United States
Environmental Protection
Agency

Office of
Emergency and
Remedial Response

EPA/ROD/R02-93/219
September 1993
PB94-963820

EPA

Superfund Record of Decision:

SMS Instruments, NY

50272-101

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15. Supplementary Notes

PB94-963820

16. Abstract (Limit: 200 words)

The 120-acre SMS Instruments site is a commercial area surrounding a military aircraft component repair facility located in Deer Park, Suffolk County, New York. Land use in the area is predominantly light industrial and residential. The site also is located directly adjacent to a large ground water recharge basin and in the recharge zone of the Magothy Aquifer, a sole-source aquifer for Long Island, which provides drinking water for the surrounding residential population. From 1967 to 1990, SMS Instruments used the site to overhaul military aircraft components. Site operations consisted of cleaning, painting, degreasing, refurbishing, metal-machining, and testing the components. These operations also involved the purchase, storage, and use of chemical products and the generation of hazardous wastes, which were stored onsite for disposal. From 1987 to 1989, EPA conducted studies that revealed organic and inorganic contamination in the soil and ground water. Soil contamination was concentrated around three areas: the former leaching pool, the vicinity of the excavated underground storage tank (UST), and, to a lesser extent, a drum storage area. Until 1980, wastewater from the site was discharged directly into a leaching pool. In 1980, a leaching pool, into which untreated wastewater from site operations had been discharged, was pumped out and filled with sand; the discharge drains and pipes were

(See Attached Page)

17. Document Analysis a. Descriptors

Record of Decision - SMS Instruments, NY
Second Remedial Action
Contaminated Medium: None
Key Contaminants: None

b. Identifiers/Open-Ended Terms

c. COSATI Field/Group

18. Availability Statement	19. Security Class (This Report) None	21. No. of Pages 36
	20. Security Class (This Page) None	22. Price

(See ANSI-Z39.18) *See Instructions on Reverse* OPTIONAL FORM 272 (4-77) (Formerly NTIS-35) Department of Commerce

filled with concrete; wastewater was drummed for disposal; and a leaking UST was emptied, taken out of service, and later removed. A 1989 ROD addressed onsite soil and ground water contamination and provided for in-situ steam or air stripping of contaminated soil and extraction, treatment, and reinjection of ground water. This ROD addresses the commercial area upgradient and surrounding the site in order to quantify potential upgradient sources contributing to onsite ground water contamination, as OU2. Soil-gas screening and extensive ground water investigation revealed that the previous remedial action successfully lowered contaminant concentrations to below health-based concentration levels; therefore, there are no contaminants of concern affecting this site.

The selected remedial action for this site is no further action because EPA, in consultation with the State, determined that the site does not pose a significant threat to human health and the environment. There are no present worth or O&M costs associated with this no action remedy.

PERFORMANCE STANDARDS OR GOALS:

Not applicable.

ROD FACT SHEET

SITE
Name: SMS Instruments, Inc.
Location/State: Deer Park, Suffolk County, N.Y.
EPA Region: II
HRS Score: 37.320
NPL Rank: 490 (06/01/86)

ROD
Date Signed: Sept. 27, 1993
Selected Remedy: In Situ steam (or if necessary air) stripping of soil, followed by groundwater extraction, treatment and reinjection
Capital Cost: $752,090
O & M/Year: $123,400
Periodic costs: $7,500 every 5 years
Present Worth: $1,195,800
Contingency Soil Remedy: Source removal, off-site incineration
Capital Cost: $2,036,500
O & M/year: none
Periodic costs: none
Present Worth: $2,036,500

LEAD
Remedial, EPA
Primary Contact (phone): Abram Miko Fayon (212-264-4706)
Secondary Contact (phone): Doug Garbarini (212-264-0109)
Main PRP: Sol M. Schusheim President of SMS Instruments, Inc.
PRP Contact (phone): Sol M. Schusheim (516-227-6087)

WASTE
Type: Chlorinated hydrocarbons (e.g.trichloroethene, trichloroethane), aromatics (e.g. xylenes), metals (e.g. chromium)
Medium: Soil and groundwater.
Origin: Cleaning, painting, and degreasing military aircraft components: 1967 to 1980, wastes were routinely discharged into a leaching pool without prior treatment
Est. Quantity: 35,000 gallons of liquid and sludge waste
700 containers (drums, bags, etc.)

DECLARATION FOR THE RECORD OF DECISION

SITE NAME AND LOCATION

SMS Instruments, Inc.
Deer Park, Suffolk County, New York

STATEMENT OF BASIS AND PURPOSE

This decision document presents the selected remedial action for the second operable unit of the SMS Instruments, Inc. site (Site), which was chosen in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended, 42 U.S.C. §§ 9601-9675, and the National Contingency Plan (NCP). This decision document explains the factual and legal basis for selecting the remedy for this Site. The information supporting this remedial action decision is contained in the administrative record for this Site. The administrative record index is attached (Appendix III).

The New York State Department of Environmental Conservation concurs with the "No Further Action" remedy, as per the attached letter (Appendix IV).

DESCRIPTION OF THE SELECTED REMEDY - NO FURTHER ACTION

This operable unit represents the second and last operable unit planned for this Site. The first operable unit addresses the treatment of contaminated soil and groundwater underlying the Site, which are contaminated primarily with volatile organic compounds. This second operable unit addresses the potential upgradient groundwater contamination at the Site. The United States Environmental Protection Agency (EPA) in consultation with the State of New York has determined that there is no evidence of contamination upgradient of the Site contributing to the contamination at the Site; therefore, remediation for the second operable unit is not appropriate. Thus "No Further Action" is the selected remedy for the second operable unit.

DECLARATION

In accordance with the requirements of CERCLA, as amended, and the NCP, it has been determined that no remedial action is necessary for the second operable unit to protect human health and the environment at the Site. Present and future cleanup activities conducted by EPA will remediate the significant contamination present at the Site. Because this remedy will not result in hazardous substances remaining on-site above health based levels, the five-year review will not apply to this action.

William J. Muszynski, P.E.
Acting Regional Administrator

9/27/93
Date

RECORD OF DECISION
DECISION SUMMARY

SMS Instruments, Inc.
Deer Park
Suffolk County, New York

United States Environmental Protection Agency
Region II
New York, New York

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SITE NAME, LOCATION AND DESCRIPTION

The SMS Instruments, Inc. site (Site) is a 1.5-acre facility located at 120 Marcus Boulevard in Deer Park, New York (see Figure 1). The facility was in operation from 1967 to 1990. It is located in a light industrial and residential area of Deer Park and consists of a 34,000 square-foot (ft^2) building on a 1.5-acre lot. About 90% of the lot is paved with asphalt. The immediate vicinity also includes more than 50 industrial facilities within a one-mile radius and a large groundwater recharge basin located directly adjacent to the Site on the east side (see Figure 2). The Site is located in the recharge zone of the Magothy aquifer, a sole-source aquifer for Long Island, which is the only source of drinking water for the surrounding residential population of more than 124,000 persons.

According to the Suffolk County Department of Health Services (SCDHS), public water is used in the vicinity of the Site by the majority of residents although some private wells may still be in use. Private wells are most likely used for irrigation purposes; however, the possibility of potable use remains. The nearest public water supply well is located approximately one mile southwest and downgradient from the Site.

The Site is not located in a floodplain, wetland, or the coastal zone as designated by the State of New York. Additionally, there are no federally designated endangered or threatened species in the proximity of the Site.

The study area for the second operable unit of Site investigation includes a 120-acre commercial area upgradient and surrounding the Site. This area is marked by Grand Boulevard to the south and Commack Avenue to the east. The northern boundary is just north of Long Island Avenue, including Evergreen Place and Prospect Place (dead end roads feeding to Long Island Avenue). The western boundary line is Carlls Straight Path. Figure 3 shows the extent of the study areas for the initial and second operable units of Site investigation.

SITE HISTORY AND ENFORCEMENT ACTIVITIES

SMS Instruments started operations in early 1967 when Mr. Sol Schusheim (now deceased) rented the property from Marcus Associates of Farmingdale, New York. In April 1967, the Site was sold to Ogden Technology, and, in September 1973, Mr. Schusheim purchased the Site property at 120 Marcus Boulevard. The facility has been inactive since 1990.

The primary operation at the Site was the overhauling of military aircraft components. Overhauling operations consisted of cleaning, painting, degreasing, refurbishing, metal-machining,

and testing of the components. These activities involved the purchase, storage and use of chemical products and the generation of hazardous wastes which were stored for disposal.

Until January 1980, wastewater from Site operations was discharged directly, without treatment, to a leaching pool on the south side of the property (see Figure 2). Samples collected from the leaching pool in 1979 and 1980 by the SCDHS contained levels of various metals (e.g., copper, chromium, lead, cadmium, silver, nickel and zinc), as well as aromatic hydrocarbons (e.g., benzene, toluene, and xylene) and halogenated aliphatic hydrocarbons (e.g., 1,1,1-trichloroethane and methylene chloride).

In May 1980, the leaching pool was pumped out and filled with sand, and the discharge drains and pipes were filled with concrete. After closing the leaching pool, SMS drummed the wastewater for disposal. In 1981, SCDHS ordered a leaking underground storage tank (UST) on the property to be emptied and taken out of service. The tank was removed from the ground in 1988, in accordance with State and local regulations.

The Site was proposed for the National Priorities List (NPL) in October 1984 by the New York State Department of Environmental Conservation. In June 1986, EPA included the Site on the NPL.

EPA performed a remedial investigation and feasibility study (RI/FS) at the Site from May 1987 to February 1989. The RI identified organic and inorganic contamination in the soils and groundwater. Soil contamination was concentrated around three areas: the former leaching pool, the vicinity of the excavated UST, and, to a lesser extent, a drum storage area. Organic and inorganic contamination was found in on-site and downgradient monitoring wells. Contamination was also detected in upgradient wells, indicating that the SMS facility may not be the sole source of groundwater contamination found on-site.

The RI/FS and Proposed Remedial Action Plan were released to the public in July 1989. A Record of Decision (ROD) was signed in September 1989. The remedial actions specified in the ROD included: in-situ steam or air stripping of contaminated soil and groundwater extraction, treatment and reinjection to restore the upper aquifer quality to meet federal and State drinking water standards. The September 1989 ROD also specified that a second operable unit be designated and a second RI/FS be performed to determine potential upgradient sources of contamination.

SCOPE AND ROLE OF OPERABLE UNIT

This is the second and last of two operable units planned for the Site. The objective of this operable unit was to investigate a

120-acre commercial area upgradient and surrounding the Site in order to identify potential upgradient sources contributing to the groundwater contamination at the Site. As indicated above, the first operable unit addresses remediation of contaminated soils and groundwater underlying the Site.

HIGHLIGHTS OF COMMUNITY PARTICIPATION

The RI and the Proposed Plan for the second operable unit were released to the public on July 15, 1993. These documents were made available in both the administrative record file at the EPA Documentation Control Center in New York City and in two information repositories maintained at the Deer Park Library in Deer Park, New York and in the Department of Environmental Control in Babylon, New York. The notice of the public meeting and the availability of the above-referenced documents appeared in the Babylon Beacon on Thursday July 22, 1993. The public comment period was held from July 15, 1993 to August 16, 1993.

On July 28, 1993, EPA conducted a public meeting at the Community Presbyterian Church in Deer Park, New York to inform local officials and interested citizens about the Superfund process, to present the results of the second operable unit RI and EPA's preferred "No Further Action" remedy, and to respond to any questions from area residents and other interested parties.

EPA did not receive any comments regarding the RI or Proposed Plan at the public meeting, nor were any written comments concerning the "No Further Action" remedy received during the public comment period. As a result, a Responsiveness Summary was not prepared. The New York State Department of Health, however, requested that private wells in the area be inventoried and sampled, which is outside the scope of work for this second operable unit. Therefore, EPA will respond to this request separately from this action.

SITE CHARACTERISTICS

The initial RI/FS for the Site was conducted by EPA from May 1987 to February 1989. The results of the study indicated that the highest concentration of contaminants were found in the leaching pool, the UST and, to a lesser extent, the drum storage area (see Figure 2). The highest level of volatile organic compound (VOC) contamination in the groundwater was 24,000 micrograms per liter (ug/l) of trichloroethene. Other prevalent VOCs included xylenes (2,200 ug/l), ethylbenzene (240 ug/l) and chlorobenzene (670 ug/l).

The second operable unit RI was planned using a two-phased approach: 1) the Phase I investigation consisted of a grid-based,

soil-gas screening to assess areas of potential contamination upgradient of the Site and 2) a proposed Phase II investigation, if necessary, consisting of an extensive groundwater investigation upgradient of the Site.

The initial field investigation for Phase I consisted of a soil-gas screening and soil-gas survey. A coarse-grid, soil-gas screening was performed throughout the study area to identify potential areas of concern to be investigated further during a more detailed soil-gas survey. Figure 4 identifies the areas of soil-gas sampling, located northeast of the Site, and Table 1 lists the HNu readings which correspond to specific grid areas. A total of nine grid areas were screened, including three designated as background areas (namely, Areas H-15, H-18 and I-18). As Table 1 indicates, the most significant contamination was found in Areas G-15, F-18 and G-18. The highest contaminant HNu reading of 250 parts per million (ppm) was measured in Area G-15. Areas F-18 and G-18 had maximum HNu readings of 100 ppm. This information suggested that there may be potential sources of contamination to the northeast of the Site that may be impacting the groundwater underlying the Site.

In order to determine if the above-identfied upgradient contamination was affecting groundwater underlying the Site, the groundwater flow direction was determined by installing six piezometers (PZ-01 through PZ-06) upgradient of the Site (see Figure 5). Groundwater level measurements were recorded four times during 1992 (see Table 2) and were used to determine the direction of groundwater flow. Figure 6 is a potentiometric surface map which shows that the relatively homogeneous, isotropic Upper Glacial Aquifer groundwater flows in a south-southeasterly direction beneath the study area. The water table in the vicinity of the recharge basin shows a slight mounding effect (as indicated by the slightly elevated water level of 55.72 at location MW-03), causing minor radial groundwater flow.

In order to verify the soil-gas survey results with respect to potential groundwater contamination, two rounds of groundwater sampling were conducted. Round One was conducted in August 1992 and Round Two in December 1992. Groundwater samples from two upgradient on-site monitoring wells (MW-02 and MW-03), two upgradient off-site monitoring wells (MW-08 and MW-09) and three upgradient piezometers (PZ-01, PZ-04, and PZ-05) were collected for VOC analyses (see Figure 5).

An abbreviated summary of the most significant groundwater contaminants (1,1 dichlorethane, 1,1,1-trichloroethane and chloroethane) detected in the upgradient monitoring wells is presented in Table 3. This table also includes a summary of the levels of the contaminants found in the upgradient piezometers. Table 4 lists the complete analytical results for all contaminants.

The highest levels of contaminants were found in MW-03, namely 90 ug/l of 1,1 dichloroethane, 670 ug/l of 1,1,1-trichloroethane and 83 ug/l of chloroethane (see Table 3). These levels were attributed to the mounding effect from the nearby recharge basin mentioned above (see Figure 5). Lower levels of contaminants were found in MW-09 which may also be due to possible mounding from the recharge basin. MW-06S, located near the leaching pit, was also sampled. The highest VOC-concentration found was 96 ug/l of 1,2 dichloroethene. High semi-volatile contaminants included 570 ug/l of chlorobenzene, 290 ug/l of ethylbenzene and 2000 ug/l of xylenes. As indicated by the analytical results shown in Table 4, nearly all of the other contaminants tested for in monitoring wells MW-02, MW-03, MW-06S (Round 1), MW-08 and MW-09 were reported below the method detection limit of 10 ug/l for most samples.

Thus, results from the two rounds of groundwater sampling indicated some low levels of volatile organic compounds in both the upgradient on-site wells and off-site wells. Analytical results from the upgradient piezometers (PZ-01, PZ-04 and PZ-05) located north/northwest of the Site revealed estimated concentrations of VOCs below the method detection limits of 5 ug/l (see Tables 3 and 4). These data indicate that the upgradient groundwater is not contributing to contamination at the Site. [The 22 ug/l of acetone reported in Table 4 for PZ-04 was deemed to be a laboratory contaminant, as acetone was also found in the laboratory blank.]

Groundwater sampling was also performed during the remedial design of the groundwater extraction system which is part of the first operable unit groundwater remedy. Samples were collected from upgradient drive points DP-A, DP-B, DP-C and DP-P at depths of 25, 50 and 75 feet (Figure 5). Table 5 shows the analytical results at sampling point DP-C at depths of 25, 50 and 75 feet. All other drive point locations can be found in Appendix A of the RI document. The analytical results indicated that the levels of all VOCs were below the detection limit of the analyses, the majority of which were at 5 ug/l.

Hence, since the groundwater flows in a south-southeasterly direction, EPA has concluded that the potential sources of contamination to the northeast, particularly in grids F-18, G-15 and G-18 (see Table 1 and Figure 4), are not contributing to the contamination at the Site; therefore, a detailed Phase II groundwater investigation upgradient of the Site was not conducted. It is also noted that any potential low level VOC contamination upgradient of the Site, such as that found in MW-08 and MW-09, would be captured by the groundwater extraction system which is part of the first operable unit remedy.

SUMMARY OF SITE RISKS

Based upon the results of the RI, a baseline risk assessment was conducted to estimate the risks associated with current and future site conditions. The baseline risk assessment estimates the human health risk which could result from the contamination at the site if no remedial action were taken.

Human Health Risk Assessment

A four-step process is utilized for assessing site-related human health risks for a reasonable maximum exposure scenario: Hazard Identification--identifies the contaminants of concern at the site based on several factors such as toxicity, frequency of occurrence, and concentration. Exposure Assessment--estimates the magnitude of actual and/or potential human exposures, the frequency and duration of these exposures, and the pathways (e.g., ingesting contaminated well-water) by which humans are potentially exposed. Toxicity Assessment--determines the types of adverse health effects associated with chemical exposures and the relationship between magnitude of exposure (dose) and severity of adverse effects (response). Risk Characterization--summarizes and combines outputs of the exposure and toxicity assessments to provide a quantitative assessment of site-related risks.

EPA conducted a baseline risk assessment to evaluate the potential risks to human health associated with the Site in its current state. The Risk Assessment focused on contaminants in the groundwater which are likely to pose significant risks to human health and the environment. A summary of the contaminants of concern for human receptors in groundwater is provided in Table 6.

EPA's baseline risk assessment addressed the potential risks to human health by considering several potential exposure pathways by which the public may be exposed to contaminant releases at the Site under current and future land-use conditions. No groundwater receptors are currently present at the site; therefore, only potential future receptors were assessed in the risk evaluation. Residential (adult, child) and light industrial (adult) exposure scenarios were chosen based on projected future land uses in the study area. For the residential groundwater ingestion and showering pathway, adult and child (1-6 years age) receptors were considered. For the light industrial groundwater ingestion pathway, only adult receptors were considered. Potential future exposure pathways are listed in Table 7. The reasonable maximum exposure was evaluated.

Under current EPA guidelines, the likelihood of carcinogenic (cancer-causing) and noncarcinogenic effects due to exposure to site chemicals is considered separately. An assumption is made that the carcinogenic toxic effects of the site-related chemicals

would be additive. The same assumption is made for the noncarcinogens found at a site.

Potential carcinogenic risks were evaluated using the cancer slope factors developed by EPA for the contaminants of concern. Cancer slope factors (SFs) have been developed by EPA's Carcinogenic Risk Assessment Verification Endeavor for estimating excess lifetime cancer risks associated with exposure to potentially carcinogenic chemicals. SFs, which are expressed in units of (milligrams/kilogram-day (mg/kg-day))$^{-1}$, are multiplied by the estimated intake of a potential carcinogen, in mg/kg-day, to generate an upper-bound estimate of the excess lifetime cancer risk associated with exposure to the compound at that intake level. The term "upper bound" reflects the conservative estimate of the risks calculated from the SF. Use of this approach makes the underestimation of the risk highly unlikely. The SFs for the contaminants of concern are presented in Table 8.

For known or suspected carcinogens, EPA considers excess upper-bound individual lifetime cancer risks of between 10^{-4} to 10^{-6} to be acceptable. This level indicates that an individual has not greater than a one-in-ten-thousand to one-in-a-million chance of developing cancer as a result of site-related exposure to a carcinogen over a 70-year period under specific exposure conditions at a site.

The highest cumulative upper-bound cancer risk at the Site, involving the future residential adult scenario, was 5×10^{-5}, which is within EPA's acceptable range (see Table 9). These estimates were developed by taking into account various conservative assumptions about the likelihood of a person being exposed to these media.

Noncarcinogenic risks were assessed using a hazard index (HI) approach, based on a comparison of expected contaminant intakes and safe levels of intake (Reference Doses (RfDs)). RfDs have been developed by EPA for indicating the potential for adverse health effects. RfDs, which are expressed in units of mg/kg-day, are estimates of daily exposure levels for humans which are thought to be safe over a lifetime (including sensitive individuals). Estimated intakes of chemicals from environmental media (e.g., the amount of a chemical ingested from contaminated drinking water) are compared to the RfD to derive the hazard quotient for the contaminant in the particular medium. The HI is obtained by adding the hazard quotients for all compounds across all media that impact a particular receptor population.

An HI greater than 1.0 indicates that the potential exists for noncarcinogenic health effects to occur as a result of site-related exposures. The HI provides a useful reference point for gauging the potential significance of multiple contaminant exposures within a single medium or across media. The RfDs for

the contaminants of concern at the Site are presented in Table 10. A summary of the noncarcinogenic risks associated with these chemicals across various exposure pathways is found in Table 11.

Table 11 shows that the maximum HI for noncarcinogenic effects from groundwater ingestion and inhalation (reasonable maximum exposure for children) is 0.06; therefore, noncarcinogenic effects are highly unlikely to occur from these exposure routes. The noncarcinogenic risk was attributable to several compounds, including 1,1-dichloroethane, 1,1-dichloroethene, 1,1,1-trichloroethane and chloroethane.

It should be noted that, since the study area is industrial in nature, it is unlikely that the area would be developed for residential use. The residential exposure scenario was used as a means by which the most conservative estimate of the site risks could be assessed.

DESCRIPTION OF THE "NO FURTHER ACTION" REMEDY

The risk assessment indicates that the levels of contaminants present in the groundwater upgradient of the Site present risks which fall within or below EPA's allowable risk range. In addition, sampling results indicate that, with the exception of a few instances above analytical detection limits in the groundwater, the contaminants do not exceed these limits in the groundwater.

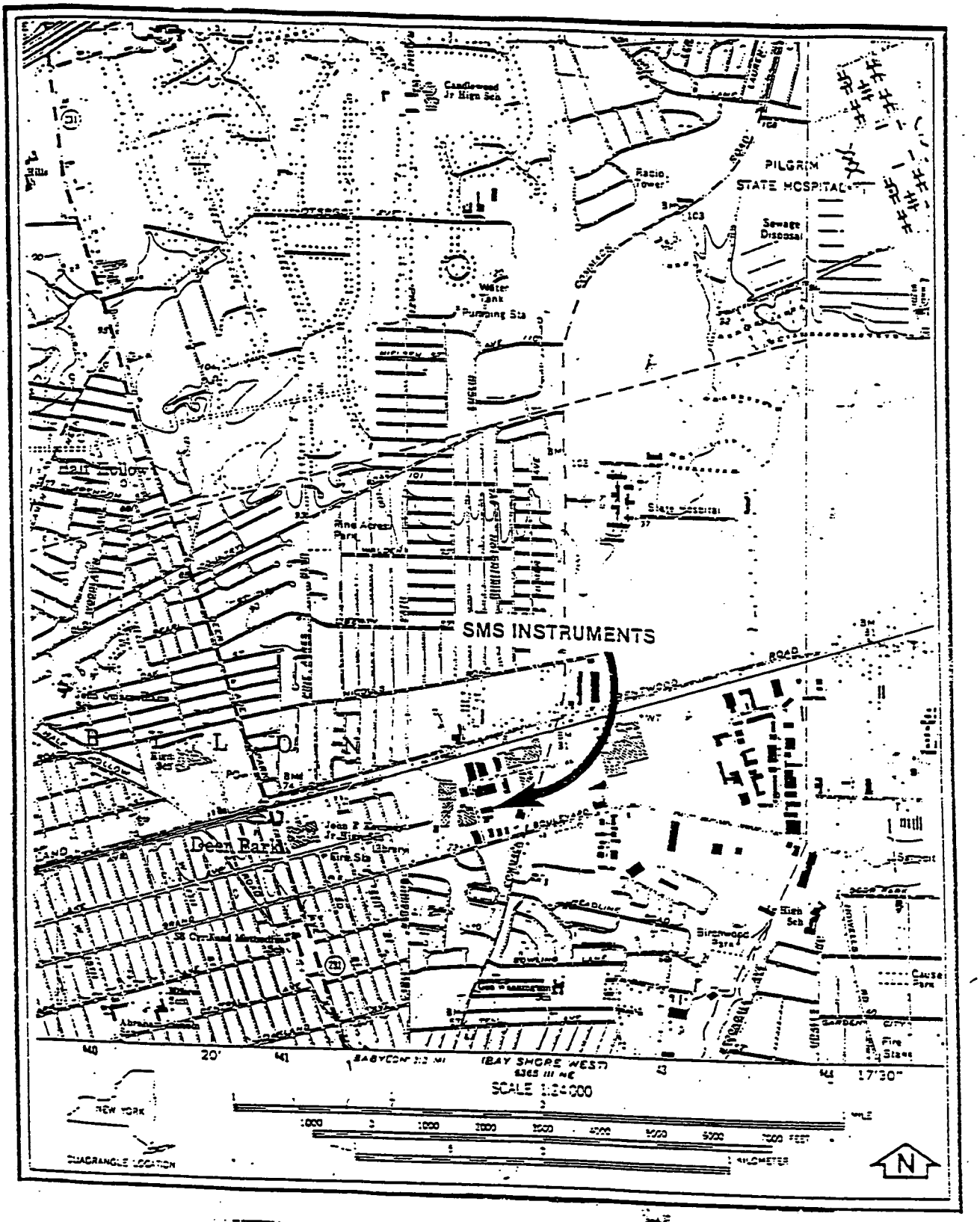
Based upon the findings of the RI performed at the Site, EPA, in consultation with NYSDEC, has determined that the Site does not pose a significant threat to human health or the environment. EPA; therefore, has selected a "No Further Action" remedy for the Site. Since this remedy will not result in hazardous substances remaining on-site above health-based levels, the five-year review will not apply to this action.

DOCUMENTATION OF SIGNIFICANT CHANGES

There are no significant changes from the preferred alternative, as presented in the Proposed Plan.

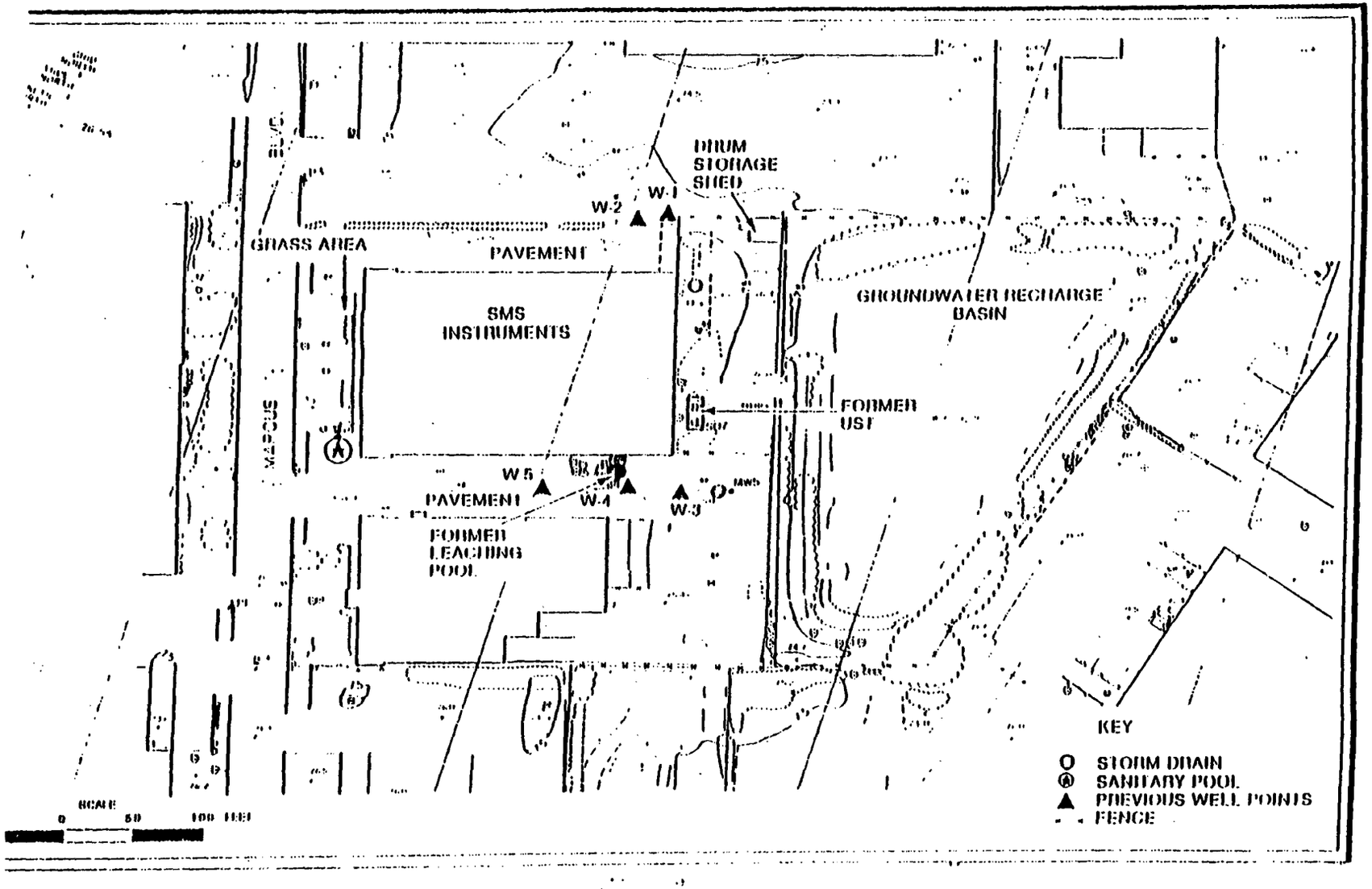
APPENDIX I

FIGURES



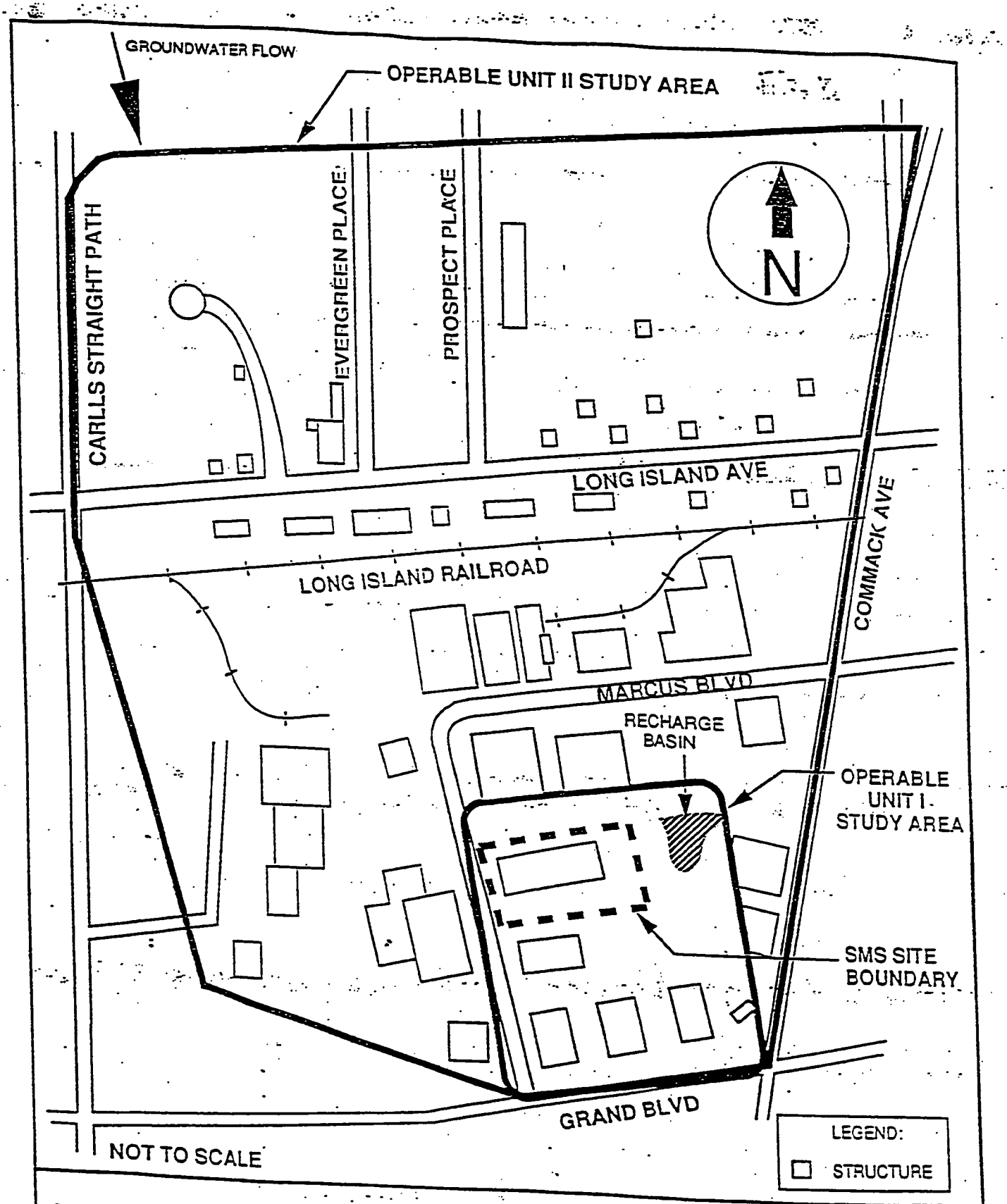
SITE LOCATION MAP, SMS INSTRUMENTS
DEER PARK, NEW YORK

FIGURE 1



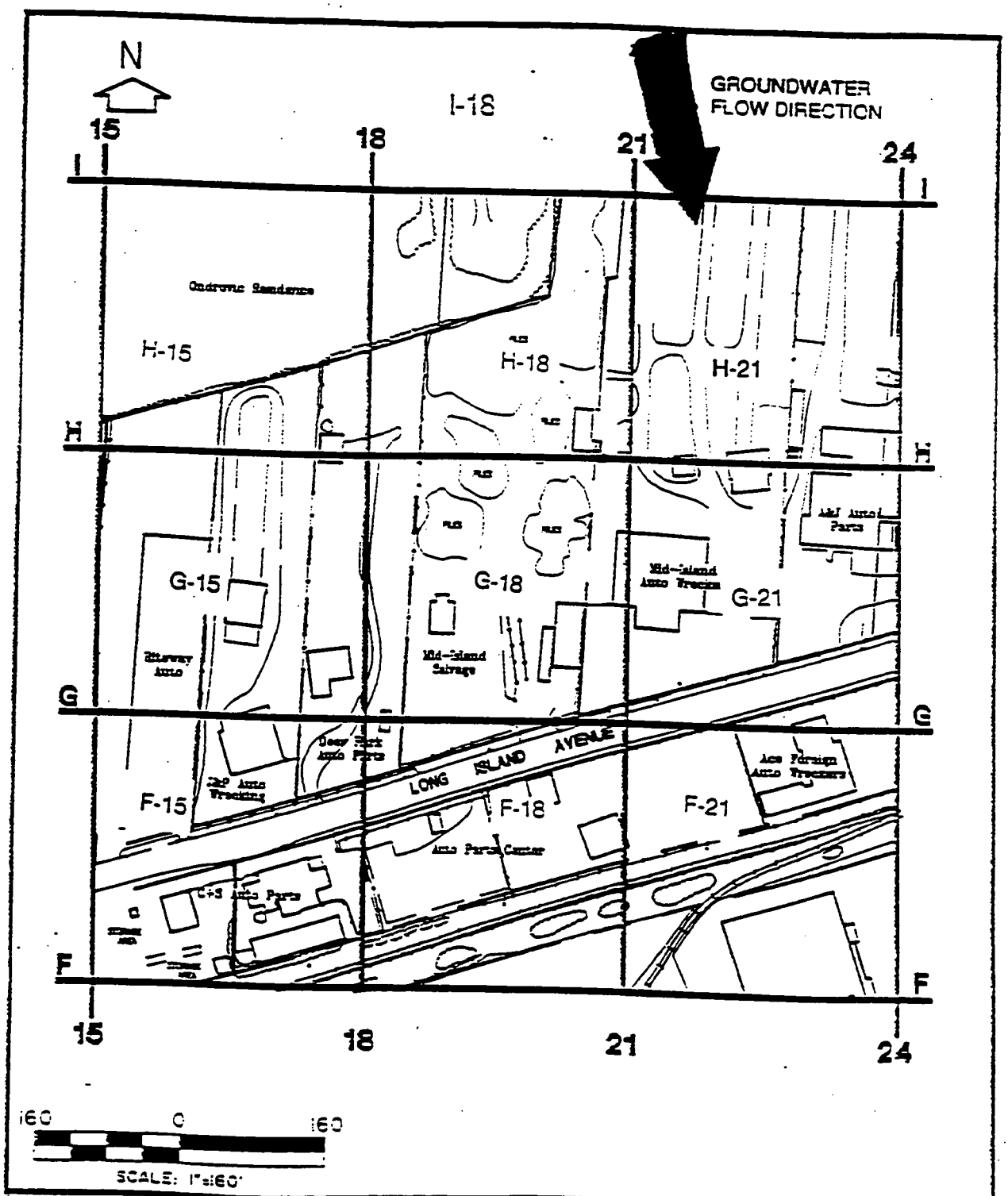
SITE MAP

FIGURE 2



SMS OPERABLE UNIT I AND
OPERABLE UNIT II STUDY AREAS
DEER PARK, NEW YORK

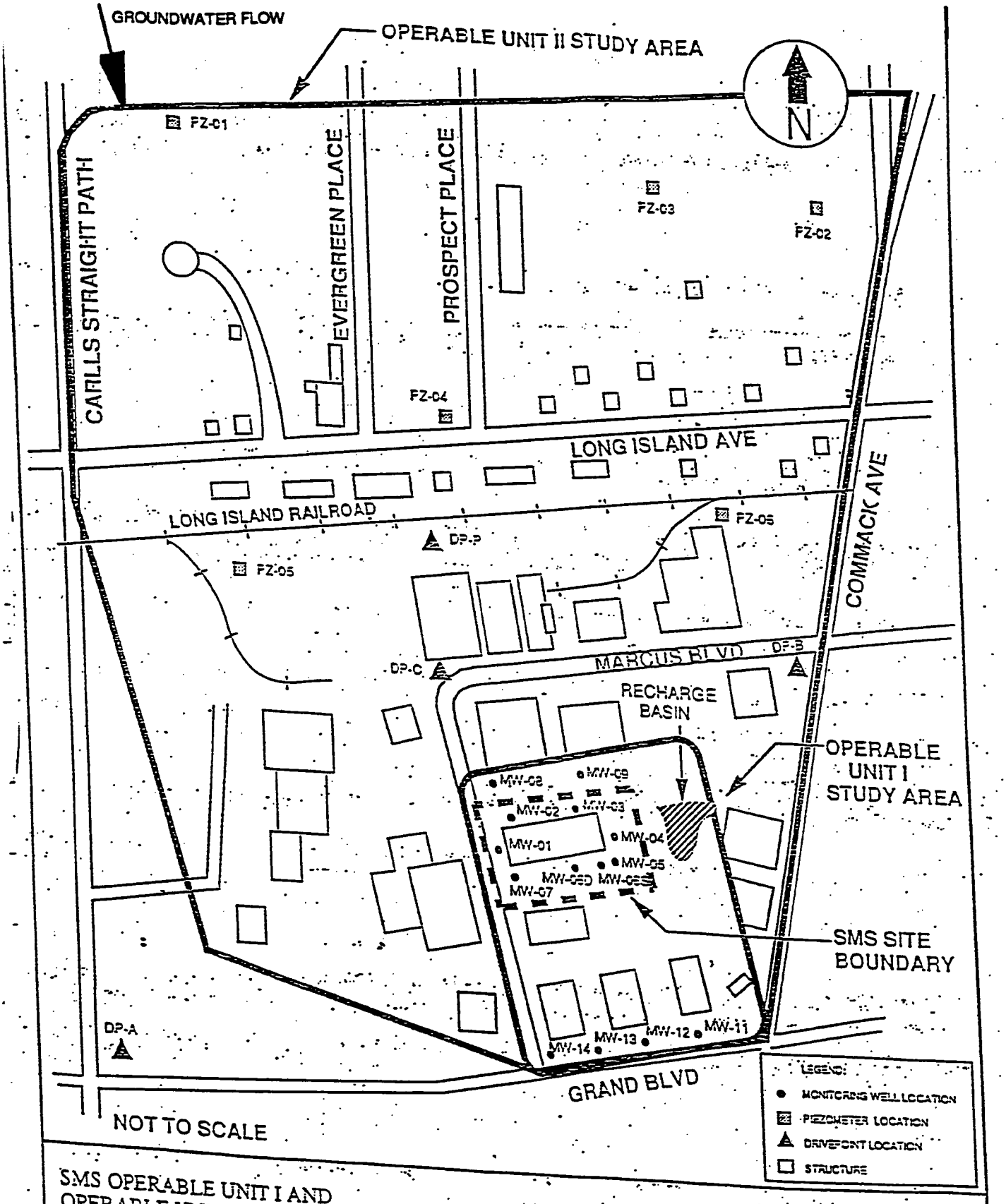
FIGURE 3



SMS INSTRUMENTS OPERABLE UNIT II STUDY AREA
DEER PARK, NEW YORK

Area of biased Grid Sampling

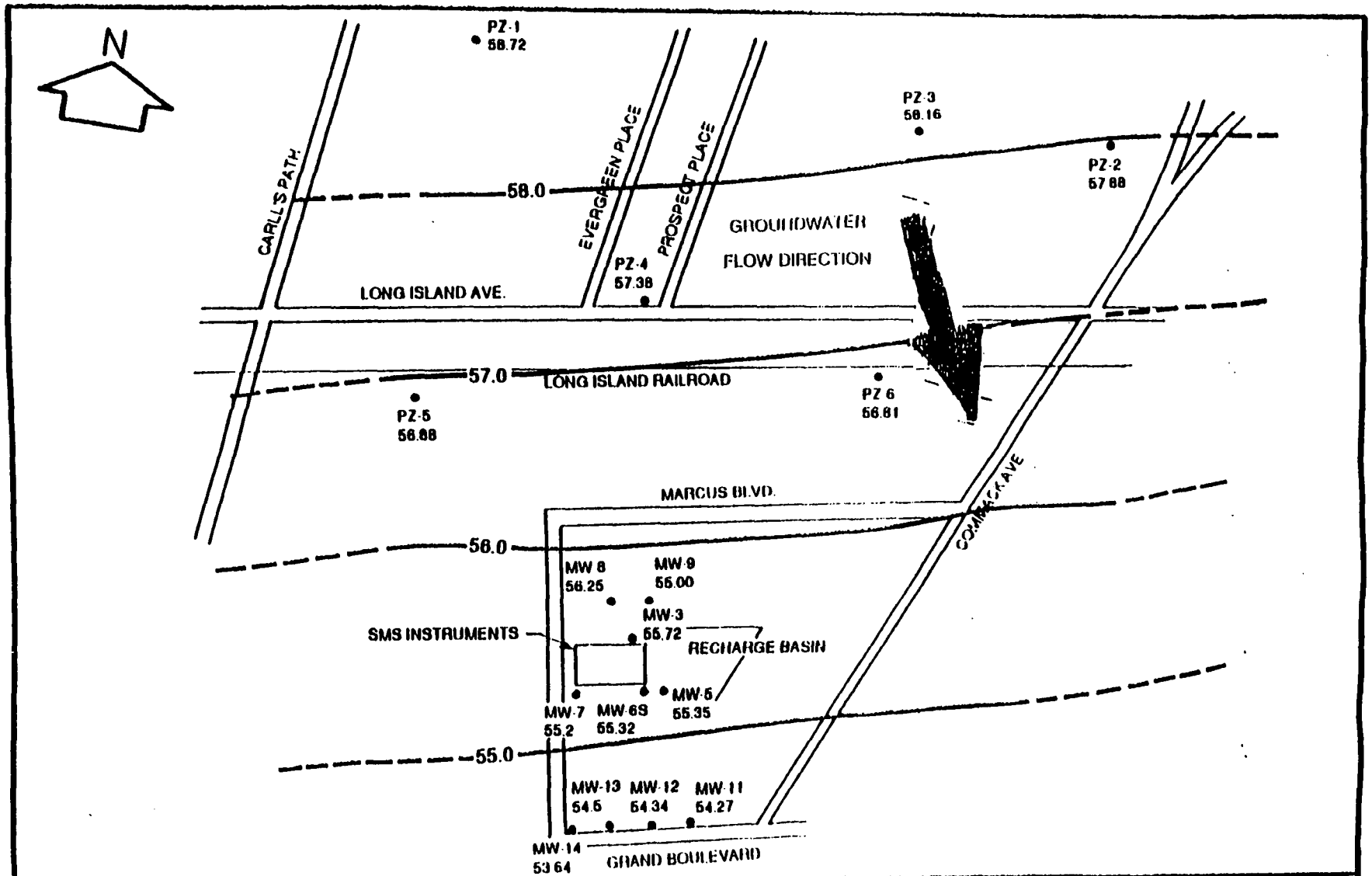
FIGURE 4



SMS OPERABLE UNIT I AND
OPERABLE UNIT II STUDY AREAS
DEER PARK, NEW YORK

Monitoring Well, Piezometer and
Drive Point Sampling Locations

FIGURE 5



SMS INSTRUMENTS OPERABLE UNIT II SITE
DEER PARK, NEW YORK

Groundwater Elevations And Potentiometric Surface Map - SMS OU2 Site
Elevations From May 7, 1992

FIGURE 6

APPENDIX II

TABLES

TABLE 1

COARSE GRID SOIL GAS SCREENING RESULTS
SMS INSTRUMENTS OU2
DEER PARK, NEW YORK

GRID #/PROPERTY	SAMPLE LOCATION	HNu READING *
F-18		
Auto Parts Center	Eastern portion	50 ppm
	Central portion	100 ppm
C+S Auto Parts -	Southwestern corner	35 ppm
	Southwestern corner	240 ppm
	Northwestern corner	250 ppm
	Northwestern corner	120 ppm
F-21		
Ace Foreign Auto Wreckers -	Central portion	24 ppm
	Southwestern fence	5 ppm
	Southeastern fence	18 ppm
G-15		
J+P Auto Wrecking	Northwest corner	4 ppm
Deer Park Auto Parts -	Northwest corner	3.5 ppm
	South-central portion	2.8 ppm
G-18		
Mid-Island Salvage	Eastern portion	50 ppm
	Central portion	100 ppm
G-21		
Mid-Island Auto Wreckers -	Central portion	7 ppm
H-21		
Mid-Island Auto Wreckers -	West-central portion	14 ppm
H-15/H-18/I-18 (Background)		
Ondrovic Property	Southern portion	5.8 ppm
	Central portion	0.6 ppm
	Northeast portion	8.8 ppm

* Reading expressed as total VOCs

TABLE 2

WATER LEVEL MEASUREMENTS
PIEZOMETERS AND MONITORING WELLS
ROUNDS ONE, TWO, THREE AND FOUR - SMS OU2 SITE

MW/Piezo. Number	Casing Elevation (ft MSL)	4/92 Depth to Water (ft)[1]	4/92 Ground Water Elevation (ft MSL)	5/92 Depth to Water (ft)[1]	5/92 Ground Water Elevation (ft MSL)	8/92 Depth to Water (ft)[1]	8/92 Ground Water Elevation (ft MSL)	12/92 Depth to Water (ft)[1]	12/92 Ground Water Elevation (ft MSL)
PZ-1	82.53	22.70	59.83	23.81	58.72	22.95	59.58	23.20	59.33
PZ-2	84.46	26.42	58.04	26.58	57.88	NA	NA	NA	NA
PZ-3	81.08	22.70	58.38	22.92	58.16	NA	NA	NA	NA
PZ-4	81.66	24.13	57.53	24.28	57.38	23.45	58.21	23.45	58.21
PZ-5	79.15	22.10	57.05	22.27	56.45	21.20	57.95	21.42	57.73
PZ-6	74.09	17.10	56.99	17.28	56.81	NA	NA	NA	NA
MW-02	NA	NA	NA	NA	NA	19.30	NA	19.70	NA
MW-03	75.82	NA	NA	20.10	55.72	18.40	57.42	18.90	56.92
MW-05	75.21	NA	NA	19.86	55.35	NA	NA	NA	NA
MW-06S	74.97	NA	NA	19.65	55.32	18.55	56.42	18.0	56.97
MW-07	76.40	NA	NA	21.20	55.20	NA	NA	NA	NA
MW-08	74.85	NA	NA	19.60	55.25	18.00 (IC)	56.85	18.5	56.35
MW-09	74.72	NA	NA	19.03	55.69	17.50 (IC)	56.57	18.0	56.72
MW-11	71.67	NA	NA	17.40	54.27	NA	NA	NA	NA

TABLE 2 (CONT'D)

WATER LEVEL MEASUREMENTS
PIEZOMETERS AND MONITORING WELLS
ROUNDS ONE, TWO, THREE AND FOUR - SMS OU2 SITE

MW/Piezo. Number	Casing Elevation (ft MSL)	4/92 Depth to Water (ft)[1]	4/92 Ground Water Elevation (ft MSL)	5/92 Depth to Water (ft)[1]	5/92 Ground Water Elevation (ft MSL)	8/92 Depth to Water (ft)[1]	8/92 Ground Water Elevation (ft MSL)	12/92 Depth to Water (ft)[1]	12/92 Ground Water Elevation (ft MSL)
MW-12	73.94	NA	NA	19.60	54.34	NA	NA	NA	NA
MW-13	75.18	NA	NA	20.68	54.50	NA	NA	NA	NA
MW-14	74.84	NA	NA	21.20	53.64	NA	NA	NA	NA

[1] Measurements of piezometers were taken from the inner casing. Measurements of monitoring wells were taken from the outer casing unless otherwise noted.

MSL - Mean Sea Level

(IC) denotes measurements taken from the inner casing of monitoring wells.

NA - Not applicable - Water level measurements were not taken at these wells/piezometers.

TABLE 3

ANALYTICAL RESULTS FROM GROUNDWATER QUALITY SCREENING ROUNDS ONE AND TWO SMS OU2 SITE, DEER PARK, NEW YORK

SAMPLE LOCATION	MW-02		MW-03		MW-08		MW-09		PZ-1		PZ-4		PZ-5	
SAMPLING ROUND	RD-1	RD-2	RD-1	RD-2	RD-1	RD-2	RD-1	RD-2	RD-1	RD-2	RD-1	RD-2	RD-1	RD-2
COMPOUND (ug/l)														
1,1-Dichloroethane	7J	2J	90	90	15	9J	ND	31	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	3J	16	670	ND	3J	19	20	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	83	27J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND - Below Method Detection Limit of 10 ug/l

J - Estimated Value

RD - Round Number

TABLE 4

SMS INSTRUMENTS, OU2
ORGANIC DATA
VOLATILE DATA (ug/L)

Comments: ANALYTICAL RESULTS ROUND ONE AND TWO,
Comments: SMS INSTRUMENTS OU2, DEER PARK, NEW YORK.

SAMPLE LOCATION	MW 8	MW 8	MW 9	MW 9	MW 2	MW 2	MW 3	MW 3
CASE/SAS NO:	19263	19263	19263	19263	19263	19263	19263	19263
SAMPLE NO:	BHY 39	BHY 39	BHY 40	BHY 40	BHY 41	BHY 41	BHY 50	BHY 50
SAMPLING ROUND	1	2	1	2	1	2	1	2
DATE	8/92	12/92	8/92	12/92	8/92	12/92	8/92	12/92
Chloroethane	10 U	10 UJ	10 U	10 UJ	10 U	10 U	83	27 J
Methylene Chloride	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
Acetone	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 UJ
Carbon Disulfide	10 U	10 UJ	10 U	10 UJ	10 U	10 U	10 U	50 U
1,1-Dichloroethene	10 U	10 UJ	10 U	10 UJ	10 U	10 U	10 U	10 J
1,1-Dichloroethane	15	9 J	10 U	31	7 J	2 J	90	90
1,2-Dichloroethene (total)	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
Chloroform	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
1,2-Dichloroethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
2-Butanone	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
1,1,1-Trichloroethane	10 U	3 J	19	20	10 U	3 J	16	670
Carbon Tetrachloride	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
Vinyl Acetate	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
Bromodichloromethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
1,2-Dichloropropane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
cis-1,3-Dichloropropene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
Trichloroethene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
Dibromochloromethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
1,1,2-Trichloroethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
Benzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
trans-1,3-Dichloropropene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
Bromoform	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
4-Methyl-2-Pentanone	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
2-Hexanone	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
Tetrachloroethene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
Toluene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
Chlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
Ethylbenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
Styrene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
Xylene (total)	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
TOTAL VOLATILES								

KEY:

TABLE 4 (CONT'D)

SHS INSTRUMENTS, OU2
ORGANIC DATA
VOLATILE DATA (ug/L)

Comments: ANLYTICAL RESULTS ROUND ONE AND TWO,
Comments: SHS INSTRUMENTS OU2, DEER PARK, NEW YORK.

SAMPLE LOCATION	PZ 4	PZ 4	PZ 5	PZ 5	PZ 1	PZ 1	MW 6S	MW 6S
CASE/SAS NO:	19263	19263	19263	19263	19263	19263	19263	19263
SAMPLE NO:.	BHY 45	BHY 45	BHY 46	BHY 46	BHY 47	BHY 47	BHY 49	BHY 49
SAMPLING ROUND	1	2	1	2	1	2	1	2
DATE	8/92	12/92	8/92	12/92	8/92	12/92	8/92	12/92
Chloroethane	10 U	10 UJ	10 U	10 UJ	10 U	10 UJ	10 U	25 UJ
Methylene Chloride	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U
Acetone	10 U	22 U	10 U	10 U	10 U	10 U	10 U	25 U
Carbon Disulfide	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U
1,1-Dichloroethene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U
1,1-Dichloroethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U
1,2-Dichloroethene (total)	10 U	10 U	10 U	10 U	10 U	10 U	96	25
Chloroform	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U
1,2-Dichloroethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U
2-Butanone	10 U	10 U	10 U	10 U	10 U	1 J	10 U	25 U
1,1,1-Trichloroethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U
Carbon Tetrachloride	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U
Vinyl Acetate	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U
Bromodichloromethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U
1,2-Dichloropropane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U
cis-1,3-Dichloropropene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U
Trichloroethene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U
Dibromochloromethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U
1,1,2-Trichloroethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U
Benzene	10 U	10 U	10 U	10 U	10 U	10 U	10	9 J
trans-1,3-Dichloropropene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U
Bromoform	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U
4-Methyl-2-Pentanone	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U
2-Hexanone	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U
Tetrachloroethene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U
Toluene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	7 J
Chlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	570	380
Ethylbenzene	10 U	10 U	10 U	10 U	10 U	10 U	290	210
Styrene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	25 U
Xylene (total)	10 U	10 U	10 U	10 U	10 U	10 U	2000	1300J
TOTAL VOLATILES								

TABLE 5

DRIVE POINT VOLATILE ORGANIC DATA

DRIVE POINT LOCATION DP-C

DEPTH - 25 FEET

CAS NO.	COMPOUND	RESULTS (UG/L)	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	125	J
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (Total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	100	R
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	50	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	50	U
591-78-6	2-Hexanone	50	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylenes (Total)	5	U
110-75-8	2-Chloroethyl vinyl ether	10	U
107-02-8	Acrolein	50	U
107-13-1	Acrylonitrile	50	U
95-50-1	Dichlorobenzene (Total)	5	U

KEY:

UG/L - parts per billion (ppb)
U - compound analyzed but not detected
J - estimated value
R - rejected value

TABLE 5 (CONT'D)

DRIVE POINT VOLATILE ORGANIC DATA

DRIVE POINT LOCATION DP-C

DEPTH - 50 FEET

CAS NO.	COMPOUND	RESULTS (UG/L)	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	100 ~~50~~	÷U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	100	÷R
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	50	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	50	U
591-78-6	2-Hexanone	50	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylenes (Total)	5	U
110-75-8	2-Chloroethyl vinyl ether	10	U
107-02-8	Acrolein	50	U
107-13-1	Acrylonitrile	50	U
95-50-1	Dichlorobenzene (Total)	5	U

TABLE 5 (CONT'D)

DRIVE POINT VOLATILE ORGANIC DATA

DRIVE POINT LOCATION DP-C

DEPTH - 75 FEET

CAS NO.	COMPOUND	RESULTS(UG/L) *	Q
74-87-3	Chloromethane	100	U
74-83-9	Bromomethane	100	U
75-01-4	Vinyl Chloride	100	U
75-00-3	Chloroethane	100	U
75-09-2	Methylene Chloride	50	U
67-64-1	Acetone	1230	U
75-15-0	Carbon Disulfide	50	U
75-35-4	1,1-Dichloroethene	50	U
75-34-3	1,1-Dichloroethane	50	U
540-59-0	1,2-Dichloroethene (total)	50	U
67-66-3	Chloroform	50	U
107-06-2	1,2-Dichloroethane	50	U
78-93-3	2-Butanone	1000	~~U~~ R
71-55-6	1,1,1-Trichloroethane	50	U
56-23-5	Carbon Tetrachloride	50	U
108-05-4	Vinyl Acetate	500	U
75-27-4	Bromodichloromethane	50	U
78-87-5	1,2-Dichloropropane	50	U
10061-01-5	cis-1,3-Dichloropropene	50	U
79-01-6	Trichloroethene	50	U
124-48-1	Dibromochloromethane	50	U
79-00-5	1,1,2-Trichloroethane	50	U
71-43-2	Benzene	50	U
10061-02-6	trans-1,3-Dichloropropene	50	U
75-25-2	Bromoform	50	U
108-10-1	4-Methyl-2-Pentanone	500	U
591-78-6	2-Hexanone	500	U
127-18-4	Tetrachloroethene	50	U
79-34-5	1,1,2,2-Tetrachloroethane	50	U
108-88-3	Toluene	50	U
108-90-7	Chlorobenzene	50	U
100-41-4	Ethylbenzene	50	U
100-42-5	Styrene	50	U
1330-20-7	Xylenes (Total)	50	U
110-75-8	2-Chloroethyl vinyl ether	100	U
107-02-8	Acrolein	500	U
107-13-1	Acrylonitrile	500	U
95-50-1	Dichlorobenzene (Total)	50	U

* In cases where samples are diluted in order to meet the instrument calibration range, detection limits above the method detection are reported for all compounds analyzed. This is because the sample detection limit has been multiplied by the dilution factor.

TABLE 6

Summary of Groundwater Contaminants of Concern

Compound	Frequency of Detection	Range, ug/l	95% UCL, ug/l *	Maximum, ug/l
1,1-Dichloroethane	7/14	2 - 90	46	90
1,1-Dichloroethene	1/14	5 - 10	6	10
1,1,1-Trichloroethane	6/14	3 - 670	85	670
Chloroethane	2/14	5 - 83	18	83

* Upper Confidence Limit

TABLE 7

Potential Future Groundwater Exposure Pathways Considered

Receptor Population	Exposure Route
Residents:	
Children (1-6 years)	Ingestion Inhalation
Adults	Ingestion Inhalation
Site Workers (Commercial/Industrial):	Ingestion

TABLE 8

SUMMARY OF CARCINOGENIC TOXICITY VALUES

Chemical	Slope Factor $(mg/kg\text{-}day)^{-1}$	Weight of Evidence Evidence	Source
1,1-Dichloroethene	6.0E-1 (oral)	C	IRIS
1,1-Dichoroethene	1.75E-1 (inhalation)	C	IRIS

TABLE 9

Cumulative Upper Bound Cancer Risks - Future Exposure Scenarios

FUTURE RECEPTOR	EXPOSURE PATHWAY	PATHWAY CANCER RISK
INDUSTRIAL WORKER	INGESTION OF GW	1E-5
RESIDENTIAL CHILD	INGESTION OF GW	2E-5
	INHALATION	8E-6
	CUMULATIVE CANCER RISK	3E-5
RESIDENTIAL ADULT	INGESTION OF GW	4E-5
	INHALATION	9E-6
	CUMULATIVE CANCER RISK	5E-5

TABLE 10

SUMMARY OF NONCARCINOGENIC TOXICITY VALUES (ORAL)

Chemical	Oral RfD mg/kg-day	Confid. Level	Uncert. Factor	Source
Chronic RfDs				
1,1,1-Trichloroethane	9E-2	___	1000	HEAST
1,1-Dichloroethene	9E-3	Medium	1000	IRIS
Subchronic RfDs				
1,1,1-Trichloroethane	9E-1	___	100	HEAST
1,1-Dichloroethene	9E-3	___	1000	HEAST

SUMMARY OF NONCARCINOGENIC TOXICITY VALUES (INHALATION)

Chemical	Inhalation RfC mg/kg/day	Uncert. Factor	Source
Chronic RfCs			
1,1,1-Trichloroethane	2.9E-1	___	HEAST
1,1-Dichloroethane	1.43E-1	___	HEAST
Chloroethane	2.86	300	IRIS
Subchronic RfCs			
1,1,1-Trichloroethane	2.9	___	HEAST
1,1-Dichloroethane	1.43	___	HEAST
Chloroethane	2.86	300	IRIS

TABLE 11

Cumulative Upper Bound Hazard Indices - Future Exposure Scenarios

FUTURE RECEPTOR	EXPOSURE PATHWAY	PATHWAY HAZARD INDEX
INDUSTRIAL WORKER	INGESTION OF GW	0.02
RESIDENTIAL CHILD	INGESTION OF GW	0.05
	INHALATION	0.006
	TOTAL HAZARD INDEX	0.06
RESIDENTIAL ADULT	INGESTION OF GW	0.04
	INHALATION	0.01
	TOTAL HAZARD INDEX	0.05

APPENDIX III

ADMINISTRATIVE RECORD INDEX

SMS INSTRUMENTS SITE
OPERABLE UNIT II
ADMINISTRATIVE RECORD FILE
INDEX OF DOCUMENTS

2.0 REMOVAL RESPONSE

2.2 Sampling and Analysis Data/Chain of Custody Forms

P. 200001 - 200001 Memo to Dr. A.M. Fayon, United States Environmental Protection Agency, from Ms. Jeanne Litwin, CDM Federal Programs Corporation, re: Drum Sampling Summary, SMS Instruments Operable Unit II, March 27, 1992.

2.7 Correspondence

P. 200002 - 200002 Letter to Abram Miko Fayon, Eng.Sc.D., Remedial Project Manager, United States Environmental Protection Agency, from Mr. James J. Harrington, Superintendent of Highways, Town of Babylon, re: Disposal of Drum Contents, 120 Marcus Blvd, Deer Park, New York, April 14, 1992.

P. 200003 - 200003 Letter to Ms. Jeanne Litwin, Work Assignment Manager, CDM Federal Programs Corporation, from Abram Miko Fayon, Eng.Sc.D., Remedial Project Manager, United States Environmental Protection Agency, re: Notification of permission granted to discharge contents of 49 drums into recharge basin, April 10, 1992.

P. 200004 - 200005 Letter to Dr. A.M. Fayon, United States Environmental Protection Agency, from Ms. Jeanne Litwin, Work Assignment Manager, CDM Federal Programs Corporation, re: SMS Instruments Operable Unit II, Disposal of Drums, April 1, 1992.

P. 200006 - 200006 Letter to Ms. Jeanne Litwin, Work Assignment Manager, CDM Federal Programs Corporation, from Mr. Abram Miko Fayon, Remedial Project Manager, United States Environmental Protection Agency, re: SMS RI/FS Drum Removal, December 6, 1991.

P. 200007 - 200007 Letter to Dr. A.M. Fayon, United States Environmental Protection Agency, from Ms. Jeanne Litwin, Work Assignment Manager, CDM Federal Programs Corporation, re: SMS Instruments Operable Unit II, Drum Disposal Activities, December 5, 1991.

P. 200008 - 200008 Letter to Dr. A.M. Fayon, United States Environmental Protection Agency, from Ms. Jeanne Litwin, Work Assignment Manager, CDM Federal Programs Corporation, re: SMS Instruments Operable Unit II, Award of Drum Disposal Subcontract, November 5, 1991.

P. 200009 - 200009 Letter to Robert Goltz, P.E., Deputy Program Manager, Camp Dresser & McKee, from Mr. Patrick Durack, Acting Chief New York Caribbean Superfund Branch I, re: Authorization for Camp Dresser and McKee to sign the manifests on behalf of the United States Environmental Protection Agency for the removal of drums of waste generated during the Remedial Investigation of the SMS Instruments, Inc. Site, August 29, 1991.

P. 200010 - 200010 Letter to Dr. A.M. Fayon, United States Environmental Protection Agency, from Ms. Jeanne Litwin, Work Assignment Manager, CDM Federal Programs Corporation, re: SMS Instruments, Drum Removal Activities, August 28, 1991.

3.0 REMEDIAL INVESTIGATION

3.1 Sampling and Analysis Plans

P. 300001 - 300001 Map: Proposed Sample Location Map. SMS Instruments. Operable Unit II. prepared by CDM Federal Programs Corporation.

3.2 Sampling and Analysis Data/Chain of Custody Forms

P. 300002 - 300017 Letter to Ms. Kathy Kinsella, RSCC Region II, United States Environmental Protection Agency, from Ms. Jeanne Litwin, Work Assignment Manager, CDM Federal Programs Corporation, re: Sampling Trip Report and original paperwork for December 16, 17, and 18, 1992 samplings of groundwater, December 28, 1992. (Attachment: Sampling Trip Report. SMS Instruments OU2 Site. December 23, 1992).

P. 300018 - 300021 Letter to Mr. Jonathan Rude, United States Environmental Protection Agency Contract Laboratory Program, from Ms. Jeanne Litwin, Work Assignment Manager, CDM Federal Programs Corporation, re: Completed CLP Paperwork for RAS Case Number 19263, December 28, 1992. (Attachments: Chain of Custody Forms).

P. 300022 - 300044 Report: Completed Analysis Report, SMS Instruments Site, October 26, 1992.

3.3 Work Plans

P. 300045 - 300058 Plan: Work Plan, SMS Instruments Operable Unit II, Deer Park, New York, Preparation of Remedial Investigation/Feasibility Study Work Plan, Volume I, prepared for United States Environmental Protection Agency, prepared by CDM Federal Programs Corporation, May 25, 1990.

P. 300059 - 300059 Statement of Work: Preparation of a Work Plan for a Second Operable Unit, March 30, 1990.

3.4 Remedial Investigation Reports

P. 300060 - 300219 Report: Final Remedial Investigation Report, Volume I, SMS Instruments Operable Unit II, Deer Park, Long Island, New York, prepared for United States Environmental Protection Agency, prepared by CDM Federal Programs Corporation, July 7, 1993.

P. 300220 - 300557 Report: Final Remedial Investigation Report, Volume II, SMS Instruments Operable Unit II, Deer Park, Long Island, New York, prepared for United States Environmental Protection Agency, prepared by CDM Federal Programs Corporation, July 7, 1993.

P. 300558 - 300665 Report: Phase I Investigation Interim Report, Volume I, SMS Instruments Operable Unit II, Deer Park, Long Island, New York, prepared for United States Environmental Protection Agency, prepared by CDM Federal Programs Corporation, July 31, 1991.

P. 300666 - 300783 Report: Phase I Investigation Interim Report, Volume II, SMS Instruments Operable Unit II, Deer Park, Long Island, New York, prepared for United States Environmental Protection Agency, prepared by CDM Federal Programs Corporation, July 31, 1991.

P. 300784 - 300817 Report: Phase I Investigation Interim Report Original Photographic Log, SMS Instruments Operable Unit Two, Deer Park, Long Island, New York, prepared for United States Environmental Protection Agency, prepared by CDM Federal Programs Corporation, July 31, 1991.

P. 300818 - 300837 Report: Field Summary Report, Coarse Grid Soil Gas Screening, SMS Instruments Operable Unit II, Deer Park, Long Island, New York, prepared for United States Environmental Protection Agency, prepared by CDM Federal Programs Corporation, May 30, 1991.

3.5 Correspondence

P. 300838 - 300838 Letter to Dr. A.M. Fayon, United States Environmental Protection Agency, and Mr. Keith Kollar, United States Environmental Protection Agency, from Robert D. Goltz, P.E., ARCS II Program Manager, CDM Federal Programs Corporation, re: Final Remedial Investigation Report, SMS Instruments Operable Unit II, July 7, 1993.

P. 300839 - 300842 Letter to Dr. A.M. Fayon, United States Environmental Protection Agency, from Ms. Jeanne Litwin, Work Assignment Manager, CDM Federal Programs Corporation, re: SMS Instruments Operable Unit II, Sampling of Existing Monitoring Wells and Piezometers, Round Two, December 9, 1992. (Attachments: sampling data).

P. 300843 - 300843 Memo to A. Fayon, from Patricia Sheridan, re: 14 day turnaround of samples, November 25, 1992.

P. 300844 - 300847 Letter to Dr. A.M. Fayon, United States Environmental Protection Agency, from Ms. Jeanne Litwin, Work Assignment Manager, CDM Federal Programs Corporation, re: SMS Instruments Operable Unit II, Sampling of Existing Monitoring Wells and Piezometers, August 19, 1992. (Attachments: sampling data).

P. 300848 - 300848 Memo to Dr. A.M. Fayon, United States Environmental Protection Agency, from Ms. Jeanne Litwin, CDM Federal Programs Corporation, re: Sampling of the Existing Wells, SMS Operable Unit II Site, Deer Park, New York, August 7, 1992.

P. 300849 - 300887 Letter to Dr. A.M. Fayon, United States Environmental Protection Agency, and Mr. Keith Kollar, United States Environmental Protection Agency, from Robert D. Goltz, P.E., ARCS II Program Manager, CDM Federal Programs Corporation, re: Addendum to the Phase I Interim Report, SMS Instruments Operable Unit II, June 19, 1992. (Attachment: Addendum to the Phase I Investigation Interim Report, SMS Instruments Operable Unit II, Deer Park, Long Island, New York, prepared for US Environmental Protection Agency, prepared by CDM Federal Programs Corporation, June 19, 1992).

P. 300888 - 301159 Letter to Ms. Jeanne Litwin, CDM Federal Programs Corporation, from Ms. Zenaida Esteves of Metropolitan Disposal Services, Inc., re: Enclosed second set of data, inadvertently omitted from the first set, associated with February 4, 1992 sampling, Data classifies material as non-hazardous and requests notification of disposal plans, March 6, 1992. (Attachment: data report).

P. 301160 - 301160 Letter to Dr. A.M. Fayon, United States Environmental Protection Agency, from Ms. Jeanne Litwin, Work Assignment Manager, CDM Federal Programs Corporation, re: SMS Instruments Operable Unit II, Project Status Update, February 7, 1992.

P. 301161 - 301161A Letter to Dr. A.M. Fayon, United States Environmental Protection Agency, from Ms. Jeanne Litwin, Work Assignment Manager, CDM Federal Programs Corporation, re: SMS Instruments Operable Unit II, Schedule Update, November 20, 1991. (Attachment: Revised Field Schedule, November 18, 1991).

P. 301162 - 301163 Letter to Dr. A.M. Fayon, United States Environmental Protection Agency, from Ms. Jeanne Litwin, Work Assignment Manager, CDM Federal Programs Corporation, re: SMS Instruments Operable Unit II, Project Status Update, September 6, 1991.

P. 301164 - 301164 Letter to Ms. Jeanne Litwin, Work Assignment Manager, CDM Federal Programs Corporation, from Abram Miko Fayon, Eng.Sc.D, Remedial Project Manager, United States Environmental Protection Agency, re: Second Operable Unit, Direction of Groundwater Flow, Northeast of the SMS site, August 30, 1991.

P. 301165 - 301165 Letter to Mr. A.M. Fayon, United States Environmental Protection Agency, and Mr. Keith Kollar, United States Environmental Protection Agency, from Robert D. Goltz, P.E., ARCS II Deputy Program Manager, CDM Federal Programs Corporation, re: Field Summary Report, Phase I Interim Report, SMS Instruments Operable Unit II, July 31, 1991.

P. 301166 - 301167 Letter to Dr. A.M. Fayon, United States Environmental Protection Agency, from Ms. Jeanne Litwin, Work Assignment Manager, CDM Federal Programs Corporation, re: Revised Schedule, SMS Instruments Operable Unit II, June 6, 1991. (Attachment: Revised RI/FS Schedule).

P. 301168 - 301169 Letter to Dr. A. Miko Fayon, United States Environmental Protection Agency, from Ms. Jeanne Litwin, Work Assignment Manager, CDM Federal Programs Corporation, re: Information Required for Drilling Invitation for Bid, SMS Instruments Site, Operable Unit II, February 22, 1991.

P. 301170 - 301171 Letter to Mr. Shaheer Alvi, United States Environmental Protection Agency and Dr. Abram Miko Fayon, United States Environmental Protection Agency, from Peter W. Tunnicliffe, P.E., ARCS II Programs Manager, CDM Federal Programs Corporation, re: Final Work Plan for SMS Instruments, Operable Unit II Site Remedial Investigation/Feasibility Study, October 5, 1990.

P. 301172 - 301172 Letter to Dr. Miko Fayon, United States Environmental Protection Agency, from Ms. Jeanne Litwin, ARCS Site Manager, CDM Federal Programs Corporation, re: Initial Phase I Activity, August 9, 1990.

P. 301173 - 301173 Memo to Miko Fayon, Bob Goltz, and Jeanne Litwin, from Sally Odland, re: Meeting June 29, 1990 on SMS Operable Unit II, June 29, 1990.

7.0 ENFORCEMENT

7.7 Notice Letters and Responses - 104e's

P. 700001 - 700001A Letter to Mr. Robert Pinter, Cotton Realty, c/o Pinter Brothers Warehouse, from Ms. Princina S. Watts, Assistant Regional Counsel, Office of Regional Counsel, United States Environmental Protection Agency, re: Access Agreement for the SMS Instruments, Inc. Site, March 4, 1992.

P. 700002 - 700013 Letter to Chem Star Corporation, and Mica Realty & Construction Corporation, from Ms. Kathleen Callahan, Director, Emergency and Remedial Response Division, United States Environmental Protection Agency, re: Request for Information, October 24, 1991. (Attachments: Instructions for Responding to Request for Information, Certification of Answers to Request for Information).

P. 700014 - 700025 Letter to F. and L. Coniglio Dagrosa, Paramount Macaroni Company, c/o Borden, Inc. - Tax Department, from Ms. Kathleen Callahan, Director, Emergency and Remedial Response Division, United States Environmental Protection Agency, re: Request for Information, October 24, 1991. (Attachments: Instructions for Responding to Request for Information, Certification of Answers to Request for Information).

P. 700026 - 700036 Letter to Mr. Jonathan J. Maltese, President, Production Spraying Company, from Mr. Stephen D. Luftig, Director, Emergency and Remedial Response Division, United States Environmental Protection Agency, re: Request for Information, April 9, 1990. (Attachments: Instructions for Responding to Request for Information, Certification of Answers to Request for Information).

P. 700037 - 700046 Letter to Mr. Miles Coon, Esq., President, Commander Industries, from Mr. Stephen D. Luftig, Director, Emergency and Remedial Response Division, United States Environmental Protection Agency, re: Request for Information, March 12, 1990. (Attachments: Instructions for Responding to Request for Information, Certification of Answers to Request for Information).

P. 700047 - 700047 Letter to Dr. Abram Miko Fayon, Project Manager, United States Environmental Protection Agency, from Mr. Syd Askoff, Attorney at Law, re: Production Spraying and Manufacturing Corporation, February 15, 1990.

P. 700048 - 700048 Letter to Dr. Abram Miko Fayon, Project Manager, United States Environmental Protection Agency, from Ms. Anne Jones, Legal Assistant, Vernitron Corporation, re: Request for Information - response time period extension request, February 13, 1990.

P. 700049 - 700049 Letter to Dr. Abram Miko Fayon, Project Manager, United States Environmental Protection Agency, from Ms. Anne Jones, Legal Assistant, Vernitron Corporation, re: Request for Information - Clarification of property addresses, February 9, 1990.

P. 700050 - 700059 Letter to President, Production Spraying Company, President, Vernitron Corporation, and President, Commander Industries, from Mr. Stephen D. Luftig, Director, Emergency and Remedial Response Division, United States Environmental Protection Agency, re: Request for Information, January 19, 1990. (Attachments: Instructions for Responding to Request for Information, Certification of Answers to Request for Information).

7.8 Correspondence

P. 700060 - 700060 Letter to Mr. John Grant, V.P. Operations, Vernitron, Inc., from Abram Miko Fayon, Eng.Sc.D., Remedial Project Manager, United States Environmental Protection Agency, re: Confirmation of phone conversation confirming December 16, 1992 as date two samples are to be taken from monitoring wells MW08 and MW09, December 14, 1992.

P. 700061 - 700061 Letter to Mr. John Grant, Vernitron, Inc., from Abram Miko Fayon, Eng.Sc.D., Remedial Project Manager, United States Environmental Protection Agency, re: EPA requests property access permission to continue groundwater sampling, August 20, 1992.

P. 700062 - 700062 Letter to United States Environmental Protection Agency Region II, attn: Abram Miko Fayon, Eng.Sc.D, Remedial Project Manager, from Mr. John Grant, V.P. Operations, Vernitron Corporation, re: Vernitron grants permission for EPA to obtain samples, August 20, 1992.

P. 700063 - 700065 Letter to Dr. Abram Miko Fayon, United States Environmental Protection Agency, Remedial Project Manager, from C.R. Springer, Manager, Environmental Affairs, Borden Packaging and Industrial Products, re: Request for approval of Agreement to Permit Entry to Premises for Environmental Investigation, April 12, 1991. (Attachment: Agreement to Permit Entry to Premises for Environmental Investigation).

APPENDIX IV

STATE LETTER OF CONCURRENCE

New York State Department of Environmental Conservation
50 Wolf Road, Albany, New York 12233 7010

SEP 27 1993

Thomas C. Jorling
Commissioner

Mr. George Pavlou
Acting Director
Emergency and Remedial Response Division
U.S. Environmental Protection Agency
Region II
26 Federal Plaza
New York, NY 10278

Re: SMS Instruments ID No. 152026

Dear Mr. Pavlou:

The New York State Department of Environmental Conservation and New York State Department of Health concur with the proposed no action remedy for the SMS Instruments site OU 2.

If you have any further questions, Victor Cardona, project Manager for the site, can be reached at (518) 457-3976.

Sincerely,

Ann DeEarbieri
Deputy Commissioner

cc: A. Fayon, USEPA-Region II
D. Garbarini, USEPA-Region II