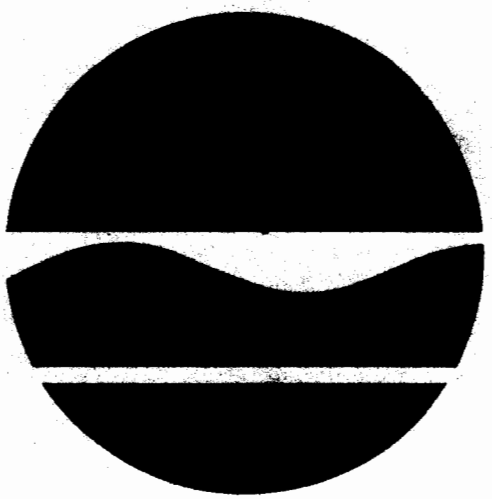
# PETER WINKELMAN CO.

Syracuse (C),Onondaga County, New York
Site No. 7-34-047

# PROPOSED REMEDIAL ACTION PLAN

February 2000



Prepared by:

Division of Environmental Remediation
New York State Department of Environmental Conservation

# PROPOSED REMEDIAL ACTION PLAN

## PETER WINKELMAN CO.

**Syracuse (C), Onondaga County, New York**
**Site No. 7-34-047**
**February 2000**

### SECTION 1: SUMMARY AND PURPOSE OF THE PROPOSED PLAN

The New York State Department of Environmental Conservation (NYSDEC) in consultation with the New York State Department of Health is proposing a remedy for the Peter Winkelman Co site, a class 2 inactive hazardous waste disposal site. As more fully described in Sections 3 and 4 of this document, leaking power transformers and spilling of transformer oil resulted in the disposal of PCBs at the site. These disposal activities resulted in the following significant threats to the public health and/or the environment:

- A significant threat to human health associated with exposure to soil contaminated with transformer oil containing Aroclor-1260 (PCB).

During the course of the investigation certain actions, known as Interim Remedial Measures (IRMs), were undertaken at the Peter Winkelman site in response to the threats identified above. An IRM is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the RI/FS. The IRM undertaken at this site included removal of power transformers, removal of contaminated soil, and installation of an oil skimmer to treat the groundwater impacted by the spill.

Based on the success of the above IRM, the findings of the investigation of this site indicate that the site no longer poses a threat to human health or the environment, therefore No Further Remedial Action, with continuation of the IRM and groundwater monitoring, is proposed as the remedy for this site. In addition, the Department also would reclassify the site to a Class 4 site on the New York State Registry of Inactive Hazardous Waste Disposal Sites, which means the site has been remediated and only continued operation, maintenance and monitoring of the remedy is required.

This Proposed Remedial Action Plan (PRAP) identifies the preferred remedy and discusses the reasons for this preference. The NYSDEC will select a final remedy for the site only after careful consideration of all comments received during the public comment period.

The NYSDEC has issued this PRAP as a component of the citizen participation plan developed pursuant to the New York State Environmental Conservation Law and 6

NYCRR Part 375. This document is a summary of the information that can be found in greater detail in the remedial investigation, available at the document repositories.

To better understand the site and the investigations conducted, the public is encouraged to review the project documents at the following repositories:

Ms. Jean Palmer
Onondaga County Public Library
Robert P. Kinchen Central Library
Local History/Special Collections
447 South Salina Street
Syracuse, NY 13202-2494
(315) 435-1900

NYSDEC Region 7 Headquarters
615 Erie Boulevard West
Syracuse, NY 13204-2400
(315) 426-7551
Attn. Charles Branagh
(By appointment only)

NYSDEC Central Office
50 Wolf Road, Room 348
Albany, NY 12233-7010
(518) 457-4343
Attn: James Candiloro
(By appointment only)

The NYSDEC seeks input from the community on all PRAPs. A public comment period has been set from February 14, 2000 to March 15, 2000 to provide an opportunity for public participation in the remedy selection process for this site. A public meeting is scheduled for **February 23, 2000** at the NYSDEC Region 7 Office beginning at **7:00 p.m.**.

At the meeting, the results of the investigation and IRMs at the site will be presented along with a summary of the proposed remedy. After the presentation, a question-and-answer period will be held, during which you can submit verbal or written comments on the PRAP.

The NYSDEC may modify the preferred alternative or select another based on new information or public comments. Therefore, the public is encouraged to review and comment on all of the alternatives identified here.

Comments will be summarized and responses provided in the Responsiveness Summary section of the Record of Decision. The Record of Decision is the NYSDEC's final selection of the remedy for this site. Written comments may be sent to Mr. Candiloro at the above address through March15, 2000.

## SECTION 2: SITE LOCATION AND DESCRIPTION

The Peter Winkelman Co. is located in a mixed commercial and industrial area of Syracuse, New York. The Peter Winkelman property comprises 4.9 acres located at 101-113 & 102 Greenway Avenue of which 0.05 acres are listed as a class 2 site. The property is situated approximately 600' north of the intersection of Divine Street and Erie Boulevard East and is bordered to the north by Interstate Route 690, and to the east by the Former Syracuse Rigging site. The 0.05 acre site is a former transformer area which is situated in an alcove along the east side of a large building. Currently the building is abandoned and the surrounding area has been

used as a dumping area for assorted debris (i.e.,. yard waste, old tires). See figure 1.

## SECTION 3: SITE HISTORY

### 3.1: Operational/Disposal History

The Peter Winkelman Co., was a construction company that owned the site until 1991 when the site was conveyed to GSI of Virginia. While the site was owned by Peter Winkelman Co, various businesses occupied buildings not used by the construction company. Due to a power outage caused by a power surge, one or more of the three transformers on Peter Winkelman's property malfunctioned. Subsequently an unknown quantity of transformer oil leaked from the transformers

### 3.2: Remedial History

In March of 1986 the transformer oil spill was discovered by the Syracuse Fire Department. Soil sample analysis showed PCB levels as high as 199 ppm. On one or more occasions in 1986, the Peter Winkelman Company was informed by the NYSDEC of the company's legal responsibility to remediate the transformer oil spill.

In July of 1987 the NYSDEC informed Winkelman that if the site was not cleaned up by August of the same year, it would be included on the registry of Inactive Hazardous Waste Sites, and litigation would be commenced.

In June of 1994 additional sampling was conducted at the site. PCB concentrations of up to 120 ppm were detected in the soil.

In April of 1997 it was observed that the oil from the three transformers had been emptied on to the ground as a result of someone scavenging the copper from the transformers. PCB levels of over 300 ppm were detected in residual oil sampled from all three transformers.

In June of 1997 the transformers were removed by a NYSDEC Spills contractor. Collection of free product from the excavation of the concrete transformer pad and removal of contaminated soil was carried out.

In August 1997 an oil skimmer was installed to collect residual transformer oil from the groundwater.

## SECTION 4: SITE CONTAMINATION

To evaluate the contamination present at the site and to evaluate alternatives to address the significant threat to human health and the environment posed by the presence of hazardous waste, the NYSDEC has recently conducted a Remedial Investigation (RI).

### 4.1: Summary of the Remedial Investigation

The purpose of the RI was to define the nature and extent of any contamination resulting from previous activities at the site.

The RI was conducted in one phase, between May 1999 and July 1999. A report entitled Remedial Investigation Report for the Peter Winkelman Co. Inactive Hazardous Waste Site dated January 2000 has been prepared which describes the field activities and findings of the RI in detail.

The RI included the following activities:

- Surface and subsurface soil samples were collected using a Geoprobe rig. The samples were then analyzed for PCBs.

- Piezometers were installed to define groundwater flow direction and determine the extent of groundwater contamination.

- Groundwater samples were collected and analyzed to help determine the extent of groundwater contamination.

To determine which media (soil, groundwater, etc.) are contaminated at levels of concern, the RI analytical data was compared to environmental Standards, Criteria, and Guidance values (SCGs). Groundwater, drinking water and surface water SCGs identified for the Peter Winkelman Co. site are based on NYSDEC Ambient Water Quality Standards and Guidance Values and Part V of New York State Sanitary Code. For soils, NYSDEC Technical and Administrative Guidance Memorandum (TAGM) 4046 provides soil cleanup guidelines for the protection of groundwater, background conditions, and health-based exposure scenarios. In addition, for soils, site specific background concentration levels can be considered for certain classes of contaminants.

Based on the RI results, in comparison to the SCGs and potential public health and environmental exposure routes, certain media and areas of the site require remediation. These are summarized below. More complete information can be found in the RI Report.

Chemical concentrations are reported in parts per billion (ppb) or parts per million (ppm). For comparison purposes, where applicable, SCGs are provided for each medium.

### 4.1.1: Site Geology and Hydrogeology

Geologic units encountered in the limited Geoprobe™ borings consist of a mix of fill material overlying bog deposits of organic rich silt, peat, and marl. Fill material encountered in the study area is generally 4 to 6 feet thick comprised of silty gravel, fly ash and coal, white paste material, foundry sands, and crushed stone. One to three feet of organic rich silt was encountered immediately beneath the fill, underlain with peat and marl (a mix of freshwater lime mud and shells) at approximately 7 to 8 feet below grade. No samples were collected beyond 8 feet below grade due to hole cave-in within the peat and marl.

Groundwater occurs under perched conditions as discontinuous lenses within the more permeable fill material, and under unconfined conditions within the peat and marl unit. Saturated sections of the fill material generally consisted of fly ash and silty gravel, often containing oily material. During development and sampling of the well points, recharge was observed to be slow, largely dependent on the composition of the fill at a specific location.

Well points were not surveyed, therefore the surface of the water table could not be accurately defined, however measurements indicate the water table to be relatively flat. Groundwater moves vertically through the fill material into the peat and marl unit, where it then flows under the effects of regional drainage patterns. Groundwater on the

adjacent parcel to the east of the site was found to flow to the southwest.

### 4.1.2: Nature of Contamination

The RI identified limited PCB contamination in groundwater and subsurface soil. The highest levels detected in subsurface soil was 11 ppm, at SB-4. Piezometer-1 and piezometer-6 exhibited PCB contamination at 70 ppb and 0.89 ppb respectively. However, groundwater contamination appears to be localized and is not impacting offsite groundwater.

As described in the RI report, eight soil and groundwater samples were collected at the site to characterize the nature and extent of contamination. The main categories of contaminants which exceed their SCGs are polychlorinated biphenyls (PCBs)

### 4.1.3: Extent of Contamination

Table 1 summarizes the extent of contamination for the contaminants of concern in soil and groundwater and compares the data with the SCGs for the site. The following are the media which were investigated and a summary of the findings of the investigation.

#### Soil

Historical data indicated that the PCB contamination was due to spills/leaks from transformers and therefore limited to an area of approximately 0.05 acres, which is listed on the Registry of Inactive Hazardous Waste sites. For this reason eight sampling locations were chosen around the former concrete pad area, as shown in Figure 2.

As part of the geoprobe investigation 14 subsurface soil samples were collected and analyzed. A summary of the results is provided in Table 1.

Of the 14 soil samples collected from the site 4 samples registered positive for PCBs. The highest level detected was located to the northeast of the former transformer area, SB-4, at 11 parts per million (ppm) compared to the Standards, Criteria, and Guidance (SCG) level of 10 ppm for subsurface soil. The PCB level of 11 ppm at SB-4 is considered to be a localized occurrence and not representative of a second source area, nor a significant exceedence of the SCG. This is based on the lab analysis results from SB-3 and SB-8, the two sample locations closest to SB-4, which were non-detect for PCBs. Also groundwater at SB-4 was found to be unimpacted by PCBs. The three other soil samples that contained PCBs were at levels under 0.3 ppm. The remaining 10 samples were nondetect at a detection level ranging from 0.038 ppm to 0.052 ppm depending upon the sample. The sampling locations are shown in Figure 2.

The geoprobe investigation showed that soil contamination is highly localized and of relatively low levels. During the IRM the soil that was most highly contaminated with PCBs was removed and an oil skimmer was installed to remove residual oil floating on the groundwater.

#### Groundwater

One groundwater sample was collected from each of the eight piezometers to determine the extent of groundwater contamination at the site. Of the eight piezometers sampled only P-1 and P-6 showed signs of contamination. These results represent residual levels of floating PCB oil from the transformers and are not indicative of PCBs in solution. Located approximately eight feet to the south of the

former transformer area P-1 exhibited elevated levels (70 ppb) of PCBs. P-2, which is located approximately 10 feet south of P-1, did not exhibit any PCB contamination. P-6 located approximately six feet to the southwest of the former transformer area only exhibited slightly elevated levels (0.89 ppb) of PCBs. The results of the analysis for all monitoring wells are presented in Table 2. The location of the piezometers are shown in Figure 3.

### 4.2: Interim Remedial Measures

An Interim Remedial Measure (IRM) is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the RI/FS.

In June of 1997 the transformers were removed from the site and transported for disposal. The concrete pad was broken up and removed with the contaminated soil. No soil was removed below four feet. The excavation remained open for six days. Booms and pads were placed in the excavation during this time to absorb as much oil as possible. Two slotted culvert pipes were placed vertically in the excavation and surrounded with #1 stone. Ten mil poly was placed over the stone and bentonite around the culverts. Then two feet of crusher run was placed to bring the site up to grade. In August 1997 a mobile oil skimmer was installed at the culvert that exhibited the highest level of PCB contamination . The oil skimmer makes use of the differences in specific gravity and surface tension between oil and water. These physical characteristics allow the unit's continuous belt to attract floating oil in the well. After picking up the oil , the belt travels through tandem wiper blades which scrape the oil off both sides of the belt and discharge it to a 55 gallon drum. Less than a drum of residual has been collected to date. The IRM will be reviewed periodically and modified, if appropriate, to increase the effectiveness of the removal.

### 4.3: Summary of Human Exposure Pathways:

This section describes the types of human exposures that may present added health risks to persons at or around the site. A more detailed discussion of the health risks can be found in Section 5.3 of the RI report.

An exposure pathway is the manner by which an individual may come in contact with a contaminant. The five elements of an exposure pathway are 1) the source of contamination; 2) the environmental media and transport mechanisms; 3) the point of exposure; 4) the route of exposure; and 5) the receptor population. These elements of an exposure pathway may be based on past, present, or future events.

Based upon the IRM completed, no pathways are known to remain at the site.

### 4.4: Summary of Environmental Exposure Pathways

This section summarizes the types of environmental exposures and ecological risks which may be presented by the site. No pathways for environmental exposure and/or ecological risks have been identified associated with the contamination at the site.

## SECTION 5: ENFORCEMENT STATUS

Potentially Responsible Parties (PRPs) are those who may be legally liable for

contamination at a site. This may include past or present owners and operators, waste generators, and haulers.

The Potential Responsible Parties (PRP) for the site, documented to date, include: The Peter Winkelman Co.

The PRPs declined to implement the IRM and RI/FS at the site when requested by the NYSDEC. After the remedy is selected, the PRPs will again be contacted to assume responsibility for the remedial program and all response costs the State has incurred.

## SECTION 6: SUMMARY OF THE REMEDIAL GOALS AND PROPOSED ACTION

The selected remedy for any site should, at a minimum, eliminate or mitigate all significant threats to the public health or the environment presented by the hazardous waste present at the site. The State believes that the remediation now in place, which is described in Section 4.2 Interim Remedial Measures, would accomplish this objective provided that it continues to be operated and maintained in a manner consistent with the design.

Based on the results of the investigations and the IRMs that have been performed at the site, the NYSDEC is proposing No Further Remedial Action, with continued operation of the IRM and periodic groundwater monitoring, as the preferred remedial alternative for the site. The Department would also reclassify the site from a Class 2 to a Class 4 on the New York State Registry of Inactive Hazardous Waste Disposal Sites, which means the site is properly closed but requires continued operation, maintenance and monitoring of the IRM. The IRM will continue to be operated until PCB levels in groundwater are below SCGs for two consecutive sampling events.

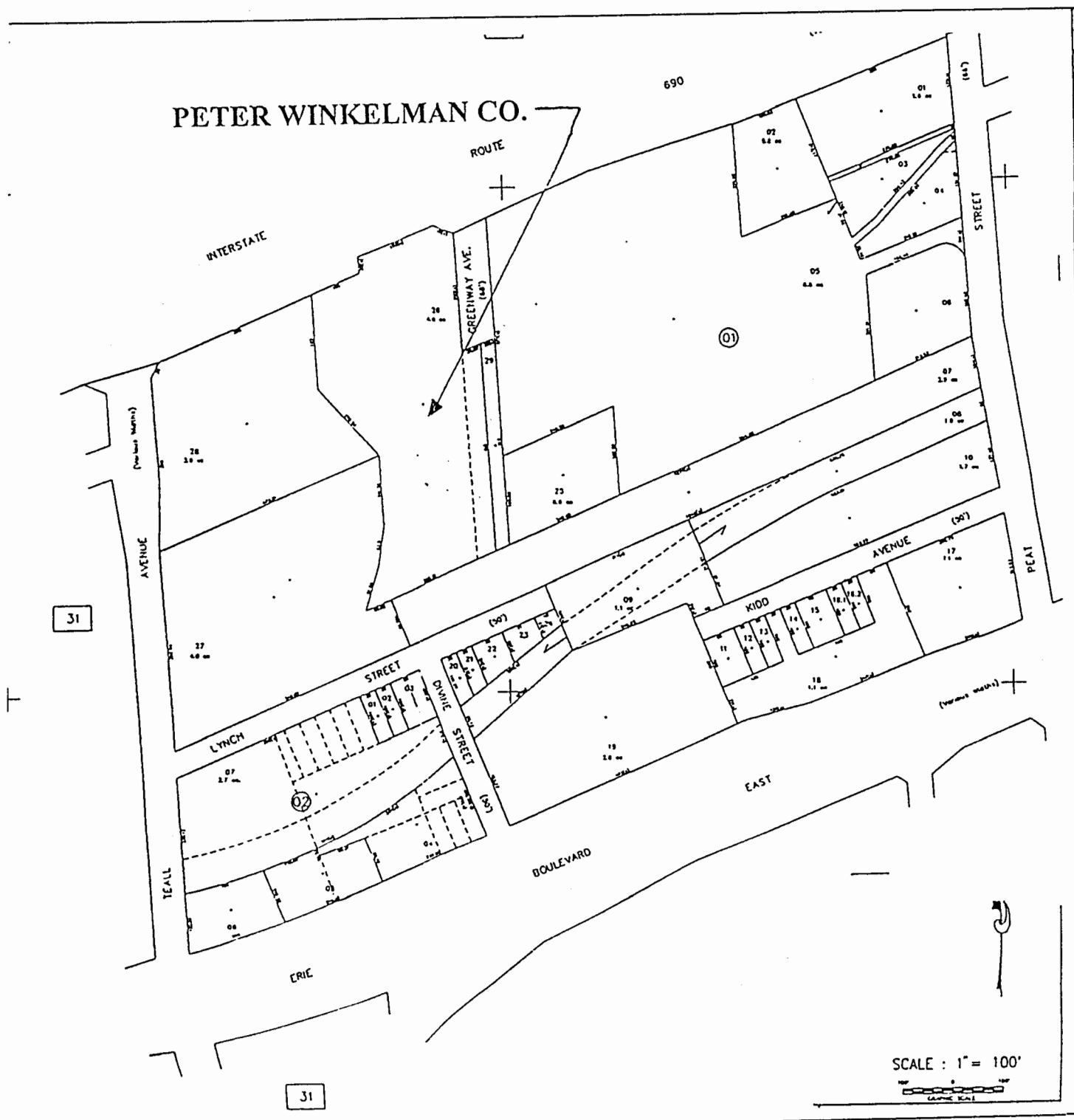
| TABLE 1<br>SOIL ANALYTICAL RESULTS | | |
|---|---|---|
| **Sample Location** | **Sample Depth** | **Concentration of Aroclor-1260** |
| SB-1 | 1'-2' | 204 PPB |
| SB-1 | 4'-5' | 217 PPB |
| SB-2 | 2'-4' | ND |
| SB-2 | 4'-5' | ND |
| SB-3 | 4'-5' | ND |
| SB-3 | 7'-8' | ND |
| SB-4 | 3'-4' | 0.292 ppm |
| SB-4 | 4'-5' | 11.089 ppm |
| SB-5 | 3'-4' | ND |
| SB-5 | 4'-5' | ND |
| SB-6 | 4'-5' | ND |
| SB-7 | 4'-5' | ND |
| SB-8 | 3'-4' | ND |
| SB-8 | 4'-5' | ND |

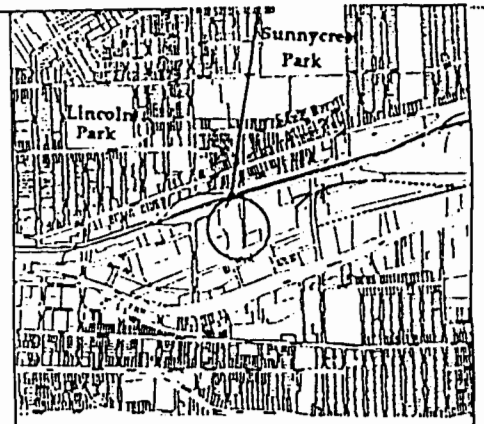
NOTE: SCG for PCBs in soil is 1 ppm (1000 ppb) for surface soil and 10 ppm(10,000 ppb) for subsurface soil.

| TABLE 2<br>GROUNDWATER ANALYTICAL RESULTS | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | P-1 | P-2 | P-3 | P-4 | P-5 | P-6 | P-7 | P-8 |
| Aroclor -1260 | 70 ppb | ND | ND | ND | ND | 0.89 ppb | ND | ND |

NOTE: SCG for PCBs in groundwater is 0.09 ppb.

Figures 1,2 and 3 follow



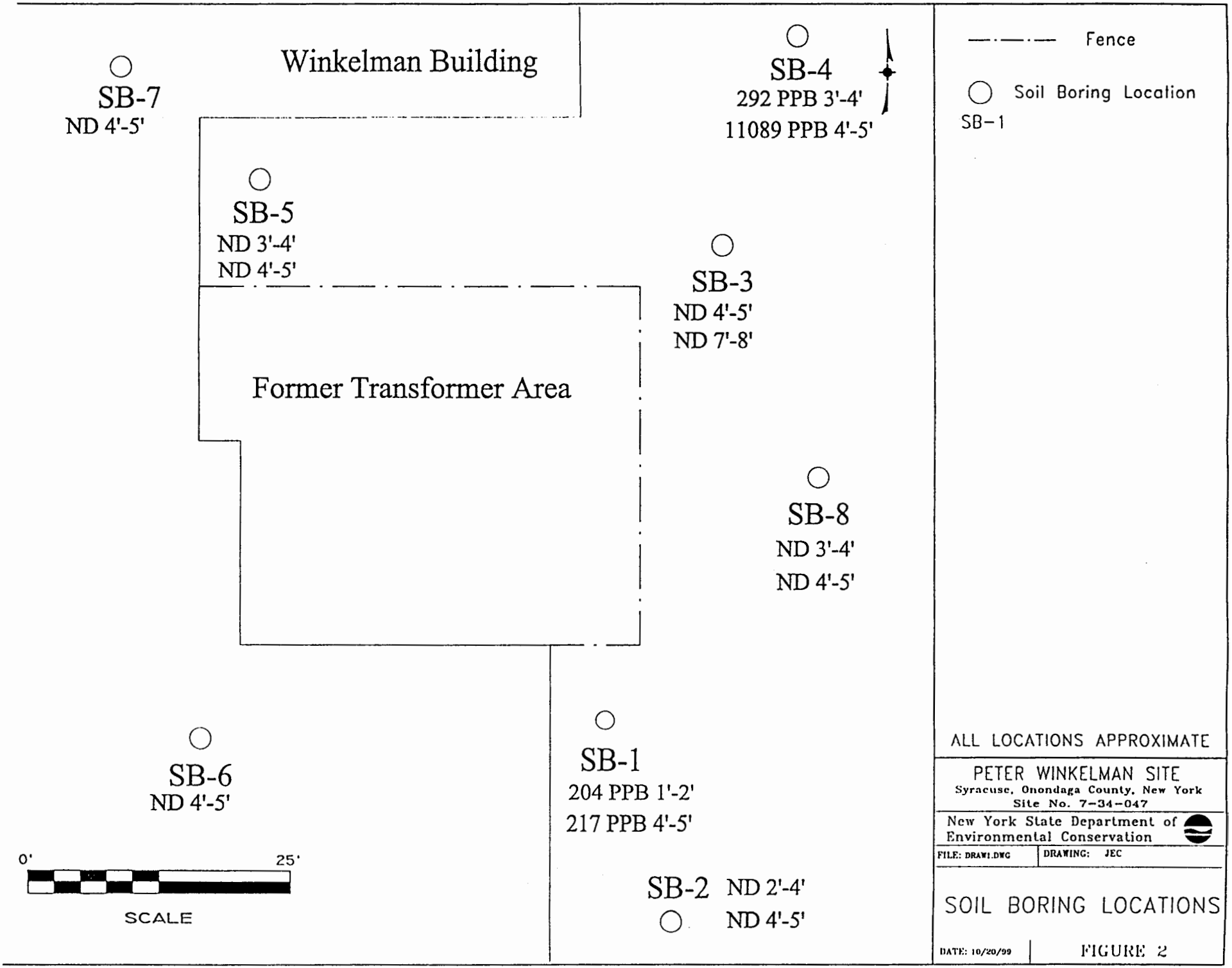



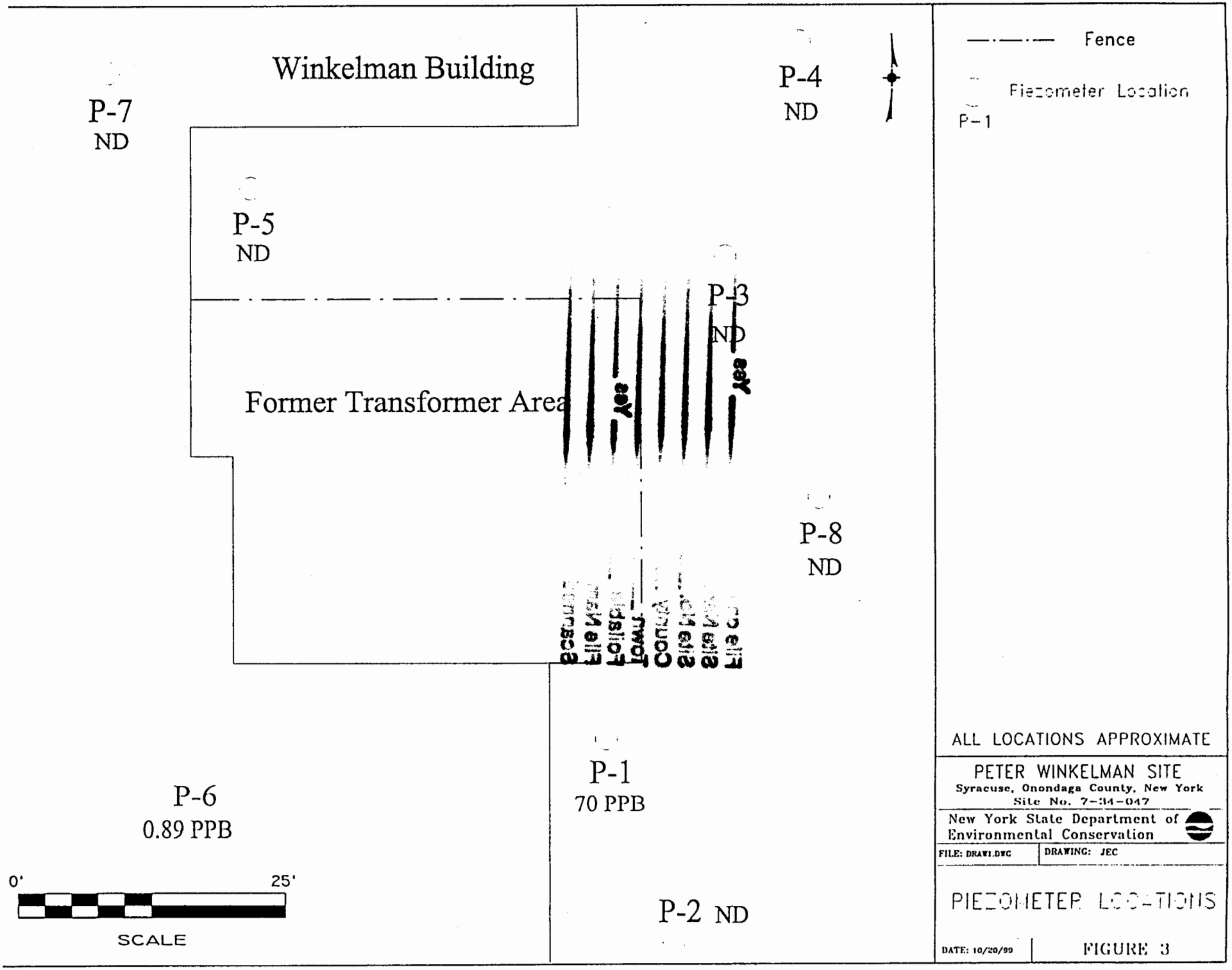

PETER WINKELMAN SITE
Syracuse, Onondaga County, New York
Site No. 7-34-047
New York State Department of Environmental Conservation

FILE: DRAW1.DWG | DRAWING: JEC

SITE MAP

DATE: 10/20/99 | FIGURE 1


Winkelman Building
SB-7
ND 4'-5'
SB-4
292 PPB 3'-4'
11089 PPB 4'-5'
SB-5
ND 3'-4'
ND 4'-5'
SB-3
ND 4'-5'
ND 7'-8'
Former Transformer Area
SB-8
ND 3'-4'
ND 4'-5'
SB-6
ND 4'-5'
SB-1
204 PPB 1'-2'
217 PPB 4'-5'
SB-2 ND 2'-4'
ND 4'-5'
0'
25'
SCALE
Fence
Soil Boring Location
SB-1
ALL LOCATIONS APPROXIMATE
PETER WINKELMAN SITE
Syracuse, Onondaga County, New York
Site No. 7-34-047
New York State Department of Environmental Conservation
FILE: DRAW1.DWG
DRAWING: JEC
SOIL BORING LOCATIONS
DATE: 10/20/99
FIGURE 2


Winkelman Building
P-7
ND
P-4
ND
P-5
ND
P-3
ND
Former Transformer Area
P-8
ND
P-1
70 PPB
P-6
0.89 PPB
P-2 ND
0'
25'
SCALE
Fence
Piezometer Location
P-1
ALL LOCATIONS APPROXIMATE
PETER WINKELMAN SITE
Syracuse, Onondaga County, New York
Site No. 7-34-047
New York State Department of Environmental Conservation
FILE: DRAW1.DWG
DRAWING: JEC
PIEZOMETER LOCATIONS
DATE: 10/20/99
FIGURE 3