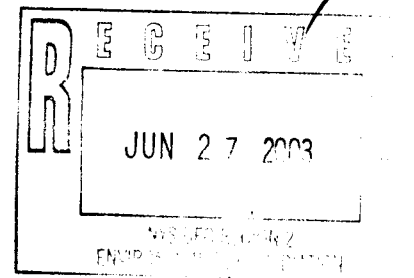


**THE  
WHITMAN  
COMPANIES, INC.**

*Setting the Standard in  
Environmental Engineering & Management*



**SUMMARY OF SITE INVESTIGATION**

**AND**

**PROPOSED REMEDIAL ACTION**

**FOR**

**DEXTER CHEMICAL, L.L.C.  
845 EDGEWATER ROAD  
BRONX, NEW YORK**

**VOLUME 1**

**TEXT, TABLES, FIGURES, ATTACHMENTS**

**PERFORMED BY**

**THE WHITMAN COMPANIES, INC.**

**JUNE 2003**

---

**116 Tices Lane, Unit B-1, East Brunswick, NJ 08816  
www.whitmanco.com**

**SUMMARY OF SITE INVESTIGATION  
AND  
PROPOSED REMEDIAL ACTION**

**DEXTER CHEMICAL, L.L.C.  
845 EDGEWATER ROAD  
BRONX, NEW YORK**

**Table of Contents**

1.0	INTRODUCTION .....	1
2.0	SITE DESCRIPTION/HISTORY .....	1
2.1	Site Characteristics .....	1
2.2	Past Operations and Chemical Usage .....	2
2.3	Current Operations and Chemical Usage .....	2
3.0	PREVIOUS ENVIRONMENTAL STUDIES .....	3
3.1	UST Closure Reports .....	3
3.2	Whitman Phase I .....	3
3.3	Whitman Phase II .....	3
3.4	Whitman Remedial Investigation .....	4
4.0	RESULTS OF JULY 2000 SITE INVESTIGATION .....	4
4.1	Introduction .....	4
4.2	Area A (819 Edgewater Road Plant) .....	5
4.2.1	Background and Description of Sampling .....	5
4.2.2	Analytical Results .....	5
4.2.3	Discussion of Analytical Results .....	5
4.3	Area B (819 Edgewater Road Plant) .....	6
4.3.1	Background and Description of Sampling .....	6
4.3.2	Analytical Results .....	6
4.3.3	Discussion of Analytical Results .....	7
4.4	Area I (842 Whittier Plant Driveway/Yard) .....	7
4.4.1	Background and Description of Sampling .....	7
4.4.2	Analytical Results .....	7
4.4.3	Discussion of Analytical Results .....	8
4.5	Ground Water .....	8
4.5.1	Well Installation and Sampling .....	8
4.5.2	Analytical Results .....	9
4.5.3	Discussion of Analytical Results .....	9

5.0	ADDITIONAL GROUND WATER INVESTIGATION (2001-2002) .....	10
5.1	Background .....	10
5.2	Installation of Temporary Well Points and Piezometers (December 2001).....	10
5.2.1	Introduction.....	10
5.2.2	Installation and Sampling of Temporary Well Points.....	10
5.2.3	Installation of Piezometers.....	11
5.2.4	Ground Water Sampling and Analytical Results .....	11
5.2.5	Groundwater Flow Direction .....	12
5.2.6	Conclusions - Installation of Temporary Well Points and Piezometers .....	13
5.3	Installation of Off-Site Monitoring Wells (November 2002) .....	13
5.3.1	Introduction.....	13
5.3.2	Installation of Off-Site Monitoring Wells.....	13
5.3.3	Ground Water Flow Direction and Repair of MW-5 and MW-8 .....	13
5.3.4	Ground Water Sampling and Analytical Results .....	14
5.3.5	Conclusions – Installation of Off-Site Monitoring Wells.....	14
6.0	CONCLUSIONS.....	15
6.1	Area A .....	15
6.2	Area B.....	15
6.3	Area I.....	15
6.4	Ground Water .....	16
7.0	PROPOSED REMEDIAL ACTION .....	16
7.1	Evaluation of Human Health Exposure Pathways .....	16
7.2	Proposed Remedial Action For Soil.....	17
7.3	Proposed Remedial Action For Ground Water .....	18

## TABLES

1A.	Historic Summary of Volatile Organic Results for Soil AEC-A
1B.	Historic Summary of Base/Neutral Organic Results for Soil AEC-A
1C.	Historic Summary of Mercury and Metal Results for Soil AEC-A
2A.	Historic Summary of Volatile Organic Results for Soil AEC-B
2B.	Historic Summary of Base/Neutral Organic Results for Soil AEC-B
2C.	Historic Summary of Metals Results for Soil AEC-B
3A.	Historic Summary of Volatile Organic Results for Soil AEC-I
3B.	Historic Summary of Base/Neutral Organic Results for Soil AEC-I
3C.	Historic Summary of Priority Pollutant Metal Results for Soil AEC-I
4A.	Summary of Volatile Organic Compound Results for Ground Water
4B.	Summary of Base/Neutral Compound Results for Ground Water
4C.	Summary of Priority Pollutant Metal Results for Ground Water

- 5A. Summary of Volatile Organic Results for Ground Water
- 5B. Summary of Base/Neutral Compound Results for Ground Water
- 6. Depth to Water and Elevation Measurements
- 7A. Summary of Volatile Organic Results for Ground Water
- 7B. Summary of Base/Neutral Compound Results for Ground Water

## **FIGURES**

- 1. Site Location on USGS Central Park, NY Quadrangle
- 2. Site Map with Monitoring Well Locations
- 3. Area A Site Investigation Soil Sampling Results
- 4. Area B Site Investigation Soil Sampling Results
- 5. Area I Site Investigation Soil Sampling Results
- 6. Ground Water Contours September 27, 2000
- 7. Location of Temporary Well Points and Piezometers
- 8. Utility Mark Out Map
- 9. Compounds Above NYSDEC Ground Water Standards
- 10. Ground Water Contour Map January 22, 2002
- 11. Ground Water Flow Map May 31, 2002
- 12. Ground Water Flow Map October 4, 2002
- 13. Monitoring Well and Utility Locations
- 14. Ground Water Flow Map December 3, 2002
- 15. Ground Water Sampling Results December 3, 2002

## **ATTACHMENTS**

- 1. Soil Boring Logs – AEC-A
- 2. Lab Summary Sheets – July 2000
- 3. Soil Boring Logs – AEC-B
- 4. Soil Boring Logs – AEC-I
- 5. Well Logs – MW-7 & 8
- 6. Well Sampling Purge Sheets – September 27, 2000
- 7. Lab Summary Sheets – September 27 2000
- 8. Temporary Well Point and Piezometer Well Logs
- 9. Well Sampling Worksheet
- 10. Monitoring Well Logs
- 11. Well Sampling Worksheet



## VOLUMES

1. Text, Tables, Figures and Attachments
- 2 Part A1 through A4 – Laboratory QA/QC
- 2 Part B – Laboratory QA/QC

**SUMMARY OF SITE INVESTIGATION  
AND  
PROPOSED REMEDIAL ACTION**

**DEXTER CHEMICAL, L.L.C.  
BRONX, NEW YORK**

**1.0 INTRODUCTION**

This report formally presents the results of soil and ground water sampling completed between July and September 2000 at Dexter Chemical L.L.C (Dexter), located at 845 Edgewater Road, Bronx, New York (Figure 1). The site work was completed as proposed in the approved New York State Department of Environmental Conservation (NYSDEC) *Site Investigation Workplan* (July 1999) and under NYSDEC's Voluntary Agreement program.

Results provided in this report have been previously presented to the NYSDEC in various letter-reports. The September 2000 ground water sampling results were provided to the Department in a letter-report dated December 6, 2000. <sup>fk</sup> Soil analytical results and soil boring logs from the July 2000 sampling event were provided to the Department in letters dated July 2, 2001 and July 5, 2001 respectively. <sub>CLC</sub> -Jex

LAST In addition to the presentation of the July 2000 results, this report summarizes environmental data collected during November 1997, March 1998, December 2001, and November 2002. This data is presented in support of the overall conclusions reached for each potential area of environmental concern discussed in Section 6.0 of this report. This report concludes by presenting remedial actions for soil and ground water.

**2.0 SITE DESCRIPTION/HISTORY**

**2.1 Site Characteristics**

The site is located at 819-845 Edgewater Road and 810-842 Whittier Street, Bronx, New York. The facility consists of six (6) buildings owned by Dexter Chemical LLC on approximately two (2) acres. The property is located in an industrial/manufacturing district of Hunts Point, Bronx, New York. Industrial facilities are located north and south of the property. A scrap metal yard is

located to the east and residential apartments and a sheet metal company are located west of the subject property. A site map is included as Figure 2.

The site is located on a flat coastal peninsula. The estimated elevation is approximately 20 feet above mean sea level. The Bronx River, located less than a 1,000 feet to the east, is the nearest surface water body. The depth to shallow ground water at Dexter varies from 5 to 12 feet below grade across the site.

Review of the 1896 and 1901 Sanborn Maps show that historically the Bronx River ran immediately adjacent to Edgewater Road. Subsequent maps show reclaimed land appearing between Edgewater Road and the River. The use of historic fill materials to raise the topographic elevation of areas near important waterways was a common practice that proceeded development. Site soils encountered during the advancement of multiple borings at the Dexter property show the characteristic profile of historic fill materials. The fill material observed consists of cinders, coal fragments, gravel and assorted debris (concrete, glass, wood, and brick fragments) in a sandy silt matrix. A distinct organic layer, identified as "meadow mat" is present at 13 to 16 feet below grade. This layer is indicative of native soils for the area.

## **2.2 Past Operations and Chemical Usage**

The site, according to Sanborn Maps, was occupied previously by a paint manufacturing company, metal works, door company and art craft table company in the 1950's. The types of raw materials/chemicals associated with these types of operations include but are not limited to:

- Solvents – Toluene, Xylene, Acetone, Ethyl Benzene, Ketones, Polynuclear Aromatic Hydrocarbons
- Other Paint Thinners – Mineral Spirits, Naphtha, Aliphatic Hydrocarbons and Ethyl Benzene

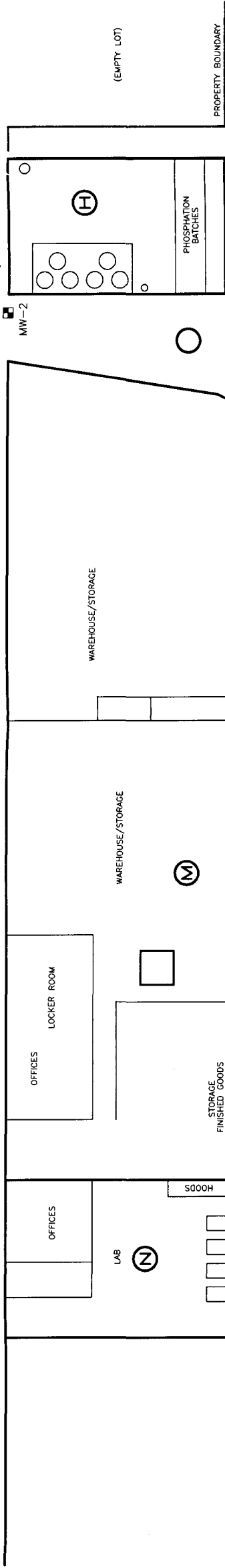
## **2.3 Current Operations and Chemical Usage**

The site is now owned and operated by Dexter Chemical L.L.C, formerly known as Dexter Chemical Corporation. For approximately 40 years, Dexter manufactured specialty industrial organic chemical, predominately phosphation and sulfation batches, and various blending operations. A complete chemical inventory was previously provided in the Phase I Environmental Assessment (Whitman 1997).



WHITTIER STREET

MW-1



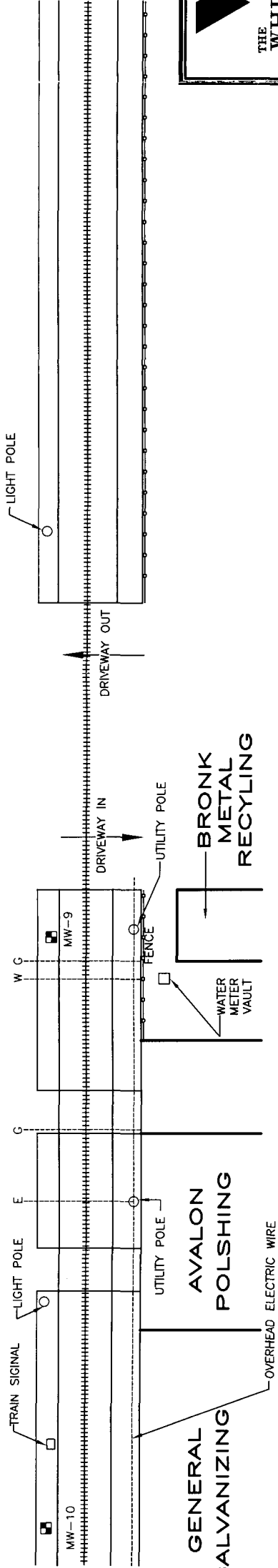
LEGEND


- (A) - AREA IDENTIFICATION TAG
- MW-1 - GROUND WATER MONITORING WELL LOCATION
- GW-1 - SOIL BORING LOCATION
- OVER HEAD ELECTRIC LINE
- U - UNKNOWN UTILITY
- G - UNDERGROUND GAS LINE
- E - ELECTRIC LINE
- W - WATER LINE
- S - SEWER LINE
- T - TELEPHONE LINE
- PZ-2 - PIEZOMETER LOCATION

SCALE  
0 40'

EDGEWATER ROAD

MANHOLE (TYP.)



 THE WHITMAN Companies, INC.		DEXTER CHEMICAL LLC BRONX, NEW YORK	
ORIGINAL BY: M.P.		DRAWN BY: D.L.	
CHECKED BY: M.P.		DATE: OCT. 2002	
		DRAWING NO: 970910F6	
		FIGURE NO: 2	

GENERAL  
GALVANIZING

BRONK  
METAL  
RECYCLING

AVALON  
POLISHING

OVERHEAD ELECTRIC WIRE

WATER  
METER  
VAULT

UTILITY POLE

DRIVEWAY IN

DRIVEWAY OUT

LIGHT POLE

VALENCIA  
BAKERY

(A)

(B)

(C)

(E)

(D)

(H)

(M)

(N)

### 3.0 PREVIOUS ENVIRONMENTAL STUDIES

#### 3.1 UST Closure Reports

Whitman reviewed two (2) reports prepared by EnviroSciences, Inc. regarding the removal of two (2) USTs in January 1993 and the decommissioning of eight (8) USTs in May 1995. The following is a summary of the tank closure activities:

##### January 1993:

- Removal of 3,500 Gallon #2 Fuel Oil UST – formerly located in Area E
- Removal of 5,500 Gallon Isopar-M UST – formerly located in Area E

*USED IN  
FORMATION*

##### May 1995:

- Decommissioning of 2,500 Gallon Methanol UST—formerly located in Area I
- Decommissioning of 2,000 Gallon Isopropanol UST—formerly located in Area B
- Decommissioning of 1,500 Gallon Varsol UST—formerly located in Area B
- Decommissioning of 550 Gallon Diesel UST—formerly located in Area G (North of Area F)
- Decommissioning of two (2) 550 Gallon Gasoline USTs—formerly located in Area F

*— NO LONGER  
USED  
STILL USING*  
*— DON'T  
KNOW*  
*— NOT  
USED*  
*— NOT  
USED*

The on-site areas referred to are identified on Figure 2, Site Map.

#### 3.2 Whitman Phase I

Whitman performed a Phase I Environmental Site Assessment/ Preliminary Assessment at the Dexter property in September 1997. During the assessment, Whitman identified several areas of potential environmental concern and recommended further investigation and/or corrective action. A copy of the Phase I Environmental Assessment was previously submitted to the Department.

#### 3.3 Whitman Phase II

The Phase II Environmental Site Investigation activities were conducted by Whitman on November 18, 1997. Soil and grab ground water samples were collected to investigate the following areas of potential environmental concern (APECs):

1. 819 Edgewater Road Plant Subsurface Contamination
2. 5,000 Gallon No. 4 Heating Oil Underground Storage Tank (UST)
3. Two (2) 3,500 Gallon Isopropyl Alcohol USTs.

The results of the initial investigation indicated the presence of ground water and soil contaminants with Volatile Organic Compounds (VOs), Base/Neutral Extractable Organic Compounds (BNs), and Priority Pollutant Metals (PPM), at concentrations above the NYSDEC recommended Soil Cleanup Objectives and Ground Water Standards/Criteria. A copy of the Phase II Environmental Site Investigation was previously submitted to the Department in January 1998.

### **3.4 Whitman Remedial Investigation**

Whitman completed a remedial investigation in March 1998. The investigation consisted of seventeen (17) soil borings and the installation of six (6) groundwater monitoring wells throughout various locations of the site. The analytical results for the soil sampling further confirmed the presence of VOs, BNs and PPM in the fill materials. Two ground water monitoring points (MW-3 and MW-6) detected compound concentrations above the NYSDEC Ground Water Quality Criteria (GWQC). The result of this work was submitted to NYSDEC in the *Remedial Investigation Report* dated July 1998.

## **4.0 RESULTS OF JULY 2000 SITE INVESTIGATION**

### **4.1 Introduction**

Whitman's *Site Investigation Workplan* (dated July 1999) proposed the further evaluation of the site through the collection and analysis of both soil and ground water samples. Specifically, soil samples were proposed to be collected from:

- Area A (819 Edgewater Road Plant)
- Area B (819 Edgewater Road Plant)
- Area I (842 Whittier Plant Driveway/Yard)

In addition, Whitman proposed to install two (2) on site wells, one in the central portion of Area E (845 Edgewater Parking Area) and one between the existing wells identified as MW-5 and MW-6 (Area B). A grab ground water sample would be collected from one of the soil borings advanced in Area B. Finally, an offsite well was proposed to be installed across the street from 819 Edgewater Road.

## **4.2 Area A (819 Edgewater Road Plant)**

### **4.2.1 Background and Description of Sampling**

On July 21, 2000, Whitman collected samples from six borings, installed within the accessible areas of Building A (Figure 3). Using Geoprobe drilling equipment, a continuous core of soil was examined from each boring. Borings A-100, A-101, and A-103 were advanced to a depth of approximately 12 feet below grade surface. Borings A-102, A-104, and A-105 were advanced to a depth of approximately 20 feet bgs. At an approximate depth of 19 feet bgs native meadow mat was encountered in each of these deeper borings. Soils above the native materials were recorded as fill, containing cinders, brick and glass. Attachment 1 contains the boring logs.

Samples were collected from various depths to either document the level of soil contamination or to determine the extent of the clean zone. Several samples were collected from each boring (except A-100) and the samples considered most representative of the subsurface conditions were submitted for analysis of VO+10, BN+15 and mercury. Only one sample was collected from A-100, as it was evident from the field observations that contaminated soils were not present.

### **4.2.2 Analytical Results**

The July 2000 soil results and previous Area A soil results are summarized by Tables 1A-1C. Laboratory Data Sheets for the July 2000 soil results are included as Attachment 2. The July 2000 QA/QC data package as presented by the laboratory is included as Volume 2, Part A.

The laboratory analytical data results were evaluated to provide an interpretation of data usability and reliability based upon adherence to quality control parameters. Based on this evaluation laboratory data is verified as technically complete.

### **4.2.3 Discussion of Analytical Results**

Examination of Tables 1A-1C, Figure 3 and Attachment 1 shows the following:

1. Concentrations of Xylene, Ethylbenzene, Toluene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, and Naphthalene were identified in several soil samples above the NYSDEC Recommended Soil Cleanup Objectives. Exceedances of these compounds are consistent with previous sampling results obtained for Area A.

2. Concentrations of Polyaromatic Hydrocarbons (PAHs) and Priority Pollutant Metals (PPM) were identified above NYSDEC Recommended Soil Cleanup Objectives. These exceedances are associated with historic fill and cinder materials used to raise the topographic elevation of the site prior to development and are not associated with current or past manufacturing operations.
3. A native meadow mat was encountered at an approximate depth of 19 feet below grade surface in borings A-102, A-104, and A-105. Samples collected of the meadow mat materials were all below NYSDEC Recommended Soil Cleanup Objectives.
4. Based on field observations and PID readings, soil contamination is concentrated in the 7 to 15 foot interval bgs.

### **4.3 Area B (819 Edgewater Road Plant)**

#### **4.3.1 Background and Description of Sampling**

On July 21, 2000, Whitman collected samples from three borings advanced to eight feet in Area B as directed by the NYSDEC (Figure 4). Using Geoprobe drilling equipment, a continuous core of soil was examined and a log prepared for each boring. The July 2000 boring logs as well as historic Area B boring logs are provided as Attachment 3. Borings logs show the prevalence of black cinder and coal-like fill material that characterizes subsurface materials in the vicinity of Area B. Native grey-black clay with intermixed root fragments (meadow mat) occurs at approximately 15 feet below grade surface.

Samples were submitted to the laboratory for VO+10 and BN+15 compound analysis.

#### **4.3.2 Analytical Results**

The July 2000 soil results, and previous Area B results, are summarized by Tables 2A-2C. Laboratory Data Sheets for the July 2000 soil results are included as Attachment 2. The July 2000 QA/QC data package as presented by the laboratory is included as Volume 2, Part A.

The laboratory analytical data results were evaluated to provide an interpretation of data usability and reliability based upon adherence to quality control parameters. Based on this evaluation laboratory data is verified as technically complete.



### **4.3.3 Discussion of Analytical Results**

Examination of Tables 2A-2C, Figure 4 and Attachment 3 shows the following:

1. Trichloroethene was detected in soil sample B-100 at a concentration of 770 ppb, marginally above the NYSDEC Recommended Soil Cleanup Objective of 700 ppb.
2. Several (PAHs) and Priority Pollutant Metal (PPM) compounds were identified above NYSDEC Recommended Soil Cleanup Objectives. As previously discussed, these exceedances are associated with the cinder and coal-like material used to raise the topographic elevation of the site prior to development and are not associated with current or past manufacturing operations.

## **4.4 Area I (842 Whittier Plant Driveway/Yard)**

### **4.4.1 Background and Description of Sampling**

On July 21, 2000, Whitman collected one soil sample from each of five borings advanced to eight feet in Area I as directed by the NYSDEC (Figure 5). Samples were collected using a Geoprobe direct push sampling device. Soil samples were collected at predetermined depths or from the interval exhibiting the highest PID readings. The July 2000 boring logs as well as historic Area I boring logs are provided as Attachment 4.

Samples were submitted to the laboratory for VO+10 and BN+15 compound analysis.

### **4.4.2 Analytical Results**

The July 2000 soil results, along with previous Area I results, are summarized by Tables 3A-3C. Laboratory Data Sheets for the July 2000 soil results are included as Attachment 2. The laboratory QA/QC data packages are included as Volume 2, Part A.

The laboratory analytical data results were evaluated to provide an interpretation of data usability and reliability based upon adherence to quality control parameters. Based on this evaluation laboratory data is verified as technically complete.

#### 4.4.3 Discussion of Analytical Results

Examination of Tables 3A-3C, Figure 5 and Attachment 4 shows the following:

1. Historically, concentrations of Xylene, Ethylbenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1,2,4-Trichlorobenzene and Naphthalene were identified in soil samples from Area I above the NYSDEC Recommended Soil Cleanup Objectives. The July 2000 sample results are consistent with previous sampling data reported at Area I. As stated previously, the presence of these compounds are the result of discharges that occurred related to historic manufacturing operations. No contaminants or discharges have originated from the present day chemical manufacturing operations at Dexter.
2. Several (PAHs) and Priority Pollutant Metal (PPM) compounds were identified above NYSDEC Recommended Soil Cleanup Objectives. These exceedances are associated with the historic fill used to raise the topographic elevation of the site prior to development, and are not associated with current or past manufacturing operations.

#### 4.5 Ground Water

##### 4.5.1 Well Installation and Sampling

As previously detailed in Whitman's October 10, 2000 letter-report entitled *Progress Report #2*, two ground water monitoring wells (MW-7 and MW-8) were installed at the subject site on September 6, 2000. The wells were installed by Aquifer Drilling & Testing, Inc., New Hyde Park, New York at locations identified on Figure 4 of Whitman's *Site Investigation Workplan*, dated July 1999. A log of soils encountered during well installation and well construction details are included as Attachment 5.

On September 27, 2000, ground water samples were collected from all on-site monitoring wells (MW-1 through MW-8). All samples were laboratory analyzed for VO+10, BN+15 and PP Metals by STL-Envirotech, Edison, New Jersey. Well Sampling Worksheets are included as Attachment 6.

Measurements of depth to water level were collected and used to construct a ground water flow contour map (Figure 6).

#### **4.5.2 Analytical Results**

A summary of analytical results for the September 27, 2000 sampling event is presented by Tables 4A-4C. Laboratory Data Sheets are included as Attachment 7. A complete set of laboratory QA/QC data packages for the September 2000 ground water sampling event is included in Volume 2, Part B.

The laboratory analytical data results were evaluated to provide an interpretation of data usability and reliability based upon adherence to quality control parameters. Based on this evaluation laboratory data is verified as technically complete.

#### **4.5.3 Discussion of Analytical Results**

Examination of Tables 4A-4C and Figure 6 shows the following:

1. Monitoring wells MW-3, MW-6 and MW-7 contained concentrations of volatile organic compounds above NYSDEC Ground Water Criteria. Concentrations of Benzene, Toluene, Ethylbenzene and Xylene were identified in MW-6 above NYSDEC Ground Water Criteria. Elevated concentrations of Benzene, Chlorobenzene, and Xylene were identified in MW-7, and MW-3 contained an exceedance of Xylene.
2. Monitoring well MW-6 contained concentrations of three Base/Neutral compounds (1,2-Dichlorobenzene, 1,2,4-Trichlorobenzene, and Naphthalene) above NYSDEC Ground Water Criteria. All other monitoring wells were below NYSDEC Ground Water Criteria for Base/Neutral compounds.
3. Monitoring wells MW-7 and MW-8 contained a Lead concentration in excess of the NYSDEC Ground Water Criteria. The Lead concentrations identified in these wells are caused by the placement of wells in coal and cinder fill materials and the subsequent entrainment of fine-grained particles into these wells during sampling. Metal exceedances were not identified at any other monitoring well location.

## **5.0 ADDITIONAL GROUND WATER INVESTIGATION (2001-2002)**

### **5.1 Background**

The July 1999 *Site Investigation Workplan* included provisions for the installation of one off-site downgradient monitoring well (MW-9). Based on the results of the ground water investigation detailed in Section 4.5 of this report, Whitman proposed an off-site well location to the NYSDEC in a letter dated December 6, 2000.

The number of off-site downgradient wells needed to delineate ground water contamination and the exact placement of these wells was a matter of lengthy discussions between Whitman and NYSDEC. The outcome of these discussions was documented in a NYSDEC letter dated November 19, 2001. As outlined by the November 2001 letter, placement of off-site wells involved a two-step process: first, a series of temporary well points and piezometers were installed in the sidewalk running parallel to the downgradient edge of the Dexter Manufacturing Areas and Edgewater Road; then, based on the results of ground water sampling and ground water elevations, the locations of two off-site downgradient wells were selected.

Details of the installation and analytical results from temporary well points and piezometers were originally provided to NYSDEC in a report entitled *Progress Report #7*. Off-site well installation and sampling results were originally provided in a report entitled *Progress Report #8*. For convenience, these results are represented in Section 5.2 and 5.3 of this report.

### **5.2 Installation of Temporary Well Points and Piezometers (December 2001)**

#### **5.2.1 Introduction**

As stated above, in response to the NYSDEC letter dated November 19, 2001, Whitman completed the installation of the three (3) temporary well points (Geoprobe type) and the installation of the four (4) piezometers. The temporary well points and piezometers were positioned at the NYDEC suggested locations (Figure 7).

#### **5.2.2 Installation and Sampling of Temporary Well Points**

On December 14, 2001, three temporary well points (GW-1, GW-2, and GW-3) were installed by Aquifer Drilling and Testing (ADT), Neptune, New Jersey under the supervision of Whitman. Soil boring logs of these points can be found in Attachment 8.

Immediately following installation, temporary well points were sampled and analyzed for Volatile Organic Compounds plus a library search (VOC+10) using EPA Method 8260 and Semi-Volatile Organic Compounds plus a library search (BN+15) using EPA Method 8270. The sample analysis was performed by STL-Envirotech Research, Inc., Edison, New Jersey (STL) a NYS Department of Health certified laboratory (ELAP# 11452).

The results of these sample analyses be found in Tables 5A and 5B. The laboratory data sheets and the complete laboratory QA/QC data package as presented by the laboratory were previously presented to NYSDEC. Discussion of analytical results is provided in Section 5.2.4.

### **5.2.3 Installation of Piezometers**

On January 3, 2002, prior to the installation of the piezometers, a private utility markout was conducted by NAEVA Geophysics Inc., Congers, New York. The results of the private utility markout are shown on Figure 8.

On January 9 and 10, 2002, four (4), two-inch piezometers (PZ-1 through PZ-4) were installed by ADT under the supervision of Whitman (Figure 7). The log of soil materials encountered during piezometer installation can be found in Attachment 8.

### **5.2.4 Ground Water Sampling and Analytical Results**

On January 22, 2002, piezometers were sampled using low-flow sampling techniques. The sampling purge sheets can be found in Attachment 9. The samples collected were analyzed for VOC+10 using EPA Method 8260 and BN+15 using EPA Method 8270. The results of these samples can be found in Tables 5A and 5B. Compounds present above NYSDEC Ground Water Standards are listed on Figure 9.

Sample analysis was performed by STL. The laboratory data sheets and the complete laboratory QA/QC data package as presented by the laboratory were previously presented to NYSDEC.

Examination of Tables 5A and 5B and Figure 9 indicate the following:

1. Ground water concentrations exceeding the NYSDEC Ground Water Criteria are limited to monitoring points installed adjacent to the southern portion of the Dexter property (i.e. PZ4, MW-6, and GW-3).

2. The marginally elevated concentrations of PAH compounds identified at PZ-1 and GW-1 are an artifact caused by the unavoidable entrapment of cinder and ash historic fill materials during the sampling process.

#### **5.2.5 Groundwater Flow Direction**

On January 22, 2002, depth to water measurements were taken from all of the monitoring wells and piezometers on-site. These measurements were used to calculate groundwater elevations (Table 6). A groundwater contour map was constructed using the January 22, 2002 elevations (Figure 10). As shown, groundwater flows toward the northeast. This flow direction is consistent with the location of the Bronx River, located 500 feet to the Northeast (Figure 1).

Ground water elevations from measuring points MW-2, MW-3 and PZ-6 were not used to construct the ground water flow direction map for reasons detailed below:

MW-2 has not been included in the contouring as the measured water levels in this well are biased low. Whitman has reviewed this well's location with respect to underground utilities and we believe that utilities in vicinity of this well intercept the ground water table and act to depress water level elevations in the immediate vicinity of MW-2.

MW-3 is located next to a catch basin that receives rainwater runoff from the building formerly identified as "F". This catch basin is constructed of concrete blocks and as a result of the leakage of stormwater from this catch basin an artificial ground water mound is created in the immediate vicinity of the catch basin and MW-3.

PZ-4 has not been included in the contouring, as the measured water level is abnormally low. Inclusion of PZ-4 would result in a component of ground water flow direction that trends uphill and away from the river.

In order to confirm the direction of groundwater flow, water level measurements were collected from all on-site monitoring wells and piezometers on May 31, 2002 and October 4, 2002 (Table 6). Ground water flow maps prepared using this data are presented as Figures 11 and 12. Examination of Figures 11 and 12 shows a ground water flow direction to the northeast, consistent with the location of the Bronx River, located 500 feet to the northeast.

### **5.2.6 Conclusions - Installation of Temporary Well Points and Piezometers**

Analysis of eight (8) ground water samples in a line parallel to Edgewater Road confirms previous conclusions that ground water contamination is limited to a localized area immediately downgradient of Area A.

## **5.3 Installation of Off-Site Monitoring Wells (November 2002)**

### **5.3.1 Introduction**

In order to delineate the downgradient extent of ground water contamination identified by PZ-4 and MW-6, Dexter agreed to install two off-site monitoring wells at locations approved by the NYSDEC (Figure 13).

### **5.3.2 Installation of Off-Site Monitoring Wells**

In preparation for the off-site monitoring well installation, on October 4, 2002 a private utility markout was conducted by NAEVA Geophysics Inc., Congers, New York. The results of the private utility markout can be seen on Figure 13.

On November 14, 2002, two (2) four-inch monitoring wells (MW-9 and MW-10) were installed by Environmental Probing Investigations (EPI) of Cream Ridge, New Jersey under the supervision of Whitman (Figure 13). The log of soil materials encountered during monitoring well installation can be found in Attachment 10.

### **5.3.3 Ground Water Flow Direction and Repair of MW-5 and MW-8**

During past sampling and monitoring events, the well caps and well casings for monitoring wells MW-5 and MW-8 were observed to be damaged. On December 3, 2002, monitoring wells MW-5 and MW-8 were repaired and re-surveyed. The new elevations are presented on Table 6.

On December 3, 2002, depth to water measurements were taken from all the monitoring wells and piezometers. These measurements were used to calculate ground water elevations (Table 6). A groundwater contour map was constructed using these elevations (Figure 14).

Examination of Figure 14 shows the following:

1. The ground water flow direction is towards the northeast, consistent with the location of the Bronx River, located 500 feet to the northeast.
2. Off-site monitoring well, MW-9, is directly downgradient of monitoring points PZ-4 and MW-6.

#### **5.3.4 Ground Water Sampling and Analytical Results**

On December 3, 2002, the monitoring wells were sampled using low-flow sampling techniques. The sampling purge sheets can be found in Attachment 11. The samples collected were analyzed for Volatile Organic Compounds plus a library search (VOC+10) using EPA Method 8260 and Semi-Volatile Organic Compounds plus a library search (BN+15) using EPA Method 8270. The sample analysis was performed by Integrated Analytical Laboratories LLC, of Randolph New Jersey (IAL) a NYS Department of Health certified laboratory (ELAP# 11402). The results of these samples can be found in Tables 7A and 7B. The laboratory data sheets and laboratory QA/QC data packages as presented by the laboratory were previously presented to NYSDEC. Compounds present above NYSDEC Ground Water Standards are listed on Figure 15.

Examination of Tables 7A and 7B and Figure 15 indicate the following:

1. All VOC+10 and BN+15 compounds in the newly installed off-site monitoring wells, MW-9 and MW-10, are below NYSDEC Ground Water Criteria.
2. Ground water concentrations exceeding the NYSDEC Ground Water Criteria are limited to monitoring points located adjacent to the southern portion of the Dexter property (i.e. PZ-4 and MW-6).

#### **5.3.5 Conclusions – Installation of Off-Site Monitoring Wells**

Installation of two off-site monitoring wells and analysis of four (4) ground water samples confirms previous conclusions that ground water contamination at Dexter is limited to a localized area immediately downgradient of Area A in the vicinity of PZ-4 and MW-6.



## **6.0 CONCLUSIONS**

### **6.1 Area A**

1. Soil concentrations of several Volatile Organic (VO) compounds and a few lighter molecular weight Base/Neutral (BN) compounds above NYSDEC criteria were identified in this area. As discussed in previous reports, contamination does not originate from present day operations, but rather, from past manufacturing operations at Building A.
2. Soil concentrations of PAH's and PPM compounds were identified above NYSDEC criteria. These compounds are associated with the coal and cinder fill material used to raise the topographic elevation of the property prior to development.

### **6.2 Area B**

1. Soil Concentrations of PAH's and PPM compounds were identified above NYSDEC criteria. These compounds are associated with the coal and cinder fill material used to raise the topographic elevation of the property prior to development.

### **6.3 Area I**

1. Soil concentrations of several VO compounds and a few lighter molecular weight BN compounds above NYSDEC criteria were identified in this area. Contamination does not originate from present day operations, but rather, from past industrial operations.
2. Soil concentrations of PAH's and PPM compounds were identified above NYSDEC criteria. These compounds are associated with the coal and cinder fill material used to raise the topographic elevation of the property prior to development.

## **6.4 Ground Water**

1. Monitoring wells MW-3 (Area I), MW-6 (Area A), MW-7 (Area I) and PZ-4 (Area A) contain ground water concentrations of VO compounds above NYSDEC criteria. As stated previously, contamination identified in the vicinity of these wells does not originate from present day operations, but rather from past manufacturing operations. Ground water in the vicinity of MW-6 and PZ-4 also contains elevated concentrations of lower molecular weight BN compounds.
2. Elevated concentrations of Lead were identified in MW-7 and MW-8. The Lead concentrations identified in these wells are caused by the placement of wells in coal and cinder fill materials and the subsequent entrainment of fine-grained particles into these wells during sampling.
3. Importantly, ground water results previously provided to the Department show that the elevated VO compounds identified in MW-3 and MW-7 are localized to the immediate vicinity of these wells and are delineated by downgradient monitoring points PZ-1, PZ-2, and MW-4.
4. Ground water results show that elevated VO and low molecular weight BN compounds identified in MW-6 and PZ-4 are delineated by downgradient wells PZ-2, MW-9 and MW-10. As shown by Tables 5A/5B and 7A/7B, VO and BN compounds have dropped significantly between 1/22/02 and 12/3/02 indicating that the processes of natural attenuation are in operation.

## **7.0 PROPOSED REMEDIAL ACTION**

### **7.1 Evaluation of Human Health Exposure Pathways**

Environmental investigation of the subject property reveals the presence of Volatile Organic Compounds, Base/Neutral Compounds, and PPM in soil and/or ground water. The contaminants found are attributed to historic fill and prior industrial operations.

The areas containing contamination above the NYSDEC soil and ground water guidelines (Areas A, B, and I) do not pose a significant environmental threat to human health for the following reasons:

- There are no downgradient ground water uses that could potentially be impacted by the localized contamination identified at the Dexter property.
- Potable water and process water supplies for the subject property and the downgradient properties are met by the public/municipal systems.
- The surface of the Dexter Chemical property is completely encapsulated with asphalt and concrete, preventing surface water penetration to the soil and ground water, thereby eliminating direct exposure to the contaminants by the employees.
- Contaminants in ground water are confined to two small areas of the site and are delineated by downgradient monitoring wells to concentrations below NYSDEC criteria. VO and BN compounds in MW-6 and PZ-4 have dropped significantly between 1/22/02 and 12/3/02 indicating that the processes of natural attenuation are in operation.
- Current industrial operations at Dexter utilize no chemicals or products containing the contaminants found in the soil and ground water. Therefore, it is clear that discharges of contaminants occurred in the past and that present (and future) industrial operations are not contributing additional soil or ground water contamination.

The absence of sensitive receptors downgradient of the site combined with localized on-site contamination encapsulated below grade eliminates the potential for a complete exposure pathway. The absence of any viable exposure pathway means that no human health impact results from contamination at the Dexter property.

## **7.2 Proposed Remedial Action For Soil**

The Dexter Chemical Corporation/Dexter Chemical LLC property in the Hunts Point section of the Bronx has been used in manufacturing for many years. The owners and operators of the property plan to continue to operate the site for manufacturing.

Because the site is largely capped by concrete and asphalt pavement materials, and elevated soil concentrations are located several feet below grade surface, there is no exposure or risk to employees or site occupants from the on-site contamination. The profile of materials found in both soil and ground water samples indicates that materials presently used in manufacturing operations are not being discharged, and are not contributing in any way to the subsurface contamination.

Therefore, the proposed remediation for soil contamination is continued encapsulation as described below:

- All floor areas where manufacturing operations take place or where hazardous materials are handled will be thoroughly inspected for cracks, breaks or other discontinuities. All concrete and asphalt paved areas will be inspected, maintained and repaired as necessary.
- Outdoor paved surfaces will be repaired or repaved where pavement is found not to be intact.
- An inspection and maintenance program will be established to assure the future integrity of all areas of encapsulation.

### **7.3 Proposed Remedial Action For Ground Water**

Volatile organic ground water contamination at Dexter has been found to be associated solely with prior manufacturing operations. Because ground water contamination is localized, delineated by nearby downgradient monitoring wells, and showing decreasing contaminant trends, it is evident that the processes of natural attenuation are in operation at the Dexter property.

It is proposed that natural attenuation, in concert with the encapsulation of all soil contaminants, be the primary means of ground water control and remediation at the Dexter property. To implement a program of ground water control by natural attenuation, the following procedures are recommended.

- Sample the existing monitoring well network annually for a period of two years to confirm the localized and delineated nature of the ground water contamination and to demonstrate the efficiency of the natural attenuation program.
- During sampling events, water level measurements will be collected to confirm ground water flow direction.
- Following the two-year monitoring period and approvals by NYSDEC for ground water control via natural attenuation, seal all existing monitoring wells.

## TABLES

TABLE 1A

Dexter Chemical, L.L.C.  
Historic Summary of Volatile Organic Results for Soil  
AEC-A

Sample ID Lab Sample Number Sampling Date Sample Depth (feet) Units	1994 NYSDEC Rec. Soil Cleanup Objective ug/kg	ISB-1 32211 11/18/97 7-9' ug/kg	ISB-2 32213 11/18/97 7-8' ug/kg	ISB-3 33215 11/18/97 7-8' ug/kg	A-1 48923 03/10/98 4-6 ug/kg	A-1 48925 03/10/98 20-21 ug/kg	MW-6 49339 3/12/98 7-8 ug/kg	A-100 218846 07/21/00 4-5 ug/kg	A-101 218847 07/21/00 7-8 ug/kg	A102A 218856 07/21/00 7-8 ug/kg	A-102B 218857 07/21/00 14-15 ug/kg	A-102D 218859 07/21/00 19-20 ug/kg	A-103A 218860 07/21/00 6-7 ug/kg	A-104A 218848 07/21/00 7-8 ug/kg	A-104B 218849 07/21/00 14-15 ug/kg	A-104C 218850 07/21/00 19-29 ug/kg	A-105A 218851 07/21/00 7-8 ug/kg	A-105B 218852 07/21/00 14-15 ug/kg	A-105C 218853 07/21/00 19-20 ug/kg
VOLATILE COMPOUNDS																			
Chloromethane	1900	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	36	ND	ND	ND	ND	ND	ND	12
Bromomethane	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	1900	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND
Methylene Chloride	6000	ND	ND	ND	ND	1.1	ND	1.3	ND	ND	ND	6.7	ND	ND	ND	ND	ND	ND	4.1
Trichlorofluoromethane	NS	ND	ND	ND	ND	ND	ND	0.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	400	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	300	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	70	ND
1,2-Dichloroethane	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	800	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	600	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	NS	ND	ND	ND	ND	ND	ND	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	NS	ND	ND	ND	ND	ND	ND	0.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	700	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	60	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.7	ND	ND	0.8	ND	ND	ND	ND
trans-1,3-Dichloropropene	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethyl Vinyl Ether	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1400	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	600	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	1500	ND	ND	ND	ND	3	ND	1.0	ND	ND	ND	89	230	ND	1.7	1,200	15,000	260	100
Chlorobenzene	1700	ND	ND	260,000	7,200	ND	ND	ND	ND	ND	390	ND	ND	ND	ND	J	ND	ND	ND
Ethylbenzene	5500	3,100	ND	19,000	3,200	1	ND	ND	49,000	5,900	100	5.9	2,600	5,000	1.6	ND	ND	400	ND
Xylene (Total)	1200	26,000	ND	79,000	25,000	2	ND	0.7	450,000	29,000	2,700	22	12,000	17,000	12	ND	410,000	3,000	32
Total Confident Conc.		29,100	0	358,000	36,190	8	0	8.3	527000	34900	3190	164.3	14830	22000	17.8	1200	483000	3730	156.7
Total Estimated Conc. VOA TICs		1,809,000	1,218,000	3,030,000	1,710,000	42	46,800	6.6	7,920,000	2,240,000	252,000	1,114	382,300	3,670,000	249	0	6,340,000	21,020	1,134

☐ - Exceeds NYSDEC Soil Cleanup Criteria  
NS - No Standard for Individual Contaminant  
ND - None Detected  
TI - Tentatively Identified Compounds  
J - The result is less than detection limit, but greater than zero

TABLE 1B

Dexter Chemical, L.L.C.  
Historic Summary of Base Neutral Organic Results for Soil  
AEC-A

Sample ID Lab Sample Number Sampling Date Sampling Depth (feet) Units	1994 NYSDEC Rec. Soil Cleanup Objective ug/kg	ISB-1 32211 11/18/97 7-9' ug/kg	ISB-2 32212 11/18/97 1-1.5' ug/kg	ISB-3 33214 11/18/97 3-4' ug/kg	A-1 48923 03/10/98 20-21 ug/kg	MW-6 49339 3/12/98 7-8 ug/kg	A-100 218846 07/21/00 4-5 ug/kg	A-101 218847 07/21/00 7-8 ug/kg	A-102A 218856 07/21/00 7-8 ug/kg	A-102B 218857 07/21/00 14-15 ug/kg	A-102D 218859 07/21/00 19-20 ug/kg	A-103A 218860 07/21/00 6-7 ug/kg	A-104A 218848 07/21/00 7-8 ug/kg	A-104B 218849 07/21/00 14-15 ug/kg	A104-C 218850 07/21/00 19-20 ug/kg	A-105A 218851 07/21/00 7-8 ug/kg	A-105B 218852 07/21/00 14-15 ug/kg	A-105C 218853 07/21/00 19-20 ug/kg
BASE NEUTRALS																		
N-Nitrosodimethylamine	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethyl) ether	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	1,600	ND	30J	1300J	ND	ND	ND	ND	ND	2,300	ND	ND	2,200	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	8,500	1200J	43J	2800J	ND	ND	ND	ND	3,000	11,000	ND	180	7,500	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	7,900	4600	290J	4500	ND	ND	ND	3,500	5,700	2,100	ND	650	14,000	ND	ND	ND	ND	ND
bis(2-chloroisopropyl) ether	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	4,400	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	3,400	18000	3300	6100	ND	ND	ND	ND	3,000	960	ND	ND	110,000	ND	ND	ND	ND	ND
Naphthalene	13,000	28000	320	520	ND	31	ND	160,000	43,000	990	ND	1,100	32,000	230	ND	37,000	5,100	ND
Hexachlorobutadiene	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4,200	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dimethylphthalate	2,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	41,000	ND	ND	ND	ND	14	ND	ND	ND	ND	ND	ND	ND	340	ND	ND	ND	ND
2,6-Dinitrotoluene	1,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	50,000	400	ND	ND	ND	8.5	ND	ND	ND	87	ND	ND	ND	530	ND	ND	ND	ND
2,4-Dinitrotoluene	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diethylphthalate	7,100	1800J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl-phenylether	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	50,000	400	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,500	ND	ND	ND	ND
N-Nitrosodiphenylamine	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	410	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	50,000	1500	28J	ND	18	37	ND	ND	ND	ND	ND	370	ND	ND	ND	ND	ND	ND
Anthracene	50,000	89J	ND	ND	ND	11	ND	ND	ND	ND	ND	ND	ND	8,000	ND	ND	ND	ND
Di-n-butylphthalate	8,100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2,600	ND	ND	ND	ND
Fluoranthene	50,000	390	51	110J	ND	100	78	ND	ND	ND	ND	170	ND	10,000	ND	ND	98	ND
Pyrene	50,000	360	45	130J	13	92	69	ND	ND	ND	ND	150	ND	10,000	ND	ND	ND	ND
Benzdine	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Butylbenzylphthalate	50,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	224	210	40	ND	14	48	42	ND	ND	ND	ND	ND	ND	5,000	ND	ND	ND	ND
Chrysene	400	110J	31J	ND	ND	70	47	ND	ND	ND	ND	ND	ND	5,800	ND	ND	ND	ND
bis(2-Ethylhexyl)phthalate	50,000	1200J	530	ND	ND	82	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-octylphthalate	50,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	1,100	ND	40J	ND	ND	70	60	ND	ND	ND	ND	ND	ND	6,100	ND	ND	ND	ND
Benzo(k)fluoranthene	1,100	ND	18J	ND	ND	25	23	ND	ND	ND	ND	ND	ND	2,500	ND	ND	ND	ND
Benzo(a)pyrene	61	ND	ND	ND	ND	50	ND	ND	ND	ND	ND	ND	ND	5,000	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	3200	ND	ND	ND	ND	33	ND	ND	ND	ND	ND	ND	ND	2,100	ND	ND	ND	ND
Dibenz(a,h)anthracene	14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	710	ND	ND	ND	ND
Benzo(g,h,i)perylene	50,000	ND	ND	ND	ND	37	ND	ND	ND	ND	ND	ND	ND	1,800	ND	ND	ND	ND
Total Confident Conc. BN (s)		53860	4286	11120	45	708.5	319	163500	54700	17437	0	6820	165700	62330	0	37000	5198	0
Total Estimated Conc. BN TICs (s)		21300000	354500	10900	29140	18830	1,300	8,380,000	6,180,000	367,000	502,000	205,100	7,620,000	73,300	461,000	2,990,000	175,000	554,000

- Exceeds NYSDEC Soil Cleanup Criteria  
ND - None Detected  
NS - No Standard for Individual Contaminant  
T1 - Tentatively Identified Compounds  
J - The result is less than detection limit, but greater than zero

TABLE 1C

Dexter Chemical, L.L.C.  
Historic Summary of Mercury and Metal Results for Soil  
AEC-A

Sample ID Lab Sample Number Sampling Date Sampling Depth (feet) Units	1994 NYSDEC Rec. Soil Cleanup Objective mg/kg	A-100 218846 7/21/00 4-5 mg/kg	A-101 218847 07/21/00 7-8 mg/kg	A-102A 218856 07/21/00 7-8 mg/kg	A-102B 218857 07/21/00 14-15 mg/kg	A-102D 218859 07/21/00 19-20 mg/kg	A-103A 218860 07/21/00 6-7 mg/kg	A-104A 218848 07/21/00 7-8 mg/kg	A104-B 218849 07/21/00 14-15 mg/kg	A104-C 218850 07/21/00 19-20 mg/kg	A-105A 218851 07/21/00 7-8 mg/kg	A-105B 218852 07/21/00 14-15 mg/kg	A-105C 218853 07/21/00 19-20 mg/kg
Mercury	0.1	0.07	1.1	0.07	0.16	ND	0.37	0.29	0.16	ND	0.13	0.2	ND

- Exceeds NYSDEC Soil Cleanup Criteria

ND - None Detected

Sample ID Lab Sample Number Sampling Date Sample Depth Units	1994 NYSDEC Rec. Soil Cleanup Objective mg/kg	ISB-1 32211 11/18/97 7-9' mg/kg	ISB-2 32212 11/18/97 1-1.5' mg/kg	ISB-3 32214 11/18/97 3-4' mg/kg	A-1 48923 03/10/98 20-21 mg/kg	MW-6 49339 3/12/98 7-8 mg/kg
PRIORITY POLLUTANT METALS						
Antimony	SB	12.4	ND	ND	ND	ND
Arsenic	7.5	5.8	2	3.1	7.9	ND
Beryllium	0.16	0.23	0.52	0.47	0.89	0.46
Cadmium	1	0.44	ND	ND	ND	ND
Chromium	10	18.6	19	16.1	36.4	24
Copper	25	194	17.7	26	13.2	38.1
Lead	*SB	569	21.3	47.8	14.6	22
Mercury	0.1	0.64	0.06	0.19	ND	0.05
Nickel	13	14.2	17.2	14.2	26.4	17.7
Selenium	2	ND	ND	ND	ND	ND
Silver	SB	0.46	ND	ND	ND	ND
Thallium	SB	ND	ND	ND	ND	ND
Zinc	20	111	49.3	72.9	76.4	56.4

- Results above 1994 NYSDEC Rec. Soil Cleanup Objective

ND - None Detected

NS - No Standard

ISB - Interior Soil Boring (819 Edgewater Road Plant)

SB - Site Background

\*Lead - Background levels for lead vary widely. Average levels in undeveloped, rural areas may range from 4-61 ppm. Average background levels in metropolitan or suburban areas or near highways are much higher and typically range from 200-500 ppm.



TABLE 2A

Dexter Chemical, L.L.C.  
Historic Summary of Volatile Organic Results for Soil  
AEC - B

Sample ID	1994 NYSDEC	B-1 4-6	B-1 16-18	B-2 1-2	B-2 3-4	B-3 1-2	B-3 15-16	B-4 3.5-4	B-100	B-101	SB-200
Lab Sample Number	Rec. Soil	48926	48927	48928	48929	48931	48932	48934	218842	218845	227193
Sampling Date	Cleanup	03/10/98	03/10/98	03/10/98	03/10/98	03/10/98	03/10/98	03/10/98	07/20/00	07/21/00	09/06/00
Sample Depth (feet)	Objective	4-6	16-18	1-2	3-4	1-2	15-16	3.5-4	4-5	4-5	4-5
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
VOLATILE COMPOUNDS											
Chloromethane	1900	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	200	ND	ND	ND	ND	ND	ND	ND	160	ND	J
Chloroethane	1900	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	6000	ND	ND	0.7	0.7	ND	3.4	1.2	ND	ND	ND
Trichlorofluoromethane	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	400	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	J
cis-1,2-Dichloroethene	NS	ND	ND	ND	ND	ND	ND	ND	890	ND	4.9
Chloroform	300	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.7
1,1,1-Trichloroethane	800	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	600	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	NS	ND	ND	ND	ND	ND	20	ND	ND	ND	6.3
cis-1,3-Dichloropropene	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	700	ND	ND	ND	ND	ND	ND	ND	770	ND	5.1
Dibromochloromethane	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	NS	ND	ND	ND	ND	ND	7.9	ND	ND	ND	ND
Benzene	60	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4
trans-1,3-Dichloropropene	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethyl Vinyl Ether	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1400	ND	ND	ND	ND	ND	6	ND	200	ND	ND
1,1,2,2-Tetrachloroethane	600	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	1500	ND	160	0.6	ND	0.7	57	1	ND	ND	J
Chlorobenzene	1700	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	5500	99	4.7	ND	ND	ND	170	ND	490	210	6.2
Xylene (Total)	1200	140	4.4	ND	ND	ND	940	ND	1000	350	29
Total Confident Conc.		239	169.1	1.3	0.7	0.7	1204.3	2.2	3510	560	65.5
Total Estimated Conc. VOA TICs		467000	1600	0	0	12	4388	0	19,070	361,000	805

- Exceeds NYSDEC Soil Cleanup Criteria

- No Standard for Individual Contaminant

- None Detected

TICs - Tentatively Identified Compounds

J - The result is less than detection limit, but greater than zero

TABLE 2B

Dexter Chemical, L.L.C.  
Historic Summary of Base Neutral Organic Results for Soil  
AEC-B

Sample ID	1994 NYSDEC Rec. Soil Cleanup Objective	HO-1 33216 11/18/97 3-4'	HO-2 32217 11/18/97 4-6'	HO-3 32218 11/18/97 4-6'	B-1 16-18 48927 03/10/98 16-18	B-2 1-2 48928 03/10/98 1-2	B-2 3-4 48929 03/10/98 3-4	B-3 1-2 48931 03/10/98 1-2	B-3 15-16 48932 03/10/98 15-16	B-4 3.5-4 48934 03/10/98 3.5-4	B-100 218842 07/20/00 4-5	B-101 218845 07/21/00 4-5	SB-200 227193 09/06/00 4-5
BASE NEUTRAL COMPOUNDS													
N-Nitrosodimethylamine	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethyl) ether	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	1,600	ND	ND	ND	ND	ND	ND	ND	ND	ND	21	ND	ND
1,4-Dichlorobenzene	8,500	ND	ND	ND	ND	ND	ND	ND	ND	ND	180	J	ND
1,2-Dichlorobenzene	7,900	ND	ND	ND	ND	ND	ND	ND	150	ND	J	ND	ND
bis(2-chloroisopropyl) ether	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	4,400	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	3,400	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	13,000	5600	510	620	36	26	60	110	700	ND	300	420	260
Hexachlorobutadiene	NS	ND	ND	ND	ND	ND	ND	ND	240	ND	J	J	J
Hexachlorocyclopentadiene	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dimethylphthalate	2,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	41,000	ND	ND	ND	26	74	440	120	54	ND	84	ND	ND
2,6-Dinitrotoluene	1,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	50,000	270	ND	90J	ND	ND	ND	34	280	ND	170	1,600	120
2,4-Dinitrotoluene	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diethylphthalate	7,100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl-phenylether	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	120	490	150
Fluorene	50,000	220	ND	190	29	66	230	44	ND	ND	J	J	J
N-Nitrosodiphenylamine	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	410	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	50,000	600	150	1100	150	770	640	410	160	83	360	220	470
Anthracene	50,000	ND	ND	81J	43	230	120	120	ND	ND	80	ND	130
Di-n-butylphthalate	8,100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	50,000	110J	190	660	130	1500	170	720	200	110	600	ND	840
Pyrene	50,000	140J	220	520	110	1200	310	800	230	130	730	85	850
Benzidine	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Butylbenzylphthalate	50,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	224	ND	160	380	73	700	89	450	130	60	290	ND	ND
Chrysene	400	ND	120	870	55	790	120	520	130	66	340	ND	ND
bis(2-Ethylhexyl)phtalate	50,000	ND	ND	ND	ND	80	ND	ND	ND	ND	ND	ND	ND
Di-n-octylphthalate	50,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	1,100	ND	140	ND	42	780	75	640	100	75	480	ND	ND
Benzo(k)fluoranthene	1,100	ND	66J	ND	ND	350	ND	300	ND	31	170	ND	ND
Benzo(a)pyrene	61	ND	100	180	31	640	71	450	120	40	320	ND	310
Indeno(1,2,3-cd)pyrene	3200	ND	57J	150J	ND	260	30	170	ND	ND	150	ND	ND
Dibenz(a,h)anthracene	14	ND	ND	ND	ND	63	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	50,000	ND	51J	150J	ND	210	38	170	ND	ND	120	ND	ND
Total Confident Conc.		6690	1590	4520	725	7781	2393	5088	2494	595	4515	2815	3130
Total Estimated BN TICs		369000	226000	336000	302400	1870	8030	12910	484400	2940	71,600	552,000	1313

Exceeds NYSDEC Soil Cleanup Criteria  
ND - None Detected  
NS - No Standard for Individual Contaminant  
TICs - Tentatively Identified Compounds  
J - The result is less than detection limit, but greater than zero

Table 2C

**Dexter Chemical, L.L.C.**  
**Historic Summary of Metals Results for Soil**  
**AEC-B**

Sample ID Lab Sample Number Sampling Date Sample Depth Units	1994 NYSDEC Rec. Soil Cleanup Objective mg/kg	B-1 4-6 48926 03/10/98 4-6 mg/kg	B-1 16-18 48927 03/10/98 16-18 mg/kg	B-2 1-2 48928 03/10/98 1-2 mg/kg	B-2 3-4 48929 03/10/98 3-4 mg/kg	B-3 1-2 48931 03/10/98 1-2 mg/kg	B-3 15-16 48932 03/10/98 15-16 mg/kg	B-4 3.5-4 48934 03/10/98 3.5-4 mg/kg
PRIORITY POLLUTANT METALS								
Antimony	SB	1.4	ND	ND	ND	ND	ND	7.1
Arsenic	7.5	3.9	8.3	3.1	2.9	5	5.7	5.8
Beryllium	0.16	0.17	0.63	0.7	0.51	0.34	0.42	1.1
Cadmium	1	0.36	ND	ND	ND	ND	ND	ND
Chromium	10	9.7	28.9	19.4	23.1	11.1	33.7	51.8
Copper	25	103	11.4	14.5	21.8	110	11.1	105
Lead	*SB	96	14.6	148	126	218	18.4	104
Mercury	0.1	ND	ND	ND	ND	ND	ND	ND
Nickel	13	11.6	18.6	13	15.7	13.3	23.5	34.7
Selenium	2	ND	ND	ND	ND	ND	ND	ND
Silver	SB	ND	ND	ND	ND	ND	ND	ND
Thallium	SB	ND	ND	ND	ND	ND	ND	ND
Zinc	20	214	50.9	78.6	232	207	125	137

Results above 1994 NYSDEC Rec. Soil Cleanup Objective

ND - None Detected

NS - No Standard

ISB - Interior Soil Boring (819 Edgewater Road Plant)

SB - Site Background

\*Lead - Background levels for lead vary widely. Average levels in undeveloped, rural areas may range from 4-61 ppm. Average background levels in metropolitan or suburban areas or near highways are much higher and typically range from 200-500 ppm.

TABLE 3A

Dexter Chemical, L.L.C.  
Historic Summary of Volatile Organic Results for Soil  
AEC-I

Sample ID	1994 NYSDEC Rec. Soil Cleanup Objective	E-2 1.5-2	E-2 2.5-3	E-4 3-3.5	I-1 3.5-4	I-1 7.5-8	I-2 7.5-8	I-2 9.5-10	I-100	I-101	I-102	I-103	I-104
Lab Sample Number		48939	48940	48941	48946	48947	48949	48950	218839	218840	218841	218862	218863
Sampling Date		03/11/98	03/11/98	03/11/98	03/11/98	03/11/98	03/11/98	03/11/98	07/20/00	07/20/00	07/20/00	07/21/00	07/21/00
Sample Depth (feet)		1.5-2	2.5-3	3-3.5	3.5-4	7.5-8	7.5-8	9.5-10	7-8	5-6	7-8	7-8	7-8
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
VOLATILE COMPOUNDS													
Chloromethane	1900	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	200	ND	ND	ND	ND	ND	ND	ND	J	ND	ND	ND	ND
Chloroethane	1900	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	6000	14	ND	ND	2.8	ND	2.3	2.5	ND	1.0	J	0.9	ND
Trichlorofluoromethane	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	400	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	NS	ND	ND	ND	ND	ND	ND	ND	J	ND	ND	ND	ND
cis-1,2-Dichloroethene	NS	ND	ND	ND	0.7	ND	ND	1	76	0.5	ND	1.3	ND
Chloroform	300	ND	ND	ND	ND	ND	ND	ND	1,300	ND	ND	ND	ND
1,2-Dichloroethane	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	800	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	600	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	700	ND	ND	ND	ND	ND	ND	ND	280	ND	ND	ND	ND
Dibromochloromethane	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	60	ND	ND	ND	ND	ND	ND	ND	J	ND	ND	ND	ND
trans-1,3-Dichloropropene	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethyl Vinyl Ether	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1400	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	600	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	1500	ND	ND	0.6	0.7	ND	1	0.8	J	1.3	ND	0.7	ND
Chlorobenzene	1700	ND	ND	ND	ND	ND	9.6	6.1	J	2.5	J	2.2	ND
Ethylbenzene	5500	64	ND	3.4	ND	ND	3.4	2.2	J	10	5.0	ND	1,100
Xylene (Total)	1200	680	4.5	24	0.7	8400	11	11	5,100	55	47	2.4	6,800
Total Confident Conc.		758	4.5	28	4.9	53400	27.3	23.6	8366	70.3	55.6	7.5	7900
Total Estimated Conc. VOA TICs		23200	350	221	7.8	497000	730	310	47,200	901	623	30	80,600

- Exceeds NYSDEC Soil Cleanup Criteria  
NS - No Standard for Individual Contaminant  
ND - None Detected  
TICs - Tentatively Identified Compounds  
J - The result is less than detection limit, but greater than zero

TABLE 3B

Dexter Chemical, L.L.C.  
Historic Summary of Base Neutral Organic Results for Soil  
AEC-I

Sample ID	1994 NYSDEC Rec. Soil Cleanup Objective	E-2 1.5-2 48939 03/11/98 1.5-2 ug/kg	E-2 2.5-3 48940 03/11/98 2.5-3 ug/kg	E-4 3-3.5 48941 03/11/98 3-3.5 ug/kg	I-1 3.5-4 48946 03/11/98 3.5-4 ug/kg	I-1 7.5-8 48947 03/11/98 7.5-8 ug/kg	I-2 7.5-8 48949 03/11/98 7.5-8 ug/kg	I-2 9.5-10 48950 03/11/98 9.5-10 ug/kg	I-100 218839 07/20/00 7-8 ug/kg	I-101 218840 07/20/00 5-6 ug/kg	I-102 218841 07/20/00 7-8 ug/kg	I-103 218862 07/21/00 7-8 ug/kg	I-104 218863 07/21/00 7-8 ug/kg
BASE NEUTRAL COMPOUNDS													
N-Nitrosodimethylamine	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethyl) ether	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	1600	ND	ND	73	63	1900	ND	64	180	ND	92	88	ND
1,4-Dichlorobenzene	8500	ND	ND	300	320	14000	87	270	800	410	610	500	1,200
1,2-Dichlorobenzene	7900	ND	ND	ND	34	6800	ND	23	ND	ND	ND	ND	ND
bis(2-chloroisopropyl) ether	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	4400	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	3400	66	ND	120	180	110000	220	99	120	ND	63	4,300	18,000
Naphthalene	13000	1200	30	160	37	18000	310	520	150	670	160	ND	2,400
Hexachlorobutadiene	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dimethylphthalate	2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	41000	320	ND	84	32	560	ND	120	100	150	ND	ND	ND
2,6-Dinitrotoluene	1000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	50000	ND	ND	170	140	530	ND	ND	180	130	ND	ND	ND
2,4-Dinitrotoluene	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diethylphthalate	7100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl-phenylether	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	50000	270	9.4	240	110	750	ND	68	250	130	ND	ND	ND
N-Nitrosodiphenylamine	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	410	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	50000	1000	25	2000	870	3400	20	450	2,400	1,400	51	ND	ND
Anthracene	50000	63	ND	600	180	680	ND	110	620	310	ND	ND	ND
Di-n-butylphthalate	8100	ND	ND	3100	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	50000	470	13	2500	960	1200	15	560	3,500	2,200	77	ND	ND
Pyrene	50000	430	9.6	ND	ND	ND	15	510	3,000	2,300	64	45	480
Benidine	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Butylbenzylphthalate	50000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	224	230	ND	1800	420	560	ND	280	1,500	910	38	ND	ND
Chrysene	400	250	ND	1900	470	220	ND	290	1,700	1,200	35	ND	ND
bis(2-Ethylhexyl)phthalate	50000	ND	ND	250	ND	ND	ND	100	ND	ND	ND	190	ND
Di-n-octylphthalate	50000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	1100	220	ND	1900	420	240	ND	310	2,100	1,300	52	ND	ND
Benzo(k)fluoranthene	1100	98	ND	880	180	240	ND	160	870	550	15	ND	ND
Benzo(a)pyrene	61	150	ND	1600	350	210	ND	270	1,500	1,100	31	ND	ND
Indeno(1,2,3-cd)pyrene	3200	86	ND	770	150	ND	ND	130	830	650	ND	ND	ND
Dibenz(a,h)anthracene	14	ND	ND	210	46	ND	ND	36	240	160	ND	ND	ND
Benzo(g,h,i)perylene	50000	88	ND	750	150	ND	ND	140	690	640	ND	ND	ND
Total Confident Conc.		4941	87	19407	6112	160250	667	4510	20730	14210	1288	5123	22080
Total Estimated BN TICs		38600	3690	161800	71230	1333000	35400	17210	59,200	12,210	27,030	279,800	1,365,000

- Exceeds NYSDEC Soil Cleanup Criteria

ND - None Detected

NS - No Standard for Individual Contaminant

TICs - Tentatively Identified Compounds

J - The result is less than detection limit, but greater than zero

TABLE 3C

Dexter Chemical, L.L.C.  
Historic Summary of Priority Pollutant Metal Results For Soil  
AEC-1

Sample ID	1994 NYSDEC Rec. Soil Cleanup Objective mg/kg	E-2 1.5-2 48939 03/11/98 1.5-2 mg/kg	E-2 2.5-3 48940 03/11/98 2.5-3 mg/kg	E-4 3-3.5 48941 03/11/98 3-3.5 mg/kg	I-1 3.5-4 48946 03/11/98 3.5-4 mg/kg	I-1 7.5-8 48947 03/11/98 7.5-8 mg/kg	I-2 7.5-8 48949 03/11/98 7.5-8 mg/kg	I-2 9.5-10 48950 03/11/98 9.5-10 mg/kg
<b>PRIORITY POLLUTANT METALS</b>								
Antimony	SB	1.2	ND	1.2	ND	ND	ND	ND
Arsenic	7.5	ND	ND	1.9	1.4	ND	1.7	1.6
Beryllium	0.16	0.79	0.77	0.31	0.53	0.56	0.61	0.53
Cadmium	1	ND	ND	ND	ND	ND	ND	ND
Chromium	10	22.5	32.9	9.3	22.8	37.7	66.4	28.9
Copper	25	37.2	67.2	19.4	29.4	76	23.3	22.1
Lead	SB1	14.2	8	49.8	27.2	13.3	9.7	15.8
Mercury	2	ND	ND	ND	ND	ND	ND	ND
Nickel	13	26	26.7	9.0	17.5	24.3	30.2	43.7
Selenium	2	ND	1.2	ND	ND	1.8	ND	ND
Silver	SB	ND	ND	ND	ND	ND	ND	ND
Thallium	SB	ND	ND	ND	ND	ND	ND	ND
Zinc	20	76.6	74	81.9	66	90.1	54.5	55.4

- Results above 1994 NYSDEC Rec. Soil Cleanup Objective

ND - None Detected

NS - No Standard

SB - Site Background

1 Background levels for lead vary widely. Average levels in undeveloped, rural areas may range from 4-61 ppm. Average background levels in metropolitan or suburban areas or near highways are much higher and typically range from 200-500 ppm.

TABLE 4A

Dexter Chemical, L.L.C.  
Summary of Volatile Organic Compound Results For Ground Water  
September 27, 200

Sample ID Lab Sample Number Sampling Date Units	1994 NYSDEC Ground Water Criteria ug/L	WP-B-100 218843 07/20/00 ug/L	MW-1 231797 09/27/00 ug/L	MW-2 281798 09/27/00 ug/L	MW-3 231799 09/27/00 ug/L	MW-4 231800 09/27/00 ug/L	MW-5 231801 09/27/00 ug/L	MW-6 231802 09/27/00 ug/L	MW-7 231803 09/27/00 ug/L	MW-8 231804 09/27/00 ug/L
VOLATILE COMPOUNDS										
Chloromethane	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	2	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	50	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	5	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	NS	ND	ND	2.1	0.6	ND	ND	18	3.5	ND
Chloroform	7	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	5	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	NS	ND	ND	ND	ND	ND	ND	65	ND	ND
cis-1,3-Dichloropropene	5	ND	ND	ND	ND	ND	ND	1.8	ND	ND
Trichloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	50	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	0.7	ND	ND	0.4	0.3	ND	ND	31	1.7	0.6
trans-1,3-Dichloropropene	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethyl Vinyl Ether	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5	ND	ND	ND	ND	ND	ND	0.4	ND	ND
1,1,2,2-Tetrachloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	5	ND	ND	ND	0.4	ND	ND	34	0.5	ND
Chlorobenzene	5	ND	ND	3.3	0.4	ND	ND	ND	35	ND
Ethylbenzene	5	ND	ND	ND	1.6	ND	ND	39	0.8	ND
Xylene (Total)	5	ND	ND	0.8	16	ND	ND	180	15	1.4
Total Confident Conc. VOAs (s)		0	0	6.6	19.3	0	0	369.2	56.5	2.0
Total Estimated Conc. VOA TICs (s)		21	0	26	90	12	21	1047	128	36

☐ - Exceeds NYSDEC Ground Water Criteria  
 ND - None Detected  
 NS - No Standard

TABLE 4B

Dexter Chemical, L.L.C.  
Summary of Base Neutral Compound Results For Ground Water  
September 27, 200

Sample ID Lab Sample Number Sampling Date Units	1994 NYSDEC Ground Water Quality Criteria ug/L	WP-B-100 218843 7/20/00 ug/L	MW-1 231797 9/27/00 ug/L	MW-2 231978 9/27/00 ug/L	MW-3 231799 9/27/00 ug/L	MW-4 231800 9/27/00 ug/L	MW-5 231801 9/27/00 ug/L	MW-6 231802 9/27/00 ug/L	MW-7 231803 9/27/00 ug/L	MW-8 231804 9/27/00 ug/L
BASE NEUTRALS										
N-Nitrosodimethylamine	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethyl) ether	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	5	ND	ND	ND	ND	ND	ND	1.6	ND	ND
1,4-Dichlorobenzene	5	ND	ND	ND	1.4	ND	ND	4.4	2.9	ND
1,2-Dichlorobenzene	5	ND	ND	ND	ND	ND	ND	7.6	ND	ND
bis(2-chloroisopropyl) ether	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	50	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	5	ND	ND	ND	3.0	ND	ND	14	ND	ND
Naphthalene	10	ND	ND	ND	ND	ND	ND	30	1.1	ND
Hexachlorobutadiene	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dimethylphthalate	20	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	20	ND	ND	ND	0.9	ND	ND	ND	ND	ND
Acenaphthene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diethylphthalate	50	ND	ND	ND	ND	ND	ND	39	ND	0.8
4-Chlorophenyl-phenylether	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	50	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	0.35	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	50	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	50	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butylphthalate	50	ND	ND	ND	0.5	ND	ND	ND	ND	ND
Fluoranthene	50	ND	ND	ND	0.9	ND	ND	ND	ND	ND
Pyrene	50	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzidine	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
Butylbenzylphthalate	50	ND	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Ethylhexyl)phthalate	50	ND	ND	ND	7.7	ND	ND	9.7	ND	ND
Di-n-octylphthalate	50	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene	50	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Confident Conc. BN (s)		0	0	0	14.4	0	0	106.3	5.4	0.8
Total Estimated Conc. BN TTCs (s)		0	0	0	690	0	0	2331	597	0

Exceeds NYSDEC Ground Water Quality Criteria

ND - None Detected

NS - No Standard

J - Compounds present below laboratory quantitation limits



TABLE 4C

Dexter Chemical, L.L.C.  
Summary of Priority Pollutant Metal Results For Ground Water  
September 27, 200

Sample ID Lab Sample Number Sampling Date Units	NYSDEC Cleanup Criteria for Ground Water ug/L	MW-1 231797 09/27/00 ug/l	MW-2 231798 09/27/00 ug/l	MW-3 231799 09/27/00 ug/l	MW-4 231800 09/27/00 ug/l	MW-5 231801 09/27/00 ug/l	MW-6 231802 09/27/00 ug/l	MW-7 231803 09/27/00 ug/l	MW-8 231804 09/27/00 ug/l
PRIORITY POLLUTANT METALS									
Antimony	3	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	NS	ND	5.4	ND	ND	ND	9.1	ND	ND
Beryllium	3	ND	ND	ND	ND	ND	ND	ND	0.3
Cadmium	10	ND	ND	ND	ND	ND	ND	ND	ND
Chromium	50	ND	ND	ND	ND	3.9	6.8	8.1	9.2
Copper	200	10.5	3.7	3.7	ND	5.1	3.2	30.5	14.6
Lead	25	ND	ND	ND	3.1	15.9	3.1	<b>78.1</b>	<b>69.2</b>
Mercury	2	ND	ND	ND	ND	ND	ND	0.63	0.16
Nickel	NS	7.5	5.6	4.4	20.5	3.7	23.4	13.8	9.3
Selenium	10	ND	ND	ND	ND	ND	ND	ND	ND
Silver	5	ND	ND	ND	ND	ND	ND	ND	ND
Thallium	4	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	300	69.7	40.4	13.1	42.0	30.2	13.7	112	186

Results above NYSDEC Criteria

ND - None Detected

NS - No Standard

TABLE 5A

**Dexter Chemical, L.L.C.**  
**Summary of Volatile Organic Results for Ground Water**

Sample ID Lab Sample Number Sampling Date Units	1998 NYSDEC Ground Water Standards/Criteria ug/l	PZ-1 328628 1/22/02 ug/l	PZ-2 328629 1/22/02 ug/l	PZ-3 328630 1/22/02 ug/l	PZ-4 328631 1/22/02 ug/l	MW-6 328632 1/22/02 ug/l	GW-1 322116 12/14/01 ug/l	GW-2 322117 12/14/01 ug/l	GW-3 322118 12/14/01 ug/l
<b>VOLATILE COMPOUNDS</b>									
Chloromethane	5*	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	5*	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	2	ND	ND	ND	ND	1.5	ND	ND	2.6
Chloroethane	5*	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	5*	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	5*	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	5*	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5*	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	5*	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	5*	ND	ND	ND	22	26	ND	ND	2.7
Chloroform	7	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.6	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5*	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	5	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	50	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	1	ND	ND	ND	280	95	ND	ND	7.6
cis-1,3-Dichloropropene	0.4 (a)	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	5*	ND	ND	ND	4	2.5	ND	ND	1.1
Dibromochloromethane	50**	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1	ND	ND	ND	6.6	27	ND	ND	8.8
trans-1,3-Dichloropropene	0.4 (a)	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethyl Vinyl Ether	NS	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	50	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5*	ND	ND	ND	ND	0.7	ND	ND	ND
1,1,2,2-Tetrachloroethane	5*	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	5*	ND	ND	ND	55	73	ND	ND	9.4
Chlorobenzene	5*	ND	ND	ND	ND	ND	ND	ND	2.8
Ethylbenzene	5*	ND	ND	ND	230	88	ND	ND	24
Xylene (Total)	5*	ND	ND	1.3	1500	470	ND	ND	80
Total Confident Conc. VOAs (s)		0	0	1.3	2097.6	783.7	0	0	139
Total Estimated Conc. VOA TICs (s)		12	16	526	3180	1013	0	172	212

☐ - Results above 1998 NYSDEC Ground Water Standards/Criteria - GA Water Class

ND - None Detected

NS - No Standard

\* The principal organic contaminant standard for ground water applies to this substance.

\*\* Guidance Value only.

(a) Applies to the sum of cis- and trans-1,3-dichloropropene.

TABLE 5B

Dexter Chemical, L.L.C.  
Summary of Base/Neutral Extractable Organic Compound Results for Ground Water

Sample ID Lab Sample Number Sampling Date Units	1998 NYS DEC Ground Water Standards/Criteria ug/l	PZ-1 328628 1/22/02 ug/l	PZ-2 328629 1/22/02 ug/l	PZ-3 328630 1/22/02 ug/l	PZ-4 328631 1/22/02 ug/l	MW-6 328632 1/22/02 ug/l	GW-1 322116 12/14/01 ug/l	GW-2 322117 12/14/01 ug/l	GW-3 322118 12/14/01 ug/l
<b>BASE NEUTRALS</b>									
N-Nitrosodimethylamine	NS	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethyl) ether	1	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	3	ND	ND	ND	ND	ND	ND	ND	2.8
1,4-Dichlorobenzene	3	ND	ND	ND	ND	4.6	ND	ND	9.4
1,2-Dichlorobenzene	3	ND	ND	ND	5.1	9.1	ND	ND	4.6
bis(2-chloroisopropyl) ether	NS	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	NS	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	0.4	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	50*	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	5	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	5	0.3	ND	0.3	88	11	0.3	1.6	8.7
Naphthalene	10*	ND	ND	ND	ND	41	ND	ND	3.4
Hexachlorobutadiene	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	5	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	10*	ND	ND	ND	ND	ND	ND	ND	ND
Dimethylphthalate	50*	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	NS	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	5	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	20*	ND	ND	0.7	ND	ND	ND	3.6	0.2
2,4-Dinitrotoluene	5	ND	ND	ND	ND	ND	ND	ND	ND
Diethylphthalate	50*	ND	ND	ND	14	43	7	ND	11
4-Chlorophenyl-phenylether	NS	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	50*	ND	ND	0.6	ND	ND	ND	1.3	ND
N-Nitrosodiphenylamine	NS	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	NS	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	0.04	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	50*	0.3	ND	0.7	1	ND	0.6	ND	ND
Anthracene	5	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butylphthalate	50	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	50*	0.6	ND	ND	ND	ND	0.6	ND	ND
Pyrene	50*	0.8	ND	ND	ND	ND	0.8	ND	ND
Benzzidine	1	ND	ND	ND	ND	ND	ND	ND	ND
Butylbenzylphthalate	50*	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	5*	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	0.002	0.5	ND	ND	ND	ND	0.5	ND	ND
Chrysene	0.002*	0.5	ND	ND	ND	ND	0.5	ND	ND
bis(2-Ethylhexyl)phthalate	5	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-octylphthalate	50*	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	0.002	0.3	ND	ND	ND	ND	0.3	ND	ND
Benzo(k)fluoranthene	0.002	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	NS	0.3	ND	ND	ND	ND	0.3	ND	ND
Indeno(1,2,3-cd)pyrene	0.002*	ND	ND	ND	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene	NS	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	NS	ND	ND	ND	ND	ND	ND	ND	ND
Total Confident Conc. BN (s)		3.6	0	2.3	108.1	108.7	10.9	6.5	40.1
Total Estimated Conc. BN T(Cs (s)		0	0	33.2	67.0	6110	0	887	591

Results above 1998 NYS DEC Ground Water Standards or Guidance Values

ND - None Detected

NS - No Standard

\* - This water quality value represents a guidance value and has not been promulgated and placed into regulation

TABLE 6

Depth to Water and Elevation Measurements  
Dexter Chemical, L.L.C.

WELL NUMBER	ELEVATION (ft*)	DEPTH TO WATER (ft)	GROUND WATER ELEVATION (ft*)
----------------	--------------------	---------------------------	------------------------------------

October 2000			
MW-1	100.35	11.76	88.59
MW-2	98.56	10.92	87.64
MW-3	97.10	7.81	89.29
MW-4	93.27	5.32	87.95
MW-5	93.41	5.21	88.20
MW-6	94.50	6.18	88.32
MW-7	96.77	8.20	88.57
MW-8	93.74	5.46	88.28
PZ-1	93.01	NI	NI
PZ-2	93.27	NI	NI
PZ-3	93.57	NI	NI
PZ-4	94.27	NI	NI

NI - Not Installed

January 22, 2002			
MW-1	100.35	12.38	87.97
MW-2	98.56	11.51	87.05
MW-3	97.10	6.73	90.37
MW-4	93.27	6.33	86.94
MW-5	93.41	6.17	87.24
MW-6	94.50	7.15	87.35
MW-7	96.77	9.85	86.92
MW-8	93.74	6.36	87.38
PZ-1	93.01	6.09	86.92
PZ-2	93.27	6.18	87.09
PZ-3	93.57	6.35	87.22
PZ-4	94.27	7.35	86.92

May 31, 2002			
MW-1	100.35	11.99	88.36
MW-2	98.56	11.08	87.48
MW-3	97.10	6.17	90.93
MW-4	93.27	5.45	87.82
MW-5	93.41	5.30	88.11
MW-6	94.50	6.21	88.29
MW-7	96.77	8.90	87.87
MW-8	93.74	5.59	88.15
PZ-1	93.01	5.24	87.77
PZ-2	93.27	5.36	87.91
PZ-3	93.57	5.48	88.09
PZ-4	94.27	6.45	87.82

October 4, 2002			
MW-1	100.35	11.84	88.51
MW-2	98.56	10.81	87.75
MW-3	97.10	5.97	91.13
MW-4	93.27	5.20	88.07
MW-5	93.41	5.14	88.27
MW-6	94.50	6.15	88.35
MW-7	96.77	8.67	88.10
MW-8	93.74	5.38	88.36
PZ-1	93.01	4.67	88.34
PZ-2	93.27	5.17	88.10
PZ-3	93.57	5.30	88.27
PZ-4	94.27	6.28	87.99

December 3, 2002			
MW-1	100.35	11.97	88.38
MW-2	98.56	11.03	87.53
MW-3	97.10	6.64	90.46
MW-4	93.27	5.40	87.87
MW-5	93.41	5.32	88.09
MW-6	94.50	6.33	88.17
MW-7	96.77	8.87	87.90
MW-8	93.74	5.50	88.24
MW-9*	94.22	6.18	88.04
MW-10*	96.64	8.51	88.13
PZ-1	93.01	4.98	88.03
PZ-2	93.27	5.31	87.96
PZ-3	93.57	5.50	88.07
PZ-4	94.27	6.58	87.69

\* - Installed November 14, 2002

MW-5**	93.22	---	---
MW-8**	93.51	---	---

\*\* - Monitoring well casing repaired and re-surveyed December 3, 2002

# TABLE 7A

## Dexter Chemical, L.L.C. Summary of Volatile Organic Results for Ground Water

Sample ID Lab Sample Number Sampling Date Units	1998 NYSDEC Ground Water Standards/Criteria ug/l	MW-9 9551-001 12/3/02 ug/l	MW-10 9551-002 12/3/02 ug/l	MW-6 9551-003 12/3/02 ug/l	PZ-4 9551-004 12/3/02 ug/l
VOLATILE COMPOUNDS					
Chloromethane	5*	ND	ND	ND	ND
Bromomethane	5*	ND	ND	ND	ND
Vinyl Chloride	2	ND	ND	ND	1.05
Chloroethane	5*	ND	ND	ND	ND
Methylene Chloride	5*	ND	ND	ND	ND
Trichlorofluoromethane	5*	ND	ND	ND	ND
1,1-Dichloroethene	5*	ND	ND	ND	ND
1,1-Dichloroethane	5*	ND	ND	ND	ND
trans-1,2-Dichloroethene	5*	ND	ND	ND	ND
cis-1,2-Dichloroethene	5*	ND	0.252	3.19	38.9
Chloroform	7	ND	ND	ND	ND
1,2-Dichloroethane	0.6	ND	ND	ND	ND
1,1,1-Trichloroethane	5*	ND	ND	ND	ND
Carbon Tetrachloride	5	ND	ND	ND	ND
Bromodichloromethane	50	ND	ND	ND	ND
1,2-Dichloropropane	1	ND	ND	7.17	290
cis-1,3-Dichloropropene	0.4 (a)	ND	ND	ND	ND
Trichloroethene	5*	ND	ND	0.488	3.8
Dibromochloromethane	50**	ND	ND	ND	ND
1,1,2-Trichloroethane	1	ND	ND	ND	ND
Benzene	1	ND	ND	7.34	9.75
trans-1,3-Dichloropropene	0.4 (a)	ND	ND	ND	ND
2-Chloroethyl Vinyl Ether	NS	ND	ND	ND	ND
Bromoform	50	ND	ND	ND	ND
Tetrachloroethene	5*	ND	ND	ND	1.98
1,1,2,2-Tetrachloroethane	5*	ND	ND	ND	ND
Toluene	5*	ND	0.313	6.05	58.6
Chlorobenzene	5*	ND	1.47	0.578	ND
Ethylbenzene	5*	ND	0.329	9.58	195
Xylene (Total)	5*	ND	3.17	37	1280
1,4-Dichlorobenzene	3	ND	0.3	5.79	1.33
1,2-Dichlorobenzene	3	ND	0.608	2.54	8.49
1,3-Dichlorobenzene	3	ND	ND	0.937	ND
Total Confident Conc. VOAs (s)		0	6.442	80.7	1889
Total Estimated Conc. VOA TICs (s)		5	506.6	209.5	2764


- ☐ - Results above 1998 NYSDEC Ground Water Standards/Criteria - GA Water Class  
 ND - None Detected  
 NS - No Standard  
 \* The principal organic contaminant standard for ground water applies to this substance.  
 \*\* Guidance Value only.  
 (a) Applies to the sum of cis- and trans-1,3-dichloropropene.

TABLE 7B

Dexter Chemical, L.L.C.

## Summary of Base/Neutral Extractable Organic Compound Results for Ground Water

Sample ID Lab Sample Number Sampling Date Units	1998 NYS DEC Ground Water Standards/Criteria ug/l	MW-9 9551-001 12/3/02 ug/l	MW-10 9551-002 12/3/02 ug/l	MW-6 9551-003 12/3/02 ug/l	PZ-4 9551-004 12/3/02 ug/l
BASE NEUTRALS					
N-Nitrosodimethylamine	NS	ND	ND	ND	ND
bis(2-Chloroethyl) ether	1	ND	ND	ND	ND
1,3-Dichlorobenzene	3	ND	ND	0.432	ND
1,4-Dichlorobenzene	3	ND	ND	3	0.693
1,2-Dichlorobenzene	3	ND	0.34	1.49	4.13
bis(2-chloroisopropyl) ether	NS	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	NS	ND	ND	ND	ND
Hexachloroethane	5	ND	ND	ND	ND
Nitrobenzene	0.4	ND	ND	ND	ND
Isophorone	50*	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	5	ND	ND	ND	ND
1,2,4-Trichlorobenzene	5	ND	ND	ND	ND
Naphthalene	10*	ND	ND	3.68	44.6
Hexachlorobutadiene	0.5	ND	ND	ND	ND
Hexachlorocyclopentadiene	5	ND	ND	ND	ND
2-Chloronaphthalene	10*	ND	ND	ND	ND
Dimethylphthalate	50*	ND	ND	ND	ND
Acenaphthylene	NS	ND	0.497	ND	ND
2,6-Dinitrotoluene	5	ND	ND	ND	ND
Acenaphthene	20*	ND	2.41	ND	0.734
2,4-Dinitrotoluene	5	ND	ND	ND	ND
Diethylphthalate	50*	0.505	ND	2.23	7.79
4-Chlorophenyl-phenylether	NS	ND	ND	ND	ND
Fluorene	50*	ND	2.15	ND	ND
N-Nitrosodiphenylamine	50*	ND	ND	ND	ND
4-Bromophenyl-phenylether	NS	ND	ND	ND	ND
Hexachlorobenzene	0.04	ND	ND	ND	ND
Phenanthrene	50*	ND	1.56	ND	0.489
Anthracene	5	ND	ND	ND	ND
Di-n-butylphthalate	50	ND	ND	ND	ND
Fluoranthene	50*	ND	0.497	ND	ND
Pyrene	50*	ND	0.382	ND	ND
Benzidine	1	ND	ND	ND	ND
Butylbenzylphthalate	50*	ND	ND	ND	ND
3,3'-Dichlorobenzidine	5*	ND	ND	ND	ND
Benzo(a)anthracene	0.002	ND	ND	ND	ND
Chrysene	0.002*	ND	ND	ND	ND
bis(2-Ethylhexyl)phthalate	5	ND	1.21	ND	1.41
Di-n-octylphthalate	50*	ND	ND	ND	ND
Benzo(b)fluoranthene	0.002	ND	ND	ND	ND
Benzo(k)fluoranthene	0.002	ND	ND	ND	ND
Benzo(a)pyrene	NS	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.002*	ND	ND	ND	ND
Dibenz(a,h)anthracene	NS	ND	ND	ND	ND
Benzo(g,h,i)perylene	NS	ND	ND	ND	ND
2-Methylnaphthalene	NS	ND	ND	0.541	13.6
Dibenzofuran	NS	ND	ND	ND	0.989
Total Confident Conc. BN (s)		0.505	9.046	11.373	74.435
Total Estimated Conc. BN TICs (s)		0	347	239.8	1296

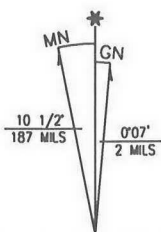
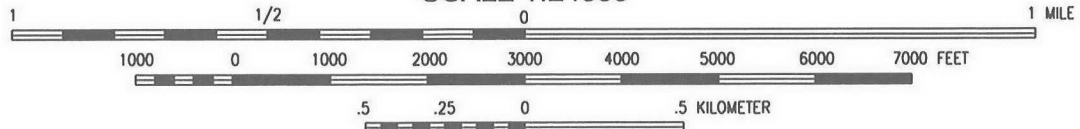
-  - Results above 1998 NYS DEC Ground Water Standards or Guidance Values  
 ND - None Detected  
 NS - No Standard  
 \* - This water quality value represents a guidance value and has not been promulgated and placed into regulation.

## FIGURES

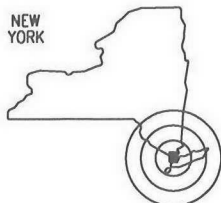




SCALE 1:24000



UTM GRID AND 1981 MAGNETIC NORTH  
DECLINATION AT CENTER OF SHEET



QUADRANGLE LOCATION



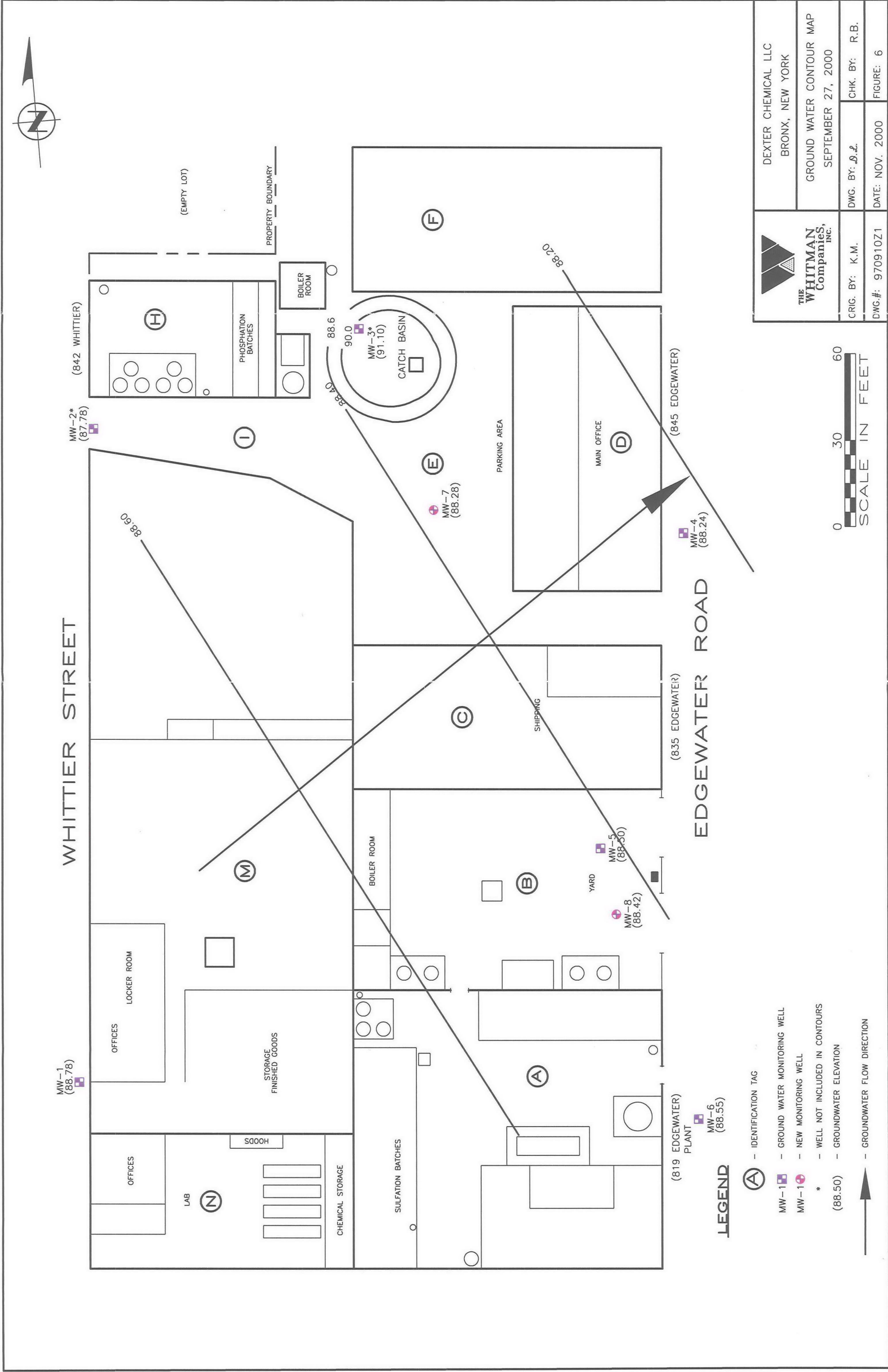
THE  
WHITMAN  
Companies,  
INC.

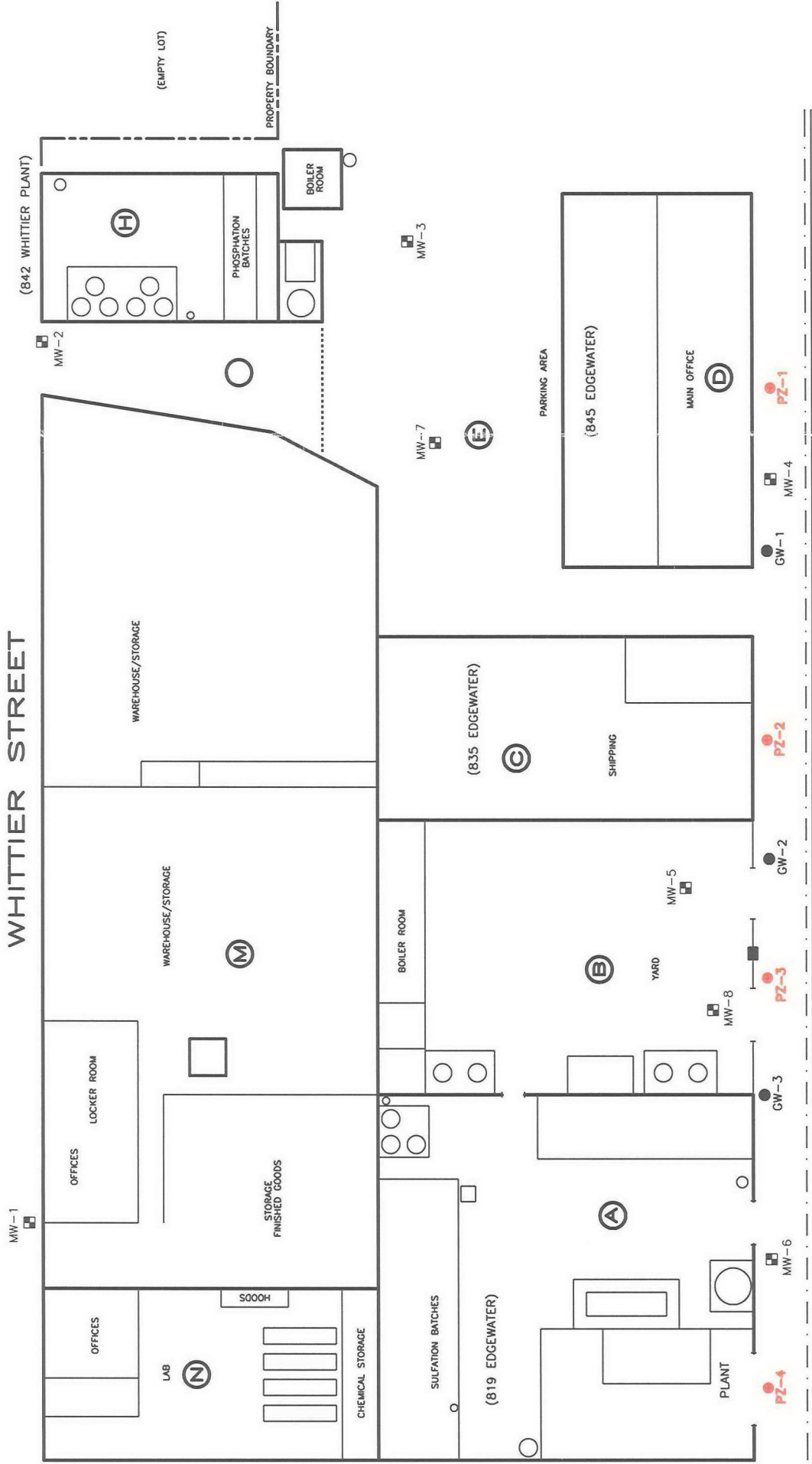
DEXTER CHEMICAL, LLC.  
845 EDGEWATER ROAD  
BRONX, NEW YORK


SITE LOCATION ON USGS  
CENTRAL PARK, N.Y. QUADRANGLE

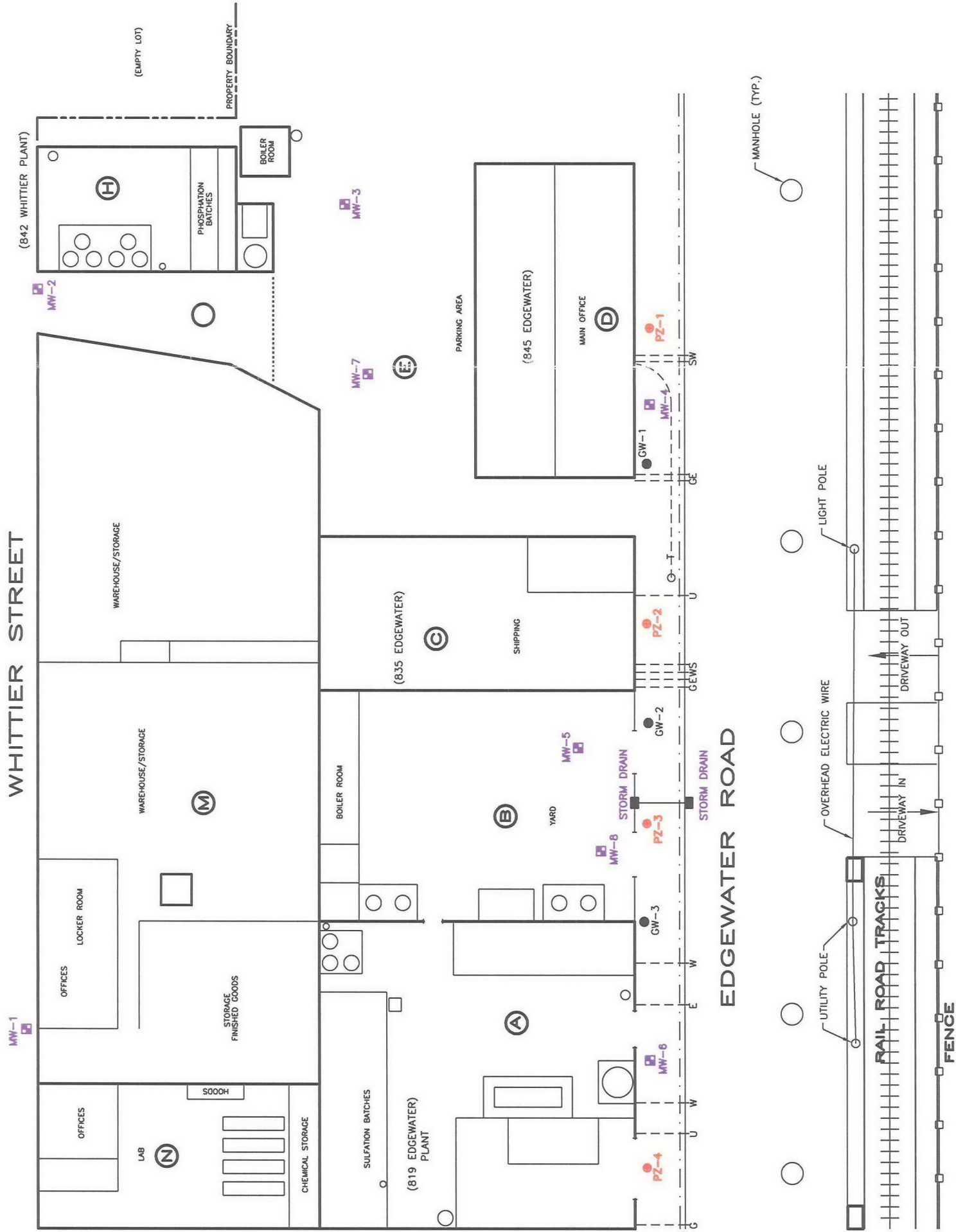
ORIGINAL BY:	M.P.	DRAWN BY:	D.L.	DRAWING NO:	970910MAP
CHECKED BY:	M.P.	DATE:	MARCH 2003	FIGURE NO:	1







		DEXTER CHEMICAL LLC BRONX, NEW YORK	
LOCATION OF TEMPORARY WELL POINTS AND PIEZOMETERS		DRAWN BY: <i>B.L.</i>	DRAWING NO: 970910E1
ORIGINAL BY: K.M.	CHECKED BY: K.M.	DATE: JAN. 2002	FIGURE NO: 7



LEGEND

- Ⓐ AREA IDENTIFICATION TAG
- MW-1 □ GROUND WATER MONITORING WELL LOCATION
- GW-1 GRAB GROUND WATER LOCATION
- OVER HEAD ELECTRIC LINE
- U UNKNOWN UTILITY
- G UNDERGROUND GAS LINE
- E ELECTRIC LINE
- W WATER LINE
- S SEWER LINE
- T TELEPHONE LINE
- PZ-2 ● PIEZOMETER LOCATION

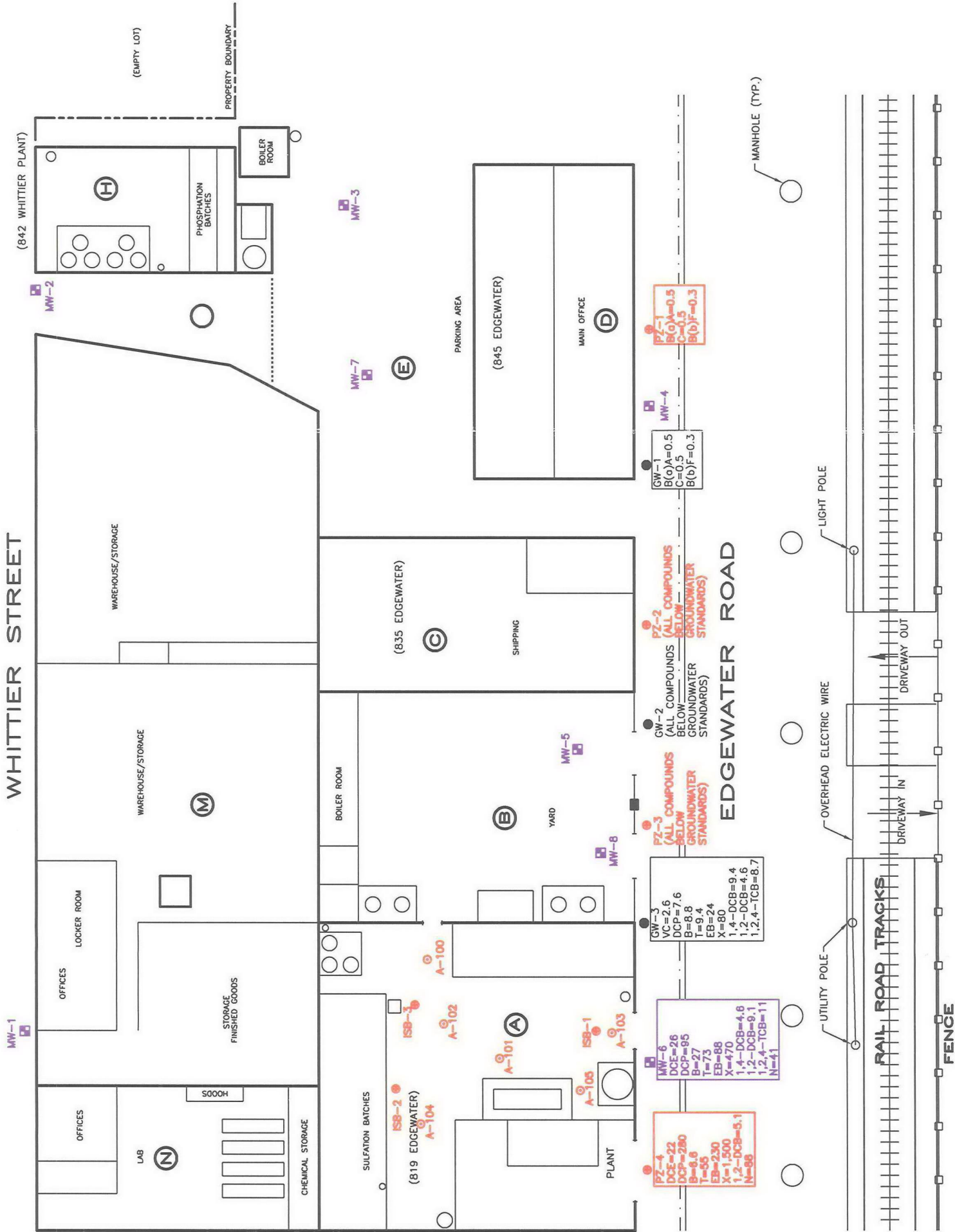


		DEXTER CHEMICAL LLC BRONX, NEW YORK	
UTILITY MARK OUT MAP			
ORIGINAL BY: K.M.	DRAWN BY: D.L.	DRAWING NO: 970910E3	
CHECKED BY: K.M.	DATE: JAN. 2002	FIGURE NO: 8	





WHITTIER STREET



LEGEND

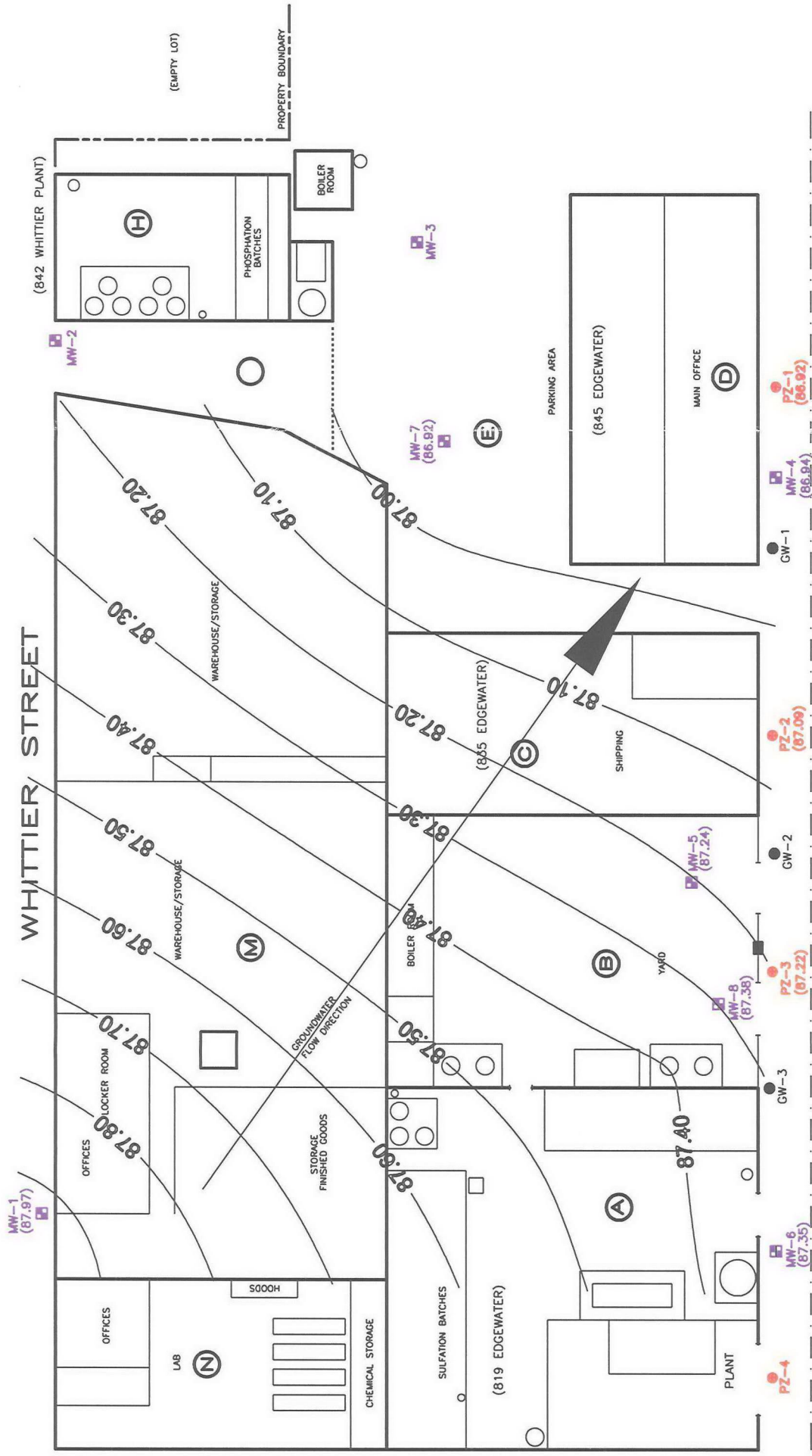
- Ⓐ AREA IDENTIFICATION TAG
- GROUND WATER MONITORING WELL LOCATION
- GRAB GROUND WATER LOCATION
- OVER HEAD ELECTRIC LINE
- Ⓟ PZ-2
- DCE - CIS-1,2-DICHLOROETHENE
- DCP - 1,2-DICHLOROPROPANE
- B - BENZENE
- T - TOLUENE
- EB - ETHYLBENZENE
- X - XYLENE
- VC - VINYLCHLORIDE
- B(a)A - BENZO(a)ANTHRACENE
- C - CHRYSENE
- B(b)F - BENZO(b)FLUORANTHENE
- 1,4-DCB - 1,4-DICHLOROBENZENE
- 1,2-DCB - 1,2-DICHLOROBENZENE
- 1,2,4-TCB - 1,2,4-TRICHLOROBENZENE
- N - NAPHTHALENE
- Ⓜ A-102
- Ⓜ ISB-3



NOTE:

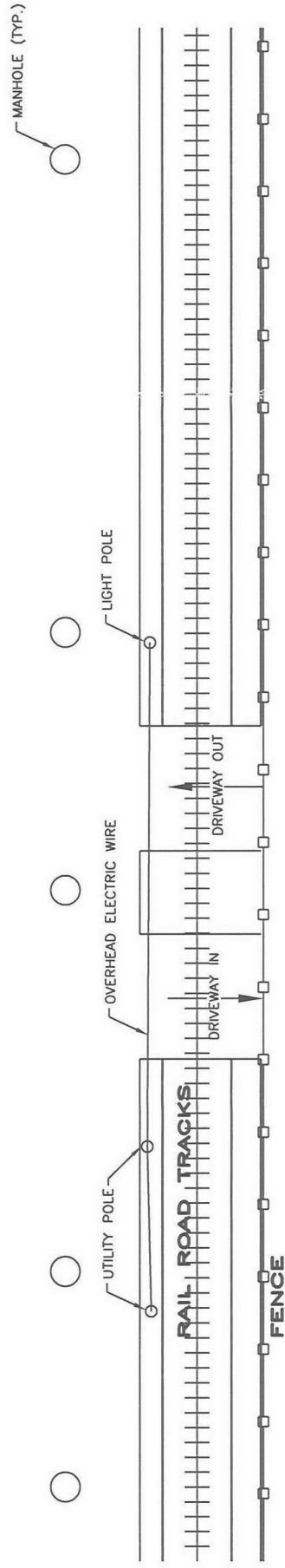
ALL CONCENTRATIONS REPORTED IN ug/l OR ppb

	DEXTER CHEMICAL LLC BRONX, NEW YORK	
	COMPOUNDS ABOVE NYSDEC GROUND WATER STANDARDS	
ORIGINAL BY: R.B.	DRAWN BY: J.L.	DRAWING NO: 970910E5
CHECKED BY: R.B.	DATE: FEB. 2002	FIGURE NO: 9

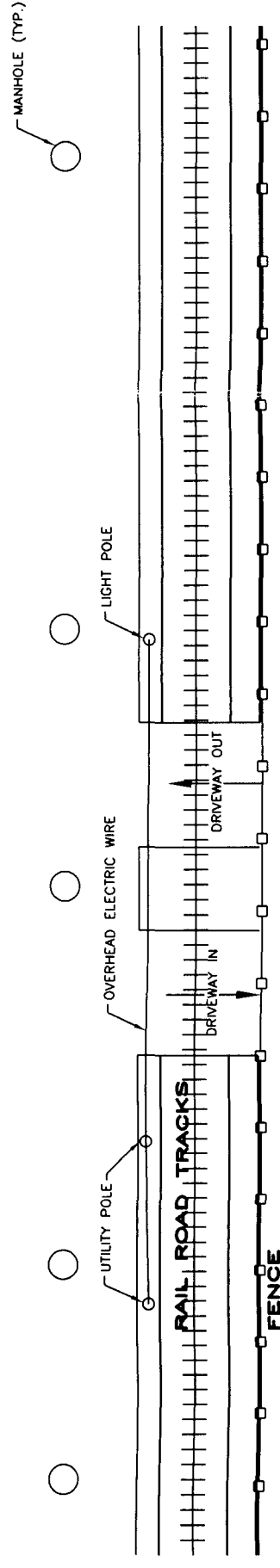


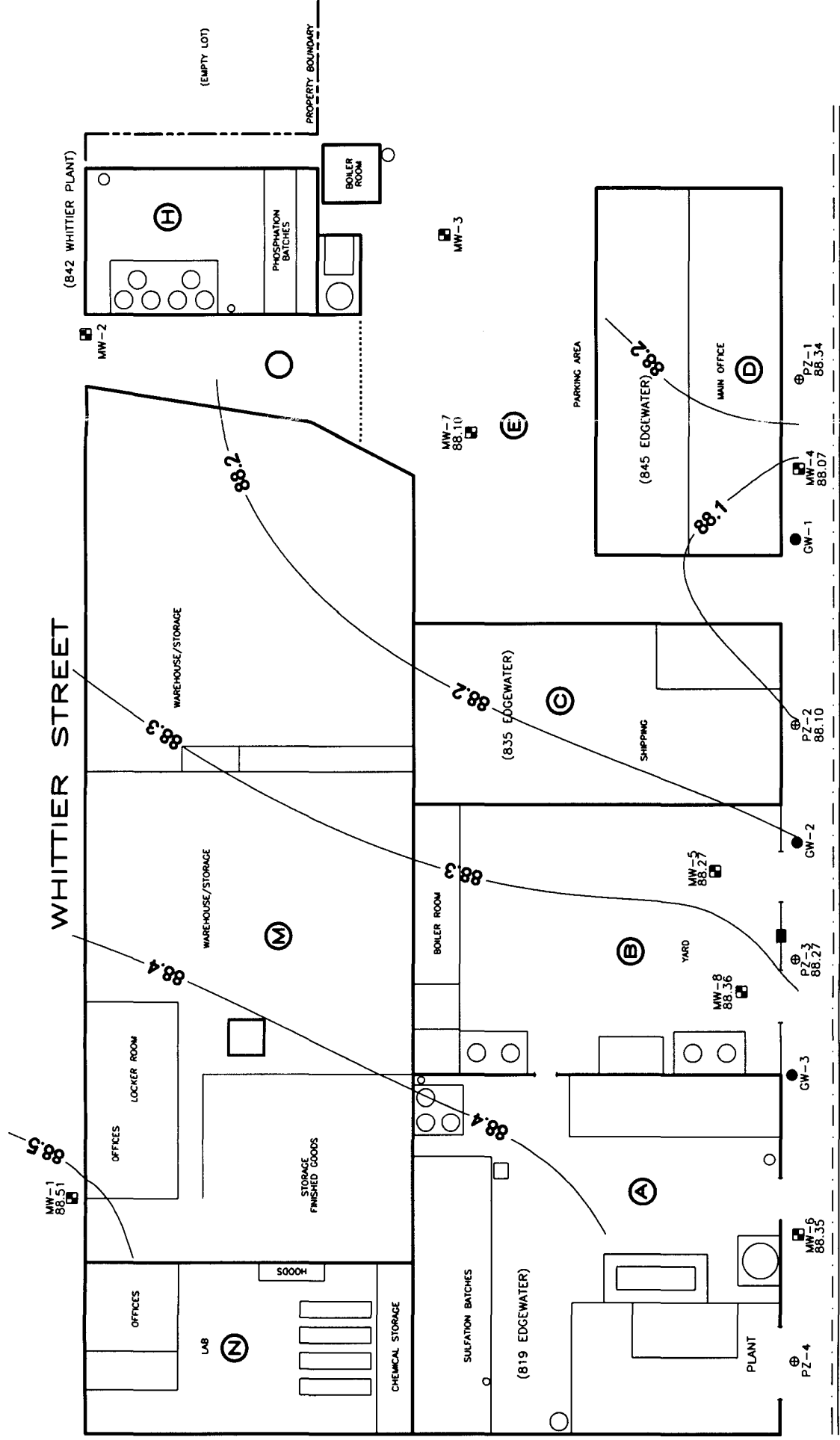
- AREA IDENTIFICATION TAG
- GROUND WATER MONITORING WELL LOCATION
- GRAB GROUND WATER LOCATION
- OVER HEAD ELECTRIC LINE
- PIEZOMETER LOCATION
- GROUNDWATER CONTOUR
- PIEZOMETER LOCATION WITH GROUNDWATER ELEVATION

EDGEWATER ROAD



 <p>THE <b>WHITMAN</b> Companies, INC.</p>	DEXTER CHEMICAL LLC BRONX, NEW YORK	
	GROUND WATER CONTOUR MAP JAN. 22, 2002	
ORIGINAL BY:	M.P.	DRAWN BY: <i>D.L.</i>
CHECKED BY:	M.P.	DRAWING NO: 970910E4
		FIGURE NO: 10
		DATE: FEB. 2002

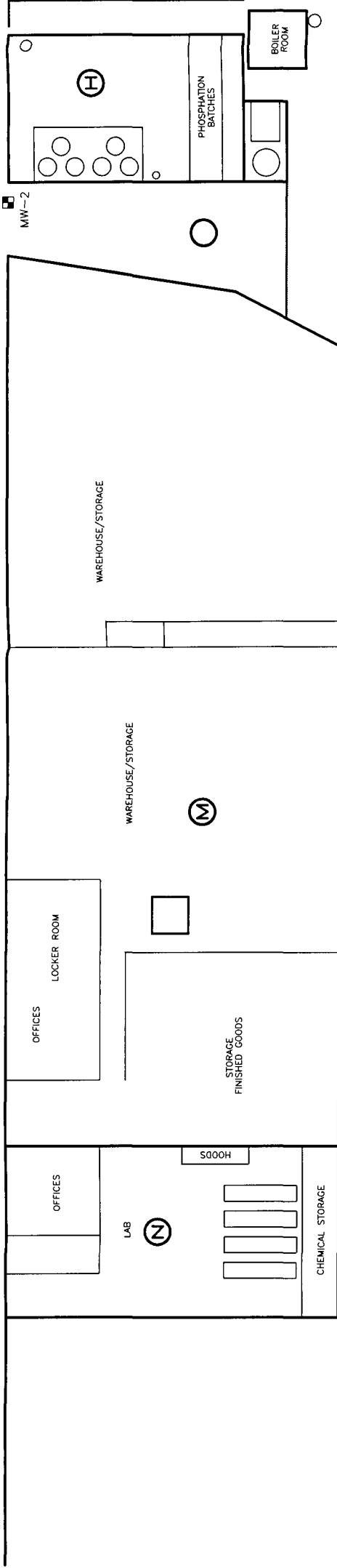






WHITTIER STREET

MW-1

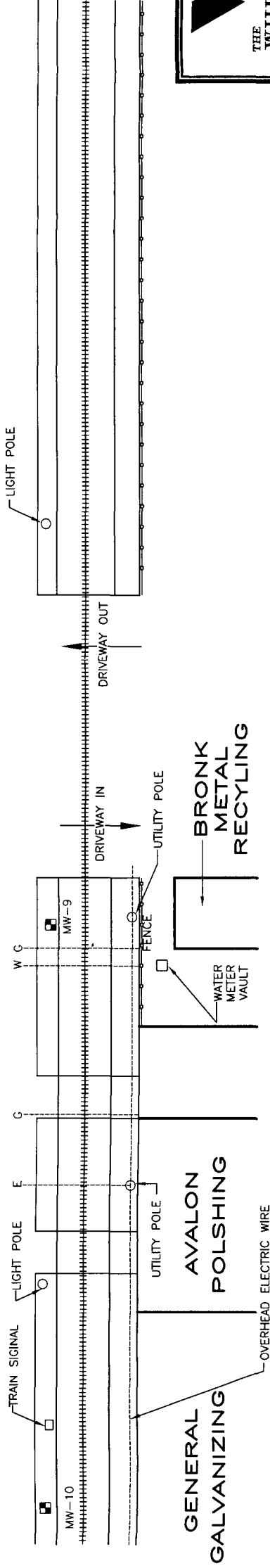


LEGEND

- Ⓐ - AREA IDENTIFICATION TAG
- MW-1 □ - GROUND WATER MONITORING WELL LOCATION
- GW-1 - SOIL BORING LOCATION
- - OVER HEAD ELECTRIC LINE
- U - UNKNOWN UTILITY
- G - UNDERGROUND GAS LINE
- E - ELECTRIC LINE
- W - WATER LINE
- S - SEWER LINE
- T - TELEPHONE LINE
- ⊕ PZ-2 - PIEZOMETER LOCATION

EDGEWATER ROAD

MANHOLE (TYP.)



DEXTER CHEMICAL LLC  
BRONX, NEW YORK

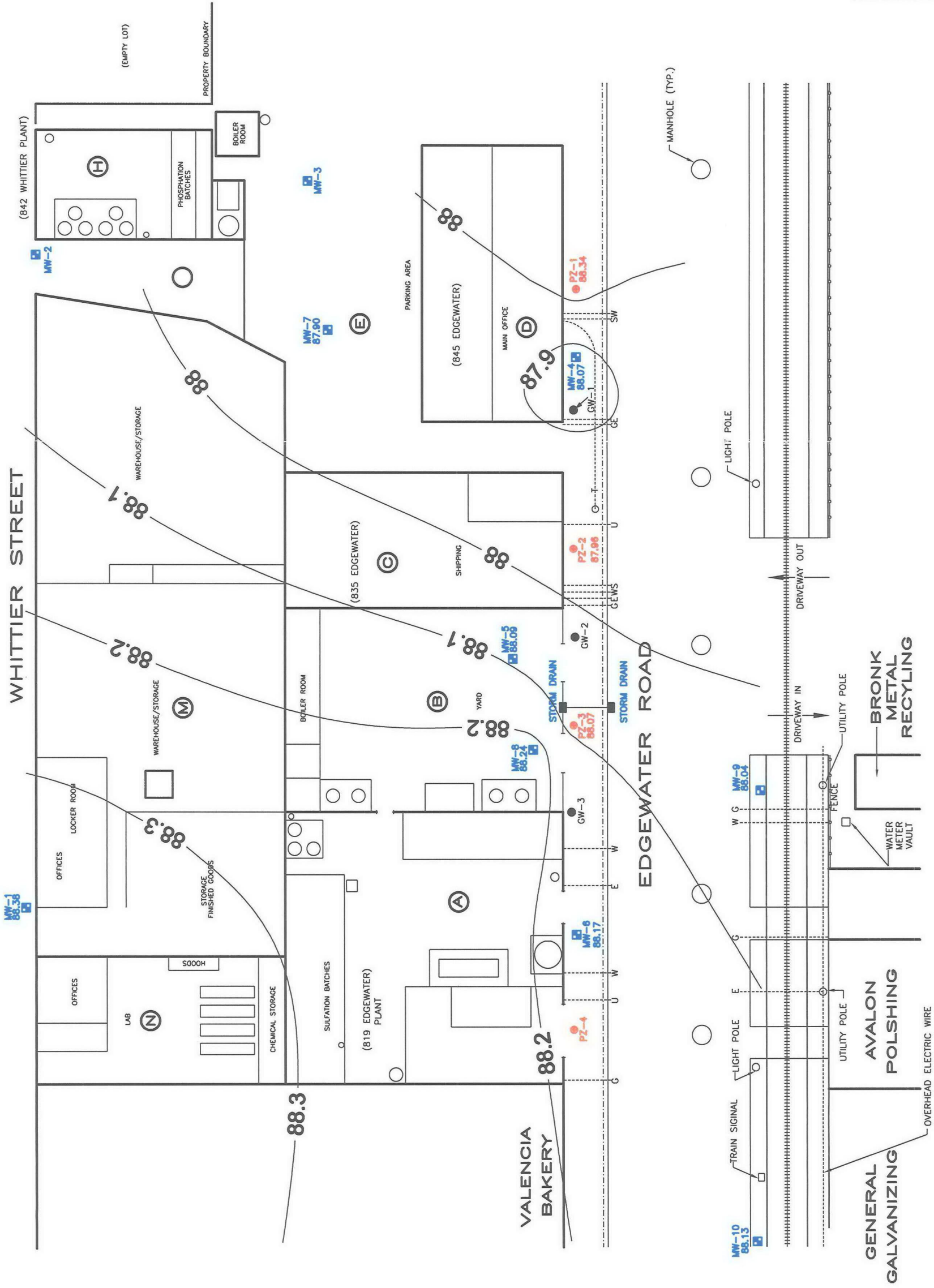
MONITORING WELL AND  
UTILITY LOCATIONS

ORIGINAL BY: M.P.  
DRAWN BY: D.L.

CHECKED BY: M.P.  
DATE: OCT. 2002

DRAWING NO: 970910F6  
FIGURE NO: 13





LEGEND

- (A) - AREA IDENTIFICATION TAG
- MW-1 88.38 - MONITORING WELL LOCATION WITH GROUND WATER ELEVATION
- PZ-2 - PIEZOMETER LOCATION
- GW-1 - GRAB GROUND WATER LOCATION
- OVER HEAD ELECTRIC LINE
- U - UNKNOWN UTILITY
- G - UNDERGROUND GAS LINE
- E - ELECTRIC LINE
- W - WATER LINE
- S - SEWER LINE
- T - TELEPHONE LINE



DEXTER CHEMICAL LLC  
BRONX, NEW YORK

GROUND WATER CONTOUR MAP  
DECEMBER 3, 2002

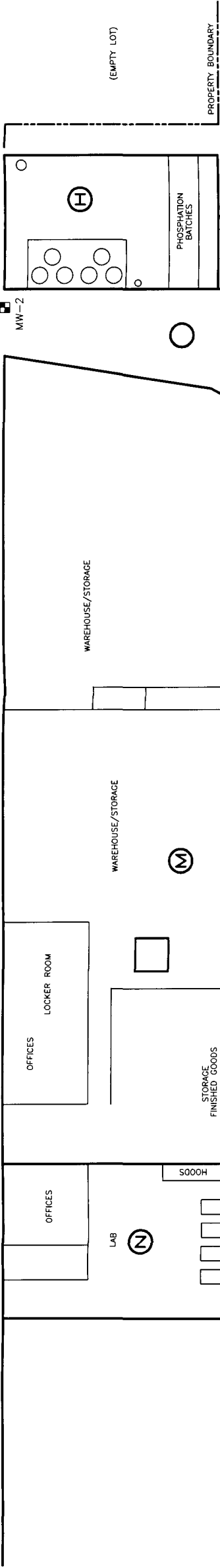
DRAWN BY: *D.L.*  
DRAWING NO: 970910F2

CHECKED BY: M.P.  
DATE: JAN. 2003  
FIGURE NO: 14



WHITTIER STREET

MW-1



LEGEND

- Ⓐ - AREA IDENTIFICATION TAG
- MW-1 - GROUND WATER MONITORING WELL LOCATION
- - SOIL BORING LOCATION
- ⊕ - PIEZOMETER LOCATION
- - OVER HEAD ELECTRIC LINE
- U - UNKNOWN UTILITY
- G - UNDERGROUND GAS LINE
- E - ELECTRIC LINE
- W - WATER LINE
- S - SEWER LINE
- T - TELEPHONE LINE
- DCE - CIS-1,2-DICHLOROETHENE
- DCP - 1,2-DICHLOROPROPANE
- B - BENZENE
- T - TOLUENE
- EB - ETHYLBENZENE
- X - XYLENE
- 1,2-DCB - 1,2-DICHLOROBENZENE
- N - NAPHTHALENE

NOTE:

ALL CONCENTRATIONS REPORTED IN ug/l OR ppb

SCALE  
0 40'

EDGEWATER ROAD

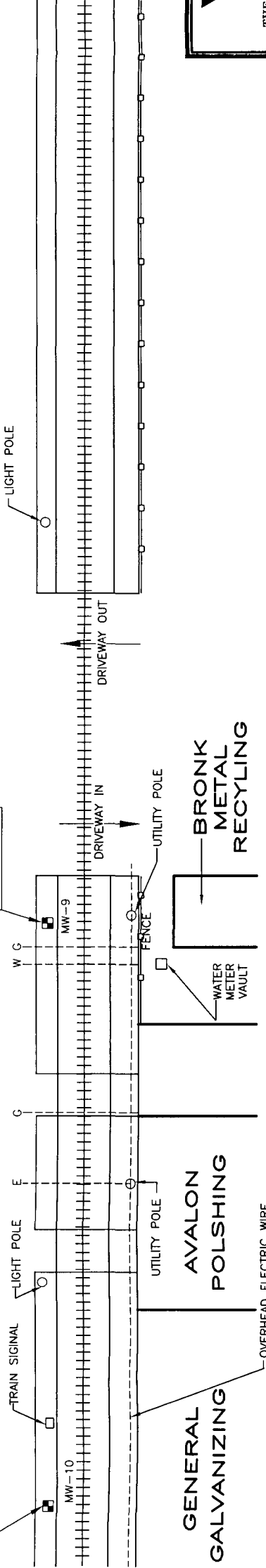
VALENCIA BAKERY

MW-10  
ALL COMPOUNDS  
BELOW  
GROUNDWATER  
STANDARDS

PZ-4  
DCE=38.9  
DCP=290  
B=7.34  
T=58.6  
EB=195  
X=1280  
1,2-DCB=4.13  
N=44.6

MW-6  
DCP=7.17  
B=7.34  
T=6.05  
EB=9.58  
X=37

MW-9  
ALL COMPOUNDS  
BELOW  
GROUNDWATER  
STANDARDS



DEXTER CHEMICAL LLC  
BRONX, NEW YORK

GROUND WATER SAMPLING RESULTS  
DECEMBER 3, 2002

DRAWN BY: *D.L.* DRAWING NO: 970910F7  
CHECKED BY: MP DATE: DEC. 02

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

---

In the Matter of the Implementation of a **Voluntary Cleanup Agreement**

for: 819-845 Edgewater Road and 810-842 Whittier Street

by: Dexter Chemical LLC, "Volunteer"

Site #: V00186-2

Index #: W2-0864-03-08

---

**WHEREAS**, the Department is responsible for the enforcement of the ECL and the NL and such laws provide the Department authority to enter into this Agreement;

**WHEREAS**, the Department has established a Voluntary Cleanup Program to address the environmental, legal, and financial barriers that hinder the redevelopment and reuse of contaminated properties;

**WHEREAS**, Volunteer represents, and the Department relied upon such representations in entering into this Agreement, that Volunteer's involvement with the Site is limited to the following: Volunteer is the current owner and operator of the Site;

**WHEREAS**, the parties are entering into this Agreement in order to set forth a process through which the Department will approve and the Volunteer will implement activities designed to address in whole or in part environmental contamination at the Site; and

**WHEREAS**, the Department has determined that it is in the public interest to enter into this Agreement as a means to address environmental issues at the Site with private funds while ensuring the protection of human health and the environment;

**NOW, THEREFORE**, IN CONSIDERATION OF AND IN EXCHANGE FOR THE MUTUAL COVENANTS AND PROMISES, THE PARTIES AGREE TO THE FOLLOWING:

I. Site Specific Definitions

For purposes of this Agreement, the terms set forth in the Glossary attached to, and made a part of, this Agreement shall have the meanings ascribed to them in that Glossary. In addition, for purposes of this Agreement, the following terms shall have the following meanings:

A. "Contemplated Use": Restricted industrial use excluding day care, child care and medical care uses.

B. "Existing Contamination": The contamination identified in the June 2003 report prepared by Whitman Companies entitled "Summary of Site Investigation and Proposed Remedial Action" that was submitted on behalf of Volunteer to the Department, including the following: volatile organic compounds ("VOCs") soil contamination in areas A and I of the Site; trichloroethene soil in area "B" of the Site; Polycyclic Aromatic Hydrocarbons (PAHs) and Priority Pollutant Metals (PPM) soil contamination in all historic fill areas; VOCs groundwater contamination in monitoring wells located immediately downgradient of areas "A" and "I" of the Site; and lead groundwater contamination in two monitoring wells that were placed in historic coal and cinder fill materials. The term also includes contamination identified during the implementation of this Agreement, the nature and extent of which were unknown or

**From:** Rosalie Rusinko  
**To:** Agrawal, Hari  
**Date:** 8/1/03 3:33PM  
**Subject:** Re: Dexter - as requested to help you develop VCA

**\*\* Confidential \*\***

Hari,

Is there a RI Report which I can reference in the VCA? I found a copy of a document dated June 2003 "Summary of Site Investigation and Proposed Remedial Action " , is this the only report?

>>> Hari Agrawal 08/01/03 11:57AM >>>

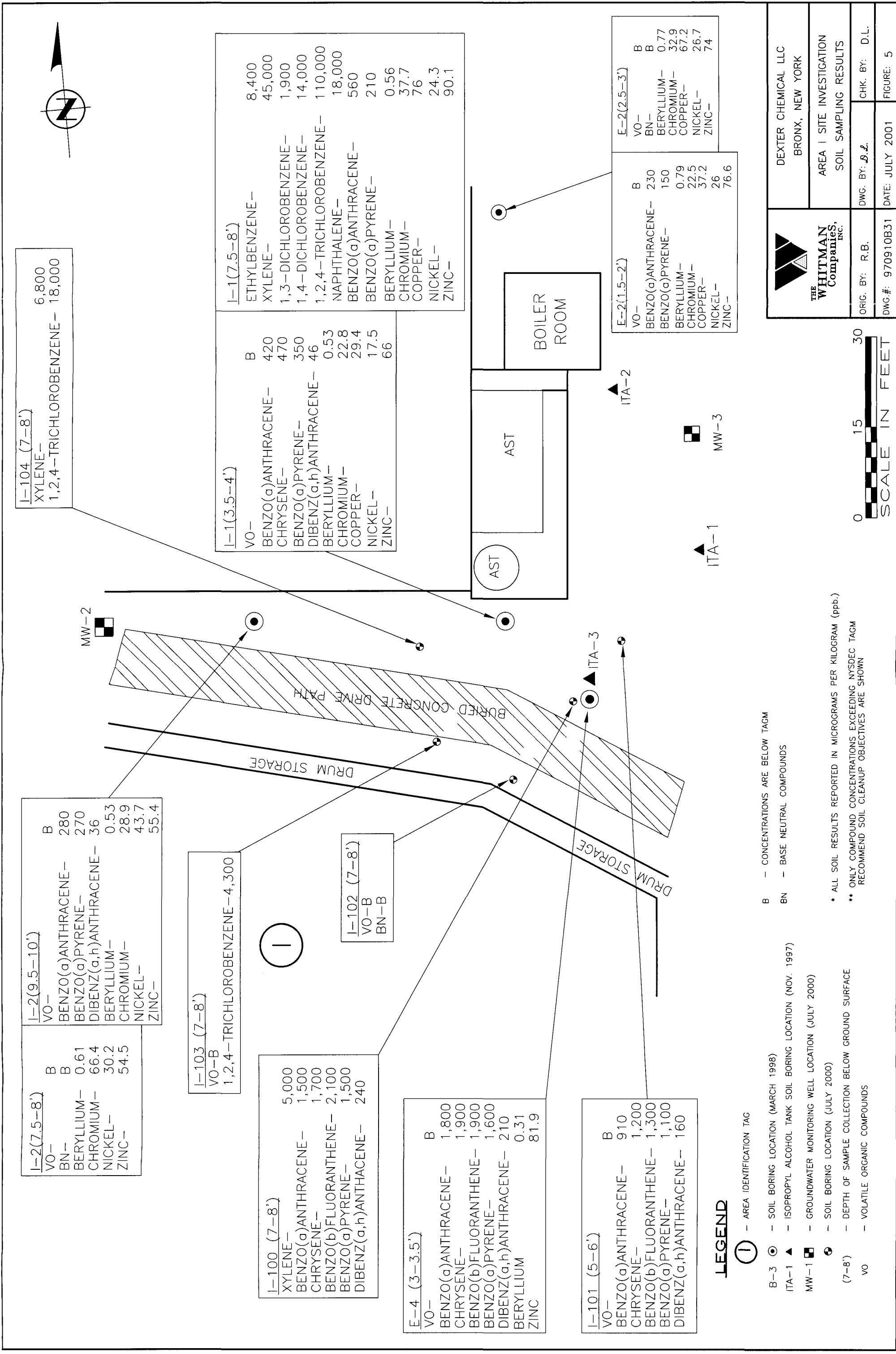
The Volunteer is Dexter Chemical LLC, the current owner and operator of the site with offices located at 845 Edgewater Road, Bronx, NY 10474. The Volunteer is a PRP.

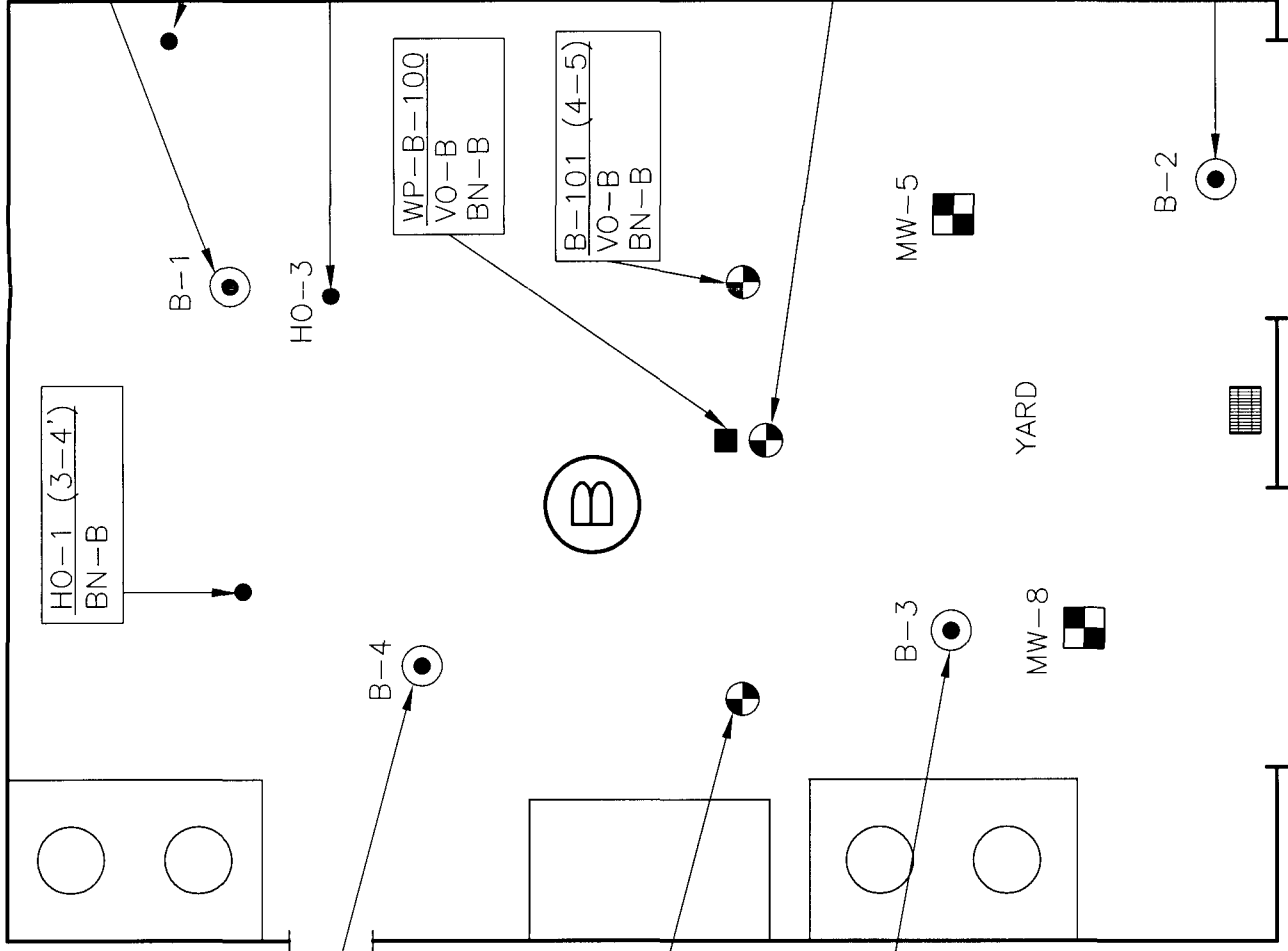
The site is located at 819 through 845 Edgewater Road and 810 through 842 Whittier Street, Bronx, New York. The property is located in an industrial/ manufacturing district of Hunts Point, Bronx, New York. Tax map identification is Block 2762, Lots 216, 224, 257, 294, 299 and 300. The street address of the site is: 845 Edgewater Road, Bronx, NY 10474.

The agreement shall supplement the existing VCA # V00186-2 and provide for remediation of contaminants present in onsite soils and groundwater, and shall also provide for remediation of any offsite impacts as a result of the past or ongoing release of site-related contaminants in the environment. The remedy shall include any remaining investigation necessary to design the remedy, the design, the implementation of the remedy, and any operation, maintenance, and monitoring necessary to return the site to its designated use with out causing any adverse public health and environmental impacts. .

The site consists of approximately 2.2 acres. There are no wetlands or woodlands on the property. Bronx River is located 1000 ft east of the site. Dexter has been a chemical manufacturing plant for over 40 years. The site is contaminated with BTEX and PAHs likely from leaking USTs in the past, and chlorobenzene, lead and mercury from previous paint manufacturing operations . The contaminants are present in groundwater leaving the site.

The Department will develop a remedial action work plan in consultation with the NYSDOH, and the plan will be subject to public review and comments.





B-1 (4-6')	
VO-	B
BN-	B
ARSENIC-	B
BERYLLIUM-	0.17
CADMIUM-	B
CHROMIUM-	B
COPPER-	103
MERCURY-	B
NICKEL-	B
ZINC-	214

B-1 (16-18')	
VO-	B
BN-	B
ARSENIC-	8.3
BERYLLIUM-	0.63
CADMIUM-	B
CHROMIUM-	28.9
COPPER-	B
MERCURY-	B
NICKEL-	18.6
ZINC-	50.9

B-4 (3.5-4')	
VO-	B
BN-	B
ARSENIC-	B
BERYLLIUM-	1.1
CADMIUM-	B
CHROMIUM-	51.8
COPPER-	105
MERCURY-	B
NICKEL-	34.7
ZINC-	137

B-100 (4-5')	
TRICHLOROETHENE-	770
BENZO(a)ANTHRACENE-	290
BENZO(a)PYRENE-	320

B-3 (1-2')	
VO-	B
BENZO(A)ANTHRACENE-	450
CHRYSENE-	520
BENZO(A)PYRENE-	450
ARSENIC-	B
BERYLLIUM-	0.34
CADMIUM-	B
CHROMIUM-	11.1
COPPER-	110
MERCURY-	B
NICKEL-	13.3
ZINC-	207

B-3 (15-16')	
VO-	B
BENZO(A)PYRENE-	120
ARSENIC-	B
BERYLLIUM-	0.42
CADMIUM-	B
CHROMIUM-	33.7
COPPER-	B
MERCURY-	B
NICKEL-	23.5
ZINC-	125

B-2 (1-2')	
VO-	B
BENZO(A)ANTHRACENE-	700
CHRYSENE-	790
BENZO(A)PYRENE-	640
DIBENZ(A)ANTHRACENE-	63
ARSENIC-	B
BERYLLIUM-	0.7
CADMIUM-	B
CHROMIUM-	19.4
COPPER-	B
MERCURY-	B
NICKEL-	B
ZINC-	78.6

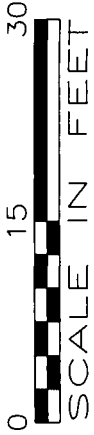
B-2 (3-4')	
VO-	B
BENZO(A)PYRENE-	71
ARSENIC-	B
BERYLLIUM-	0.51
CADMIUM-	B
CHROMIUM-	23.1
COPPER-	B
MERCURY-	B
NICKEL-	15.7
ZINC-	232

LEGEND

- ⊙ - AREA IDENTIFICATION TAG
- ⊙ - SOIL BORING LOCATION (MARCH 1998)
- - HEATING OIL TANK SOIL BORING LOCATION (NOV. 1997)
- - GRAB GROUND WATER SAMPLE LOCATION
- - GROUNDWATER MONITORING WELL LOCATION (MARCH 1998)
- ⊙ - SOIL BORING LOCATION (JULY & SEPTEMBER 2000)
- (7-8') - DEPTH OF SAMPLE COLLECTION BELOW GROUND SURFACE
- VO - VOLATILE ORGANIC COMPOUNDS

- B - CONCENTRATIONS ARE BELOW TAGM
- BN - BASE NEUTRAL COMPOUNDS
- HG - MERCURY

\* ALL SOIL RESULTS REPORTED IN MICROGRAMS PER KILOGRAM (ppb.)  
\*\* ONLY COMPOUND CONCENTRATIONS EXCEEDING NYSDEC TAGM  
RECOMMENDED SOIL CLEANUP OBJECTIVES ARE SHOWN  
\*\*\* GROUND WATER RESULTS REPORTED IN MICROGRAMS PER LITER (ppb.)



	DEXTER CHEMICAL LLC BRONX, NEW YORK	
	AREA B SITE INVESTIGATION SOIL AND GRAB GROUND WATER SAMPLING RESULTS	
	ORIG. BY: R.B.	CHK. BY: R.B.
DWG.#: 970910-B21		DATE: JULY 2001
		FIGURE: 4



1SB-3 (7-8')	
CHLOROBENZENE-	260,000
ETHYLBENZENE-	19,000
XYLENE-	79,000
1,2,4-TRICHLOROBENZENE-	6,100
ARSENIC-	B
BERYLLIUM-	0.47
CADMIUM-	B
CHROMIUM-	16.1
COPPER-	26
MERCURY-	0.19
NICKEL-	14.2
ZINC-	72.9

A-100 (4-5')	
VO-	B
BN-	B
MERCURY-	B

A-102A (7-8')	
ETHYLBENZENE-	5,900
XYLENE-	29,000
NAPHTHALENE-	43,000
MERCURY-	B
A-102B (14-15')	
XYLENE-	2,700
1,3-DICHLOROBENZENE-	2,300
1,4-DICHLOROBENZENE-	11,000
MERCURY-	160
A-102C-NA	
A-102D (19-20')	B
VO-	B
BN-	B
MERCURY-	B

A-1 (4-6')	
CHLOROBENZENE-	7,200
XYLENE-	25,000
BENZENE-	430
A-1 (20-21')	
VO-	B
BN-	B
ARSENIC-	7.9
BERYLLIUM-	0.89
CADMIUM-	B
CHROMIUM-	36.4
COPPER-	B
MERCURY-	26.4
NICKEL-	B
ZINC-	76.4

A-103A (6-7')	
XYLENE-	12,000
BN-	B
MERCURY-	370

MW-6 (7-8')	
VO-	B
BN-	B
ARSENIC-	B
BERYLLIUM-	0.46
CADMIUM-	B
CHROMIUM-	24.0
COPPER-	38.1
MERCURY-	B
NICKEL-	17.7
ZINC-	56.4

1SB-1 (7-9')	
XYLENE-	26,000
1,2,4-TRICHLOROBENZENE-	18,000
NAPHTHALENE-	28,000
ARSENIC-	B
BERYLLIUM-	0.23
CADMIUM-	0.44
CHROMIUM-	18.6
COPPER-	194
MERCURY-	0.64
NICKEL-	14.2
ZINC-	111

A-105A (7-8')	
TOLUENE-	15,000
ETHYLBENZENE-	58,000
XYLENE-	410,000
NAPHTHELENE-	37,000
MERCURY-	130
A-105B (14-15')	
XYLENE-	3,000
BN-	B
MERCURY-	200
A-105C (19-20')	
VO-	B
BN-	B
MERCURY-	B

A-101 (7-8')	
TOLUENE-	28,000
ETHYLBENZENE-	49,000
XYLENE-	150,000
MERCURY-	1,100

A-104 (7-8')	
XYLENE-	17,000
1,3-DICHLOROBENZENE-	2,200
1,2-DICHLOROBENZENE-	14,000
1,4-DICHLOROBENZENE-	7,500
NAPHTHALENE-	32,000
1,2,4-TRICHLOROBENZENE-	110,000
MERCURY-	290
A-104B (14-15')	
BENZO(a)ANTHRACENE-	5,000
CHRYSENE-	5,800
BENZO(b)FLUORANTHENE-	6,100
BENZO(k)FLUORANTHENE-	2,500
BENZO(a)PYRENE-	5,000
DIBENZ(a,h)ANTHRACENE-	710
VO-	B
MERCURY-	160
A-104C (19-20')	
VO-	B
BN-	B
MERCURY-	B

1SB-2 (7-8')	
VO-B	B
BN-	B
ARSENIC-	B
BERYLLIUM-	0.52
CADMIUM-	B
CHROMIUM-	19.0
COPPER-	B
MERCURY-	B
NICKEL-	17.2
ZINC-	49.3

MIXING KETTLES

LYE TANK

SURFACE ACID

## LEGEND

A-102 ⊙ - SOIL BORING LOCATION (JULY 2000)

1SB-3 ⊗ - SOIL BORING TAKEN ON 11/97

A-1 ⊙ - SOIL BORING TAKEN ON 3/98

(7-8') - DEPTH OF SAMPLE COLLECTION BELOW GRADE

VO - VOLATILE ORGANIC COMPOUNDS

BN - BASE NEUTRAL COMPOUNDS

B - CONCENTRATIONS ARE BELOW TAGM

NA - NOT ANALYZED

\* ALL RESULTS REPORTED IN MICROGRAMS PER KILOGRAM (ppb.)

\*\* ONLY COMPOUND CONCENTRATIONS EXCEEDING NYSDEC TAGM RECOMMEND SOIL CLEANUP OBJECTIVES ARE SHOWN



DEXTER CHEMICAL LLC  
BRONX, NEW YORK

AREA A SITE INVESTIGATION  
SOIL SAMPLING RESULTS

ORIG. BY: R.B.

DWG. BY: J.L.

CHK. BY: R.B.

DWG.#: 970910B11

DATE: JULY 2001

FIGURE: 3



SCALE IN FEET