Division of Hazardous Waste Remediation
Bureau of Hazardous Site Control

130053B

ADDITIONS/CHANGES TO REGISTRY: SUMMARY OF APPROVALS

SITE NAME: Pall Corp. DEC I.D. NUMBER 130053B

Current Classification _____

Activity: [✓] Add as Class 2 [ ] Reclassify to ___ [ ] Delist Category ___ [ ] Modify ___

Approvals:

Regional Hazardous Waste Engineer	Yes	[✓]	No	[ ]	_____
NYSDOH	Yes	[✓]	No	[ ]	_____
DEE	Yes	[✓]	No	[ ]	_____
Construction Services	Yes	[n/a]	No	[ ]	_____
BHSC: a. Investigation Section	Yes	[✓]	No	[ ]	_____
b. Site Control Section	Robert J. Marino		Date	4/1/96	
c. Director	[signature]		Date	4/2/96	
DHWR Assistant Director	for Charles H. Gaddis		Date	5/30/96	

Completion Checklist

		Completed By: Initials	Date
OWNER NOTIFICATION LETTER?	[✓]	_____	6/13/96
ADJACENT PROPERTY OWNER NOTIFICATION LETTER?	[✓]	_____	6/28/96
ENB/LEGAL NOTICE SENT? (For Deletion Only)	[ ]	_____	_____
COMMENTS SUMMARIZED/PLACE IN REPOSITORY	[ ]	_____	_____
FINAL NOTIFICATION SENT TO OWNER? (For Deletion Only)			

(For proposed Class 2a sites only) Planned investigative activities & dates: _____

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS WASTE REMEDIATION

4/28/95

SITE INVESTIGATION INFORMATION

1. SITE NAME	2. SITE NUMBER	3. TOWN/CITY/VILLAGE	4. COUNTY
Pall Corporation	130053 B	Oyster Bay	Nassau

5. REGION	6. CLASSIFICATION		
1	CURRENT	PROPOSED 2	MODIFY

7. LOCATION OF SITE (Attach U.S.G.S. Topographic Map showing site location)

a. Quadrangle Sea Cliff and Hicksville

c. Tax Map Numbers Section 21, Block H, Lots 37 & 320

b. Site Latitude 40° 51' 6" N Site Longitude 73° 37' 23" W

d. Site Street Address 30 Sea Cliff Avenue, Glen Cove, New York 11542

8. BRIEFLY DESCRIBE THE SITE (Attach site plan showing disposal/sampling locations)

Pall Corporation, which began operations at this location in 1946, consists of a two-story masonry structure containing office, laboratory and some small scale production facilities. The company, located on the north side of the road, is part of the Sea Cliff Avenue Industrial Area. Pall manufactures a variety of filtration products, and is currently geared towards research and development. The facility has occupied the premises since 1946, with most of the production happening more than thirteen years ago. This site also includes the 1.37 acre August Thomsen company which is adjacent to the Pall building, and which was formerly owned by Pall Corporation. August Thomsen, which has been at this location since 1971, currently produces cake decorating utensils and pastry bags & tubes.

a. Area 4.66 acres b. EPA ID Number _____

c. Completed ( )Phase I (X)Phase II ( ) PSA ( )RI/FS ( )PA/SI ( )Other

9. Hazardous Waste Disposed (Include EPA Hazardous Waste Numbers)

Tetrachloroethene and Trichloroethene (Both F001)

10. ANALYTICAL DATA AVAILABLE

a. ( )Air (X)Groundwater (X)Surface Water ( )Sediment (X)Soil ( )Waste ( )Leachate ( )EPTox ( )TCLP

b. Contravention of Standards or Guidance Values

Groundwater(µg/l)

	Values	NYS Class GA Standard
Tetrachloroethene	880	5
Trichloroethene	1600	5
1,2-Dichloroethene	3500	5
Vinyl Chloride	840	2
1,1-Dichloroethene	22	5
1,1-Dichloroethane	33	5

Sample results submitted by Pall in sample taken in 1995 suggest that these levels have dropped in most wells. However PCE level in one well may have increased.

11. CONCLUSION

Both tetrachloroethene (PCE) and trichloroethene were used and stored on the subject premises. A former chemical engineer at Pall indicated that the company had a history of dumping chemicals down the drains and in the yards. Indeed, these compounds along with six other VOCs were found in the soil at Pall. PCE was also found in the soil at August Thomsen. Wells on both properties also indicate high levels of groundwater contamination from the above-mentioned chemicals, as well as their derivative products. The concentrations are at least an order of magnitude higher than might be expected from another potential upgradient source. This situation is thereby causing a significant threat to the environment.

12. SITE IMPACT DATA

a. Nearest Surface Water: Distance 25 ft.	Direction West		Classification D		
b. Nearest Groundwater: Depth 1.95 ft.	Flow Direction Northwest		(X)Sole Source ( )Primary ( )Principal		
c. Nearest Water Supply: Distance 100 ft.	Direction Northwest		Active ( )Yes (x)No		
d. Nearest Building: Distance 25 ft.	Direction North		Use Municipal		
e. In State Economic Development Zone?	( )Y	(x)N	i. Controlled Site Access?	(x)Y	( )N
f. Crops or livestock on site?	( )Y	(x)N	j. Exposed hazardous waste?	( )Y	(x)N
g. Documented fish or wildlife mortality?	( )Y	(x)N	k. HRS Score _____		
h. Impact on special status fish or wildlife resource?	( )Y	(x)N	l. For Class 2: Priority Category I		

13. SITE OWNERS' NAMES	14. ADDRESSES	15. TELEPHONE NUMBER
(1)Pall Corporation & (2) August Thomsen	(1) 25 Harbor Park Drive, Port Washington, NY 11050 & (2) 36 Sea Cliff Avenue, Glen Cove, New York 11542	(516) 671-4000 & (516) 676-7100

16. PREPARER		17. APPROVED	
Hayden Brewster	August 2, 1995	[signature]	5/3/96
Signature	*Date*	*Signature*	*Date*
Hayden Brewster, Environmental Engineer 2, BHSC / EIS		Asst Dir	
Name, Title, Organization		*Name, Title, Organization*	

STATE OF NEW YORK
DEPARTMENT OF HEALTH

Corning Tower The Governor Nelson A. Rockefeller Empire State Plaza Albany, New York 12237

Barbara A. DeBuono, M.D., M.P.H.
Commissioner

Karen Schimke
Executive Deputy Commissioner

September 19, 1995

Mr. Earl Barcomb, P.E., Director
Bureau of Hazardous Site Control
NYS Department of Environmental Conservation
50 Wolf Road
Albany, NY 12233

RE: **Site Investigation Information**
Pall Corporation
Site #130053B
Oyster Bay, Nassau County

Dear Mr. Barcomb:

My staff have reviewed the classification documents for the proposed listing of Pall Corporation as a Class 2 site. We have also reviewed the March 1994 Draft Preliminary Site Assessment for the Sea Cliff Industrial Area. Based on that review, I concur with the recommendation to classify the Pall Corporation site Class 2 because there is documented on-site disposal of hazardous waste, groundwater and soil are contaminated, and the site threatens the sole-source aquifer.

If you have any questions, please call Mr. Steven Bates of my staff at 458-6305.

Sincerely,

G. Anders Carlson, Ph.D.
Director
Bureau of Environmental Exposure
Investigation

lmw/95244PRO0412

cc: Dr. N. Kim
Mr. S. Bates/Mr. M. VanValkenburg/Ms. K. Evans
Mr. T. Mulvihill - NCHD
Mr. M. Alarcon - NCHD
Mr. R. Marino - DEC
Mr. A. Shah - DEC, Region 1

11/9/94

NEW YORK STATE DEPARTMENTS OF ENVIRONMENTAL CONSERVATION AND HEALTH
INACTIVE HAZARDOUS WASTE DISPOSAL SITE PRIORITY RANKING WORKSHEET

SITE I.D. 130053 B SITE NAME PALL CORPORATION

° **Priority I** - Sites for which remediation should supersede all other Class 2 sites. Priority I can be assigned if any one of the following questions can be answered affirmatively.

a) Has a public or private water supply which is currently in use been contaminated or threatened?..... ☑
b) Has human exposure to contaminants (or the potential for exposure) been identified which represents a significant health risk as determined by DOH?..... ☐
c) Has bioaccumulation of site contaminants in flora or fauna resulted in a health advisory?..... ☐
d) Are site contaminants present at levels that are acutely toxic to fish or wildlife or that have caused documented fish or more wildlife mortality?..... ☐

☑ (1) [If 1 or more boxes are checked, check this box]

° **Priority II** - Important Sites. Priority II will be assigned if any of the following questions can be answered affirmatively.

a) Has a Class A or AA surface water body or a principal aquifer been contaminated or threatened without affecting an existing water supply?..... ☐
b) Has bioaccumulation of site contaminants in flora or fauna resulted in actionable levels (but not a health advisory)?.... ☐
c) Are contaminants at levels chronically toxic to fish/wildlife?..... ☐
d) Have endangered, threatened or rare species, significant habitats, designated coastal zone or regulated wetlands been impacted by releases from the site?..... ☐

☐ (2) [If 1 or more boxes are checked, check this box]

° **Priority III** - will be assigned unless one or more of the site prioritization criteria, specified above, apply to a site. After remedial needs for Priority I and II sites have been accommodated, remediation of sites under this category can be considered. If priority III, check box 3. ☐ (3)

Enter the number of the priority box checked 1, 2, or 3 here..... ☐ (4)
This is the site's priority rank.

FACTORS

IJC Factor - If the site has been identified by the International Joint Commission (IJC) as a component in a remedial action plan, subtract (1) from the value in box 4 and enter the result in box 5..... ☐ (5)

	Yes	No
EDZ Factor - If the site is within a New York State designated Economic Development Zone (EDZ) should this fact cause the site priority to be raised?..	☐	☐
Community Support Factor - If the site has been targeted for local government-supported development by a developer willing to sign a consent order with DEC to finance investigation and remediation should this fact cause the site priority to be raised?.....	☐	☐

If either "yes" box is checked, subtract 1 from the value in box 4 and enter the result into box 6. If "no" is checked, the value in box 6 equals box 4 (or box 5 if applicable). If both IJC and EDZ/Community Support factors apply, only 1 (not 2) will be subtracted form the value in box 4. The resultant value in box 6 will never be less than 1..... ☐ (6)

	Yes	No
IRM NOTE: Should this site be considered a candidate for an Interim Remedial Measure (IRM) as defined by 6NYCRR Part 375-1.3n?.....	☐	☑

If "yes", please explain why: _____

Preparer Hayden Brewster / NUS Date August 2, 1995

CLASSIFICATION WORKSHEET

Site: Pall Corporation County: Nassau Region: 1

1. Hazardous waste disposed X Y (to 2) _ N (Stop) _ U (Stop)

2. Consequential amount of hazardous waste? X Y (to 3) _ N (Stop) _ U (to 3)

3. Part 375-1.4(a)(1) applies? X N (to 4) _ U (to 4)

_ Y (as checked below; Class 2; to 5)

_ a. endangered or threatened species
_ b. streams, wetlands or coastal zone
_ c. bioaccumulation
_ d. fish, shellfish, crustacea or wildlife
_ e. fire, spill, explosion or toxic reaction
_ f. proximity to people or water supplies

4. Part 375-1.4(a)(2) applies? _ N (Cl 3; Stop) _ U (Cl 2a: Stop)

X Y (Class 2; to 5) Hazardous waste disposal has caused significant groundwater contamination.

5. Factor(s) considered in making this determination: (a)Type...of the hazardous waste: PCE and its derivatives are fairly persistent and mobile in soil-water systems.

(d) Nature of soils: Deposits of sand and gravel.

(g)Level of contaminants in GW: PCE, TCE & 1,2-DCE @ 880, 1600 & 620 ppb vs. a 5 ppb standard.

(j)Proximity of the site...: These properties lie immediately atop a sole source aquifer.

SUMMARY

Consequential Hazardous Waste X Yes _ No _Unknown

Significant Threat X Yes _ No _Unknown

Proposed Classification 2 Site Number 130053B

08/02/95
Date

Hayden Brewster Environmental Engineer 2
Signature and Title

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS WASTE REMEDIATION
INACTIVE HAZARDOUS WASTE DISPOSAL REPORT

CLASSIFICATION CODE: 2 REGION: 1 SITE CODE: 130053B
EPA ID:

NAME OF SITE: Pall Corporation
STREET ADDRESS: 30-36 Sea Cliff Avenue
TOWN/CITY: Glen Cove COUNTY: Nassau ZIP: 11542

SITE TYPE: Open Dump- Structure-X Lagoon- Landfill- Treatment Pond-
ESTIMATED SIZE: 4.66 Acres

SITE OWNER/OPERATOR INFORMATION:
CURRENT OWNER NAME....: Pall Corporation // August Thomsen
CURRENT OWNER ADDRESS.: 30 & 36 Sea Cliff Avenue, Glen Cove, NY 11542
OWNER(S) DURING USE...: Pall Corporation
OPERATOR DURING USE...: Pall Corporation
OPERATOR ADDRESS.....: 30 Sea Cliff Avenue, Glen Cove, NY 11542
PERIOD ASSOCIATED WITH HAZARDOUS WASTE: From 1948 To Present

SITE DESCRIPTION: The Pall Corporation site is located in the Sea Cliff Avenue Industrial Area. It includes both the Pall Corporation and August Thomsen facilities. Pall, which manufactures filtration products, was founded in 1946 and moved to 30 Sea Cliff Avenue some years later. August Thomsem is located north of Pall Corp., at 36 Sea Cliff Avenue, and this property was a research and development facility for Pall's Aerospace Division until 1971. August Thomsen is currently involved in the manufacture of pastry bags and tubes.

Pall Corporation stored solvents on both of these properties in the past. Spent solvets were also released to the ground. This is confirmed by the presence of volatile organic compounds such as tetrachloroethene and trichloroethene in the soil. They were also discovered in the groundwater at levels much higher than would be produced by any potential upgradient source. These compounds in particular, were likely mismanaged, spilled or disposed at the site. The data are from a 1994 Preliminary Site Assessment, which is largely a compendium of previous investigations, and an interpretation of those results.

HAZARDOUS WASTE DISPOSED: CONFIRMED _X	SUSPECTED __
TYPE	QUANTITY (units)
Tetrachloroethene (F001)	Unknown
Trichloroethene (F001)	Unknown

SITE CODE:130053B

ANALYTICAL DATA AVAILABLE:
Air- Surface Water- Groundwater-X Soil-X Sediment-

CONTRAVENTION OF STANDARDS:
Groundwater-X Drinking Water- Surface Water- Air-

LEGAL ACTION:

TYPE..:		State-	Federal-
STATUS:	Negotiation in Progress-		Order Signed-

REMEDIAL ACTION:

Proposed- Under design- In Progress- Completed-
NATURE OF ACTION:

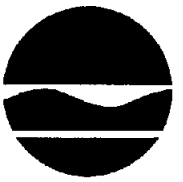
GEOTECHNICAL INFORMATION:
SOIL TYPE: Sand and Gravel
GROUNDWATER DEPTH: Approximately 2 feet

ASSESSMENT OF ENVIRONMENTAL PROBLEMS:

Degreasing solvents were mismanaged or disposed on the soil, and has subsequently contaminated the underlying aquifer.

ASSESSMENT OF HEALTH PROBLEMS:

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



Michael Zagata
Commissioner

JUN 28 1996

Town Clerk
Town of Oyster Bay
Town Hall
Oyster Bay, NY 11771

Dear Sir/Madam:

The Department of Environmental Conservation (DEC) maintains a Registry of sites where hazardous waste disposal has occurred. Property located at 30-36 Sea Cliff Avenue in the Town of Oyster Bay and County of Nassau and designated as Tax Map Numbers 21-H-37 and 21-H-320 was recently added as a Class 2 in the Registry. The name and site I.D. number of this property as listed in the Registry is Pall Corporation, Site #130053B.

The Classification Code 2 means that a significant threat to the public health or environment exists -- action required.

We are sending this letter to you and others who own property near the site listed above, as well as the county and town clerks. We are notifying you about these activities at this site because we believe it is important to keep you informed.

If you currently are renting or leasing your property to someone else, please share this information with them. If you no longer own the property to which this letter was sent, please provide this information to the new owner and provide this office with the name and address of the new owner so that we can correct our records.

The reason for this recent classification decision is as follows:

- Both tetrachloroethene and trichloroethene were used and stored on the subject premises. These compounds along with six other volatile organic compounds were found in the soil at Pall. Tetrachloroethene was also found in the soil at August Thomsen. Water from wells on both properties contain high levels of the above-mentioned chemicals, as well as their derivative products. This situation is thereby causing a significant threat to the environment. Municipal water supplies are routinely tested to ensure that all drinking water quality standards are met.

If you would like additional information about this site or the inactive hazardous waste site remedial program, call:

DEC's Inactive Hazardous Waste Site Toll-Free Information Number 1-800-342-9296 or New York State Health Department's Health Liaison Program (HeLP) 1-800-458-1158, ext. 402.

Sincerely,

Robert L. Marino
Chief
Site Control Section
Bureau of Hazardous Site Control
Division of Hazardous Waste Remediation

bcc: R. Marino
J. Swartwout
J. Epstein, R/1
A. Sylvester
A. Carlson
L. Ennist

AS/srh

ENGINEERING INVESTIGATIONS AT

INACTIVE HAZARDOUS WASTE SITES

PRELIMINARY SITE ASSESSMENT

SEA CLIFF AVENUE INDUSTRIAL AREA SITE NO. 130053
TOWN OF OYSTER BAY NASSAU COUNTY

DATE: MARCH 1994

Prepared for:

NEW YORK STATE

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

50 Wolf Road, Albany, New York 12233

Thomas C. Jorling, Commissioner

Division of Hazardous Waste Remediation
Michael J. O'Toole, Jr., P.E., Director

BY:

NASSAU COUNTY DEPARTMENT OF PUBLIC WORKS
Division of Sanitation and Water Supply
Hazardous Waste Services Unit

ENGINEERING INVESTIGATIONS AT INACTIVE HAZARDOUS WASTE SITES
PRELIMINARY SITE ASSESSMENT, SEA CLIFF AVENUE INDUSTRIAL AREA
SITE NO. 130053

1.0 EXECUTIVE SUMMARY

The Nassau County Department of Public Works (NCDPW), Hazardous Waste Services Unit, under contract to the New York State Department of Environmental Conservation, Bureau of Hazardous Site Control, conducted a Preliminary Site Assessment (PSA) of the Sea Cliff Avenue Industrial Area site, located in the City of Glen Cove, Town of Oyster Bay, Nassau County, New York.

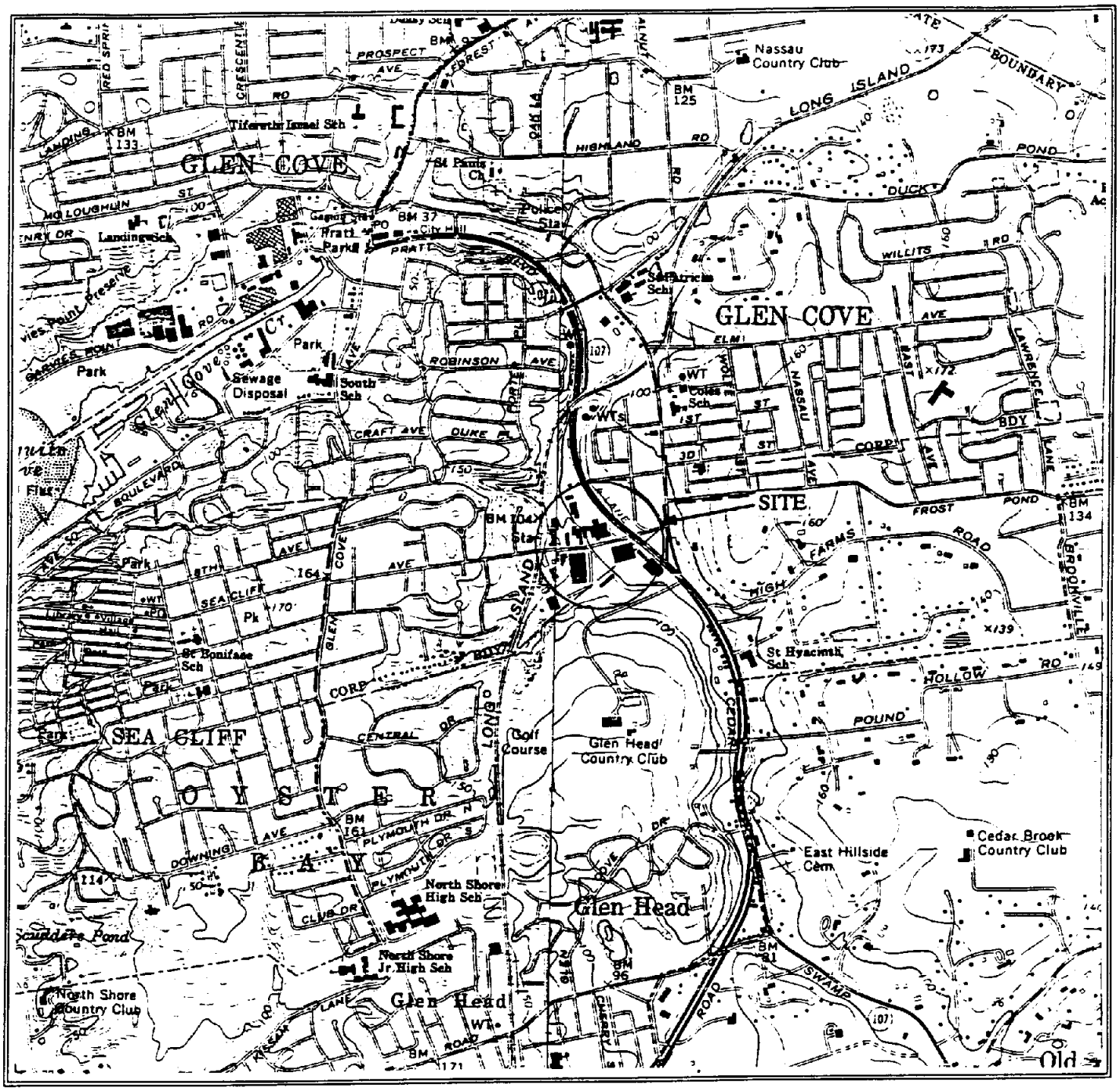
The presence of volatile organic compounds (VOC's) in groundwater at high concentrations, which contravene New York State Department of Health Drinking Water Standards, beneath the industrial area has been documented in past investigation reports, and has resulted in the closure of three public supply wells owned by the City of Glen Cove.

The industrial area examined under this PSA, is comprised of five industrial properties, Photocircuits Corporation, Pass and Seymour, Inc., August Thomsen, Pall Corporation and Associated Drapery, and one non-industrial property, the Carney Street Wellfield owned by the City of Glen Cove. All properties examined had alleged releases of chemicals to the environment or used and stored significant volumes of synthetic organic chemicals.

The Sea Cliff Avenue Industrial Area is located within an area of glacial moraine and is characterized by a variable surface topography (Figure A). Specifically, the study area is situated in a north-south trending valley that runs parallel to Glen Cove Creek, elevations rise rapidly to the east and west of the study area from 40-60 feet above sea level (ASL) to over 175 feet ASL. The geology of the study area is comprised of three hydrostratigraphic units, an upper glacial till of generally low permeability, a sand and gravel unit of moderate to high permeability and the areally extensive Port Washington confining clay unit which forms the base of the glacial aquifer in the study area.

Three comprehensive water level surveys were conducted as part of this PSA, utilizing twenty-one existing and two new groundwater monitoring wells. The contoured groundwater elevation data indicates that groundwater generally flows from southeast to northwest in the shallow portion of the upper glacial aquifer beneath the study area, and that Glen Cove Creek acts as a discharge area for the surrounding topographic highs. Horizontal flow gradients across the study area range from 0.005 ft/ft to 0.01 ft/ft, with the variability due to local till units.

Several environmental assessments and investigations by government agencies and private parties have been performed in the study area. Due to the abundance of both soil and groundwater data from the previous environmental work, a limited number of soil borings and monitoring wells were



SITE LONGITUDE – 73.6231° W
SITE LATITUDE – 40. 8518° N

NORTH

FIGURE A – SITE TOPOGRAPHY

Source: U.S.G.S. Sea Cliff and Hicksville Quadrangles
Scale: 1" = 2000'

constructed as part of this PSA. The bulk of information used to evaluate the industrial and non-industrial properties was taken from three studies conducted by the consulting firms Holzmacher, McLendon & Murrell, P.C. (H2M), and Fanning Philips & Molnar, from 1989 to 1993. NCDPW site inspections were also used to evaluate the soil and groundwater impacts on each property in this study.

A summary of the specific site assessments follows:

PALL CORPORATION

The Pall Corporation is located on the north side of Sea Cliff Avenue and has occupied the site since 1946. Pall Corporation manufactures a variety of filtration products. Currently the site is geared toward research and development with the bulk of production occurring over twelve years ago. Although there was no indication of current use of solvents, Nassau County Department of Health Industrial Chemical Profiles show historical use of both Trichloroethene and Tetrachloroethene.

Five groundwater monitoring wells were identified during the site inspection and data from the 1992 H2M report provides both soil and groundwater results for these well locations. Eight volatile organic compounds were identified in the soils: Acetone, 1,1-Dichloroethane, 1,2-Dichloroethene, Trichloroethene, Tetrachloroethene, Toluene,

Ethylbenzene and Xylene. Xylene was the only constituent in the soil that exceeded State cleanup criteria.

Wells onsite characteristically showed detectable levels of Vinyl Chloride, 1,1-Dichloroethane, 1,1-Dichloroethene, 1,2-Dichloroethene, Trichloroethene, Tetrachloroethene and Xylene. Concentrations of both 1,2-Dichloroethane (3500 ppb) and Trichloroethene (1600 ppb) far exceeded the State's MCL standard of 5 ppb. The maximum on-site concentrations of Trichloroethene in groundwater beneath the site also occurred at values over 20 times greater than the nearest potential upgradient source, indicating an on-site origin for this compound. Therefore, considering Pall Corporation's past use and storage of solvents, their detection in both the soil and groundwater beneath the site at concentrations exceeding State groundwater standards, it is recommended that Pall Corporation be classified as a Class 2 site, in that it poses a significant threat to the public health and the environment.

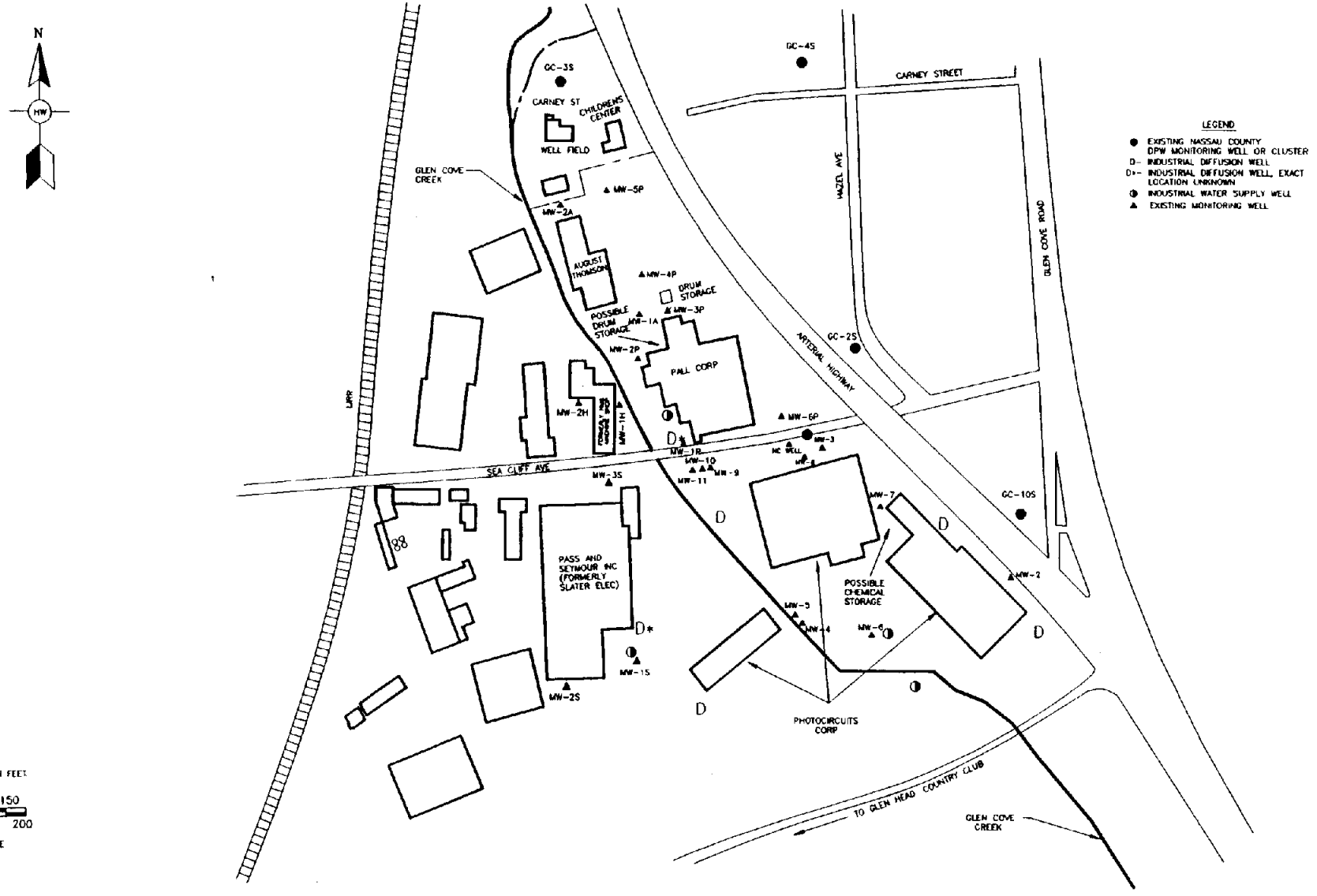
AUGUST THOMSEN

The August Thomsen site is located on the north side of Sea Cliff Avenue, adjacent to the Pall Corporation. The site was formerly owned by Pall Corporation. Currently August Thomsen uses the property for the production of pastry bags and tubes. An inspection of the site showed the bulk storage of acids and bases used for current manufacturing processes; however, past storage of solvents by Pall Corporation was likely, as indicated by historical Health Department

Industrial Chemical Profiles.

Two on-site groundwater monitoring wells were identified during the inspection, and data obtained from the H2M 1992 Sea Cliff Avenue Investigation shows that four soil borings were also completed. The soil borings data shows only Tetrachloroethene present in one boring at 8 ppb and several tentatively identified compounds (TIC's), of which neither exceeded any State cleanup objectives.

The data from the two groundwater monitoring wells indicate the presence of volatile organic compounds (VOC's) at concentrations ranging from 2 ppb to 1444 ppb. The two principal VOC's identified were Trichloroethene and Tetrachloroethene at 380 ppb and 410 ppb, respectively. These two compounds far exceed the State's MCL of 5 ppb, and considering the past use of Trichloroethene and Tetrachloroethene by Pall Corporation, it is recommended that August Thomsen be classified a Class 2 site since it poses a significant threat to the public health and the environment.



			FILE NAME: \DWG\GCIND	CONTRACT NUMBER,		SHEET NO. 1 OF 1	COUNTY OF NASSAU DEPARTMENT OF PUBLIC WORKS SANITATION & WATER SUPPLY HAZARDOUS WASTE SERVICES UNIT
			SCALE: AS SHOWN	DWG NO.	DRAWN BY: J.ZIMMET	DATE 4/21/93	FIGURE 1 SITE PLAN GLEN COVE INDUSTRIAL AREA GLEN COVE, NEW YORK
0	ORIGINAL RELEASE	12/1/93	DESIGNED BY: M.FLAHERTY	DATE 4/13/93	CHECKED BY: S.URBAN	DATE 4/22/93	
NO	REVISION DESCRIPTION	DATE					

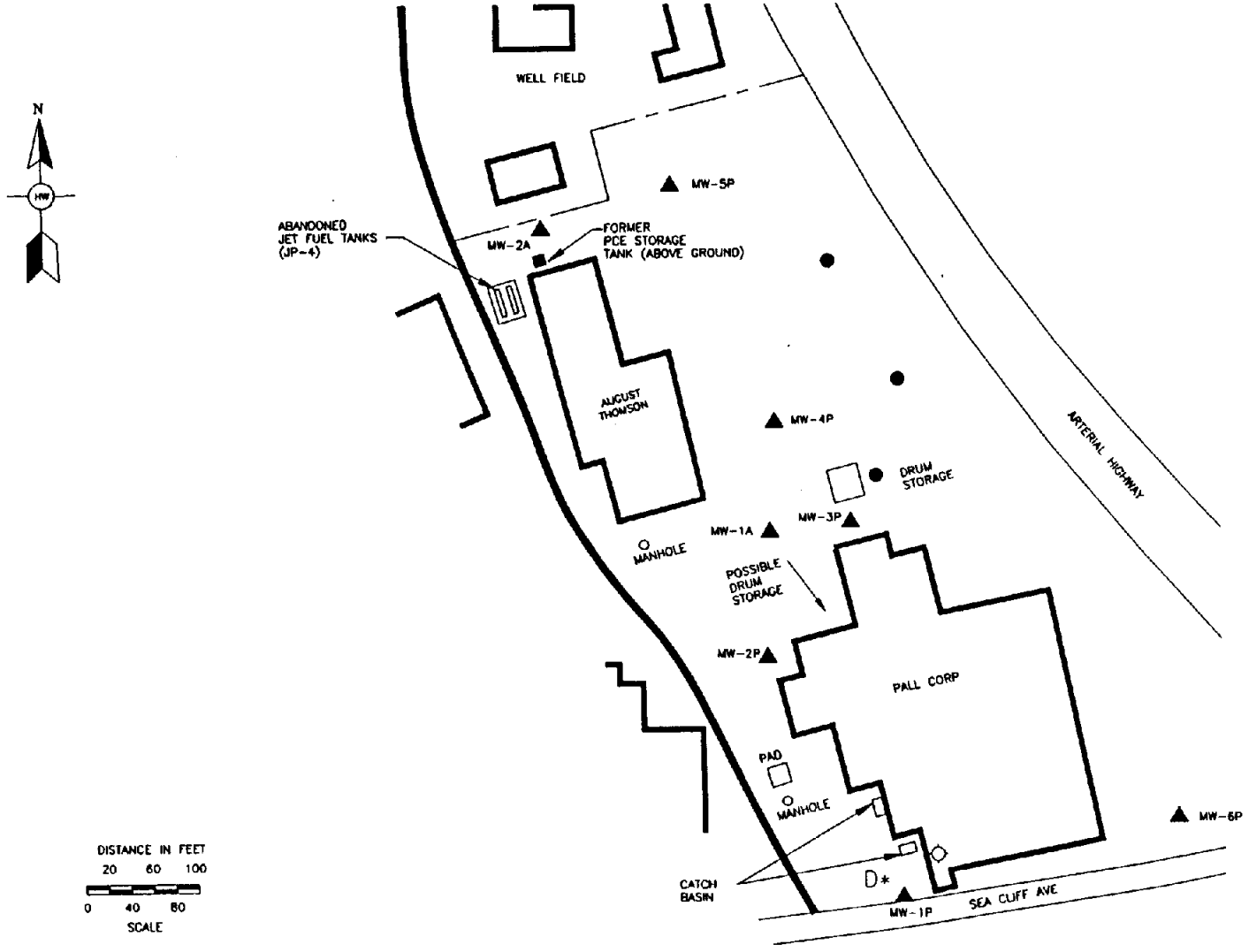
4.0 Scope of Work

4.1 Individual Site Inspections

In order to evaluate the possible relationship between commercial or municipal activities at each of the sites and any potential soil or groundwater contamination discovered during the preliminary site assessment, inspections were conducted at each facility. The inspections were conducted with personnel who were familiar with the nature of production at each industrial location, and included both indoor and outdoor facilities. Indoor inspections included review of any production activities, drainage and chemical and bulk material storage practices which might contribute to a potential environmental impact. Outdoor inspections focused on surface runoff and associated drainage; the location of any drywells, catchbasins or surface impoundments were also noted. The outdoor inspections also examined any exterior chemical storage facilities including storage sheds and tank farms. Inspectors tried to identify any production, diffusion or groundwater monitoring wells which might be located on the five industrial sites.

Pall Corporation

Pall Corporation is located at 30 Sea Cliff Avenue, Glen Cove. The facility lies on the north side of Sea Cliff Avenue, and it is bordered by the Glen Cove arterial highway to the east, Glen Cove Creek to the west, and the Carney Street Wellfield to the north (Figure 7). The facility was



			FILE NAME: \DWG\GCPALL	CONTRACT NUMBER:		SHEET NO. 1 OF 1	COUNTY OF NASSAU DEPARTMENT OF PUBLIC WORKS SANITATION & WATER SUPPLY HAZARDOUS WASTE SERVICES UNIT
			SCALE: AS SHOWN	DWG. NO.	DRAWN BY: J.ZIMMET	DATE 4/28/93	
0	ORIGINAL RELEASE	12/1/93	DESIGNED BY: K.STOKES	DATE 4/27/93	CHECKED BY: K.ARNOLD	DATE 4/28/93	
NO.	REVISION DESCRIPTION	DATE					

FIGURE 7
SITE PLAN
PALL CORPORATION/AUGUST THOMSEN
GLEN COVE, NEW YORK

inspected by Nassau County Department of Public Works, Hazardous Waste Services Unit personnel on Wednesday, May 5, 1993.

The building used by Pall Corporation at this location is a two-story masonry structure which contains office, laboratory and some small scale production facilities. The bulk of production activities at this site are reported to have ceased approximately 12 years ago. The indoor inspection began with a tour of the blood lab, which is used to test filter media for biological applications. This lab is used exclusively for research and development. The next area examined was the fiber pilot facility, which is used to test filter papers. Deionized water and cellulose are the bulk materials used in this facility. The deionized water is produced by treating Glen Cove City water in an onsite deionization plant, no onsite production wells are used to supply water for this process. The microbiology lab was also examined, activities in the lab are restricted to counting particulates on test filters with a scanning electron microscope.

The last interior facility to be inspected was the Research and Development Casting Room. This area is used to coat mylar films with various resins. Feeder tanks supply the casting room with Dimethyl Acetamide, which is used as a high purity solvent for the resins. Deionized water is also used in this process. Process water is then neutralized in holding tanks prior to eventual discharge into the City of

Glen Cove sewer system.

The outdoor inspection identified two catch basins on western side of the building, one of which was located at the base of a loading dock. A single manhole cover next to a concrete pad was also identified on the west side of the building, however, the manhole is believed to be part of the sewer connection for the building. A single on-site production well was identified by Pall personnel. The well is believed to be approximately 250 feet deep.

The Nassau County Department of Public Works inspection team positively identified six groundwater monitoring wells on the Pall Site (Figure 7). Two wells MW-1P and MW-6P, could provide upgradient water quality and groundwater elevation data. Monitoring wells MW-2P and MW-3P were located downgradient of the research and development laboratory and the casting room. Monitoring well MW-4P was believed to be downgradient of an outdoor chemical storage shed and well MW-5P was located at the northern end of the property. Three circular depressions were also identified in the northeastern portion of the parking lot which could represent abandoned diffusion wells or borings.

August Thomsen

The August Thomsen site is located on the northern side of Sea Cliff Avenue. The property is immediately adjacent to Pall Corporation on the south and east, and bounded by Glen Cove Creek to the west and the Carney Street wellfield to the

north (Figure 7). The NCDPW inspection of the single story brick structure was conducted on Tuesday, May 25, 1993. August Thomsen produces pastry bags and tubes at this facility. The indoor inspection began with a tour of a large storage area and an assembly area where stock material is cut and sealed for use in pastry bag manufacturing.

The next part of the building to be inspected was the "wash room". This room contains tanks of acids and bases which are used to wash nickel/silver pastry tubes in order to remove solder flux. Spent materials from this process are stored in plastic-lined drums and removed by licensed haulers. Wash materials observed included: Nitric acid, acetic acid, phosphoric acid, sulfuric acid and calcium hydroxide. The total system is reportedly drained every 4-5 months. PVC drain lines with open valves were observed leaving the tanks. The lines are reported to be connected to the municipal sewer. A production area was also observed in the building. Sheet metal stock is pressed and rolled in this area using mechanical brakes. The tubes which are produced here are then soldered using Envirosafe solder. A second smaller storage area was observed in the northern end of this building. This area was reported to be a former degreasing/tumbling room when the facility was owned by Pall Corporation. There were no active floor drains observed in this area.

The outdoor inspection revealed the presence of two groundwater monitoring wells. Well MW-1A is located off the

southeast corner of the building between Pall and the August Thomsen property. Well MW-2A was identified on the northern end of the building, outside the former degreasing area, referenced above (Figure 7). An August Thomsen employee identified the former location of an above ground Tetrachloroethene tank (Figure 7). A concrete pad was also identified on the northwest corner of the building. This pad is all that remains of a former compressor building. Two abandoned jet fuel tanks (JP-4) are reported to be located beneath the pad. The tanks were reportedly cleaned and filled with sand around 1987. Tank abandonment documentation is reported to exist.

5.3 Pall Corporation

5.3.1 Soil Quality

Soil conditions at the Pall Corporation site were examined through a review of the sampling data from the same 1992 Source Area Investigation used in the previous two individual site assessments. A total of twelve soil samples were collected as part of the Source Area Investigation at the Pall Corporation facility. The results of the soil analyses are summarized in Table 10. The location of all sample collection points can be found in Figure 13.

Review of the data in Table 10 in conjunction with the locations shown in Figure 13 indicates that four of the soil samples were collected from the borings for groundwater monitoring wells MW-2P, 3P, 4P and 5P. The remaining eight soil boring locations (P1-P8) appear to have been selected based upon the results of some screening method, possibly soil gas; as each of these locations carries a second numerical designation, which does not seem to equate with a specified two-foot sampling interval.

Review of the data in Table 10 indicates that volatile organic compounds are present in soils beneath the Pall Corporation facility. Eight VOC's were identified including Acetone, 1,1-Dichloroethane, 1,2-Dichloroethene (total), Trichloroethene, Tetrachlorethene, Toluene, Ethylbenzene, and Xylene (total). Tentatively identified volatile organic compounds were also detected at P2, P4, P6 and P7. The two boring locations with the highest concentration of total

TABLE 10

PALL CORPORATION

VOLATILE ORGANIC ANALYSIS SUMMARY

SOIL

SAMPLING DATE:11/91

COMPOUND DETECTED (MG/KG)	SOIL BORING/ SAMPLE # MW-2P	(2-4) MW-3P	(1-3) MW-4P	(4-6) MW-5P	P1(3)	P2(38)*	P3(43)	P4(30)*	P5(27)	P6(26)*	P7(25)*	P8(46)	RECOMMENDED SOIL CLEAN-UP OBJECTIVE (PPM)
CHLOROMETHANE	U	U	U	U	U	U	U	U	U	U	U	U	NA
BROMOMETHANE	U	U	U	U	U	U	U	U	U	U	U	U	NA
VINYL CHLORIDE	U	U	U	U	U	U	U	U	U	U	U	U	0.12
CHLOROETHANE	U	U	U	U	U	U	U	U	U	U	U	U	0.19
METHYLENE CHLORIDE	U	U	U	U	U	U	U	U	U	U	U	U	0.1
ACETONE	.030	.071	.029	U	U	.074	.022	.035(J)	U	.040(J)	U	.047	0.11
CARBON DISULFIDE	U	U	U	U	U	U	U	U	U	U	U	U	2.7
1,1-DICHLOROETHENE	U	U	U	U	U	U	U	U	U	U	U	U	0.4
1,1-DICHLOROETHANE	U	.013	.004(J)	U	U	U	U	U	U	U	U	U	0.2
1,2-DICHLOROETHENE (TOTAL)	U	U	.040	.075	U	U	U	U	U	.240	U	U	0.3
CHLOROFORM	U	U	U	U	U	U	U	U	U	U	U	U	0.3
1,2-DICHLOROETHANE	U	U	U	U	U	U	U	U	U	U	U	U	0.1
2-BUTANONE	U	U	U	U	U	U	U	U	U	U	U	U	0.3
1,1,1-TRICHLOROETHANE	U	U	U	U	U	U	U	U	U	U	U	U	0.76
CARBON TETRACHLORIDE	U	U	U	U	U	U	U	U	U	U	U	U	0.6
VINYL ACETATE	U	U	U	U	U	U	U	U	U	U	U	U	NA
BROMODICHLOROMETHANE	U	U	U	U	U	U	U	U	U	U	U	U	NA
1,2-DICHLOROPROPANE	U	U	U	U	U	U	U	U	U	U	U	U	NA
CIS-1,3-DICLOROPROPENE	U	U	U	U	U	U	U	U	U	U	U	U	NA
TRICHLOROETHENE	U	U	U	U	U	U	U	U	.017	.040	U	U	0.7
DIBROMOCLOROMETHANE	U	U	U	U	U	U	U	U	U	U	U	U	NA
1,1,2-TRICHLOROETHANE	U	U	U	U	U	U	U	U	U	U	U	U	NA
BENZENE	U	U	U	U	U	U	U	U	U	U	U	U	.06
TRANS-1,3-DICHLOROPROPENE	U	U	U	U	U	U	U	U	U	U	U	U	NA
BROMOFORM	U	U	U	U	U	U	U	U	U	U	U	U	NA
4-METHYL-2-PENTANONE	U	U	U	U	U	U	U	U	U	U	U	U	1.0
2-HEXANONE	U	U	U	U	U	U	U	U	U	U	U	U	NA
TETRACHLOROETHENE	U	U	U	.030	U	U	U	.057	.110	1.0	U	U	1.4
1,1,2,2-TETRACHLOROETHANE	U	U	U	U	U	U	U	U	U	U	U	U	0.6
TOLUENE	U	.018	.024	.210	U	U	U	.110	U	U	U	U	1.5
CHLOROBENZENE	U	U	U	.740	U	U	U	U	U	U	U	U	1.7
ETHYLBENZENE	U	.018	U	.600	U	U	U	.029*	U	U	U	U	5.5
STYRENE	U	U	U	U	U	U	U	U	U	U	U	U	NA
XYLENE (TOTAL)	U	.170	U	4.400	U	U	U	U	U	U	U	U	1.2
TOTAL VOLATILE ORGANIC COMPOUNDS	.030	.288	.097	6.055	U	.074	.022	.231	.127	1.320	U	.047	

LEGEND

U = UNDETECTED
J = ESTIMATED CONCENTRATION
* = TIC's PRESENT

volatile organic compounds in soil were MW-5P (4-6 ft) and P6 (26), which totaled 6.055 ppm and 1.320 ppm, respectively. The two compounds with the highest individual concentrations were also detected in these borings. Xylene (total) was found at 4.40 ppm in boring MW-5P and Tetrachloroethene was found at a concentration of 1.0 ppm, in boring P6.

The concentrations of all compounds detected in the soils at the Pall Corporation site were compared with the recommended soil cleanup objectives specified in the November 16, 1992, NYSDEC (DHWR) Technical and Administrative Guidance Memorandum (TAGM), Determination of Soil Cleanup Objectives and Cleanup Levels. Of the eight volatile organic compounds detected, only Xylene (total) exceeded its cleanup objective of 12 ppm in the 4-6 ft sample collected from the boring for monitoring well MW-5P. Only one of the borings exhibited total volatile organic concentrations above the specified cleanup objective of 10 ppm established in the TAGM. Boring P4 had a combined total of 16.291 ppm total volatile organics. This total was comprised mostly of tentatively identified compounds (TIC's), which included unknown hydrocarbons at an estimated concentration of 15.980 ppm.

5.3.2 Groundwater Quality

Five groundwater monitoring wells were sampled by H2M consultants on Pall Corporation property in November, 1991. The location of all wells are shown in Figures 7 and 13. A sixth groundwater monitoring well MW-6P (Figure 7) was identified by NCDPW hydrogeologists during the summer of

1993. Groundwater quality data was not provided for this well and it may not have existed during the November, 1991 sampling event.

The results of the November, 1991 sampling round are provided in Table 11. Review of this data indicates that volatile organic compounds exist in groundwater beneath the Pall site at all five well locations. The two wells with the highest total volatile organic compound (TVOC) concentrations in groundwater are MW-2P and MW-5P which had concentrations of 3,259 and 6,847 ppb, respectively. The remaining three wells had TVOC concentrations greater than 50 ppb. MW-3P had a total concentration of 736 ppb, MW-4P had a concentration of 302 ppb and groundwater monitoring well MW-1P totaled 58 ppb.

Four of the volatile organic compounds detected were common to all five wells. Vinyl Chloride ranged from 7 to 840 ppb, 1,1,-Dichloroethane was detected at concentrations ranging from 8 to 33 ppb, 1,2-Dichloroethene (total) was found from 25 to 3500 ppb and Trichloroethene ranged from 12 to 1600 ppb. Tetrachloroethene was detected at all well locations except MW-1P and was found in groundwater at concentrations ranging from 18 to 880 ppb. The remaining eight compounds which were detected on the site occurred sporadically at concentrations less than 25 ppb.

Four of the five sampled well locations had total volatile organic compound concentrations exceeding the 100 ppb level established for combined principal and unspecified

TABLE 11

PALL CORPORATION

VOLATILE ORGANIC ANALYSIS SUMMARY

GROUNDWATER

SAMPLE DATE: 11/91

COMPOUND DETECTED (UG/L)	MONITORING WELL#						
	MW-1P	MW-2P	MW-3P	MW-4P	MW-5P	MCL OR CLASS GA STANDARD	GUIDANCE VALUE (TOG's)
CHLOROMETHANE	U	U	U	U	U	5	
BROMOMETHANE	U	U	U	U	U	5	
VINYL CHLORIDE	7(J)	130	120	110	840	2	
CHLOROETHANE	U	U	U	U	2(J)	5	
METHYLENE CHLORIDE	U	U	3(J)	U	U	5	
ACETONE	U	U	U	U	U	50	
CARBON DISULFIDE	U	U	U	U	U	50	
1,1-DICHLOROETHENE	2(J)	22	6	U	7	5	
1,1-DICHLOROETHANE	11	33	13	8	10	5	
1,2-DICHLOROETHENE (TOTAL)	25	2500	480	140	3500	5	
CHLOROFORM	U	U	U	U	U	7	
1,2-DICHLOROETHANE	U	U	U	U	U	5	
2-BUTANONE	U	U	U	U	U	50	
1,1,1-TRICHLOROETHANE	1(J)	4(J)	U	U	U	5	
CARBON TETRACHLORIDE	U	U	U	U	U	5	
VINYL ACETATE	U	U	U	U	U		
BROMODICHLOROMETHANE	U	U	U	U	U		50
1,2-DICHLOROPROPANE	U	U	U	U	U	5	
CIS-1,3-DICLOROPROPENE	U	U	U	U	U	5	
TRICHLOROETHENE	12	480	65	19	1600	5	
DIBROMOCLOROMETHANE	U	U	U	U	U	50	
1,1,2-TRICHLOROETHANE	U	U	4(J)	U	U	5	
BENZENE	U	2(J)	U	1(J)	U	0.7	
TRANS-1,3-DICHLOROPROPENE	U	U	U	U	U	5	
BROMOFORM	U	U	U	U	U	50	
4-METHYL-2-PENTANONE	U	U	U	U	U	50	
2-HEXANONE	U	U	U	U	U	50	
TETRACHLOROETHENE	U	85	24	18	880	5	
1,1,2,2-TETRACHLOROETHANE	U	U	U	U	U	5	
TOLUENE	U	U	5	2(J)	3(J)	5	
CHLOROBENZENE	U	U	U	U	U	5	
ETHYLBENZENE	U	U	U	U	U	5	
STYRENE	U	U	U	U	U	5	
XYLENE (TOTAL)	U	3(J)	22	4(J)	5(J)	5	
TOTAL VOC (CONC.)	58	3259	736	302	6847		

LEGEND

U = UNDETECTED
J = ESTIMATED CONCENTRATION

organic contaminants in drinking water (NYCRR, sub-part 5.1). The only well which did not exceed this value was MW-1P which had a TVOC concentration of 58 ppb. Maximum contaminant levels and/or class GA standards specified for individual compounds were exceeded at one or more well locations for the following compounds: Vinyl Chloride, 1,1-Dichloroethene, 1-1 Dichloroethane, 1,2- Dichloroethene (total) Trichloroethene, Tetrachloroethene and Xylene.

5.4 August Thomsen

5.4.1 Soil Quality

Soil conditions at the August Thomsen site were evaluated using soil sampling results obtained from four soil borings drilled in November 1991, during H2M's Source Area Investigation for Sea Cliff Avenue. The locations for the borings appear to have been selected based upon some form of soil gas screening and have been designated SGP (Soil Gas Point). No information was provided regarding the depth of these samples. However, since they were presumably selected based upon soil gas readings it would be reasonable to infer that they were collected from the vadose zone. The locations of all borings are provided in Figure 13.

The results of the volatile organic analyses for the soil samples collected at the August Thomsen site can be found in Table 12. Review of the data presented in the table indicates that very low levels of volatile organics are present in the soils beneath August Thomsen property at three of the four boring locations. Volatile organic compounds

TABLE 12

AUGUST THOMSEN

VOLATILE ORGANIC ANALYSIS SUMMARY

SOIL

SAMPLING DATE: 11/91

COMPOUND DETECTED (MG/KG)	SOIL BORING/SAMPLE #				RECOMMENDED SOIL CLEAN-UP OBJECTIVE (PPM)
	SGP-5	SGP-31*	SGP-33	SGP-37	
CHLOROMETHANE	U	U	U	U	NA
BROMOMETHANE	U	U	U	U	NA
VINYL CHLORIDE	U	U	U	U	0.12
CHLOROETHANE	U	U	U	U	1.9
METHYLENE CHLORIDE	U	U	U	U	0.1
ACETONE	U	U	U	U	0.11
CARBON DISULFIDE	U	U	U	U	2.7
1,1-DICHLOROETHENE	U	U	U	U	0.4
1,1-DICHLOROETHANE	U	U	U	U	0.2
1,2-DICHLOROETHENE (TOTAL)	U	U	U	U	0.3
CHLOROFORM	U	U	U	U	0.3
1,2-DICHLOROETHANE	U	U	U	U	0.1
2-BUTANONE	U	U	U	U	0.3
1,1,1-TRICHLOROETHANE	U	U	U	U	0.76
CARBON TETRACHLORIDE	U	U	U	U	0.6
VINYL ACETATE	U	U	U	U	NA
BROMODICHLOROMETHANE	U	U	U	U	NA
1,2-DICHLOROPROPANE	U	U	U	U	NA
CIS-1,3-DICLOROPROPENE	U	U	U	U	NA
TRICHLOROETHENE	U	U	U	U	0.7
DIBROMOCLOROMETHANE	U	U	U	U	NA
1,1,2-TRICHLOROETHANE	U	U	U	U	NA
BENZENE	U	U	U	U	.06
TRANS-1,3-DICHLOROPROPENE	U	U	U	U	NA
BROMOFORM	U	U	U	U	NA
4-METHYL-2-PENTANONE	U	U	U	U	1.0
2-HEXANONE	U	U	U	U	NA
TETRACHLOROETHENE	U	U	.008	U	1.4
1,1,2,2-TETRACHLOROETHANE	U	U	U	U	0.6
TOLUENE	U	U	U	U	1.5
CHLOROBENZENE	U	U	U	U	1.7
ETHYLBENZENE	U	U	U	U	5.5
STYRENE	U	U	U	U	NA
XYLENE (TOTAL)	U	U	U	U	1.2
TOTAL VOLATILE ORGANIC COMPOUNDS	U	U	.008	U	

LEGEND

U = UNDETECTED
* = TIC's PRESENT

were not detected in soil samples collected at borings SGP-5 and SGP-37. A single volatile organic compound, Tetrachloroethene was detected at a concentration of .008 ppm in soils collected from boring SGP-33.

The soil sample which was collected from the fourth boring SGP-31, did not reveal the presence of any calibrated volatile organic compounds. However, twelve tentatively identified volatile organic compounds (TIC's) were detected at an estimated concentration of 2.414 ppm. These TIC's included seven hydrocarbons, three cyclic compounds and two unknowns.

Comparison of the concentrations of volatile organic compounds detected in soils at the August Thomsen facility with their NYSDEC appropriate individual and total recommended cleanup objectives (TAGM, 1992) indicate that neither form of the objective was exceeded at any boring location.

5.4.2 Groundwater Quality

Groundwater quality beneath the August Thomsen site was examined using volatile organic data collected from two onsite monitoring wells which were sampled by H2M Consultants in November 1991. The two wells are located on August Thomsen property on the southeast and northwest corners of the building (Figure 7).

The volatile organic data collected from these two wells is presented in Table 13. Review of this information indicates that groundwater beneath the site has been impacted

TABLE 13

AUGUST THOMSEN

VOLATILE ORGANIC ANALYSIS SUMMARY

GROUNDWATER

SAMPLING DATE: 11/91

COMPOUND DETECTED (UG/L)	MONITORING WELL#		MCL OR CLASS GA STANDARD	GUIDANCE VALUE (TOG's)
	MW-1A	MW-2A		
CHLOROMETHANE	U	U	5	
BROMOMETHANE	U	U	5	
VINYL CHLORIDE	130	180	2	
CHLOROETHANE	U	U	5	
METHYLENE CHLORIDE	2	2	5	
ACETONE	U	U	50	
CARBON DISULFIDE	U	U	50	
1,1-DICHLOROETHENE	9	3(J)	5	
1,1-DICHLOROETHANE	15	6	5	
1,2-DICHLOROETHENE (TOTAL)	480	620	5	
CHLOROFORM	U	28	7	
1,2-DICHLOROETHANE	U	U	5	
2-BUTANONE	U	U	50	
1,1,1-TRICHLOROETHANE	16	3	5	
CARBON TETRACHLORIDE	U	U	5	
VINYL ACETATE	U	U		
BROMODICHLOROMETHANE	U	U		50
1,2-DICHLOROPROPANE	U	U	5	
CIS-1,3-DICLOROPROPENE	U	U	5	
TRICHLOROETHENE	380	65	5	
DIBROMOCLOROMETHANE	U	U	50	
1,1,2-TRICHLOROETHANE	U	U	5	
BENZENE	2	8	0.7	
TRANS-1,3-DICHLOROPROPENE	U	U	5	
BROMOFORM	U	U	50	
4-METHYL-2-PENTANONE	U	U	50	
2-HEXANONE	U	U	50	
TETRACHLOROETHENE	410	160	5	
1,1,2,2-TETRACHLOROETHANE	U	U	5	
TOLUENE	U	12	5	
CHLOROBENZENE	U	12	5	
ETHYLBENZENE	U	13	5	
STYRENE	U	10	5	
XYLENE (TOTAL)	U	39	5	
TOTAL VOC (CONC.)	1444	1011		

LEGEND

U = UNDETECTED
J = ESTIMATED CONCENTRATION

by volatile organic compounds. The total concentration of VOC's in groundwater from monitoring well MW-2A is 1011 ppb and 1444 ppb in well MW-1A. The majority of the volatile organic compounds found in these wells can be classified as solvents along with their associated breakdown products.

Nine of the fifteen volatile organic compounds detected in groundwater are common to both wells. These compounds include: Vinyl Chloride, Methylene Chloride, 1,1-Dichloroethene, 1,1-Dichloroethane, 1,2-Dichloroethene (total), 1,1,1-Trichloroethane, Trichloroethene, Benzene, and Tetrachloroethene. The compounds with the highest individual concentrations are Vinyl Chloride, 180 ppb (MW-2A), 1,2-Dichloroethene (total), 620 ppb (MW-2A), Trichloroethene, 380 ppb (MW-1A) and Tetrachloroethene 410 ppb (MW-1A). All concentrations were found to be well above their respective Maximum Contaminant Levels.