SUPERFUND PRELIMINARY SITE CLOSE OUT REPORT

ANCHOR CHEMICAL

TOWN OF OYSTER BAY, NASSAU COUNTY, NEW YORK

September 1996

Prepared By

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9/30/96
Date

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ATTACHMENTS

I. INTRODUCTION

This Preliminary Close Out Report documents that the U.S. Environmental Protection Agency (EPA) has completed construction activities at the Anchor Chemical Superfund Site (the "Site") in accordance with the Office of Solid Waste and Emergency Response (OSWER) Directive 9320.2-3C. On September 29, 1995, EPA issued a Record of Decision (ROD) for the Site, which specified no further action beyond the completion of a dry well removal action. The removal action was completed on July 11, 1996.

II. SUMMARY OF SITE CONDITIONS

Background

The Anchor Chemical Site is located at 500 West John Street in the Village of Hicksville, Town of Oyster Bay, Nassau County, New York (see Figure 1). The surrounding area is predominantly industrial but also has recreational areas.

The Site is bordered to the west by a commercial property, to the south by West John Street, and to the north and west by Cantiague park, a 125 acre recreational facility. A groundwater recharge basin lies east of the Site.

The Site is approximately 1.5 acres in size and includes one 28,850 square foot, two-story building. The KoBar Company purchased the Site on September 30, 1964, and in the same year constructed the building for the Anchor Chemical Company. Before the building was constructed, the Site was used for agricultural purposes.

From 1964 to 1978, Anchor Chemical leased the Site from KoBar and began manufacturing, blending, and storing chemicals for the graphic arts industry. The company operated two solvent mixing rooms and several container storage areas. In 1964, seventeen (17) underground storage tanks (USTs), which ranged in size from 500 to 4,000 gallons were installed under the mixing room for Anchor Chemical (see Figure 2). The tanks were used to store chemicals and solvents such as acetone, 1,1,1-trichloro-ethane, methylene chloride, 2-butoxyethanol, and isopropyl alcohol. The chemicals were also stored in seven aboveground tanks, which ranged in size from 550 to 1,500 gallons. The aboveground tanks were removed from the Site in 1985.

In addition, there are nine dry wells and one drain, which are located in the parking lot on Site (see Figure 2). The dry wells and drain were installed to collect rainwater run off and drainage from the building. Most of the Site is paved with asphalt. Liquid which collects in the dry wells infiltrates into the soil. None of the dry wells are connected to a sewer.

Record of Decision

EPA, in consultation with the State of New York, determined that the Anchor Chemical Superfund Site does not pose a significant threat to human health or the environment and, therefore, further remediation was not appropriate. This determination was based on the findings of the remedial investigation and the baseline risk assessment. The risks posed by the Site are within EPA's acceptable risk range and therefore do not pose a treat to human health or the environment.

Although the risks posed by the Site contamination are within the acceptable risk range, four dry wells on-Site were contaminated with chromium, lead, 1,1,1-trichloroethane (1,1,1-TCA) and other volatile organic compounds (VOCs). The four dry wells (DWs) are designated as DW-2, DW-3, DW-6 and DW-8. Analysis of sediment samples, which were collected from the dry wells in August 1991 as part of the remedial investigation of the Site, revealed the contamination. The sample results are as follows:

Sample Results and Locations				
Contaminant	**Dry Well 2**	**Dry Well 3**	**Dry Well 6**	**Dry Well 8**
1,1-DCA[1]	1,600 ppb	ND	ND	ND
1,1,1-TCA[2]	3,300 ppb	ND	ND	ND
Toluene	4,800 ppb	ND	ND	ND
Xylene	67,000 ppb	ND	ND	ND
BEP[3]	27,000 ppb	ND	ND	ND
UOCs[4]	1,302.5 ppm	226.2 ppm	26 ppm	85.3 ppm
Chromium	463 ppm	101 ppm	240 ppm	198 ppm
Lead	1,210 ppm	607 ppm	1,120 ppm	1,620 ppm

[1] 1-1-Dichloroethane;[2] 1,1,1-Trichloroethane; [3] bis(2ethylhexyl) phathale;[4] Unspecified Organic Compounds

Contaminated soil and sediments were removed from the dry wells in order to reduce the concentrations of chromium, lead, 1,1,1-TCA, bis(2-ethylhexyl)phthalate, and the total concentration of unspecified organic compounds in the groundwater. Soil samples were collected on September 29, and 30, 1995, after contaminated sediments were removed from the dry wells. Short-term monitoring of the groundwater quality will also be conducted to confirm the effectiveness of the removal action. Results of the samples are presented below in the summary discussion on the removal action.

Community Participation

On August 19, 1991, EPA held a public meeting at the Hicksville Library to inform the community of its intent to oversee a remedial investigation of the Site. At the meeting, EPA provided a brief summary of the Site history, an overview of the federal Superfund process and summarized the RI work, which was to occur at the Site.

After completion of the RI, the RI report, risk assessment report and the Proposed Plan were released to the public for comment on August 23, 1995. These documents were made available to the public in the administrative record file in the Docket Room at EPA's Region II Office, in New York City and the information repository at the Hicksville Public Library. The notice of availability for the above-referenced documents was published in Newsday on August 23, 1995. The public comment period for these documents was held from August 23, 1995, to September 21, 1995.

On September 12, 1995, EPA and the New York State Department of Environmental Conservation (NYSDEC) conducted a public meeting at the Hicksville Library to inform local officials and interested citizens about the Superfund process, to review the Proposed Plan, and to respond to any questions from local residents and other attendees.

Comments on EPA's Proposed Plan for the Site were received

from the public and the Nassau County Department of Health (DOH). The public commented on the following issues: the source of Site contaminants, Site related cancer incidence, the drywell removal action and deed restrictions for a future sale of the Site property. No specific objections were raised by the public on implementation of the Site remedy, i.e. removal of contaminated soil and sediments from four dry wells and no further action. The Nassau County DOH did not, however, think that the remedy was adequate and recommended that off Site groundwater monitoring be conducted in addition to the removal action.

Enforcement Activities

In 1978, Anchor Chemicals was purchased by Chessco Industries and became known as Anchor/Lith Kem-Ko. Company operations were terminated in 1985. Since 1985, the following tenants have occupied the Site: from 1985 to 1988, Emery Worldwide Freight, a shipping company; from 1988 to 1992, J.D. Brauner, a furniture manufacturer; from 1992 to 1994, Distributors of America, a distributer of newspaper inserts; and from 1994 to present, Machinery Values, a machinery resale operation.

In 1977, the Nassau County Health Department (NCHD) discovered 1,1,1-TCA, trichloroethene (TCE) and tetrachloroethene (PCE) in liquid samples near dry well 1, which is located north of the building in the parking lot (see Figure 2). In response, Anchor Chemical submitted a spill prevention plan to the NCDH.

In May 1981, the Nassau County Fire Marshall notified Anchor/Lith Kem-Ko that the 17 USTs on Site had not been registered with the Fire Marshall or tested for leaks. In subsequent testing of 14 of the 17 USTs, 5 tanks failed air-over-product tank tightness tests. The five tanks were decommissioned in 1983. The three remaining tanks, which were not tested in 1981, were tightness tested in 1982 and 1983, and one of these tanks failed the test. In 1982, the NCDH requested Anchor/Lith Kem-Ko to investigate the possibility of groundwater and soil contamination at the Site.

Three groundwater monitoring wells were installed in September 1982. Groundwater samples taken from the wells contained 24,000 parts per billion (ppb) of 1,1,1-TCA, 1,100 ppb of PCE, 350 ppb of dichloroethane, 170 ppb of chlorodibromomethane, 41 ppb of methylene chloride and 55 ppb of TCE. Soil samples,

which were taken during the installation of one well (well number 1), revealed 490 ppb of methylene chloride and 22 ppb of 1,1,1-TCA.

In January 1983, the Site was included on the NYSDEC's list of hazardous waste sites in Nassau County. On June 10, 1986, the Site was added to the federal National Priorities List (NPL). Subsequent monitoring of the Site by the PRPs through 1991 has indicated a decrease in the concentration of contaminants in the groundwater.

On June 2, 1989, EPA issued an administrative order on consent to the K.B. Company, the owner of the property and successor to Kobar, to undertake a remedial investigation/ feasibility study (RI/FS) to determine the nature and extent of contamination at the Site and to evaluate options for cleanup. On August 3, 1989, EPA issued an administrative order to Chessco Industries, a former owner of Anchor Lith/Kem-Ko, which required it to participate and cooperate with K.B. Company. EPA issued an administrative order to Anchor Lith/Kem-Ko on March 31, 1992, which also required it to participate and cooperate in the performance of the RI/FS. RI field work was completed in February 1995, and the RI report was compiled by the PRPs and submitted to the EPA in March 1995. The risk assessment was finalized by the EPA on June 2, 1995.

On September 15, 1995, K.B. Company, Anchor Lith/Kem-Ko and Chessco Industries were ordered by the EPA to remove the contaminated sediment and soil from dry wells 2, 3, 6 and 8. K. B. Company was issued a unilateral administrative order, while Anchor Lith/Kem-Ko and Chessco industries were issued an administrative consent order for the removal work. A workplan for the dry well removal action was approved by EPA on September 28, 1995. The order and the workplan required the following: 1) removal of any liquid, sediments and soils from the bottom of dry wells 2, 3, 6 and 8; 2) excavation of sediments and soils form the dry wells to a depth of two feet below the concrete rings of the dry wells; 3) backfilling the excavations with clean fill material, and; 4) obtaining a representative sample from the remaining soils in each drywell.

Removal Action

Physical removal of the contaminated material from the dry wells occurred on September 29, and 30, 1995. Liquid and solid material removed from the dry wells were stored on-Site until they could be characterized for proper disposal.

Approximately 4,600 gallons of liquid and 21 tons of sediments and soil were removed from the dry wells and stored on-Site for waste characterization and disposal.

After reviewing the analytical data for the water, which was pumped from the dry wells, the NYSDEC allowed it to be discharged on-Site. On November 10, 1995, the water was discharged into DW-3.

On November 22 and 30, 1995, the PRP's contractor sent to EPA the waste characterization results for the excavated sediment/sludge material, and a request for off-site recycling/ disposal of the material. After reviewing the waste characterization data, which indicated that the material was not hazardous, EPA allowed the material to be disposed of off-site. The material, which amounted to 21.35 tons, was transported to Soil Safe, Inc. in Baltimore, Maryland for treatment and recycling. In addition, during on-Site storage of the excavated material, 1,800 gallons of water settled out. The water, which was also non-hazardous, was transported to Paradise Heating Oil, Inc. of Ossining, New York for treatment and disposal. Off-Site disposal of the sediment material and water was conducted on February 29, 1996.

Also included with the PRP contractor's November 20, 1996, submission, were the analytical results for the soil samples which were collected from each drywell after removal of the contaminated sediments. The analytical results for the samples are as follows:

Sample Results and Locations				
Contaminant	**Dry Well 2**	**Dry Well 3**	**Dry Well 6**	**Dry Well 8**
1,1-DCA	ND	ND	ND	ND
1,1,1 TCA	ND	ND	ND	ND
Toluene	ND	ND	ND	ND
Xylene	ND	ND	ND	ND
BEP	ND	ND	ND	ND
UOC	NA	NA	NA	NA
Chromium	124 ppm	8 ppm	4.2 ppm	2.42 ppm
Lead	6.23 ppm	12.2 ppm	9.33 ppm	1,620 ppm

The September 29, 1995, ROD also stated that groundwater samples should be collected to assess the effectiveness of the removal action. During early April 1996, EPA Region II's Environmental Services Division sampled the wells designated MW-4, 5S, 5D, 6S and 6D (see Figure 2). Analysis of the samples did not reveal any contaminants, which were above MCLs. EPA plans to sample the wells again in 1997.

The PRPs documented the removal action in a Removal Action Final Report, which was submitted to the EPA for review on May 3, 1996. EPA commented on the report, and, after reviewing the PRP's reponses to its comments, approved the report on July 11, 1996. EPA's approval of the report constituted completion of the removal action.

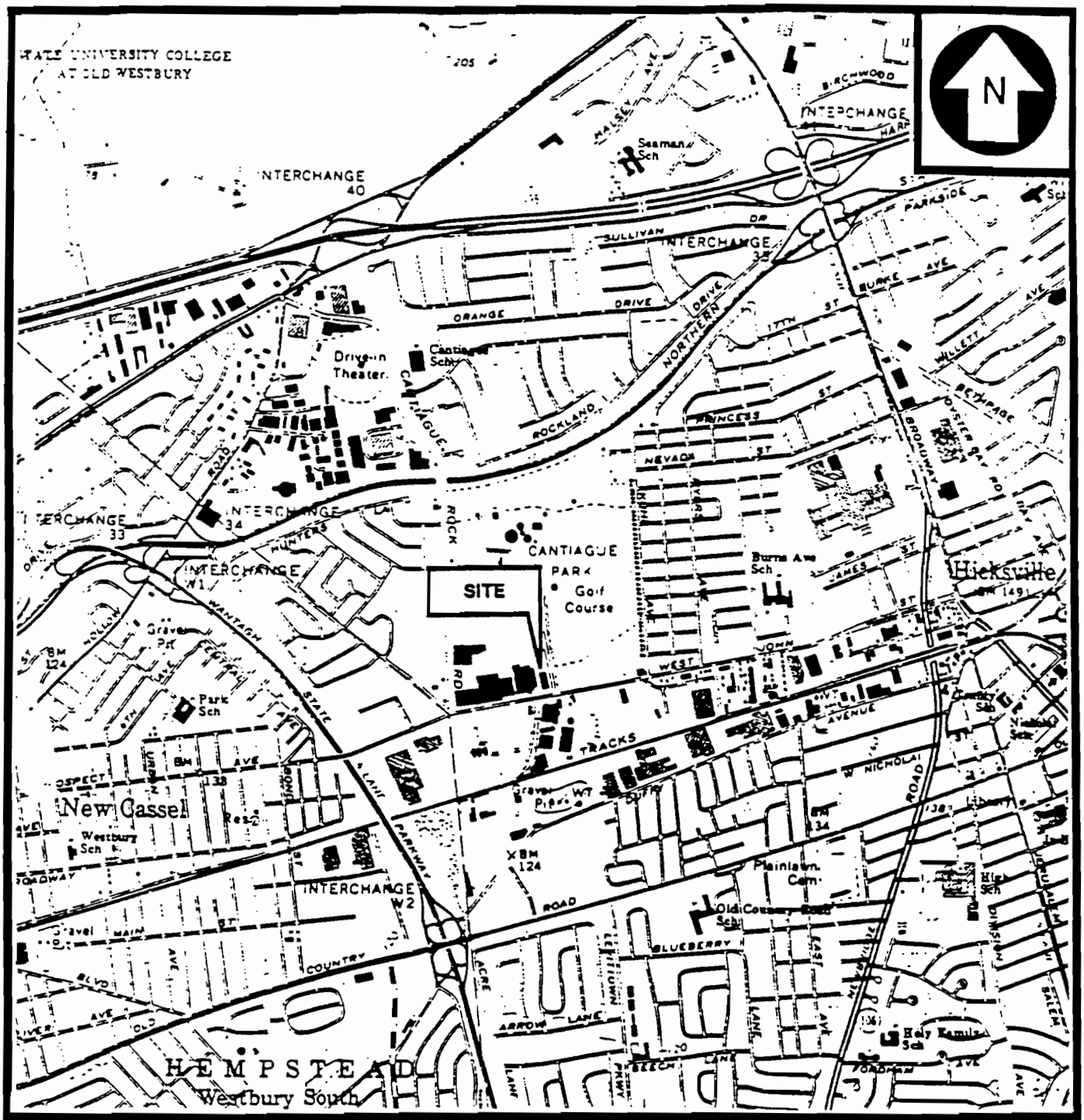
III. DEMONSTRATION OF QA/QC

All activities for the RI and dry well removals were conducted in accordance with EPA approved workplans. Sampling and analysis of the groundwater, soil and sediment samples for these activities were performed in accordance with EPA's Contract Lab Program (CLP) protocols. CLP data validation procedures were also followed to confirm data quality.

IV. SITE COMPLETION

The Anchor Chemical baseline risk assessment indicates that the Site does not pose a significant treat to human health and the environment. Therefore, no further action beyond the removal of the contaminated sediments and soils from the four dry wells on-Site will be necessary. Short-term monitoring of the groundwater quality will be conducted in order to confirm the effectiveness of the removal action.

Because this remedy did not result in hazardous substances remaining on-Site above health-based levels, the five (5) year review does not apply to this action.

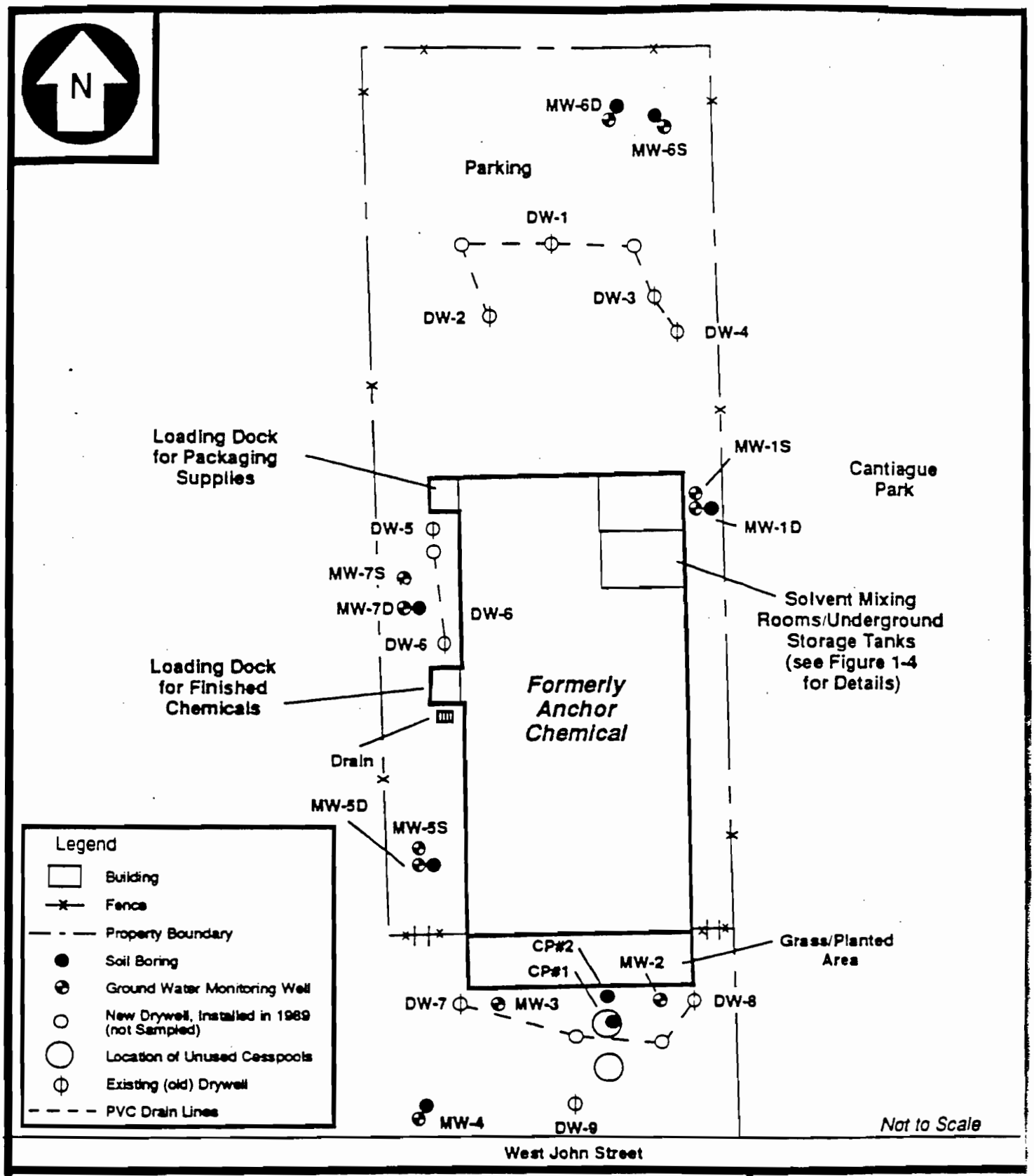


BASE MAP IS A PORTION OF THE FOLLOWING USGS 7.5' SERIES QUADRANGLE:
HICKSVILLE, NY, 1967; PHOTOREVISED 1979

LOCATION MAP

ANCHOR CHEMICAL PROPERTY
HICKSVILLE, NEW YORK

Figure 1



APPROXIMATE GROUND WATER, SOIL, AND SEDIMENT SAMPLING LOCATIONS

ANCHOR CHEMICAL SITE
HICKSVILLE, NEW YORK

Figure 2

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