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**U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION I**

OFFICE OF SITE REMEDIATION AND RESTORATION

FIVE-YEAR REVIEW

**CANNONS ENGINEERING CORPORATION SUPERFUND
SITE
BRIDGEWATER, MASSACHUSETTS**

SEPTEMBER 2000

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I. INTRODUCTION

A. AUTHORITY STATEMENT

The United States Environmental Protection Agency (EPA) Region I conducted this five year review pursuant to CERCLA Section 121(c), NCP Section 300.400(f)(4)(ii), and OSWER Directives 9355.7-02 (May 23, 1991), 9355.7-02A (July 26, 1994), and 9355.7-03A (December 21, 1995). It is a statutory review. The purpose of the five year review is to ensure that a remedial action remains protective of public health and the environment and is functioning as designed. This document will become part of the Site file. This is the second five year review for this Site. This review will evaluate the Management of Migration (MOM) and Source Control remedial measures at the Site.

B. SITE BACKGROUND/CHARACTERISTICS

The Cannons Engineering Corporation, Bridgewater (CEC) Site is located on First Street in a small industrial park in the western part of the Town of Bridgewater, Plymouth County, Massachusetts. The Site is comprised of two parcels of land, Lot 4 and Lot 3A, which occupy approximately four to six acres of land. Current land use in the immediate vicinity of the Site consists of industrial development to the north and east, vacant industrial lots to the south and a major four lane highway to the west.

A portion of the Site (Lot 4) was purchased by CEC in 1974 and was developed to handle, store, and incinerate chemical wastes. The Site locus is shown in Figure 1 and the Site/sampling map is shown as Figure 2. The CEC facility operated from 1974 until 1980 when the State of Massachusetts revoked its license to operate because of alleged hazardous waste reporting and handling violations. Between 1980 and 1982, EPA and Massachusetts Department of Environmental Protection (MADEP) conducted Site investigations, conducted removal actions, performed sampling and analysis and confirmed the presence of chemical contamination at the Site. Subsequently, EPA used this information to rank the Site, which was added to the National Priorities List (NPL) in December of 1982.

There are three other Superfund sites in Region 1 related to the Bridgewater Site. The Cannons Engineering Corporation Plymouth Harbor Site is in Plymouth, MA, the Tinkham's Garage Site is in Londonderry, NH, and the Gilson Road Site is in Nashua, NH. The Plymouth Harbor Site was deleted from the NPL in September, 1992.

In March 1988, Region 1 issued a Record of Decision (ROD) for the Site, as discussed below. Since 1989, a group of Potentially Responsible Parties (the Settling Parties) have been performing the remedial design/remedial action at the Site pursuant to a Consent Decree. The source control portion of the remedial action was completed in 1991 and the management of migration portion of the remedial action is ongoing.

In October of 1996, Osterman Propane Company, a small propane distribution operation, relocated and redeveloped Lot 4, the former CEC facility. Osterman graded for a driveway, installed a 30,000 gallon propane storage tank and equipment, installed electrical and water lines and an office building that includes a septic system and additional groundwater monitoring wells. Osterman's redevelopment relies on Town supplied drinking water which is available at the Site.

The second parcel of land that makes up the Site, Lot 3A, was also redeveloped. In the spring of 1998, a communication tower was installed on this parcel. See section IIB1 for further discussion.

II. DISCUSSION OF REMEDIAL OBJECTIVES

As documented in the ROD, dated March 1988, the remedial action for the Site was separated into two parts; a source control portion and a management of migration portion. A description of which follows:

A. *REMEDIAL OBJECTIVES FOR SOURCE CONTROL*

For more detailed information of the source control remedial objectives, see the March 1988 ROD for the Site.

In summary, the source control portion of the remedy provided for fencing the entire Site area to restrict access, on-site thermal aeration (also known as thermal desorption) of upland area and wet area soils contaminated with volatile organic compounds (VOCs) to cleanup levels established after additional sampling, and off-site incineration of polychlorinated biphenyl (PCB) contaminated soils in excess of 9 parts per million (ppm).

Early in the remedial design process, a groundwater contaminant leaching modeling study was performed by Canonie Environmental (1989), the Settling Parties' contractor, for the contaminants of concern and results were compared with the promulgated Safe Drinking Water Act standards (MCLs and Maximum Contaminant Level Goals [MCLGs]). Remedial action goals for soils in the source areas were set in order to prevent the migration of the contaminants of concern beyond the perimeter of the Site at levels above these standards.

In addition, on-site buildings and tanks were to be decontaminated and removed and soils under those structures, along with other soil locations, were to be characterized. Any contaminated soils that were determined to require treatment based on a threat to human health and the environment were to be remediated by either thermal desorption or incineration. Impacts to the on-site wetlands and uplands from the excavation of contaminated soils were mitigated through restoration of the affected areas. The Site

restoration activities were essentially complete in December of 1990. All fill material, used for restoration was tested and found to be free of contamination.

Additional VOCs and SVOCs of concern were identified following post-demolition sampling after the buildings were removed. The soil Remediation criteria is summarized in the *Site Interim Close Out Report*, dated September 30, 1991. Table 1 includes the final design soil cleanup levels established for the Remedial Action.

1. ***Evaluation of Source Control***

On February 8, 1990 cleanup activities were undertaken by the Settling Parties with oversight by EPA and the MADEP. Four hundred tons of PCB contaminated soil were incinerated off site, 11,300 tons of soils containing VOCs and SVOCs were treated on site, 1,200 tons of steel and 1,300 tons of concrete were shipped for recycling, 360 cubic yards of hazardous debris were sent to an approved disposal facility, and 480 cubic yards of non hazardous debris were shipped to a demolition materials landfill.

Post-excavation confirmatory sampling verified that the remedial design excavation levels were achieved during VOC and PCB contaminated soil removal. Post-treatment confirmatory sampling verified that the thermal aeration treatment levels were achieved following VOC-contaminated soil treatment. Almost all of the post treatment confirmatory samples showed no contamination present at detection levels, which were well below the required treatment levels. The remaining samples showed the treatment process met the required treatment levels.

The Superfund Site Interim Close Out Report, dated September 30, 1991, documents that all quality assurance and quality control procedures were followed and the post remedial confirmatory sampling verified that all ROD soil cleanup objectives have been achieved and cleanup actions specified in the ROD have been completed. Results of the air monitoring, confirmatory sampling, and the backfilling of the Site with clean-fill material provide further assurance that the source control remedy is protective of human health and the environment.

On September 15, 2000, potential human health risks for soil contamination for PAH's and PCB's were recalculated for worker and trespasser scenarios. The cancer and non-cancer risks associated with the PCB and PAH cleanup levels of 9 ppm and 3 ppm, respectively, were within EPA's acceptable risk range. Attachment 1 provides further discussion of these protectiveness findings.

B. Remedial Objectives for Management of Migration

For a more detailed explanation of the management of migration remedial objectives, see the March 1988 ROD for the Site.

The management of migration portion of the remedy includes restricting the use of groundwater at the Site, installing additional monitoring wells, and implementing a long term water quality monitoring program to observe the presence, distribution and migration of contaminants, if any. The ROD stated that removal and treatment of contaminated soils will eliminate sources of further groundwater contamination and that the remediation of the low levels of contamination found in the groundwater will meet drinking water standards through monitored natural attenuation.

The ROD specified federal Maximum Contaminant Levels (MCLs) as appropriate groundwater cleanup targets for the following contaminants identified in the Remedial Investigation: benzene (5 ppb), TCE (5 ppb) and vinyl chloride (2 ppb).

The groundwater monitoring program was designed to assure that contamination above the MCL's does not migrate off-site and that contaminant levels on-site naturally attenuate over time. The ROD stated that the effects of natural attenuation are expected to reduce contaminants in the groundwater to cleanup target levels in 15 to 20 years.

Also, the ROD specified as part of the management of migration remedy that institutional controls (e.g., deed and land use restrictions) will be required to prevent the use of on-site groundwater for all water use purposes and to protect human health.

1. EVALUATION OF MANAGEMENT OF MIGRATION

Additional groundwater monitoring wells were installed and the first year long term groundwater monitoring program began in June of 1991. The groundwater monitoring has been performed in accordance with the approved *Long Term Ground Water Monitoring Plan, (Plan) GEI Consultants, Inc., June 1992*. This plan establishes the sampling frequency, sampling locations, analysis and media to be sampled for a twenty year period.

During the week of September 18, 2000, the consultants for the Settling Parties performed annual groundwater sampling. EPA's contractor was onsite for oversight activities and to obtain split samples. On September 25, 2000, the Remedial Project Manager for EPA visited the Site to review site conditions, along with MADEP's project manager.

Review of data from the groundwater sampling indicates as follows: groundwater contaminant levels have generally decreased; natural attenuation of

contaminants is occurring, and monitored natural attenuation of contaminants is expected to continue to occur over time. Review of the data from the Long Term Monitoring Plans indicates that the Site's groundwater contamination is not migrating off-site. Attachment 2 provides additional discussion and review of the groundwater monitoring, and is based on a comparison of historical groundwater data to currently promulgated federal drinking water standards.

In 1991, the required institutional controls were implemented. At that time, two Declarations of Restrictions (the Restrictions) that run with the land were recorded in the Plymouth County Registry of Deeds, one for Lot 3A and one for Lot 4. These Restrictions prohibit all uses of the groundwater, as well as excavation below the level of the groundwater (unless prior approval of such excavation is provided by EPA or MADEP). In addition, because soil cleanup levels do not allow for unrestricted use, the Restrictions limit the use of the Site to certain commercial and industrial uses (and with respect to Lot 4, certain additional municipal uses).

Both parcels that comprise the Site have been redeveloped for industrial/commercial purposes since the source control portion of the cleanup was completed.

In 1996, Osterman Propane Company, a small propane distribution company, redeveloped Lot 4, the former CEC facility. Osterman and EPA entered into a Prospective Purchaser Agreement (PPA) to address Osterman's liability concerns. Under the PPA, Osterman agreed, among other things, to comply with the Restrictions, to exercise due care at the Site, and to submit to EPA all development plans that require excavation of soils. In addition, in connection with the PPA, a certification was recorded in the Plymouth County Registry of Deeds, which generally specifies that propane distribution is a permissible use of the parcel acquired by Osterman and that Osterman could install its own groundwater monitoring wells. To date, Osterman has complied with the Restrictions for the Site, which have served to prevent exposure to contaminated groundwater and/or soils both during and after the parcel was redeveloped.

The second parcel within the Site, Lot 3A, was also redeveloped and put into use. The property owner leased this property to Omnipoint Communications Enterprises, Inc. (Omnipoint). From about March 15, 1998, until April 15, 1998, Omnipoint constructed and installed a communications tower at this parcel. Neither the property owner nor Omnipoint sought prior approval from EPA or MADEP in connection with the installation of the tower. As a result of EPA and MADEP's review of documentation that was later submitted by Omnipoint, it was determined that the Restriction for this parcel had been violated. Specifically, without prior knowledge or approval from EPA or MADEP and during the installation of the communication tower, soils were excavated below the levels of

the groundwater; groundwater from the excavation pit was dewatered; and the withdrawn groundwater was discharged onto the premises.¹ In addition, the property owner's lease did not include a required notification to the lessee concerning the Restrictions.

In November 1999, EPA notified the property owner and Omnipoint of the violation of the Restrictions and required the property owner and Omnipoint to refrain from all further soil excavation below the water table and withdrawal of groundwater. In addition, EPA instructed the property owner and Omnipoint to amend all leases and subleases to include the Restrictions and provide a copy of such revised documents to EPA. Finally, EPA provided written notice to the Town of Bridgewater (the Town) of the violation (along with copies of both Restrictions) and requested ongoing coordination with the Town with respect to the monitoring of activities at the Site. Apparently, the Town had approved various permits that were necessary to construct the communications tower at Lot 3A without due consideration of the prohibitions contained in the Restrictions.

Initially, it would seem that the Restrictions were not completely successful on this parcel. However, now that Omnipoint is fully aware of the existence of the Restrictions, no further compliance problems have occurred. Since November 1999, Omnipoint has submitted revised lease agreements to the Agency that include the Restrictions. Moreover, Omnipoint has initiated contact with EPA with respect to the planned upgrade of its communications tower, which may involve the removal of contaminated groundwater and soils. EPA and MADEP expect to be involved in the future review of Omnipoint's plans to upgrade the communications tower, to the extent that such plans include excavation below the level of the groundwater. While the institutional controls were violated in connection with the installation of the communication tower, EPA will continue to work with property owner and Omnipoint to ensure future compliance with the Restrictions.

¹ Monitoring Well #14 is located approximately forty feet southeast and side gradient of the newly installed communications tower. Review of the groundwater data from the September 1998 and 1999 sampling (performed after construction of the communications tower) reveals no detectable levels of VOC's in this well.

III. RECOMMENDATIONS

A. *THE FIRST (1995) FIVE YEAR REVIEW*

The previous five year review for the Site recommended the chain link fence surrounding the Site be repaired, PCB sediment sampling, seep/standing water sampling (if present) and one round of groundwater and surface water samples for metals analysis prior to Site closure.

Repairs to the fence are unnecessary, considering that the Site has been redeveloped since the previous five year review was performed. Osterman's redevelopment of Lot 4 necessitated that various portions of fencing be removed and or relocated.

PCB sediment sampling and seep/standing water sampling are performed in accordance with *Long Term Ground Water Monitoring Plan, (Plan) GEI Consultants, Inc. , June 1992.*

Lastly, one round of groundwater and surface water samples for metals analysis will be conducted prior to Site closure.

B. *The Second (2000) Five Year Review*

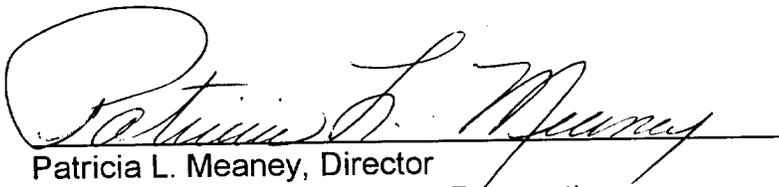
In order to ensure that the institutional controls/deed restrictions are not violated, it is recommended that more frequent Site visits be performed. This should assist in determining if there is a violation(s) to the Restrictions.

IV. STATEMENT OF PROTECTIVENESS

I certify that the remedies selected for this Site remain protective of human health and the environment.

V. NEXT FIVE-YEAR REVIEW

Hazardous substances will remain at the Site above health-based levels after the completion of all remedial actions. Pursuant to CERCLA section 121(c), NCP section 300.400(f)(4)(ii), and OSWER Directives 9355.7-02 (May 23, 1991), 9355.7-02A (July 26, 1994), and 9355.7-03A (December 21, 1995), EPA must continue to conduct statutory Five-Year Reviews at the Site. The next five year review will be conducted September of 2005 and will evaluate the performance of all remedial activities at the Site.


Patricia L. Meaney, Director
Office of Site Remediation & Restoration

9/28/00
Date

ATTACHMENTS



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
ONE CONGRESS STREET SUITE 1100
BOSTON, MASSACHUSETTS 02114-2023**

Memorandum

Date: September 15, 2000

Subj: Cannons Bridgewater, Five-year Review

From: Margaret McDonough, Environmental Scientist

To: Derrick Golden, RPM

I have reviewed the protectiveness of the PCB and PAH cleanup levels of 9 ppm and 3 ppm, respectively for the worker and trespasser scenarios. The cancer and non-cancer risks associated with these cleanup levels are within the EPA acceptable risk range. It is assumed that no other chemicals are present at levels which would pose a significant potential risk.

The attached spreadsheets (Attachments 1 and 2 provide a summary of the exposure parameters used to calculate potential risks at this site. A summary of the risk associated with the cleanup levels set for the two contaminants of concern is as follows:

Scenario	Contaminants	Cancer Risk	Hazard Index
Trespasser	PAHs	2.5×10^{-6}	0.0001
	PCBs	2.1×10^{-6}	0.4
	SUM	5×10^{-6}	0.4
Worker	PAHs	6×10^{-6}	0.0002
	PCBs	5×10^{-6}	0.5
	SUM	2×10^{-5}	0.5

The cancer and noncancer risks associated with PAHs are overestimated because I have assumed that all PAHs present have a toxicity equal to that of the individual PAH which has the highest toxicity value (Benzo(a)pyrene and naphthalene, respectively). But, in fact, in any given mixture of PAHs, the toxicity of individual PAHs varies considerably.

Please call me if you have any questions.

Attachments

ATTACHMENT 1

CANCER RISK

INPUT PARAMETERS AND CALCULATIONS

SITE	SCENARIO	CHEMICAL	CONCEN. (MG/KG)	FREQUEN (DAYS)	DURATIO (YRS)	INGESTION (MG/DAY)	INGEST ABS	DERMAL SA(cm2)	DERMAL ADH (mg/cm2)	DERMAL ABS	BW (KG)	AVG TIME (YRS)	CPF	INTAKE (MG/KG/D)	RISK
CECBW	TRESPASSER	B(a)P	3.00E+000	5.00E+001	1.00E+001	1.00E+002	1.00E+000	4.30E+003	2.40E-001	1.30E-001	4.00E+001	7.00E+001	7.30E+000	3.44E-007	2.51E-006
		PCBs	9.00E+000	5.00E+001	1.00E+001	1.00E+002	1.00E+000	4.30E+003	2.40E-001	1.40E-001	4.00E+001	7.00E+001	2.00E+000	1.08E-006	2.15E-006
	SUM														
CECBW	WORKER*	B(a)P	3.00E+000	1.50E+002	2.50E+001	1.00E+002	1.00E+000	3.30E+003	2.00E-001	1.30E-001	7.00E+001	7.00E+001	7.30E+000	1.17E-006	8.53E-006
		PCBs	9.00E+000	1.50E+002	2.50E+001	1.00E+002	1.00E+000	3.30E+003	2.00E-001	1.40E-001	7.00E+001	7.00E+001	2.00E+000	3.63E-006	7.26E-006
	SUM														

SUM

* commercial groundskeeper scenario assumed for the worker exposure

CALCULATION:

$$\text{RISK} = \frac{\text{CONC} * \text{FREQUENCY} * \text{DURATION} * ((\text{MG/DAY INGEST.} * \text{INGEST ABS}) + (\text{MG/DAY DERMAL} * \text{DERM ABS}))}{\text{BODY WEIGHT} * \text{AVERAGING TIME} * 365 \text{ DAYS/YR} * 1000000}$$

ATTACHMENT 2

NON-CANCER RISK

INPUT PARAMETERS AND CALCULATIONS

SITE	SCENARIO	CHEMICAL	CONCEN. (MG/KG)	FREQUEN (DAYS)	DURATIO (YRS)	INGESTION (MG/DAY)	INGEST ABS	DERMAL SA(cm2)	DERMAL ADH (mg/cm2)	DERMAL ABS	BW (KG)	AVG TIME (YRS)	RfD	INTAKE (MG/KG/D)	HAZARD INDEX
CECBW	TRESPASSER	PCBs	9.00E+000	5.00E+001	1.00E+001	1.00E+002	1.00E+000	4.30E+003	2.40E-001	1.40E-001	4.00E+001	1.00E+001	2.00E-005	7.54E-006	3.77E-001
		PAHs	3.00E+000	5.00E+001	1.00E+001	1.00E+002	1.00E+000	4.30E+003	2.40E-001	1.30E-001	4.00E+001	1.00E+001	2.00E-002	2.41E-006	1.20E-004
SUM															
CECBW	WORKER	PCBs	9.00E+000	1.50E+002	2.50E+001	1.00E+002	1.00E+000	3.30E+003	2.00E-001	1.40E-001	7.00E+001	2.50E+001	2.00E-005	1.02E-005	5.08E-001
		PAHs	3.00E+000	1.50E+002	2.50E+001	1.00E+002	1.00E+000	3.30E+003	2.00E-001	1.30E-001	7.00E+001	2.50E+001	2.00E-002	3.27E-006	1.64E-004
SUM															

CALCULATION:

$$HI = \text{CONC} * \text{FREQUENCY} * \text{DURATION} * ((\text{MG/DAY INGEST.} * \text{INGEST ABS}) + (\text{SA} * \text{ADH} * \text{ABS}))$$

$$\text{BODY WEIGHT} * \text{AVERAGING TIME} * 365 \text{ DAYS/YR} * 1000000 * \text{RfD}$$

M. McDonough
09/08/00

Cannons Engineering Bridgewater – Five year review input

The Management of Migration (MOM) portion of the remedy for the Cannons Engineering Bridgewater Site includes groundwater monitoring to ensure that contamination above MCLs does not migrate off site and that onsite contaminant levels naturally attenuate. The ROD estimated that groundwater cleanup target levels would be achieved within 15 to 20 years. The target levels are 5 ppb for benzene and trichloroethene and 2 ppb for vinyl chloride. The MOM remedy also requires institutional controls restricting future use of groundwater at the site.

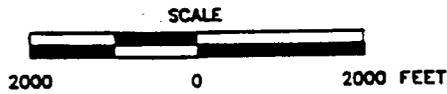
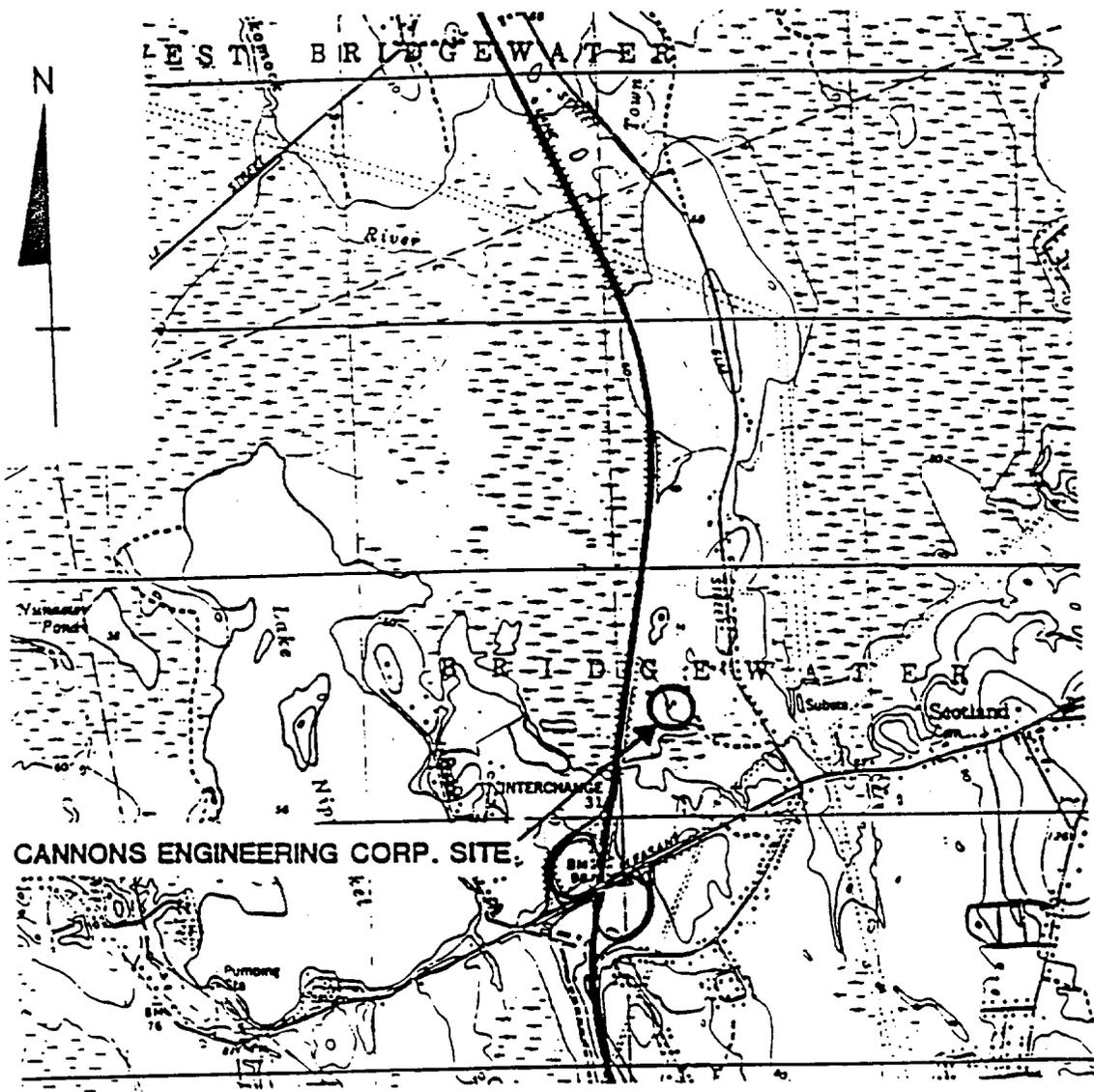
The groundwater monitoring network currently consists of 24 wells, as follows: 4 background wells, 6 perimeter or site boundary wells, and 14 wells on the site. The long-term groundwater monitoring program was initiated in mid-1991. During the first two years of quarterly groundwater monitoring, MCLs were exceeded at two site perimeter wells (MW15B, MW15C). Since September 1993 groundwater concentrations at all site perimeter wells have been below MCLs. All upgradient, or background, monitoring wells have been below MCLs since December 1991 with one exception (MW-1 @ 6 ppb PCE in September 1996).

Over the nine years of monitoring, there have been MCL exceedances at 8 of 14 monitoring wells within the site boundaries. VOC concentrations have fluctuated significantly at the wells near Wet Area #2 (MW-8, MW-11) but have now declined to below MCLs with the exception of vinyl chloride which increased to 6.7 ppb in 1999 (MCL = 2 ppb). VOC concentrations at wells upgradient of Wet Area #1 (MW17A, MW-17B) have also fluctuated and exceeded the MCL for chlorobenzene but have declined to levels below MCLs as of 1999. MW-18C, part of the newer well triplet added in 1994, showed significant increases in VOCs in 1999, exceeding MCLs for three VOCs.

The 9 years of monitoring have shown the groundwater quality to gradually improve. Groundwater currently meets MCLs at background, perimeter and 12 of 14 site monitoring wells. The data confirm that contamination is not migrating off site. Groundwater monitoring has been performed for half of the period estimated in the ROD. Continued monitoring is warranted, since MCLs are not achieved throughout the site, however, it appears that the remedy remains protective of human health and the environment.

FIGURES

FIGURE 1



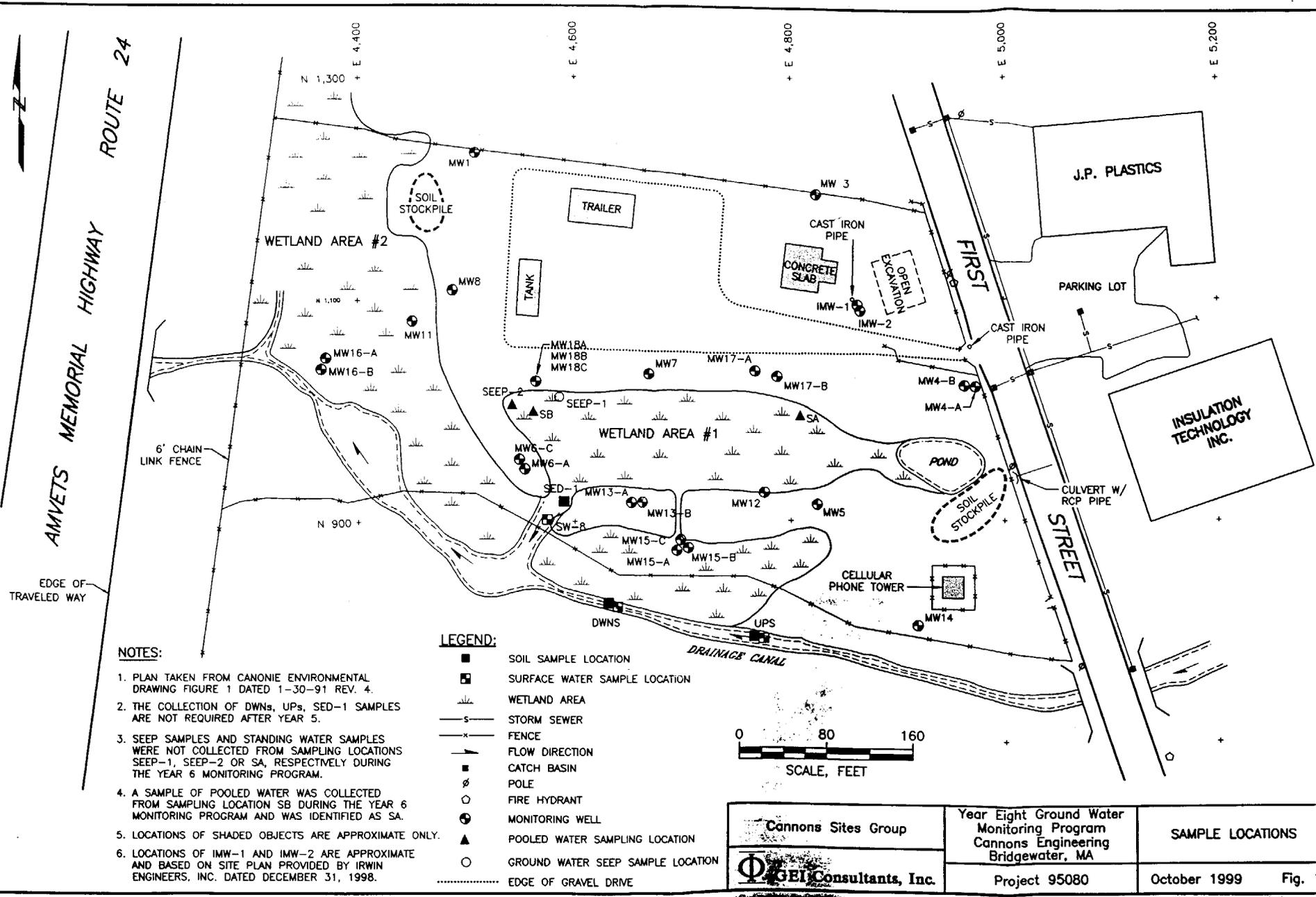
SITE
LOCATION MAP
BRIDGEWATER SUPERFUND SITE
BRIDGEWATER, MASSACHUSETTS

- REFERENCES:
- E. C. JORDAN CO. CONSULTING ENGINEERS "SITE LOCATION MAP" PROJECT No. 5101-44
 - USGS 7.5 MINUTE SERIES, TUNTON QUAD, PHOTOREVISED 1977

**SITE LOCATION MAP
CANNONS BRIDGEWATER SUPERFUND SITE
BRIDGEWATER, MASSACHUSETTS**



FIGURE 2

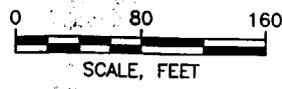


NOTES:

1. PLAN TAKEN FROM CANONIE ENVIRONMENTAL DRAWING FIGURE 1 DATED 1-30-91 REV. 4.
2. THE COLLECTION OF DWNs, UPs, SED-1 SAMPLES ARE NOT REQUIRED AFTER YEAR 5.
3. SEEP SAMPLES AND STANDING WATER SAMPLES WERE NOT COLLECTED FROM SAMPLING LOCATIONS SEEP-1, SEEP-2 OR SA, RESPECTIVELY DURING THE YEAR 6 MONITORING PROGRAM.
4. A SAMPLE OF POOLED WATER WAS COLLECTED FROM SAMPLING LOCATION SB DURING THE YEAR 6 MONITORING PROGRAM AND WAS IDENTIFIED AS SA.
5. LOCATIONS OF SHADED OBJECTS ARE APPROXIMATE ONLY.
6. LOCATIONS OF IMW-1 AND IMW-2 ARE APPROXIMATE AND BASED ON SITE PLAN PROVIDED BY IRWIN ENGINEERS, INC. DATED DECEMBER 31, 1998.

LEGEND:

- SOIL SAMPLE LOCATION
- ◻ SURFACE WATER SAMPLE LOCATION
- ▨ WETLAND AREA
- s- STORM SEWER
- x- FENCE
- FLOW DIRECTION
- CATCH BASIN
- POLE
- FIRE HYDRANT
- MONITORING WELL
- ▲ POOLED WATER SAMPLING LOCATION
- GROUND WATER SEEP SAMPLE LOCATION
- EDGE OF GRAVEL DRIVE



Cannons Sites Group GEI Consultants, Inc.	Year Eight Ground Water Monitoring Program Cannons Engineering Bridgewater, MA	SAMPLE LOCATIONS October 1999 Fig.
	Project 95080	

TABLE

TABLE 1
REMEDIATION CRITERIA FOR SOIL
FIVE YEAR REPORT - CANNONS

Contaminant	Final Design Soil Cleanup Level (1)
UPLAND AREA SOILS	
Trichloroethene	500 ppb
1,1-Dichloroethene	500 ppb
Toluene	1000 ppb
Xylenes	1000 ppb
Chlorobenzene	1000 ppb
Tetrachloroethene	500 ppb
Benzene	1000 ppb
Ethylbenzene	1000 ppb
1,2 Dichlorobenzene	1000 ppb
1,3 Dichlorobenzene	1000 ppb
1,4 Dichlorobenzene	1000 ppb
1,1,1-Trichloroethane	1000 ppb
4-Methylphenol	3000 ppb
2-Methylnaphthalene	3000 ppb
Dimethylphthalate	3000 ppb
Di-n-butylphthalate	3000 ppb
Phenol	3000 ppb
N-Nitrosodiphenylamine	3000 ppb
Bis (2-ethylhexyl)phthalate	3000 ppb
Naphthalene	3000 ppb
Butylbenzylphthalate	3000 ppb
PCBs (total)	9000 ppb (4)
Chromium	Not Specified
WET AREA SOILS	
1,1-Dichloroethene	160 ppb
Trichloroethene	120 ppb
Benzene	120 ppb
Vinyl Chloride	50 ppb
Tetrachloroethene	120 ppb
PCBs (total)	9000 ppb (4)
Chromium	Not Specified

Notes:

(1) - U.S. EPA, Superfund Site Interim Close Out Report, Cannons Engineering Corporation Site, September 30, 1