p>Clean Harbors ENVIRONMENTAL SERVICES, INC. ENVIRONMENTAL CONSTRUCTION & TECHNICAL SERVICES DIVISION 392 Libbey Industrial Parkway Weymouth, Massachusetts 02189 Telephone (781) 849-1800</p>					
<p>TITLE MURPHY'S WASTE OIL SERVICE, INC. 252 SALEM STREET WOBURN, MASSACHUSETTS 01801</p> <p style="text-align: center;">PROPOSED BORING LOCATIONS</p>					
PROJECT NO.	EN183186	DRAWING NO.	170-C-33		
SCALE	1"=30'				





Figure 1: 8-inch diameter absorbent boom placed along bank of wetland adjacent to MW-16. Pink flag is approximate location where sheen was observed. Photo taken on January 13, 2003.

APP. A



IMMEDIATE RESPONSE ACTION (IRA)
TRANSMITTAL FORM

Release Tracking
Number

3 - 22144

Pursuant to 310 CMR 40.0424 - 40.0427 (Subpart D)

A. RELEASE OR THREAT OF RELEASE LOCATION:

Release Name:
(optional)

Street: 252 Salem Street Location Aid: _____

City/Town: Woburn ZIP Code: 01801-0000

- Check here if a Tier Classification Submittal has been provided to DEP for this Release Tracking Number.
- Check here if this location is Adequately Regulated, pursuant to 310 CMR 40.0110-0114.
- Specify Program: CERCLA HSWA Corrective Action Solid Waste Management RCRA State Program (21C Facilities)

Related Release Tracking Numbers That This IRA
Addresses: _____

B. THIS FORM IS BEING USED TO: (check all that apply)

- Submit an IRA Plan (complete Sections A, B, C, D, E, H, I, J and K).
 Check here if this IRA Plan is an update or modification of a previously approved written IRA Plan. Date Submitted: _____
- Submit an Imminent Hazard Evaluation (complete Sections A, B, C, F, H, I, J and K).
- Submit an IRA Status Report (complete Sections A, B, C, E, H, I, J and K).
- Submit a Request to Terminate an Active Remedial System and/or Terminate a Continuing Response Action(s) Taken to Address an Imminent Hazard (complete Sections A, B, C, D, E, H, I, J and K).
- Submit an IRA Completion Statement (complete Sections A, B, C, D, E, G, H, I, J and K).

You must attach all supporting documentation required for each use of form indicated, including copies of any Legal Notices and Notices to Public Officials required by 310 CMR 40.1400.

C. RELEASE OR THREAT OF RELEASE CONDITIONS THAT WARRANT

IRA: Identify Media and Receptors Affected: (check all that apply)

Air Groundwater Surface Water Sediments Soil

Wetland Storm Drain Paved Surface Private Well Public Water Supply Zone 2 Residence

School Unknown Other Specify _____

Identify Conditions That Require IRA, Pursuant to 310 CMR 40.0412: (check all that apply)

72 Hour Reporting Condition(s) Substantial Release Migration 2 Hour Reporting Condition(s) Other Condition(s)

Describe greater than 1/2-inch of LNAPL on groundwater in monitoring well.

Sheen on surface water.

Identify Oils and Hazardous Materials Released: (check all that apply)

Others Specify: Polychlorinated biphenyl compounds in oil at 19 mg/kg. Oils Chlorinated Solvents Heavy Metals

D. DESCRIPTION OF RESPONSE ACTIONS: (check all that apply)

- Assessment and/or Monitoring Only
- Excavation of Contaminated Soils
- Re-use, Recycling or Treatment
 - On Site Off Site Est. Vol.: _____ cubic yards
 - Describe _____
 - Store On Site Off Site Est. Vol.: _____ cubic yards
 - Landfill Cover Disposal Est. Vol.: _____ cubic yards
- Removal of Drums, Tanks or Containers
 - Describe _____
- Deployment of Absorbent or Containment Materials
- Temporary Covers or Caps
- Bioremediation
- Soil Vapor Extraction
- Structure Venting System
- Product or NAPL Recovery
- Groundwater Treatment Systems
- Air Sparging
- Temporary Water Supplies

SECTION D IS CONTINUED ON THE NEXT PAGE.



IMMEDIATE RESPONSE ACTION (IRA)
TRANSMITTAL FORM

Release Tracking
Number

3 - 22144

Pursuant to 310 CMR 40.0424 - 40.0427 (Subpart D)

D. DESCRIPTION OF RESPONSE ACTIONS (continued):

- Removal of Other Contaminated Media
- Temporary Evacuation or Relocation of Residents
- Specify Type and Volume: _____
- Other Response Actions Describe _____
- Fencing and Sign Posting
- Check here if this IRA involves the use of Innovative Technologies (DEP is interested in using this information to aid in creating an Innovative Technologies Clearinghouse).
- Describe Technologies: _____

E. TRANSPORT OF REMEDIATION WASTE: (if Remediation Waste has been sent to an off-site facility, answer the following questions)

Name of Facility: None to date

Town and State: _____

Quantity of Remediation Waste Transported to Date: _____

F. IMMINENT HAZARD EVALUATION SUMMARY: (check one of the following)

- Based upon an evaluation, an Imminent Hazard exists in connection with this Release or Threat of Release.
- Based upon an evaluation, an Imminent Hazard does not exist in connection with this Release or Threat of Release.
- Based upon an evaluation, it is unknown whether an Imminent Hazard exists in connection with this Release or Threat of Release, and further assessment activities will be undertaken.
- Based upon an evaluation, it is unknown whether an Imminent Hazard exists in connection with this Release or Threat of Release. However, response actions will address those conditions that could pose an Imminent Hazard.

G. IRA COMPLETION STATEMENT:

Check here if future response actions addressing this Release or Threat of Release will be conducted as part of the Response Actions planned for a Site that has already been Tier Classified under a different Release Tracking Number, or a Site that is identified on the Transition List as described in 310 CMR 40.0600 (i. e., a Transition Site, which includes Sites with approved Waivers). These additional response actions must occur according to the deadlines applicable to the earlier Release Tracking Number (i. e., Site ID Number).

State Release Tracking Number (i. e., Site ID Number) of Tier Classified Site or Transition Site: _____

If any Remediation Waste will be stored, treated, managed, recycled or reused at the site following submission of the IRA Completion Statement, you must submit either a Release Abatement Measure (RAM) Plan or a Phase IV Remedy Implementation Plan, along with the appropriate transmittal form, as an attachment to the IRA Completion Statement.

H. LSP OPINION:

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this transmittal form, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of (i) the standard of care in 309 CMR 4.02(1), (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and (iii) the provisions of 309 CMR 4.03(5), to the best of my knowledge, information and belief,

> if Section B of this form indicates that an Immediate Response Action Plan is being submitted, the response action(s) that is (are) the subject of this submittal (i) has (have) been developed in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) complies(y) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> if Section B of this form indicates that an Imminent Hazard Evaluation is being submitted, this Imminent Hazard Evaluation was developed in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, and the assessment activity(ies) undertaken to support this Imminent Hazard Evaluation complies(y) with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000;

> if Section B of this form indicates that an Immediate Response Status Report is being submitted, the response action(s) that is (are) the subject of this submittal (i) is (are) being implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) complies(y) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> if Section B of this form indicates that an Immediate Response Action Completion Statement or a Request to Terminate an Active Remedial System and/or Terminate a Continuing Response Action(s) Taken to Address an Imminent Hazard is being submitted, the response action(s) that is (are) the subject of this submittal (i) has (have) been developed and implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) complies(y) with the identified provisions of all orders, permits, and approvals identified in this submittal.

SECTION H IS CONTINUED ON THE NEXT PAGE.



IMMEDIATE RESPONSE ACTION (IRA)
TRANSMITTAL FORM

Pursuant to 310 CMR 40.0424 - 40.0427 (Subpart D)

Release Tracking Number

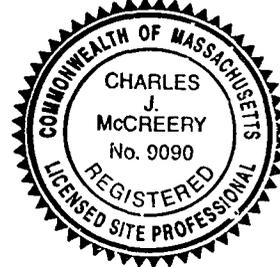
3 - 22144

H. LSP Opinion (continued):

I am aware that significant penalties may result, including, but not limited to, possible fines and imprisonment, if I submit information which I know to be false, inaccurate or materially incomplete.

Check here if the Response Action(s) on which this opinion is based, if any, are (were) subject to any order(s), permit(s) and/or approval(s) issued by DEP or EPA. If the box is checked, you MUST attach a statement identifying the applicable provisions thereof.

LSP Name: Charles J. McCreery LSP #: 9090 Stamp:
Telephone: 781-849-1800 Ext.: 8399
FAX: 781-794-1760 (optional)
Signature: [Handwritten Signature]
Date: 2/25/03



I. PERSON UNDERTAKING IRA:

Name of Organization: Murphy's Waste Oil Service, Inc.
Name of Contact: William F. Connors Title: Vice President
Street: P.O. Box 859048
City/Town: Braintree State MA ZIP Code: 02185-9048
Telephone: 781-849-1800 Ext.: 1357 FAX: (optional)

Check here if there has been a change in the person undertaking the IRA.

J. RELATIONSHIP TO RELEASE OR THREAT OF RELEASE OF PERSON UNDERTAKING IRA: (check one)

- RP or PRP Specify Owner Operator Generator Transporter Other RP or PRP:
Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c. 21E, s. 2)
Agency or Public Utility on a Right of Way (as defined by M.G.L. c. 21E, s. 5(j))
Any Other Person Undertaking IRA Specify Relationship:

K. CERTIFICATION OF PERSON UNDERTAKING IRA:

I, William F. Connors, attest under the pains and penalties of perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

By: [Handwritten Signature] Title: Vice President
For Murphy's Waste Oil Service, Inc. Date: 2/21/03
(print name of person or entity recorded in Section I)

Enter address of the person providing certification, if different from address recorded in Section I:
Street:
City/Town: State ZIP Code:
Telephone: Ext. FAX: (optional)

YOU MUST COMPLETE ALL RELEVANT SECTIONS OF THIS FORM OR DEP MAY RETURN THE DOCUMENT AS INCOMPLETE. IF YOU SUBMIT AN INCOMPLETE FORM, YOU MAY BE PENALIZED FOR MISSING A REQUIRED DEADLINE.

APP. B



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

ARGEO PAUL CELLUCCI
Governor

JANE SWIFT
Lieutenant Governor

BOB DURAND
Secretary

EDWARD P. KUNCE
Acting Commissioner

Certified Mail: _____

March 5, 2002

Mr. Steven Fleming, P.E., CHMM
Safety-Kleen Corporation
11923 Tramway Drive
Sharonville, OH 45241

Re: Marlborough MA Facility, Remedial Action Plan-Approval With Modifications

Dear Mr. Fleming:

The Massachusetts Department of Environmental Protection, Bureau of Waste Prevention, Business Compliance Division (Department) has completed its review of the Revised Modified Remedial Action Plan (MRAP) dated, October 2001 for Safety-Kleen's Marlborough Facility MA. Barton & Loguidice (B&L) of Syracuse, New York prepared the MRAP on behalf of Safety-Kleen (S-K) and submitted it to the Department in response to the requirements listed in our letters dated May 31, 2001, August 28, 2001 and May 13, 1999.

The MRAP proposes bioremediation of residual contaminated soils by injecting oxygen release compounds (ORC) and nutrients into previously assessed areas of contaminated subsoils at the Facility. S-K believes that additional remedial excavations are not feasible to obtain a permanent remedy. The MRAP proposes ground water quality monitoring and closure confirmation soil sampling at the completion of the process. MRAP's objective is to achieve a permanent solution equivalent to a Response Action Outcome (RAO) that reduces concentrations in soils and groundwater to levels that achieve a condition of no significant risk or approaches background. The Department **Approves** the MRAP with the following conditions and comments:

- (1) Application wells such as MW-1, MW-3, and PZ-6 shall not be used for ground water sampling.
- (2) New wells shall be installed downgradient of treatment areas to minimize data gaps from potential impacted ground water quality. The new overburden well screens shall be placed at appropriate depths to monitor any potential changes from residual soil contaminated zones.
- (3) Any existing wells must have their well screens within and below contaminated soil depths.
- (4) Previous installed wells that had contaminated soil formations collapsed around well screens are not suitable for monitoring.
- (5) Closure sampling of contaminated soils in the former UST area shall also apply to all other impacted areas at the facility. The soil samples shall be taken at appropriate depths where previous contaminated soils were found.
- (6) If monitoring wells show that ground water is impacted above appropriate standards beyond impacted treatment areas, S-K shall:

This information is available in alternate format by calling our ADA Coordinator at (617) 574-6872.

DEP on the World Wide Web: <http://www.magnet.state.ma.us/dep>

Printed on Recycled Paper

Should you have any questions regarding this Decision please contact Mr.Ralph Fine at (617) 292-5866.

Sincerely,

Ralph Fine, Geologist, LPG

Jeffrey H. Chormann, Branch Chief
Bureau of Waste Prevention
Business Compliance Division
Compliance Assessment Branch

JHC/RF/rf

(Attachment)

Cc: Mr. Ed Benoit
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morphs

- Gwmp - Also need to connect on the Comp
SP
Voc

1. needs approval from Department for existing facilities operations -
- therefore proposed Analytes for existing:

propose VPH & EPH with suitable targets we can designate what these should be in metals, chlorinated

by ~~prop~~ 2 year quarterly than evaluated low flow and oil/water interface probe to pump wells.

need to have sufficient # of wells to measure groundwater conditions need to have sufficient wells to determine up gradient etc.

comply with section 2 of License conditions in 30.664(6) (7) & (9)

prop. elimination of indicator permeate during pump up could vary - may reduce pump permeates.

add an additional BK well

same all wells separately & add BK well's risk

1. Migration off property can be in
 - need to monitor - or is SW problem.
 - Still historical release from Muffly
 - Did not sample for VOC in soil in deep bony wells High metal content PDS levels

next steps further assessment of site - tie in with Ketch for O&A - Upland. check lease

water levels in 1995 were higher $\pm 6''$ than now - probable release of oil from oil cont. food - need BNA.