DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service
Agency for Toxic Substances
and Disease Registry

Memorandum

SDMS Document
112071

Date Deçember 6, 1994

From Arthur Block
Sr. Regional Representative

Subject **Revised Site Review and Update (SRU) for Anchor Chemicals/Lith Kem-Ko, Hicksville, Nassau County, NY**

To Tom Taccone
ERRD/NYCSB2-W

Attached is a copy of the Revised Site Review and Update (SRU) for the above site, dated **November 16, 1994**, prepared by the New York State Department of Health (NYSDOH) under a Cooperative Agreement with the Agency for Toxic Substances and Disease Registry (ATSDR).

The primary purpose of the SRU is to perform a review of current site conditions and recommend further actions for ATSDR to take at the site. An extensive evaluation of available data is not done for the SRU. If extensive evaluation is necessary due to new information, the SRU will suggest that a health consultation or a public health assessment be performed. This document is final and will not be reissued unless new and substantial information/data is submitted that would warrant reevaluation.

Should you have any questions/concerns, please contact my office at extensions 9673/9255.

Attachment

cc:

ATSDR	EPA	NYSDOH
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Site Review And Update

ANCHOR CHEMICALS

HICKSVILLE, NASSAU COUNTY, NEW YORK

CERCLIS NO. NYD001485226

MAY 16, 1994

REVISED

NOVEMBER 16, 1994

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Public Health Service
Agency for Toxic Substances and Disease Registry
Division of Health Assessment and Consultation
Atlanta, Georgia 30333

Site Review and Update: A Note of Explanation

The purpose of the Site Review and Update is to discuss the current status of a hazardous waste site and to identify future ATSDR activities planned for the site. The SRU is generally reserved to update activities for those sites for which public health assessments have been previously prepared (it is not intended to be an addendum to a public health assessment). The SRU, in conjunction with the ATSDR Site Ranking Scheme, will be used to determine relative priorities for future ATSDR public health actions.

REVISED SITE REVIEW AND UPDATE

ANCHOR CHEMICALS

HICKSVILLE, NASSAU COUNTY, NEW YORK

CERCLIS NO. NYD001485226

Prepared by:

The New York State Department of Health
Under Cooperative Agreement with the
Agency for Toxic Substances and Disease Registry

SUMMARY OF BACKGROUND AND HISTORY

The Anchor/Lith Kem-Ko Chemical site is at 500 West John Street in the Village of Hicksville, Town of Oyster Bay, in Nassau County. The surrounding area is predominantly industrial, but a 125 acre recreational park and golf course borders the site to the east and north. To the west and south, the site is bordered by commercial properties. The nearest residence is about 0.25 miles to the east. The topography of the site and surrounding area is generally flat with no wetlands. The surrounding area is not used for agricultural purposes.

The 1.5 acre site includes a 25,850 square foot two-story building surrounded by a paved parking lot. Currently, seventeen inactive storage tanks are buried under the northeast corner of the building. All of the tanks have been filled with concrete and permanently decommissioned. Nine dry-wells and one floor drain on-site collect surface water runoff and drain directly to the ground. Prior to connection to public sewer in 1985, the sewage system was connected to an on-site cesspool in front of the building.

The building is serviced by public water and there are no known private drinking water wells in the area. However, groundwater is the source for several public water supply wells within three miles of the site. These wells supply water to 70,000 people in nine municipal districts. The public water supply wells for three municipalities are within 1.25 miles of the site and the nearest public supply well is one-half mile east of the site. The well is tested periodically by Nassau County Department of Health (NCHD) and is not contaminated. It is presently used to supply water for the Hicksville area. Groundwater flows southwest from the site and there are no public drinking water supply wells immediately downgradient of the site. The nearest downgradient public water supply wells are about 2 miles southwest of the site and serve the City of Hempstead.

In 1964, the K.B. Company purchased the site property and constructed the present building. From 1964 to 1978 the site was leased to the Anchor Chemical Company which manufactured, blended, and stored chemicals for the graphic arts industry. Seventeen underground and seven above ground storage tanks (500 to 4,000 gallon capacity) were constructed in 1964 and reported to store chemicals. In 1978, Anchor Chemical Company changed its name to Anchor/Lith Kem-Ko and continued chemical production until 1984, when it ceased operations at the site. The site was placed on the National Priorities List (NPL) in 1983. From 1985 to 1988, Emery Worldwide Freight, a shipping company occupied the building, and from 1988 to 1992, J.D. Brauner manufactured furniture at the site.

Presently, Distribution Systems of America, a company which distributes marketing flyers, leases the site.

In 1977, the NCHD identified 1,1,1-trichloroethane, trichloroethene, and tetrachloroethene in water samples collected from a drywell north of the parking lot. Anchor/Lith Kem-Ko submitted a spill prevention plan to NCHD and sealed all lines leading to the drywells. In 1981, during inspection of the underground storage tanks, five of the tanks failed pressure tests and were suspected of leaking. At various times since 1964, on-site tanks stored organic chemicals including 1,1,1-trichloroethane, methylene chloride, tetrachloroethene and blended chemicals such as naphtha, textile and mineral spirits. Textile and mineral spirits are petroleum distillates.

In 1982, NCHD requested that Anchor/Lith Kem-Ko conduct groundwater and soil monitoring at the site. Three groundwater monitoring wells were constructed, one north of the building and two south. The wells were sampled and contained 1,1,1-trichloroethane at levels ranging from 5 micrograms per liter (mcg/L) to 11,000 mcg/L, tetrachloroethene (42 mcg/L - 470 mcg/L), 1,1-dichloroethene (27 mcg/L - 230 mcg/L), methylene chloride (7 mcg/L - 41 mcg/L) and trichloroethene (17 mcg/L-43 mcg/L) in groundwater. Methylene chloride was detected at concentrations ranging from 41 micrograms per kilogram (mcg/kg) to 490 mcg/kg and 1,1,1-trichloroethane was detected at less than (<)20 mcg/kg and 22 mcg/kg in two subsurface soil samples at depths of 50 and 60 feet, respectively. The leaking underground storage tanks were probably the source of these compounds. The site was later placed on the New York State Department of Environmental Conservation (NYS DEC) listing of Inactive Hazardous Waste Disposal Sites and an investigation was initiated.

Additional groundwater samples, collected between 1982 and 1987 from the three on-site wells, continued to show contamination including 1,1,1-trichloroethane (<1 mcg/L - 24,000 mcg/L), tetrachloroethene (<1 mcg/L - 1,100 mcg/L), trichloroethene (<1 mcg/L - 55 mcg/L) and 1,1-dichloroethene (<1 mcg/L - 800 mcg/L). These compounds were also detected in Nassau County monitoring wells downgradient of the site (1,800-6,600 feet). However, other compounds not associated with the site were also detected in these downgradient monitoring wells. It is unclear if Anchor/Lith Kem-Ko was the only source of this contamination. Two other inactive hazardous waste sites are on the same block of West John Street and have also contaminated groundwater in the area.

In 1988, the New York State Department of Health (NYS DOH) completed a preliminary health assessment under a cooperative agreement with the Agency for Toxic Substances and Disease Registry (ATSDR). The finding of the health assessment was that groundwater

is contaminated by the Anchor/Lith Kem-Ko site and people could be exposed in the future if the public water supply wells, south of the site, become contaminated. Possible contamination of these wells is the main public health concern. No community health concerns were identified in the preliminary health assessment. The health assessment identified 1,1,1-trichloroethane, trichloroethene, tetrachloroethene and 1,1-dichloroethene as the groundwater contaminants of concern. In the preliminary health assessment, it was recommended that additional monitoring wells be constructed between the site and the public water supply wells. ATSDR also recommended that sampling of on-site monitoring wells and the Nassau County test wells continue to monitor the levels of VOCs in groundwater. The preliminary health assessment identified the need to confirm the integrity of the on-site monitoring wells.

In 1989, through an Administrative Order of Consent by the United States Environmental Protection Agency (US EPA), the owners agreed to initiate a remedial investigation (RI) of the site. The purpose of the RI was to characterize the site with regard to the extent of possible soil or groundwater contamination which may have occurred from past disposal activities at the site. The sampling data showed that the levels of contaminants in the groundwater in the area of the site have significantly decreased since 1982. This decrease was attributed to migration of contaminants with movement of the groundwater through the area. Some biodegradation of the contaminants may have also occurred. The RI also identified contaminated sediments in the areas of the drywells on-site and recommended that they be excavated. Elevated levels of lead, chromium, volatile organic compounds (VOCs) and several semi-volatile organic compounds were found in sediment samples. Drywell #2 had the highest concentration of contaminants. The floor drain of the mixing room inside the building discharged directly to this drywell.

The NYS DOH, Bureau of Cancer Epidemiology conducted a cancer surveillance program in April 1990 for the Hicksville Census Tract which includes the area of the site. The survey was completed in response to community concerns over the number of cancer cases in Hicksville. The survey concluded that the cancer incidence in the Hicksville Census Tract did not differ from other comparable areas of New York State for the period between 1978 and 1987.

Current Site Conditions

Mike Hughes and Tim Vickerson of the NYS DOH visited the site on March 15, 1994. No areas of on-site surface contamination have occurred. The building and grounds have been maintained; the site is completely fenced and access is controlled. At the time of visit, the gates to the property were open. No physical hazards are evident. The building is being used as a warehouse for

Distribution Systems of America Inc., which distributes advertisement flyers.

New sources of contamination have not existed on-site since Anchor/Lith Kem-Ko ceased operations in 1985 and no hazardous substances have been manufactured, stored or spilled at the site since that time. The area around the building is paved, which covers the contaminated sediments and subsurface soils and there does not appear to be any exposure to contaminants on-site. These observations are consistent with the observations from the previous site visits conducted by the NYS DOH in 1985 and also in 1988 for the preliminary health assessment. The most recent sampling was conducted in 1990 for the RI, and is discussed in the Summary of Background and History section of this site review and update (SRU).

Current Issues

Under current conditions, groundwater, sediments and subsurface soil contamination at the site do not pose a concern to human health. Remedial workers and occupants of the on-site building could be exposed to contaminants in sediments and subsurface soils via inhalation and dermal exposure to contaminants during future remediation activities. It is unlikely that private wells will be constructed near the site in the future. The main public health concern is that groundwater contamination from the site may contaminate the public water supply wells south of the site. However, there has been no known exposure to the public from contaminated drinking water. Under present site conditions, there is little likelihood of human exposure to contaminants on-site. The only known past community health concern is related to the incidence of cancer in Hicksville. NYS DOH conducted a study of cancer incidence in response to these concerns and no statistically significant results were observed. There are no known new community health concerns about this site and there are no new public health concerns.

VOC concentrations in recent on-site monitoring well samples decreased since 1982. Monitoring wells downgradient of the site have contained VOCs, which are believed to be from site. The levels of these compounds exceed NYS DOH drinking water standards. However, other compounds not related to the site have also been found in the monitoring wells and public supply wells. Several other inactive hazardous sites in the area have contaminated groundwater. Contaminated sediments in the drywells at the site continue to be a source of groundwater contamination.

Conclusions

Conclusions of the 1988 preliminary health assessment were valid and the recommendations were followed. The RI initiated in 1989 conducted a comprehensive evaluation of the site and media which may have been contaminated. Analyses of sediments in the drywells and soils conducted during the RI identified VOCs, metals and semi-volatile organic compounds. The recommendation to excavate the contaminated soil in the area of the drywells has been acknowledged by the regulatory agencies. If land use in the area changes, an evaluation of potential future development of the site should be considered.

Currently, the site poses no apparent public health hazard. The NYS DOH's cancer survey for the Hicksville area did not identify an increased incidence of cancer among the population studied. There are no known exposures that have occurred in the past or known to be occurring at present. There are no known community health concerns and past public health concerns have been addressed by remedial measures completed at the site. However, if groundwater remediation does not occur, contaminants from the site could migrate towards downgradient public water supply wells and exposures to contaminants could occur at levels of public health concern.

Recommendations

Under present conditions, monitoring of groundwater both on-site and off-site, especially between the site and public water supply wells, should continue. Analyses should include those VOCs previously identified as well as degradation by-products. The drywells should be excavated as soon as possible, followed by continued groundwater monitoring both on-site and off-site. The possibility of future land use in the area should also be investigated with local municipalities to determine if the potential for residential development exists.

A public health assessment or health consultation is not needed at this time for the site. Past and proposed remedial measures will address contamination in on-site subsurface soil and sediments in the drywells.

The data and information developed in this site review and update for the Anchor/Lith Kem-Ko Chemical site have been evaluated to determine whether follow-up actions may be indicated. No further public health actions are indicated at this time.

DOCUMENTS REVIEWED

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ATTACHMENT 1

FIGURES

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

0 1000 2000 3000

SCALE = feet

QUADRANGLE LOCATION

LOCATION MAP

ANCHOR CHEMICAL PROPERTY
HICKSVILLE, NEW YORK

Figure 1

Taken from Final Risk Assessment, TRC Environmental Corp.

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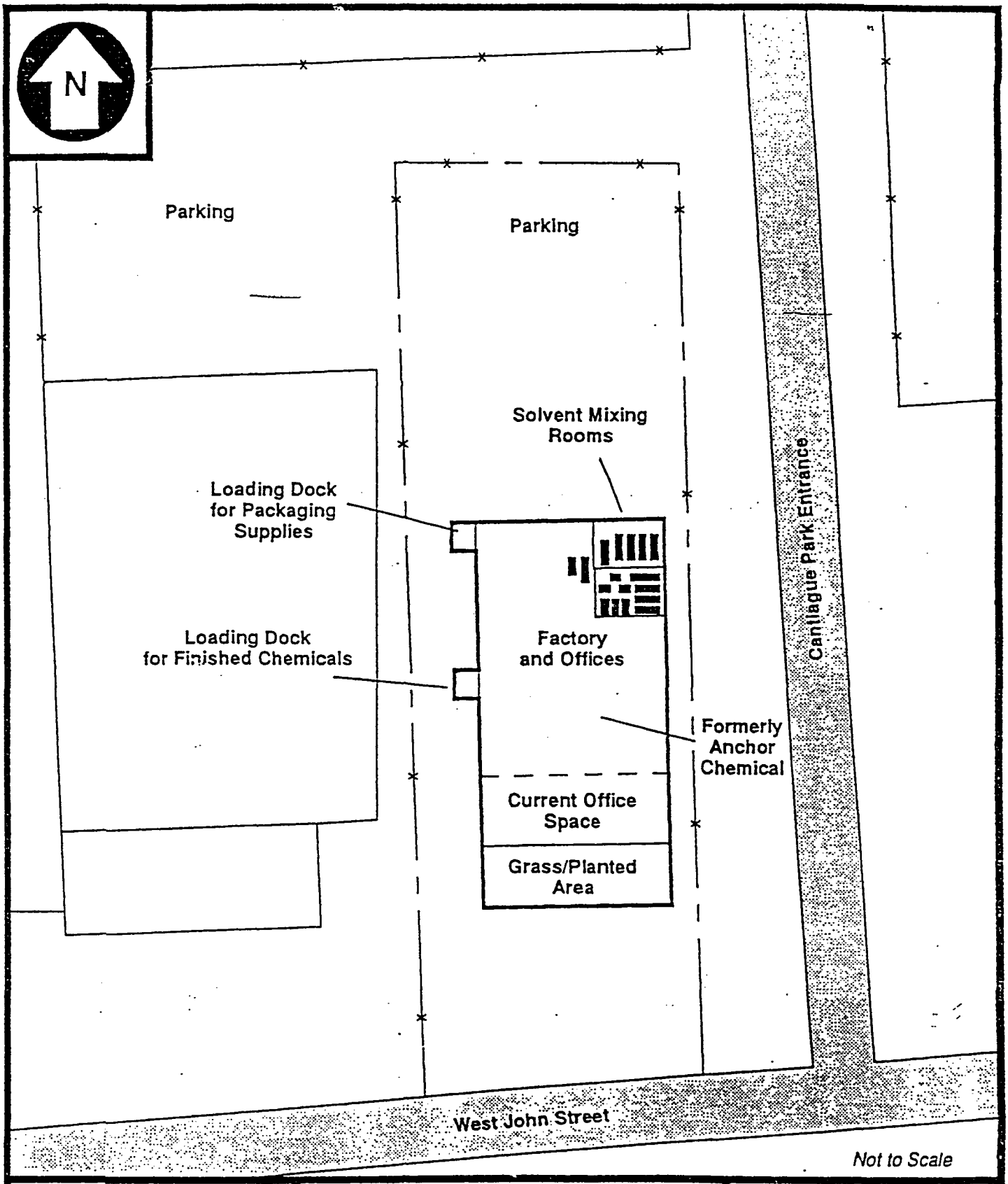

SITE SKETCH

ANCHOR CHEMICAL SITE
HICKSVILLE, NEW YORK

Figure 2

Taken from Final Risk Assessment, TRC Environmental Corp.

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