EPA/ROD/R02-93/219
1993

EPA Superfund
Record of Decision:

SMS INSTRUMENTS, INC.
EPA ID: NYD001533165
OU 02
DEER PARK, NY
09/27/1993

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. SS 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 thepotential 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.

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 flood plain, 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-identified 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 dichloroethane, 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 upperbound 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-tenthousand to one-in-a-million chance of developing cancer as a result of siterelated 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 5x10[-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 fiveyear 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

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TABLES

APPENDIX III

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SMS INSTRUMENTS SITE
OPERABLE UNIT II
ADMINISTRATIVE RECORD FILE
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2.0 REMOVAL RESPONSE

2.2 Sampling and Analysis Data/Chain of Custody Forms

P. 200001 - Memo to Dr. A.M. Fayon, United States
200001 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 - Letter to Abram Miko Fayon, Eng.Sc.D., Remedial
200002 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 - Letter to Ms. Jeanne Litwin, Work Assignment
200003 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 - Letter to Dr. A.M. Fayon, United States
200005 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 - Letter to Ms. Jeanne Litwin, Work Assignment
200006 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 - Letter to Dr. A.M. Fayon, United States
200007 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 - Letter to Dr. A.M. Fayon, United States
200008 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 - Letter to Robert Goltz, P.E., Deputy Program
200009 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 - Letter to Dr. A.M. Fayon, United States
200010 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 - Map: Proposed Sample Location Map, SMS
300001 Instruments, Operable Unit II, prepared by CDM Federal Programs Corporation.

3.2 Sampling and Analysis Data/Chain of Custody Forms

P. 300002 - Letter to Ms. Kathy Kinsella, RSCC Region II,
300017 United States Environmental Protection Agency, fromMs. 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 - Letter to Mr. Jonathan Rude, United States
300021 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 - Report: Completed Analysis Report, SMS
300044 Instruments Site, October 26, 1992.

3.3 Work Plans

P. 300045 - Plan: Work Plan, SMS Instruments Operable Unit 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 - Statement of Work: Preparation of a Work Plan for
300059 a Second Operable Unit, March 30, 1990.

3.4 Remedial Investigation Reports

P. 300060 - Report: Final Remedial Investigation Report,
300219 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 - Report: Final Remedial Investigation Report,
300557 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 - Report: Phase I Investigation Interim Report,
300665 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 - Report: Phase I Investigation Interim Report,
300783 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 - Report: Phase I Investigation Interim Report
300817 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 - Report: Field Summary Report, Coarse Grid Soil
300837 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 - Letter to Dr. A.M. Fayon, United States
300838 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 - Letter to Dr. A.M. Fayon, United States
300842 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 - Memo to A. Fayon, from Patricia Sheridan, re: 14
300843 day turnaround of samples, November 25, 1992.

P. 300844 - Letter to Dr. A.M. Fayon, United States
300847 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 - Memo to Dr. A.M. Fayon, United States
300848 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 - Letter to Dr. A.M. Fayon, United States
300887 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 - Letter to Ms. Jeanne Litwin, CDM Federal
301159 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 nonhazardous and requests notification of disposal plans, March 6, 1992. (Attachment: data report).

P. 301160 - Letter to Dr. A.M. Fayon, United States
301160 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 - Letter to Dr. A.M. Fayon, United States
301161A 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 - Letter to Dr. A.M. Fayon, United States

301163 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 - Letter to Ms. Jeanne Litwin, Work Assignment
301164 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 - Letter to Mr. A.M. Fayon, United States
301165 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 - Letter to Dr. A.M. Fayon, United States
301167 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 - Letter to Dr. A. Miko Fayon, United States
301169 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 - Letter to Mr. Shaheer Alvi, United States
301171 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 - Letter to Dr. Miko Fayon, United States
301172 Environmental Protection Agency, from Ms. Jeanne Litwin, ARCS Site Manager, CDM Federal Programs Corporation, re: Initial Phase I Activity, August 9, 1990.

P. 301173 - Memo to Miko Fayon, Bob Goltz, and Jeanne Litwin,
301173 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 - Letter to Mr. Robert Pinter, Cotton Realty, c/o
700001A 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 - Letter to Chem Star Corporation, and Mica Realty &
700013 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 - Letter to F. and L. Coniglio Dagrosa, Paramount
700025 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 - Letter to Mr. Jonathan J. Maltese, President,
700036 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 - Letter to Mr. Miles Coon, Esq., President,
700046 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 - Letter to Dr. Abram Miko Fayon, Project Manager,
700047 United States Environmental Protection Agency, from Mr. Syd Askoff, Attorney at Law, re: Production Spraying and Manufacturing Corporation, February 15, 1990.

P. 700048 - Letter to Dr. Abram Miko Fayon, Project Manager,
700048 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 - Letter to Dr. Abram Miko Fayon, Project Manager,
700049 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 - Letter to President, Production Spraying Company,
700059 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 - Letter to Mr. John Grant, V.P. Operations,
700060 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 - Letter to Mr. John Grant, Vernitron, Inc., from
700061 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 - Letter to United States Environmental Protection
700062 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 - Letter to Dr. Abram Miko Fayon, United States
700065 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

Thomas C. Jorling
Commissioner

SEP 27 1993

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 DeBarbieri
Deputy Commissioner

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