

**INTERIM REMEDIAL MEASURES  
COMPLETION REPORT**

**VOLUME I - TEXT**

**Pfohl Bros. Landfill  
Cheektowaga, New York**

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## 1.0 INTRODUCTION

In accordance with its Record of Decision (ROD) issued in February, 1992 for the Pfohl Brothers Landfill (Site), the New York State Department of Environmental Conservation (NYSDEC) initiated Interim Remedial Measures (IRMs) at the Site in the summer of 1992. The IRMs were intended to remove "hot spots" which consisted of drums, drum remnants, and visibly impacted soils from the Site.

The NYSDEC began implementation of IRM activities. Subsequently, the NYSDEC and eight of the PRPs executed an Order of Consent (Index #B9-0048-84-10, effective date October 4, 1993) for completion of the IRM. Field activities for the IRM Completion were initiated by the PRPs in December 1993 and completed in August 1995.

Pursuant to Paragraph 10, Section III of the Order on Consent, the PRPs are required to submit to the NYSDEC and the New York State Department of Health (NYSDOH), an IRM Completion Report. This report fulfills the requirement of Paragraph 10.

## 1.1 SITE LOCATION

The Site (NYSDEC Site No. 9-15-043) is located in Cheektowaga, New York in a commercial/residential area northeast of the Buffalo International Airport. The location of the Site is shown on Figure 1.1. The Site is approximately 130 acres in area and is bounded to the east by Transit Road, to the west by the Niagara Mohawk Power easement and the Pfohl Trucking property, to the north by land adjacent to the New York State (NYS) Thruway (Route 90), and to the south by Pfohl Road.

The landfill was divided into three areas designated as Areas A, B, and C (see Figure 1.2). After completion of a Remedial Investigation/Feasibility Study (RI/FS), a ROD was issued in 1992 for Areas B and C recommending construction of a 6NYCRR Part 360 cap, and collection and treatment of the Site's overburden groundwater. In 1994 a ROD was

issued in which the NYSDEC concluded that no action was required to remediate Area A. The NYSDEC Registry of Inactive Hazardous Waste Disposal Sites was revised to remove Area A from consideration as part of the Site.

Work performed for the IRM Completion was conducted in Area B, situated between Transit Road and Aero Drive, and Area C, situated south of Aero Drive and west of Transit Road.

## 1.2 SITE HISTORY

The Site was operated by the Pfohl family from 1932 to 1969. The quantity of waste material and the precise nature of all of the wastes disposed at the Site are unknown. A salvager also reportedly operated at the Site and after dumping out the contents, removed drums from the Site for reclaiming, making it impossible to estimate the total number of drums disposed at the Site. Information is available, however, from a variety of sources including former employees of the Site, employees of transporters who utilized the Site, and incomplete records of the Site owners which indicated that the following types of waste were accepted for disposal: municipal waste, general industrial waste including plant trash, waste solvents, paints, thinners, pine tar pitch, rubber, and scrap metal. There is also evidence to suggest that the landfill accepted sludges, capacitors with polychlorinated biphenyls (PCBs), and phenol tars for disposal.

The Erie County Department of Environment and Planning collected samples from a number of private wells in May 1980 and resampled those locations later that year. The analytical results for the initial samples detected low level concentrations of PCBs. However, PCBs were not detected in the later samples. Some inorganics (e.g. barium, cadmium, iron and magnesium) were detected above groundwater standards in several wells.

The Site first came under investigation by the United States Environmental Protection Agency (USEPA) in June 1982 when a

hazardous ranking of the Site was performed. This investigation revealed the presence of benzene, chlorinated benzenes, and nitrogen compounds in water samples from a spring flowing into a drainage ditch along the south side of Aero Lake. The Site was not recommended for listing on the National Priorities List (NPL) at that time.

A Phase I Remedial Investigation Report for the Site was prepared by RECRA Research, Inc. in 1983. In that report, the Site is said to have accepted sludges, solids, and liquids. Paints and thinners, phenol tar with chlorinated benzenes, and capacitors with PCBs were also included.

In February 1984, the property owner commissioned Ecology and Environment, Inc. to perform an additional investigation of the Site. The investigation revealed elevated levels of barium in a leachate seep sample. Polycyclic aromatic hydrocarbons (PAHs), phenols, and elevated concentrations of nickel were detected in the soils. The shallow groundwater revealed elevated concentrations of barium, lead, chromium, and cadmium. As a result of this work, the Site was listed on the NYSDEC Registry as a Class 2 Inactive Hazardous Waste Site in 1985.

In November 1986, the NYSDOH analyzed samples of leachate, soil, and waste from surface drums containing a tar-like material. The drums revealed elevated levels of PAHs. Soil samples collected south of Aero Lake revealed PCBs, as well as elevated concentrations of arsenic, barium, cadmium, chromium, lead, and mercury.

A RI/FS was initiated in 1988 by the NYSDEC under the State Superfund Program. The RI spanned the years 1988 through 1990 and consisted primarily of six major field activities. These included:

- i) Geophysical Survey;
- ii) Surface Water, Leachate Seep, and Sediment Sampling;
- iii) Gamma Radiation Survey - Phase I and II;
- iv) Test Pit Investigation;
- v) Soil Boring Investigation; and
- vi) Groundwater Investigation.

Additionally, from April 1989 through June 1991, the NYSDEC and the NYSDOH collected supplemental data on groundwater radioactivity, residential basement sump groundwater, residential radon levels, blood lead levels, residential water wells, surface water, residential surface soil, on-Site surface soil, and sediment quality.

In 1993 a new Hazard Ranking Score was prepared for the Site and it was recommended for inclusion on the NPL.

An off-Site RI, which consisted of the installation of additional boreholes and wells, the collection of soil and groundwater samples, and hydraulic monitoring, was performed by the NYSDEC in 1992 and 1993. Based on the findings of the off-Site RI, the NYSDEC recommended that no action is necessary for the off-Site groundwater, and Area A was subsequently deleted from the description of the Site.

### 1.3 DESCRIPTION OF THE INTERIM REMEDIAL MEASURE

The 1992 ROD states that the "IRMs are intended to remediate the hot spots which have been discovered at the Site". In accordance with the 1992 ROD, the NYSDEC began implementation of the IRM in the summer of 1992. Subsequently, the NYSDEC and eight of the PRPs executed an Order of Consent for completion of the IRM.

The objectives of the IRM Completion were to:

- i) investigate the suspected drum areas; and
- ii) remove, appropriately store and dispose of surface and sub-surface drums, drum contents, spilled contents from those drums, if any, (hereinafter "spilled drums contents"), materials immediately contiguous to the drums if they have been visibly impacted by the spilled drum contents (hereinafter "visibly impacted soils"), and surface radioactive materials in Areas B and C.

In addition, visibly impacted soils from any other areas identified during investigative activities were to be excavated and disposed off-Site. Within the 100-year floodplain, surface drums, drum contents, spilled drum contents, visibly impacted soils, and surface radioactive materials were also to be removed and disposed off-Site.

Drum contents, spilled drum contents, visibly impacted soils, and tar-like materials are hereinafter collectively referred to as "Waste". Waste materials with radioactive readings at levels exceeding three times the maximum background levels are hereinafter referred to as "Radioactive Materials". Based on available Site data, three times the background level is approximately 28 microroentgens.

The IRM Completion for the Site was performed in accordance with the documents entitled:

- i) Work Plan  
Interim Remedial Measures Completion  
Volume I - Text  
January 1994;
- ii) Work Plan  
Interim Remedial Measures Completion  
Volume II - Appendices  
August 1993; and
- iii) Site-Specific Emergency Response and  
Contingency Plan for Release of  
Hazardous Materials  
Interim Remedial Measures Completion  
July 1993.

Modifications to the above documents were made occasionally in the field to facilitate completion of the IRM. The modifications are presented in the appropriate sections of this document. Each modification was approved by the NYSDEC prior to implementation.

The work performed for the IRM Completion included:

- i) implementation of the Real Estate Plan;
- ii) mobilization and Site preparation, including:
  - a) Construction of the support zone,
  - b) Installation of the drum shredder,
  - c) Installation of the truck scale,
  - d) Construction of the access roads,
  - e) Installation of the meteorological station,
  - f) Installation of the storm water management controls, and
  - g) establishment of grid coordinate system (same system used by NYSDEC) to facilitate on-Site location identification. Each 50 foot square grid section is represented by a letter designation and a number designation representative of a north-south and east-west direction, respectively;
- iii) consolidation and solidification, where required, of drums and visibly impacted soils staged by the NYSDEC for off-Site disposal;
- iv) dozer cuts and test trenching in Areas B and C as per the PRPs on-Site representative's (Engineer's) direction in concurrence with NYSDEC;
- v) excavation, removal, staging, and off-Site disposal of visibly impacted soil from a small area in the southwest corner of drum cluster 22 (DC-22) shown on Plan 1;
- vi) investigation and excavation of tars in Area C and subsequent off-Site disposal;
- vii) excavation, consolidation, and solidification, where required, of remaining drums and visibly impacted soil in Areas B and C for off-Site disposal;
- viii) retrieval, sampling, staging, and characterization of drums found within the 100-year flood plain;
- ix) sampling and analysis of drums and visibly impacted soil;

- x) transportation and disposal of Waste and Radioactive Materials to approved off-Site disposal facilities; and
- xi) Performance of air monitoring during all hazardous Site activities.

This document describes how each of the above activities were completed during the IRM Completion.

Construction of decontamination pads and temporary waste storage pads was not required because the existing pads constructed by the NYSDEC were sufficient. Removal and disposal of drums from the bottom of Aero Creek and excavation of the white granular radioactive materials on the ground surface within the 100-year floodplain were completed by the NYSDEC prior to initiation of the IRM Completion. Areas in which the above activities were performed by the NYSDEC are shown on Plan 1.

#### 1.4 CHRONOLOGY OF EVENTS

The Order on Consent for the IRM Completion has an effective date of October 4, 1993. IT Corporation was selected on December 7, 1993 as the contractor to perform the IRM Completion activities. Mobilization to the Site commenced on December 15, 1993. An on-Site preconstruction meeting and an emergency response and contingency plan meeting were held on December 17 and 27, 1993, respectively. Investigative activities (dozer cuts and trenching) commenced on January 10, 1994. Consolidation of drums and visibly impacted soils staged by the NYSDEC commenced on January 24, 1994, while excavation, staging, and off-Site disposal of Waste from Areas B and C commenced on January 25, 1994.

The Final IRM Completion Inspection was held on March 24, 1994.

An Interim Site Inspection was held on April 6, 1994 which confirmed that all of the outstanding items identified during the Final IRM Completion Inspection, except regrading of the area south of the Quonset Hut and off-Site disposal of the drums with Radioactive Materials, were completed. Regrading of the area south of the Quonset Hut was subsequently determined not to be required, with NYSDEC concurrence, due to existing Site conditions. Removal of the drums with Radioactive Materials was completed on August 11, 1995. The NYSDEC performed the Final Site Inspection on August 11, 1995, and no outstanding items were identified.

A chronology of the IRM Completion activities is presented on Table 1.1.



## 2.0 PRE-WASTE REMOVAL ACTIVITIES

### 2.1 PRELIMINARY ACTIVITIES

Prior to the commencement of activities to be performed as part of the IRM Completion, negotiations were initiated to obtain access agreements with identified property owners on and adjacent to the Site. A plan and listing of reported property owners on and adjacent to the Site is presented on Plan 2 and in Table 2.1, respectively. All necessary access agreements were obtained by February 14, 1994.

Prior to initiation of ground intrusive activities, an on-Site underground utilities search was conducted. No underground utilities were reported to be present at the Site. Additionally, no ground intrusive activities were conducted prior to performance of the background air monitoring as outlined in the IRM Completion Health and Safety Plan (IRM HSP). Details of the air monitoring conducted are presented in Section 11.

A Nuisance Animal Control Agent was contracted to assist any residents living adjacent to the Site in the event any animals were driven from the Site during IRM Completion activities. Distribution of the name and phone number of the Nuisance Animal Control Agent was completed in February 1994.

### 2.2 MOBILIZATION AND SITE PREPARATION

Initial Site mobilization activities were begun on Wednesday, December 15, 1993. The existing support areas and access roads in both Areas B and C were utilized throughout the course of the IRM Completion activities. Site facilities and support areas are presented on Plan 3.

Weeds and brush were removed from the areas adjacent to the two Aero Drive gates. Clearing of this growth was conducted to

improve visibility for traffic entering or exiting the Site. Additionally, a total of four road signs were placed on Aero Drive to alert oncoming traffic of construction traffic at the Site.

Personnel support and hygiene facilities consisting of a personnel decontamination trailer, shower trailer, first aid/break trailer, security trailer, analytical trailer and two office trailers were mobilized to the Site and placed at the locations shown on Plan 3. Each trailer mobilized to the Site was staged, blocked and secured.

Temporary fencing consisting of a snow fence and/or caution tape supported by posts was placed in both Areas B and C to separate Exclusion Zones (EZ) from the Contaminant Reduction Zone (CRZ) and Support Zones (SZ).

On-Site utilities consisted of electricity, telephone/fax service, potable water supply and portable sanitary facilities. Potable water was obtained from Conley Trucking Company of Elma, New York and was transported to the Site by truck. Potable water was stored in two heated poly-storage tanks (2,200 gallons and 2,500 gallons capacity). All piping and tanks were protected from freezing.

A calibrated truck scale with a ticket printer and digital weight indicator was placed in Area B. The scale met the applicable requirements of the National Bureau of Standards Handbook 44 for commercial weighing as required by the IRM Completion Work Plan.

A 1,500 gallon diesel storage tank was placed adjacent to the truck scale in Area B to provide diesel for the drum shredder generator. The tank was placed within a berm constructed of gravel and lined with a continuous sheet of 10 mil HDPE liner.

A portable meteorological station was set up near the security trailer in Area B. The station was positioned 30 feet above ground, on top of an on-Site telephone pole, in conformance with USEPA Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD)

standards for horizontal wind speed and direction as specified on PSD regulations promulgated by USEPA under the Clean Air Act Amendments of 1977. The station monitored and recorded wind speed, wind direction, ambient air temperature, atmospheric pressure, atmospheric humidity, incoming radiation and atmospheric precipitation.

## 2.3 PRE-WASTE REMOVAL MEETINGS

### 2.3.1 Pre-Construction Meeting

A pre-construction meeting was held on December 17, 1993 with representatives from CRA, Occidental Chemical Corporation (OxyChem), URS Consultants, Inc. (URS), IT Corporation (IT) and the NYSDEC. An attendee list is presented in Table 2.2. The primary items discussed at the meeting included:

- i) authority;
- ii) construction schedule;
- iii) temporary facilities;
- iv) traffic control;
- v) subcontractors;
- vi) coordination with other contractors;
- vii) inspection of works at the Site;
- viii) field clarifications;
- ix) project modifications/change orders;
- x) job safety;
- xi) Site security;
- xii) housekeeping;
- xiii) utilities;
- xiv) as-built drawings/record information documents;
- xv) existing Site conditions;
- xvi) emergency phone numbers; and
- xvii) extra drawings.

### 2.3.2 Emergency Response and Contingency Plan Meeting

A meeting was held on December 27, 1993 with local emergency response coordinators to present IT's Emergency Response and Contingency Plan (ERCP). An attendee list is presented in Table 2.3. The following items were also discussed at the meeting:

- i) Site security;
- ii) emergency numbers;
- iii) status and reporting of radioactive drums;
- iv) press releases;
- v) evacuation procedures;
- vi) truck routes; and
- vii) additional meetings.

## 2.4 EQUIPMENT DECONTAMINATION FACILITIES

Separate concrete decontamination pads were constructed by the NYSDEC in Areas B and C for work performed at the Site prior to the commencement of IRM Completion activities. Each decontamination pad was equipped with a drain system and holding tank. Existing splash walls were repaired as required and used to contain overspray at the Area C decontamination pad. Splash walls consisting of corrugated fiberglass sheets attached to 4" x 4" lumber were installed in the Area B decontamination pad during mobilization for the IRM Completion. Decontamination of equipment and vehicles used on-Site was performed using a 3,000 psi steam cleaner and a high pressure steam jenny as described in Section 7. Wastewater was pumped from the decontamination pad catchbasin to the adjacent 1,500 gallon sump using a portable pump. The water was then pumped to one of two 1,550 gallon poly-storage tanks where settling was allowed to occur for two days. The water was then pumped to the treatment system described in Section 2.7.

## 2.5 DRUM/SOIL STAGING AREAS

Separate staging areas were used in Areas B and C for the IRM Completion activities. Each area had individual staging locations for both drums and visually impacted soils. The staging area in Area B consisted of the existing concrete drum pad for drum storage and the existing concrete storage pad for visibly impacted soils in Area B. The two temporary plywood drum storage pads in Area B were not used once they had been cleared of existing drums. A wooden bulkhead and a gravel ramp were constructed at the eastern end of the soil staging area during IRM Completion mobilization to allow truck access to dump impacted soils into the soil staging area without the potential of the dumped soils to contact the truck undercarriage.

The drum shredder was placed northwest of the concrete drum pad in Area B as shown on Plan 3. The drum shredder was powered by a diesel-powered generator. The generator for the shredder was housed in a trailer which was located adjacent to the west side of the shredder. This location was chosen to minimize the distance from the shredder to both the drum storage pads and the visibly impacted soil staging area.

Area C contained two concrete drum storage pads and one temporary plywood storage pad. The northern concrete pad was used for rolloff storage during the IRM Completion. The other two pads were not used during the IRM Completion once they had been cleared of existing drums. The storage pad locations are shown on Plan 3. There were two impacted soil staging piles, adjacent to each other, located in the eastern portion of Area C as shown on Plan 3. These soil piles were located in an area of the Site with extensive existing concrete rubble which was found to be present throughout this portion of the Site. Poly-sheeting had been placed by the NYSDEC beneath and on top of these soil piles. All soils placed in these piles were removed during the IRM Completion.

## 2.6 ACCESS ROADS/ROLLOFF STAGING AREAS

Existing access roads and staging areas were utilized in both Areas B and C during the IRM Completion to the maximum extent possible. Prior to utilization, the facilities were improved (e.g. additional crushed stone placement) as required. In addition to the existing access roads, several access roads and rolloff staging areas were constructed during the performance of the IRM Completion as shown on Plan 3. Each of the access roads and rolloff staging areas constructed during the IRM Completion were constructed by placing a layer of geotextile fabric on cleared ground. A 6-inch base of 1 3/4-inch stone followed by a 6-inch layer of 3/4-inch stone was placed over the geotextile fabric and was compacted using a vibratory roller.

Access roads leading from the support zone to the drum consolidation area in Area B were constructed and/or improved. In addition, an east-west access road was constructed leading from the decontamination pad in Area B to the suspect drum Area AN. Prior to constructing the access road through Area 46, AL and suspect drum Area AN, an investigative dozer cut (see Plan 3) was installed to determine if drums and/or visibly impacted soils were present. No drums or visibly impacted soils were observed.

Two rolloff staging areas were constructed in Area B. The purpose of the rolloff staging areas was to temporarily stage rolloffs in order to perform activities such as consolidation, sampling, analysis, mixing and stabilization. The first was constructed in the area north of the existing temporary and concrete drum storage pads and covered roughly 15,000 square feet. A second rolloff staging area straddling the east-west access road was constructed along the central-western perimeter of suspect drum Area 46, AL (see Plan 3). This area was approximately 15,000 square feet in size.

The existing northern concrete pad south of the decontamination pad in Area C was expanded to serve as a rolloff staging area during the IRM Completion. The expanded area encompassed approximately 3,750 square feet. An east-west access road was constructed leading from this staging area to just north of the two soil piles located in the eastern portion of Area C. Prior to constructing the east-west access road, an investigative

trench (see Plan 3) was installed to determine if drums and or visibly impacted soil were present. No drums or visibly impacted soils were observed.

A turnaround road, which connected with the east-west access road, was constructed south of the tar pit excavation in Area C. The location of access roads and rolloff staging areas are shown on Plan 3.

## 2.7 WASTEWATER TREATMENT SYSTEM

A wastewater treatment system was constructed in Area B to treat all collected wastewaters at the Site. The wastewater treatment system consisted of:

- i) two 1,550 gallon poly-storage tanks, utilized for settling of solids;
- ii) pump;
- iii) sock filter;
- iv) rapid sand filter;
- v) two 55-gallon activated carbon canisters; and
- vi) two 12,000 gallon storage frac tanks for post-treatment storage, prior to disposal.

Wastewater was held in the settling tanks for a minimum of 48 hours.

### 3.0 INVESTIGATIVE ACTIVITIES

Investigative activities conducted during the IRM Completion included the following:

- i) excavation of approximately 102,800 vertical square feet of trenching ranging in depth from 2 to 8 feet below ground surface (bgs); and
- ii) excavation of approximately 327,000 horizontal square feet of dozer cuts, which includes the constructed access roads, with a minimum depth of one foot.

During the above investigative activities, the type of waste materials observed at the Site were primarily municipal refuse type materials. These materials included glass, plastic, wood, brick, construction and demolition debris and industrial waste. There was essentially no observed evidence of putrescible material within the refuse at the Site. This is typical of municipal landfills of this age (the Site operated from 1932 to 1971). In addition, there was also very little visual evidence observed of chemical waste at the Site other than the tars and drums which were subsequently removed and disposed off-Site as part of the IRM Completion.

### 3.1 GENERAL

Prior to the excavation of any drums, tars or soils, investigative backblading "dozer cuts" and/or trenching, collectively referred to herein as investigative cuts, were performed to determine the horizontal and vertical extent of drums and/or visibly impacted soils. Dozer cuts were performed using a bulldozer. The dozer cuts were approximately 16 feet wide and a minimum of one foot deep. In areas of narrow berms and ridges, the dozer cut often went to depths on the order of four feet.

Trenching was performed using a trackhoe or backhoe. Two to four foot wide trenches were excavated to various depths ranging from 2 feet to 8 feet. Each investigative cut/trench was measured in the field



using a tape measure or a wheel measuring device. The boundaries of the areas requiring additional investigation were surveyed and marked in the field. The locations of the investigative cuts/trenches in these areas were selected in the field by the Engineer with NYSDEC concurrence. Most cuts/trenches were surveyed prior to installation. Several investigative cuts/trenches were made within the presurveyed boundaries of suspect drum areas. Any encountered drums and/or visibly impacted soils were handled using the procedures described in Section 4.0. Investigated areas included those described in the Work Plan and shown on Plan 1, areas determined to need further investigation by NYSDEC prior to startup of the IRM Completion, and additional areas investigated during the IRM Completion at the request of NYSDEC. All investigated areas are shown on Plan 3.

A clearly identifiable orange safety fence was installed around the perimeter of the excavations which remained open overnight. Berms were constructed in areas where there was a potential threat of groundwater overflow (i.e. to keep groundwater within the excavation) and to prevent surface water from entering the excavation, as described in Section 6.0. All investigative cuts and trenches were made with the prior concurrence from the NYSDEC's on-Site Representative.

Air monitoring was performed during all investigative activities in accordance with the approved HSP as described in Section 11.0.

### 3.2 INVESTIGATIVE ACTIVITIES - AREA B

Investigative activities began in Area B on January 10, 1994 and were completed on March 10, 1994.

#### 3.2.1 Area 46, AL

Investigative activities, consisting of 250± linear feet investigative dozer cuts, were performed in Area 46, AL prior to road construction through the central portion of Area B. No drums or visibly

impacted soils were observed. On January 12, 1994, an additional four investigative dozer cuts (675± linear feet) were performed in Area 46, AL. On January 24, 1994, four investigative trenches were made (4± feet deep by 8± feet long) to investigate areas adjacent to the initial investigative cuts in 46, AL. One drum was observed which required additional investigative trenching to determine the areal limits of drums and visibly impacted soils. In total, five drums were observed. The drums and visibly impacted soils were removed using the procedures described in Section 4.0. All open trenches in Area 46, AL were backfilled with NYSDEC concurrence by January 28, 1994.

### 3.2.2 Area AN

On January 12, 1994, seven investigative dozer cuts (250± linear feet) were made in this area. No drums or visibly impacted soils were observed. All investigative cuts were backfilled with NYSDEC concurrence by January 28, 1994.

### 3.2.3 Area 14, AU

On January 18, 1994, two investigative dozer cuts were made in this area (250± linear feet). One drum was observed which required additional investigation. On January 24, 1994, an additional investigative dozer cut (50± linear feet) was made upon NYSDEC request. No drums or visibly impacted soils were observed. All investigative cuts were backfilled with NYSDEC concurrence on January 28, 1994.

### 3.2.4 Area 13, AI

On January 18, 1994, five investigative dozer cuts (1,000± linear feet) were made within the surveyed boundaries of Area 13, AI. The four corner points of Area 13, AI were surveyed prior to investigative activities in this area. Investigative dozer cuts were surveyed in the field

following completion of the investigative activities. No drums or visibly impacted soils were observed. All investigative cuts were backfilled with NYSDEC concurrence on January 18, 1994.

On March 7, 1994, at the request of the NYSDEC, two additional investigative trenches (2,200± square feet, 4 to 5 feet deep) were excavated in Area 13, AI. Drums were observed in these trenches. The additional trenches were backfilled with NYSDEC concurrence on March 28, 1994 following removal of eight drums and visibly impacted soils using the procedures described in Section 4.0. The NYSDEC also collected several analytical samples of the groundwater in the trenches on March 23, 1994.

### 3.2.5 Area 20, AX

On January 24 and 25, 1994, four presurveyed investigative dozer cuts (900± linear feet) were made in Area 20, AX. One drum was observed in these cuts and removed using the procedures described in Section 4.0. All investigative cuts were backfilled with NYSDEC concurrence on January 30, 1994.

### 3.2.6 Drum Deposition Area

The drum deposition area is an area along the western edge of Area B where drum deposition activities occurred. Prior to investigative activities in the Drum Deposition Area, the eastern boundary of the Area was surveyed as were the boundaries of areas previously investigated/remediated during the NYSDEC's IRM program. All investigative cuts made in the Drum Deposition Area were staked in the field by the Engineer prior to commencement of investigative activities. Due to the areal extent of the Drum Deposition Area, it was subdivided into four areas, Areas I, II, III and IV, for IRM Completion activity tracking as shown on Plan 3.

### 3.2.6.1 Drum Deposition Area I

On January 26, 1994, two investigative dozer cuts were made in Area I (450± linear feet). Eight drums were initially encountered in these cuts. On February 2 and 3, 1994, investigative trenching (1,850± square feet, three to four feet deep) was performed and a total of 21 drums were recovered. Drums and visibly impacted soils were removed using the procedures described in Section 4.0. Backfilling of all investigative dozer cuts and trenching in Area I was completed with NYSDEC concurrence on February 8, 1994.

### 3.2.6.2 Drum Deposition Area II

On January 27, 1994, three investigative dozer cuts (750± linear feet) were made in Area II. One isolated drum was found near the southern end of the eastern dozer cut and one isolated drum was found near the northern end of the western dozer cut. These drums and visibly impacted soils were removed using the procedures described in Section 4.0.

On February 2, 1994, two investigative trenches (350± square feet, 2 to 4 feet deep) were installed to delineate the extent of drums in the areas where the isolated drums were observed (northern portion of the western cut and southern portion of the eastern cut. There were no additional drums or visibly impacted soils observed in these investigative trenches. The investigative dozer cuts and trenches were backfilled with NYSDEC concurrence on February 8, 1994.

### 3.2.6.3 Drum Deposition Area III

On January 28, 1994, two investigative dozer cuts (450± linear feet) were made in Area III of the Drum Deposition Area. Two drums were observed near the northern end of the eastern investigative dozer cut.

On February 2, 1994, investigative trenching (340± square feet, 3 to 4 feet deep) was performed in the area where drums had been observed. A total of 21 drums were removed from this area using the procedures described in Section 4.0. The investigative cuts and trenches were backfilled with NYSDEC concurrence on February 8, 1994.

At the request of the NYSDEC on February 15, 1994, an additional east-west investigative trench was excavated running from the western edge of the western dozer cut to the eastern edge of the previously investigated and remediated area (520± square feet, 2 to 6.5 feet deep). Drums and visibly impacted soils were observed. Additional trenching (1,300± square feet, 6.5± feet deep) was performed to delineate the areal extent of drums and visibly impacted soils. The drums and visibly impacted soils were removed using the procedures described in Section 4.0. No further investigation was required in this area and the investigative cuts were backfilled on February 18, 1994 with NYSDEC concurrence.

#### 3.2.6.4 Drum Deposition Area IV

Investigative activities commenced in Area IV of the Drum Deposition Area on January 31, 1994. Four investigative dozer cuts (950± linear feet) were made in this area. Two drum "clusters" were observed in the area and removed using the procedures described in Section 4.0. The investigative dozer cuts were backfilled to within 15 feet of the observed drum "clusters" on February 1, 1994 with NYSDEC concurrence.

On February 1, 1994, investigative trenching (2,020± square feet, 4± feet deep) was performed to delineate the areal extent of the two drum "clusters" in Area IV. A total of 386 drums were removed from these excavations using the procedures described in Section 4.0. These investigative trenches were backfilled on February 8, 1994 with NYSDEC concurrence.

At the request of the NYSDEC, on February 15, 1994, five investigative east-west trenches (4,540± square feet, 2 to 6 feet deep) were excavated in Area IV. Drums and visibly impacted soils were observed in all but one of these trenches. Additionally, visibly impacted soils/tars were observed in the southwestern portion of the investigated area. Additional investigative trenching was performed in this area in order to delineate and remove observed drums and visibly impacted soils/tars. Approximately 4,565 square feet of additional investigative trenching was performed in this area. A total of 197 drums and approximately 60 cubic yards of visibly impacted soils were removed from this area using the procedures described in Section 4.0. These investigative trenches were backfilled on February 18, 1994 with NYSDEC concurrence.

### 3.2.7 Additional Cuts in Area B

Between March 5, 1994 and March 8, 1994, seven additional investigative trenches were excavated in various locations throughout Area B (7,910± square feet, 4 to 5 feet deep). No drums or visibly impacted soils were observed in four of these trenches. These four trenches were backfilled with NYSDEC's concurrence on March 10, 1994. Drums were found in the three remaining trenches. Additional trenching (8,750± square feet, 4 feet deep) was performed to delineate the areal extent of drum presence. Excavation of the drums in these trenches was performed using the procedures described in Section 4.0. Backfill activities took place with NYSDEC's concurrence on March 11, 1994.

## 3.3 INVESTIGATIVE ACTIVITIES - AREA C

### 3.3.1 Areas DC16 and DC17

On February 5, 1994, investigative dozer cuts were made in Areas DC16 and DC17 (350± linear feet). No drums or visibly impacted soils were observed in either of these investigative dozer cuts. These

investigative dozer cuts were backfilled with NYSDEC concurrence on February 5, 1994.

### 3.3.2 Access Road

On February 7, 1994, a one± foot deep trackhoe trench approximately 1350 feet long was excavated the length of the east-west access roadbed prior to road construction in this area. No drums or visibly impacted soils were observed in this trench. The road was constructed in this area with NYSDEC concurrence on February 7-8, 1994.

### 3.3.3 Area 30,Q

On February 4, 1994, one investigative dozer cut west of Area 30,Q and three investigative dozer cuts were made in the western portion of Area 30,Q (2,650± linear feet). These dozer cuts were surveyed and staked prior to conducting the investigative cuts. One isolated drum was observed in the third dozer cut. These dozer cuts were backfilled by February 17, 1994, with the exception of a 25 foot area where the isolated drum was located. The isolated drum was removed using the procedures described in Section 4.0.

On February 8, 1994, excavation of five investigative trenches in the eastern portion of Area 30,Q commenced. These trenches were 2 to 4 feet deep and extended approximately 10 feet north and 10 feet south of the east-west access road. No drums or visibly impacted soils were observed in these investigative trenches. These investigative trenches remained open until one-foot deep investigative dozer cuts, running north-south, were completed the full length of Area 30, Q. The investigative dozer cuts were completed on February 15, 1994. Drums were observed in portions of each cut in areas south of the access road and were removed using the procedures described in Section 4.0.

At the request of NYSDEC on February 22, 1994, five of the trenches were extended northward with 2 to 3 foot deep trenches. Drums were encountered in each of these investigative trench "extensions". Additional trenching (10,300± square feet) was performed in the areas where drums were observed to delineate the extent of the observed drums and visibly impacted soils. These investigative activities were continued until the drums and/or visibly impacted soils were removed from these areas. In addition to the northward extension of these investigative trenches, an east-west 2 to 3 foot deep investigative trench was excavated from the northeast corner of the easternmost investigative trench eastward to the northern portion of Area 40,T. No drums or visibly impacted soils were observed in this investigative trench.

At the request of NYSDEC on February 28, 1994, additional 4 to 5 foot deep investigative trenches were made south of the access road in six of the dozer cuts (12,180± square feet). Additional drums were found in all but one of these investigative trenches, which warranted further investigative trenching to define the extent of drum presence. Beginning on March 1, 1994, excavation of two east-west investigative trenches commenced. These trenches identified additional drums. Investigative trenching was continued in these areas (17,900± square feet, 3 to 4 feet deep) until the extent of the drums were fully delineated and the drums and visually impacted soils were removed. Investigative trenches in this area were completed on March 6, 1994.

On February 28, 1994, two 4± foot deep investigative trenches were excavated in DC-18 and DC-20. No drums were observed in the trenches of DC-18. Drums and visibly impacted soils were observed in and removed from DC-20. Approximately 6,900 square feet of investigative trenching was performed in these areas.

All of the investigative cuts/trenches in Area 30,Q were backfilled with NYSDEC concurrence by March 7, 1994.



#### 3.3.4 Area 40,T

On February 8, 1994, two feet deep, 10 foot long investigative trenches were excavated north and south of the access road. No drums or visibly impacted soils were observed in these areas. The trenches remained open until all investigative activities in Area 40,T had been completed.

On February 10, 1994, three investigative trenches were excavated north of the access road (1,050± square feet). On the same date, three 2 to 3 foot deep investigative trenches were made south of the access road (1,100± square feet). Drums were observed in each of the investigative trenches north of the access road and in two of the trenches located south of the access road. The drums and visually impacted soils were delineated and removed using the procedures described in Section 4.0.

Clay was observed in the bottom of the full length of the easternmost trench north of the access road. At the request of the NYSDEC on February 23, 1994, an approximately 320 foot long, 2 to 3 foot deep investigative trench was excavated north of the access road in order to determine what was located underneath the observed clay in this area. No drums or visibly impacted soils were observed in this trench. A silty layer was observed below the clay.

All investigative cuts in Area 40,T were backfilled with NYSDEC concurrence by March 4, 1994.

#### 3.3.5 Area 44, F

Between February 11-14, 1994, four presurveyed investigative dozer cuts (2,200± linear feet) starting from Area 44,F were made in the southeast portion of Area C. Isolated drums were located in all but one of these investigative dozer cuts. Investigative trenches were made at the northern end of one of the north-south cuts on February 14, 1994 at the request of NYSDEC. These dozer cuts and trenches were backfilled with

NYSDEC concurrence on February 24, 1994. As requested by NYSDEC, two investigative trenches 4 to 5 feet deep were excavated on March 1, 1994 at DC-21 (770± square feet). No drums or visibly impacted soils were observed in these trenches. These trenches were backfilled with NYSDEC concurrence on March 2, 1994.

On March 2, 1994, at the request of NYSDEC, an additional 2,100± square foot, four to five foot deep investigative trench was excavated along the southern portion of the north-south dozer cut not previously investigated using a trench. No additional drums or visibly impacted soils were observed in this trench. This trench was backfilled with NYSDEC approval on March 4, 1994.

### 3.3.6 "Eastern" Area C (Includes DC-22 and DC-23)

Between February 8 and 10, 1994, investigative trenches were excavated in the far eastern section of Area C. Investigation activities included four investigative dozer cuts (1,100± linear feet, one to two feet deep) and two investigative trenches (900± square feet, four± feet deep). Some drums were found in all of these trenches. On February 22, 1994, additional investigative trenches were performed in areas of drum clusters in all of the excavated trenches (700± square feet). All visibly impacted soils and drums were removed using the procedures described in Section 4.0.

On February 10, 1994, investigative dozer cuts were made in the southwest corner of DC-22 and DC-23 (250± linear feet, 1 to 2 feet deep). No drums were found. At the request of NYSDEC on February 22, 1994, additional investigative trenches were made in DC-23 (400± square feet, 4± feet deep). Three drums were found and removed along with visibly impacted soils using the procedures described in Section 4.0.

All investigative cuts in "Eastern" Area C were backfilled with NYSDEC's concurrence on March 3, 1994.

### 3.3.7 DC-27 Area Cuts

At the request of NYSDEC on March 24, 1994, three additional investigative trenches were made north and southwest of DC-27. Two investigative trenches (1,870± square feet, 4 to 5 feet deep) north of DC-27, contained 11 drums which were removed with visibly impacted soils using the procedures described in Section 4.0. The third trench (530± square feet, 4 to 5 feet deep), southwest of DC-27, contained no drums or visibly impacted soil. A section of the trench approximately 100 feet long, could not be excavated due to the presence of a 2 to 3-foot thick layer of concrete at ground surface. All three of these trenches were backfilled with NYSDEC concurrence on March 25, 1994.

### 3.4 DRUMS FOUND DURING PREDESIGN ACTIVITIES

A total of six drums were recovered during test trenching conducted as part of the Pre-design activities at the Site. Three drums were recovered from test pit TP-4 and one drum was recovered from each of test pits TP-11, TP-18 and TP-32. Recovered drums were staged on poly sheeting prior to being removed during the IRM Completion surface drum search. Each of these drums were handled as part of the IRM Completion using the procedures described in Section 4.0.

#### 4.0 WASTE EXCAVATION

##### 4.1 DRUM AND VISIBLY IMPACTED SOIL REMOVAL

Drums and visibly impacted soils to be excavated were initially located during the investigative activities described in Section 3.0. Prior to excavation of any drums or visibly impacted soils, test trenching was performed to determine the areal extent of drum presence. Test trenching was performed and continued 6 to 8 feet beyond the point where drums were last observed. Drum and visibly impacted soil removal continued until no visible evidence of the presence of additional drums or visibly impacted soils was observed.

Visibly impacted soils were transferred directly into an appropriate rolloff container and/or staged for use during Waste consolidation. Any visibly impacted soil left near the excavation overnight was covered with 10-mil polyethylene sheeting. A temporary safety fence consisting of orange snow fence was setup around the perimeter of trenches/excavations which were left open overnight as specified in the Work Plan.

Drums were removed and directly placed into overpacks by use of a grappler. Direct handling of drums by personnel occurred only when conditions required. All overpacked drums were temporarily staged in a 6 x 6 foot steel containment pan. The drums were screened with an explosimeter, organic vapor photoionization meter and a radiation survey meter before being characterized for consolidation and disposal.

##### 4.2 RCRA EMPTY DRUMS/OVERPACKS

Drums and overpacks containing one inch or less of solidified residue were treated as RCRA empty. RCRA empty drums encountered during excavation activities and drum parts found during excavation activities, were returned to the excavation in which they were found.

RCRA empty drums, drum parts and overpacks obtained from waste consolidation remaining after IRM Completion investigation activities were completed, were crushed and buried in the two investigative trenches located in Area 13, A1 in Area B as shown on Plan 3. Upon IRM Completion, two to three feet of clean soil cover was placed over the two trenches located in Area 13,A1 during backfill operations. This procedure was approved by the NYSDEC On-Site Field Representative on March 19, 1994.

#### 4.3 DRUMS WITH RADIOACTIVE MATERIALS

Radiation screening was performed on all removed drums including those previously staged by the NYSDEC. Any screened material that had radiation readings at levels exceeding three times the maximum background reading (>28,000 cpm), was considered radioactive. No drums or visibly impacted soils containing Radioactive Materials were recovered during the IRM Completion. A total of 22 drums with Radioactive Materials were present at the Site from the NYSDEC's IRM (See Table 4.1). These drums were temporarily stored on-Site in a fenced area located in Area B previously constructed by CDM (see Plan 3) and secured with a padlock. Appropriate warning signs were placed around the perimeter of the fenced area. Handling and disposal of these drums is presented in Section 5.6.

#### 4.4 TAR PIT/SOIL REMOVAL

The tar pit removal operation was performed in two phases. The first phase concentrated on the removal of tar/soil south and west of the quonset hut chain-link fence. The second phase dealt with removal of the tar seam located west of the quonset hut, inside the chain-link fence. In both phases, investigative cuts were made to determine the areal and vertical extent of the tar and visibly impacted soil.

Phase I excavation of tars and visibly impacted soil began on March 14, 1994 at the western portion of the tar pit and continued to a

point two feet beyond the visible tar seam. All tars and visibly impacted soils were excavated and loaded directly into licensed hazardous waste rolloffs and transported to the soil staging area for waste consolidation. Waste consolidation involved mixing tars and visibly impacted soils with shredded drums and their contents. A total of 26 drums were removed from the tar pit and staged for waste consolidation.

To gain access for the Phase II excavation, the west side of the quonset hut chain-link fence was removed and the wood chip stockpile was transferred to the northeastern portion of the fenced area. Phase II excavation of the tar seam began in the southern portion of the area enclosed by the fence around the quonset hut. The excavation continued northerly to a point two feet beyond the visible tar seam. No drums were observed in this excavation.

Excavation of the tar pit area was completed on March 23, 1994. Approximately 930 cubic yards of tars and visibly impacted soils were removed and disposed off Site.

#### 4.5 VISIBLY IMPACTED SOIL PILES

The removal of two visibly impacted soil piles in Area C ran concurrent with the tar pit excavation. Approximately 250 cubic yards of visibly impacted soil (generated by NYSDEC activities) were removed and consolidated in rolloffs for off-Site disposal.

The removal of the visibly impacted soil pile in Area B occurred throughout waste consolidation activities. These soils were mixed with tars, shredded drums, and other visibly impacted soils and placed in rolloffs during waste consolidation activities. Approximately 142 cubic yards of visibly impacted soils (generated by NYSDEC activities) were removed from the impacted soil storage pad. An additional 60 cubic yards of visibly impacted soil were excavated from Drum Deposition Area IV as described in Section 3.2.6.4.

## 5.0 WASTE HANDLING AND DISPOSAL

### 5.1 OVERVIEW OF PROCEDURE

Waste (drums and visibly impacted soils) were visually characterized by color, texture and physical state and were screened with an explosimeter, photoionization detector and a radiation survey meter. These results are presented in Appendix A.

All drums, including drums previously staged by the NYSDEC, were visually characterized and screened as detailed above on the drum staging pad prior to the final waste characterization determination. The drums characterized as non-conforming based on the above were staged separately for further testing. Based on the above characterization and screening, the drums characterized as conforming based on the above were field Haz-Cat tested in groups of ten drums prior to shredding. The field Haz-Cat testing parameters were as follows:

- i) flammability;
- ii) combustibility;
- iii) water reactivity;
- iv) water solubility;
- v) pH;
- vi) oxidant;
- vii) cyanide;
- viii) sulfide; and
- ix) chlorinated hydrocarbons.

Appendix B presents a summary of the Haz-Cat analyses.

All sampling was performed in Level B protection.

As drums were shredded, impacted soils and tars were added at an approximate 1:1 ratio in the bulk waste mixing box and the consolidated mixed material was then transferred to a rolloff box and a five-point composite sample was taken and submitted to an off-Site

laboratory and analyzed for PCBs and total or TCLP lead. Disposal, treatment or additional analysis based on these results is described in Section 5.5.

## 5.2 HANDLING OF STAGED AND EXCAVATED DRUMS

All drums removed during the IRM Completion were placed in overpacks, due to their poor condition. Overpacks were staged on the drum storage pads and screened as described in Section 5.1. After waste characterization, the overpacks were taken to the shredder and efforts were made to dump the drum contents into the shredder allowing for reuse of the overpacks. However, the majority of the material in the overpacks could not be removed. Therefore, for the majority of the overpacked drums, the overpack and its contents were shredded.

## 5.3 DRUMS STAGED BY NYSDEC

A total of 3,062 overpacked drums staged from previous activities at the Site by NYSDEC were present on-Site. This included the 22 drums with Radioactive Materials. Mini Haz-Cat testing was performed on all of these drums to confirm the results provided by the NYSDEC.

## 5.4 NON-CONFORMING DRUMS

All drums previously staged on-Site and characterized as non-conforming (drum numbers 170, 184, 187, 191, 195, 200, 209, 220, 223, 225, 1737 and 1792) as well as excavated drums that were classified as non-conforming were staged separately on the drum staging pad for further analysis. Non-conforming drums were put in groups of a maximum of ten drums and composite samples taken for further analysis.

After review of the analytical results, all of the drums initially characterized as non-conforming were determined to be conforming



to the existing waste profile and were consolidated and mixed as conforming waste with NYSDEC concurrence. The analytical results are presented in Appendix C and the Quality Assurance/Quality Control (QA/QC) assessment is presented in Appendix D.

## 5.5 CONSOLIDATED WASTE

A five-point composite sample was taken from each rolloff box and analyzed for PCBs and total or TCLP lead. The waste handling procedure presented in the IRM Completion Work Plan stated that TCLP for lead would be performed if the total lead concentration was greater than 100 mg/kg. This procedure was modified partially through the program such that the sample was analyzed for PCBs and TCLP lead without being analyzed for total lead. This modification was made because many samples with total lead concentration above 100 mg/kg were below the 5 mg/L concentration for TCLP lead. Based on the above analysis, the batch was either manifested for off-Site disposal under one of the existing waste profiles or stabilized on-Site with Portland cement. After stabilization, another five-point composite sample from each rolloff box was taken and analyzed for TCLP lead.

Based on the analysis, the stabilized load was then disposed off-Site under the appropriate waste profile. The consolidated waste analytical results are presented in Appendix E, and the QA/QC assessment is presented in Appendix D. A summary of waste disposal/transport activities is presented in Table 5.1. The master waste disposal log, listing drums sequentially by drum number, is presented in Appendix F. Bills of lading/waste manifests, analytical results, certification statements, and certificates of disposal for each load are presented in Appendix G.

## 5.6 DRUMS WITH RADIOACTIVE MATERIALS

The 22 drums with Radioactive Materials were sampled for waste disposal characterization on June 2 and 3, 1994. Analytical results are presented in Appendix H. Permission to dispose 21 of the 22 drums at the

Chemical Waste Management, Inc. facility located in Model City, New York was provided by the NYSDEC on December 21, 1994. The excluded drum was drum number SEG-01 (DEC-7). From March 24 to 27, 1995 the 21 drums were repackaged into oversize drums as necessary and were removed from the Site on March 28, 1995 (see Table 5.2). During repackaging, two of the original drums (SEG-2 and SEG-21) were emptied and were shipped as empty drums, to be crushed for disposal. The non-hazardous waste manifest and certificate of disposal are presented in Appendix I.

Drum number SEG-01 was resampled on March 28, 1995, and the samples submitted to Barringer Laboratories in Golden, Colorado. The analytical results are presented in Appendix J. Drum number SEG-01 was removed from the Site on August 11, 1995 and transported to the Scientific Ecology Group metal processing facility in Oak Ridge, Tennessee. One drum containing used PPE and a liner, which had been placed on the ground during repacking, was also shipped to the Oak Ridge facility. The shipping manifest and certificate of disposal are presented in Appendix I.

## 6.0 WATER MANAGEMENT AND TREATMENT

### 6.1 GROUNDWATER

Preventive measures to minimize the risk of runoff from open excavations in both Areas B and C were implemented as necessary throughout the IRM Completion activities. Care was taken in each excavation to eliminate the runoff of any waters collected in excavations.

Groundwater was collected for treatment and disposal from one investigative trench during the course of the IRM Completion activities. Approximately 1,500 gallons of groundwater was pumped from one trench located in Area IV of the Drum Deposition Area. The water was pumped to a 250-gallon truck mounted poly-storage tank, using a portable submersible pump. The extracted water was treated in the on-Site treatment system described in Section 2.7. The extracted groundwater contained a high amount of sediment. Dewatering of the excavation was not successful due to the high rate of groundwater infiltration. Due to the problem encountered in dewatering and with agreement from the NYSDEC On-Site Representative, additional dewatering activities were not required.

Temporary berms were constructed around portions of three excavations. Area III of the Drum Deposition Area was temporarily bermed prior to backfilling. A temporary berm was constructed in the center of the excavation during drum removal/soil excavation activities to prevent any potentially contaminated water encountered in the excavation during these activities to enter clean excavated areas. The berm was constructed using a trackhoe and was composed of clean excavated soils. The dimensions of the berm were approximately 15 feet in length, three feet in width and two feet in height. The berm was cut to grade once both sides of the trench had been completely backfilled and the risk of runoff had been eliminated.

A temporary berm was constructed along one of the excavations north of Area 30,Q to prevent any runoff of groundwater from the excavation to low-lying areas located north and east of the excavation. The berm was constructed using a dozer to push previously excavated soils

up along the eastern and northeastern edges of the excavation. The berm was roughly 30 feet long, three feet wide and was four to five feet above grade. The berm was cut to grade once the excavations had been backfilled and the risk of runoff had been eliminated.

A berm was constructed along the eastern portion of the trench located in the northeastern portion of Area C, north of DC 27, to prevent runoff of groundwater from the excavation to low-lying areas located north and east of the excavation and west of the existing berm which runs south/southeast in the northeast portion of Area C. The berm was constructed to eliminate runoff from the backfill of excavations. The berm was constructed using a trackhoe and previously excavated clay-rich soils. The berm was roughly 50 feet long, three feet wide and one to two feet above grade. The berm was left in place as the entire area was saturated upon completion of excavation/backfilling activities.

## 6.2 SURFACE WATER

No surface water was collected for treatment and disposal during the IRM Completion activities. Field conditions did not dictate the need for any preventive measures regarding surface water to be implemented as outlined in Section 6.0 of the IRM Completion Work Plan.

## 6.3 COLLECTED WASTEWATER

Wastewater was collected from several locations, as described below, throughout the course of IRM Completion activities. All collected wastewater was pumped through the on-Site water treatment system described in Section 2.7.

Wastewater from the two concrete drum storage pads in Area C and the concrete drum storage pad in Area B was collected once the pads had been cleared of all drums and overpacks. The wastewater was collected using a portable pump. The wastewater was pumped to a 250-gallon

truck mounted poly-storage tank. The collected water was transported and transferred to the on-Site water treatment system located in Area B.

Wastewater from the Area C decontamination pad catchbasin was collected using a portable pump. The wastewater was pumped from the catchbasin to a truck-mounted 250-gallon truck mounted poly-storage tank. The water was then transported across Aero Drive and was transferred to the Area B on-Site water treatment system.

Wastewater from the Area B decontamination pad catchbasin was pumped to the adjacent 1,500 gallon sump using a portable pump. The collected water was then pumped into the Area B on-Site water treatment system.

Analytical samples of treated wastewater were collected from each of the on-Site frac tanks. The samples were submitted to RECRA Environmental Services, Inc. (RECRA) for PCB analysis. A summary of analytical results is presented in Table 6.1. No PCBs were detected above their associated detection limit. An additional sample was submitted to the City of North Tonawanda Wastewater Treatment Plant (WWTP) for pH, chemical oxygen demand (COD), lead, iron and suspended solids analysis to evaluate the potential for disposal at the WWTP. The analytical results for samples submitted to RECRA and the WWTP are presented in Appendix K.

Washwater from the shower facility, floor drains and laundry were all piped to a temporary 4,000 gallon storage tank prior to pumping and treatment through the on-Site treatment system.

All wastewater and washwater generated at the Site during the IRM Completion was disposed of at Chemical Waste Management's (CWM) Model City, New York facility. Approximately 18,000 gallons of wastewater were treated and disposed of during the IRM completion. Manifests/bills of lading and certificates of disposal are presented in Appendix L.

## 7.0 EQUIPMENT CLEANING

### 7.1 EXCAVATION AND WASTE HANDLING EQUIPMENT

Excavation equipment and on-Site vehicles were decontaminated periodically as required to ensure that Waste from trenching and removal activities were not transferred to the CRZ and SZ due to vehicle tracking. Decontamination was performed on the decontamination pad(s) in Areas B and C using either high pressure washers or a high pressure steam jenny. Each time a piece of equipment was decontaminated it was inspected and approved by a CRA representative prior to removal from the decontamination pad.

### 7.2 SAMPLE COLLECTION EQUIPMENT

The sampling equipment was disposed of with Site wastes. Dedicated disposable sampling equipment was used for soil and water sample collections.

## 8.0 INSPECTIONS

### 8.1 FINAL IRM COMPLETION INSPECTION

After waste removal but before demobilization, the Final IRM Completion Inspection was conducted with NYSDEC personnel on March 24, 1994 to determine whether the IRM was complete. Personnel present at the inspection are listed on Table 8.1. A list of outstanding activities (see Table 8.2), which were to be addressed prior to completion of demobilization by IT, was developed during the inspection. Items 1 through 6 and Item 8 on Table 8.2 were completed prior to demobilization. Subsequent to the inspection, it was determined, with NYSDEC concurrence, that compliance with Item 7 (grade and place a thin layer of crushed stone on the surface of the deeply rutted area south of the Quonset Hut in Area C) would not be required due to existing Site conditions. Item 9, analysis and off-Site disposal of the 22 drums with Radioactive Materials, was completed on August 11, 1995.

### 8.2 FINAL SITE INSPECTION

An interim Site inspection was held on April 6, 1994 to confirm that all outstanding items, except for removal and disposal of the drums with Radioactive Materials, had been completed. A list of attendees is presented on Table 8.3. NYSDEC verbal approval that the items were satisfactorily completed was received on April 6, 1994. Removal of the drums with Radioactive Materials was completed on August 11, 1995. The NYSDEC performed the Final Site Inspection on August 11, 1995, and no outstanding items were identified.

## 9.0 SECURITY

Access to the Site was controlled by the existing chainlink fence. The fence gates were kept locked at all times when the Site was unattended. During performance of IRM Completion field activities, a security guard was on Site at all times. During the time that no IRM Completion field activities were being performed, security provided a drive-by inspection of the Site every four hours.

During waste handling activities, security was responsible for the following:

- i) limiting vehicular access to the Site to authorized vehicles and personnel only;
- ii) maintaining a security log with documentation for all Site personnel, visitors, and deliveries and any security incidents. The log included date, name, address, company, time in and time out for each individual logged;
- iii) maintaining a visitor log. Visitors were not allowed to enter the Site without the knowledge of IT and approval of the CRA Representative. Any visitors wishing to gain access to the secured areas were required to provide documentation of training in accordance with the HASP prior to gaining access. IT gave each person a Site-specific health and safety orientation;
- iv) recording weight measurements of rolloff boxes both before and after Site waste was loaded for shipment; and
- v) maintaining a transport log with documentation for all shipped rolloffs. This log included date of shipment, name of transport company, tractor plate number, trailer plate number, rolloff number, empty rolloff box weight, Site empty weight, and Site full weight.



## 10.0 PROJECT CLOSEOUT

### 10.1 EXCLUSION ZONE SURFICIAL CLEANUP

A total of 195 surface drums were removed during IRM Completion surface drum recovery closeout activities; 55 in Area B and 140 in Area C. These drums were handled and disposed using the procedures in Section 5.0. RCRA empty drums, drum parts and lids from the shredder area were buried in Area 13, A1, as well as three to four inches (five± cubic yards) of surface stone excavated from the shredder area. Any trash generated during IRM Completion activities was removed and disposed at a sanitary landfill.

### 10.2 FINAL CLEANUP

#### 10.2.1 Wastewater Treatment System

The on-Site wastewater treatment system was dismantled on April 6, 1994, following completion of the IRM Completion activities at the Site. The system was drained of water prior to dismantling and all drained water was placed in one of the on-Site frac tanks. Approximately 110 gallons of sediment from the settling tanks was placed in a rolloff for off-Site disposal. The carbon canisters and carbon, sock filter, sand filter, and all of the PVC and vinyl piping and rubber hosing associated with the treatment system was placed in a rolloff for off-Site disposal. The settling tanks and frac tanks remained on-Site until completion of the Remedial Design/Remedial Action (RD/RA) pre-design perimeter trenching and borehole activities.

All collected decontamination wastewater (18,000± gallons) was shipped off-Site in tank trailers to CWM, Model City, for treatment and disposal. Two analytical samples were collected of the wastewater from the two 12,000 gallon frac tanks. The samples were analyzed for PCBs. Analytical results are presented in Table 6.1.

The settling tanks and frac tanks were decontaminated using a high pressure water rinse. The rinse water was shipped to CWM for treatment/disposal on June 14, 1994. Manifests/bills of lading and certificates of disposal are presented in Appendix L. The settling tanks and frac tanks were removed from the Site by June 15, 1994.

#### 10.2.2 Personnel Support and Hygiene Facility

Upon completion of IRM investigative/remedial activities, each trailer used on-Site was cleaned and inspected prior to being removed from the Site. The analytical trailer was removed from the Site on March 31, 1994. The security trailer left the Site on April 4, 1994. The two office trailers, the break trailer and the shower trailer were removed from the Site on April 6, 1994. The personnel decontamination trailer was cleaned on April 5, 1994. All associated HDPE sheeting and poly-sheeting was placed in a rolloff for off-Site disposal. The personnel decontamination trailer was removed from the Site on June 13, 1994.

Telephone and electrical service was disconnected at the Site on April 6, 1994.

#### 10.2.3 Drum and Soil Staging Area and Decontamination Facility

Each of the three temporary drum storage pads (one in Area C and two in Area B) were left in place following the completion of IRM activities with NYSDEC concurrence. These pads were constructed of geotextile sheeting and plywood.

Each of the three concrete drum pads (two in Area C and one in Area B), the concrete soil staging pad in Area B and the two concrete decon pads (one each in Area B and Area C) were cleaned using a pressure cleaner. All collected water was pumped to a 250-gallon truck mounted poly-storage tank using a portable pump and was transported to the on-Site treatment system for treatment. Approximately 200 gallons of wastewater

was collected from the three drum storage pads. Following cleaning of the pads, wipe samples from each of the six pads were collected and analyzed for PCBs. The analytical results are presented in Table 10.1. The QA/QC assessment for the wipe sample analytical results is presented in Appendix M. PCBs were not detected in any of the wipe samples above the associated detection limit.

The six concrete pads were left in place following completion of the IRM activities.

#### 10.2.4 Final Equipment Decontamination

All equipment, vehicles and tools which entered the EZ were cleaned on the decontamination pad(s) with water using either a high pressure washer or a high pressure steam jenny. All water and material generated was collected and treated in the on-Site wastewater treatment system. Any personnel handling potentially contaminated waste wore, at a minimum, Level C personal protective clothing.

The following is a list of vehicles and heavy equipment that were decontaminated prior to removal from the Site. All equipment was inspected and decontamination approved by a CRA representative before removal from the decontamination pad(s).

<i>Date of Inspection</i>	<i>Decontaminated Equipment</i>
March 23, 1994	IT: Shredder-Model SP-30
March 26, 1994	IT: Bulldozer DGH-LGP IT: Trackhoe PC-120
March 30, 1994	IT: Hazcat Trailer IT: Trackhoe EL-200
April 5, 1994	IT: Backhoe 310 IT: CAT IT-28

Following decontamination, two wipe samples were collected from the drum shredder for PCB analysis. The analytical results are

presented in Table 10.1. PCBs were not detected in the wipe samples above the associated detection limit.

Any pumps which needed decontamination were cleaned in the following manner:

- i) the pump was drained;
- ii) a sufficient quantity of cleaning solution (Alconox and water) was pumped and/or recirculated through the pump;
- iii) the outside of the pump was washed down;
- iv) the pump was disassembled and the internal surfaces were wiped down;
- v) pump components were soaked in cleaning solution (if needed); and
- vi) the pumps were reassembled as needed.

Cleaning solution was disposed with the decon waters as described in 10.2.1.

### 10.3 FINAL SITE CONDITIONS

#### 10.3.1 Site Rehabilitation/Demobilization

All open excavations and trenches have been backfilled. The staging pads and decontamination pads were decontaminated and left in place. The meteorological station, portable toilets, and all equipment has been removed from the Site. The truck scale and all trailers have been demobilized. All utilities have been disconnected. The access roads, support zone parking lot and perimeter fence remain for future use. The quonset hut fence and gates were reinstalled and the gates were secured with a padlock. The perimeter gates in both Areas B and C have also been secured with padlocks. All trash generated during IRM Completion activities was removed and disposed in a sanitary landfill.

## 11.0 HEALTH AND SAFETY

### 11.1 GENERAL

All project activities were conducted in accordance with the approved IRM Completion HSP and all applicable State and Federal occupational safety and health regulations. The specific requirements of 29 CFR 1910.120 were followed during the completion of all project activities. A Health and Safety Officer (HSO) provided by the Contractor was on-Site at all times during work activities which involved the handling of waste materials.

Site security and control was maintained throughout the project through the use of fencing which had previously been installed around the perimeter of the Site, the use of security personnel and the establishment of three distinct work zones; the EZ; the CRZ; and the SZ. The establishment of these three work zones furthered the prevention of migration of contamination caused through tracking by personnel or equipment.

### 11.2 PERSONNEL HEALTH AND SAFETY

All Site personnel were required to have met the training and medical surveillance requirements as set forth in the Occupational Safety and Health Administration (OSHA) Standards and Regulations prior to participation in project activities.

A general health and safety indoctrination session was conducted by the HSO for all personnel who actively participated in project activities. These indoctrination sessions were given to personnel prior to their involvement in project activities. The purpose of the indoctrination sessions was to advise personnel of the specific hazards associated with the project activities and to instruct them in the appropriate safety precautions and procedures that were to be followed during the completion of all project activities.

Additional safety meetings were held at the beginning of each work day which addressed the health and safety issues of the current Site activities and work conditions.

### 11.3 AIR MONITORING

An air monitoring program was implemented during project activities in accordance with the approved IRM Completion HSP. The air monitoring program was implemented to ensure both the safety of the project personnel and the surrounding community and consisted of both realtime monitoring (from direct reading instruments) and laboratory analysis of collected samples. Sections 11.3.1, 11.3.2, 11.3.3 and 11.3.4 provide additional discussion on the specific components of the air monitoring program.

All air monitoring equipment was used, maintained and calibrated in accordance with the manufacturer's guidelines and the specific sampling protocols. All results were recorded, reviewed and are presently in storage. A summary of the integrated air sampling program is presented in Appendix N and the QA/QC assessment is presented in Appendix O.

#### 11.3.1 Background Air Monitoring Program

Pre-remedial sampling was conducted for three days prior to initiation of Site activities to obtain background data for volatile organics, total particulates, semi-volatiles, and PCBs. The results of this sampling established a baseline documenting the current ambient air concentrations around the Site perimeter prior to the initiation of any ground intrusive IRM Completion activity.

### 11.3.2 Personnel Air Monitoring

Personnel air monitoring was completed in accordance with the approved IRM Completion HSP and in accordance with the Occupational Safety and Health Standard that requires employers to document exposures on workers who have the highest potential to be exposed to hazardous substances above permissible exposure limits. The results of this monitoring confirmed that workers were properly safeguarded and adequately protected against any substance through the wearing of the appropriate personal protective equipment (PPE).

### 11.3.3 Realtime Air Monitoring

Throughout the duration of the project, realtime air monitoring was conducted in accordance with the requirements of the IRM Completion HSP. A review of the realtime air monitoring data showed that the action levels established in the HSP were not exceeded. The data generated by this monitoring were useful in verifying the health and safety of the project personnel and the protection of the community. Realtime monitoring was conducted in and around the work zones and on the perimeter of the Site.

### 11.3.4 Documentation Air Monitoring

This component of the Site air monitoring program included the weekly collection and analysis of samples for PCBs, semi-volatiles, and total nuisance dust which were collected at the various downwind sampling locations and/or Site perimeter as directed by the sampling protocols in the IRM Completion HSP. The documentation air monitoring provided data on the ambient concentration of these parameters during the completion of the project activities.

### 11.3.5 Summary

Throughout IRM Completion activities, volatile organics, semi-volatiles and PCBs were not detected by the air monitoring program. Total particulates were detected however they did not exceed action levels established in the HSP.



## 12.0 CONCLUSIONS

The objectives of the IRM Completion were to investigate and remediate the "hot spots" that had been discovered at the Site. The "hot spots" generally consisted of drums, drum remnants, and identifiable concentrations of phenolic tars. These objectives were achieved by:


- i) the excavation of approximately 102,800 vertical square feet of trenching ranging in depth from 2 to 8 feet bgs;
- ii) the excavation of approximately 327,000 horizontal square feet of dozer cuts with a minimum depth of one foot;
- iii) the removal and off-Site disposal of 3,062 drums, including 22 drums with Radioactive Materials, and 392 cubic yards of visibly impacted soils previously staged by the NYSDEC;
- iv) the removal and off-Site disposal of 1,724 drums and 990 cubic yards of visibly impacted soils and tar materials discovered during IRM Completion activities;
- v) the shipment for off-site disposal of 174 rolloff box loads of the above consolidated materials (including seven reshipped rolloff boxes due to excess moisture content); and
- vi) rehabilitation of the Site to pre-IRM conditions and the removal of all appropriate IRM support facilities.


As the objectives of the IRM have been achieved by the above activities, the IRM has been successfully completed.

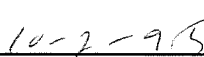
## CERTIFICATION

## CERTIFICATION

I, Richard J. Snyder, a Professional Engineer in the State of New York, certify, based on a review of documentation submitted to me and interviews with persons directly responsible for performing the work, and the performance of Site inspections during performance of the work, that the activities performed during implementation of the Interim Remedial Measures Completion at the Pfohl Brothers Landfill located in Cheektowaga, New York, including decontamination, dismantling and removal of remedial equipment from the Site, were completed in conformance with the requirements of the documents entitled, "Record of Decision" dated February 1992, the "Order on Consent" dated October 4, 1993, and "Work Plan, Interim Remedial Measures Completion, Pfohl Brothers Landfill, Cheektowaga, New York" dated January, 1994 with the modifications described in the document entitled "Interim Remedial Measures Completion Report".

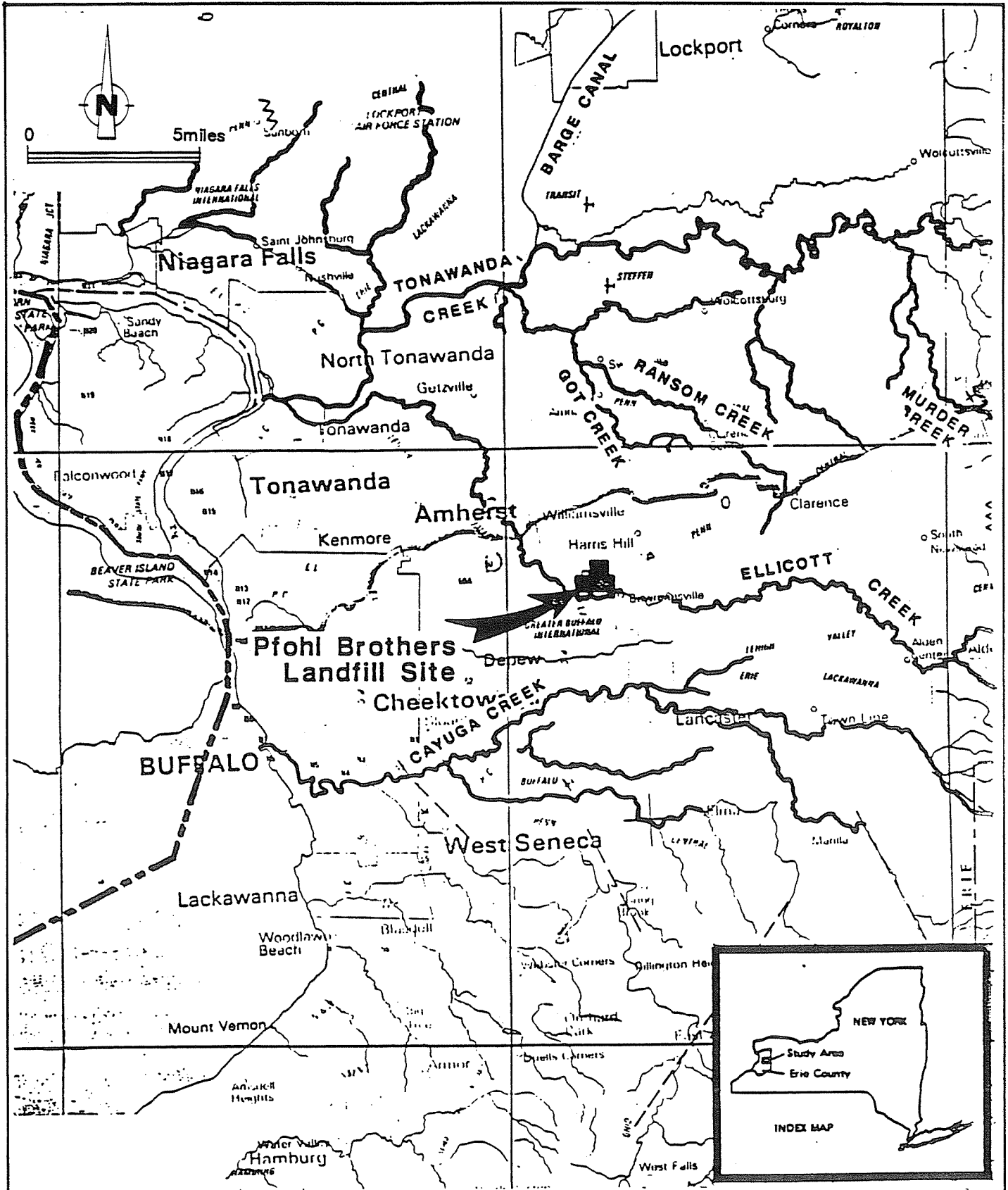
  
\_\_\_\_\_  
Richard J. Snyder, P.E. 66242



  
\_\_\_\_\_  
Date

## FIGURES

FIGURES



SOURCE:  
 FEDERAL EMERGENCY MANAGEMENT AGENCY,  
 1983 (MODIFIED BY CDM, 1990)

figure 1.1

CRA

SITE LOCATION  
 INTERIM REMEDIAL MEASURE COMPLETION  
*Pfohl Brothers Landfill, Cheektowaga, New York*

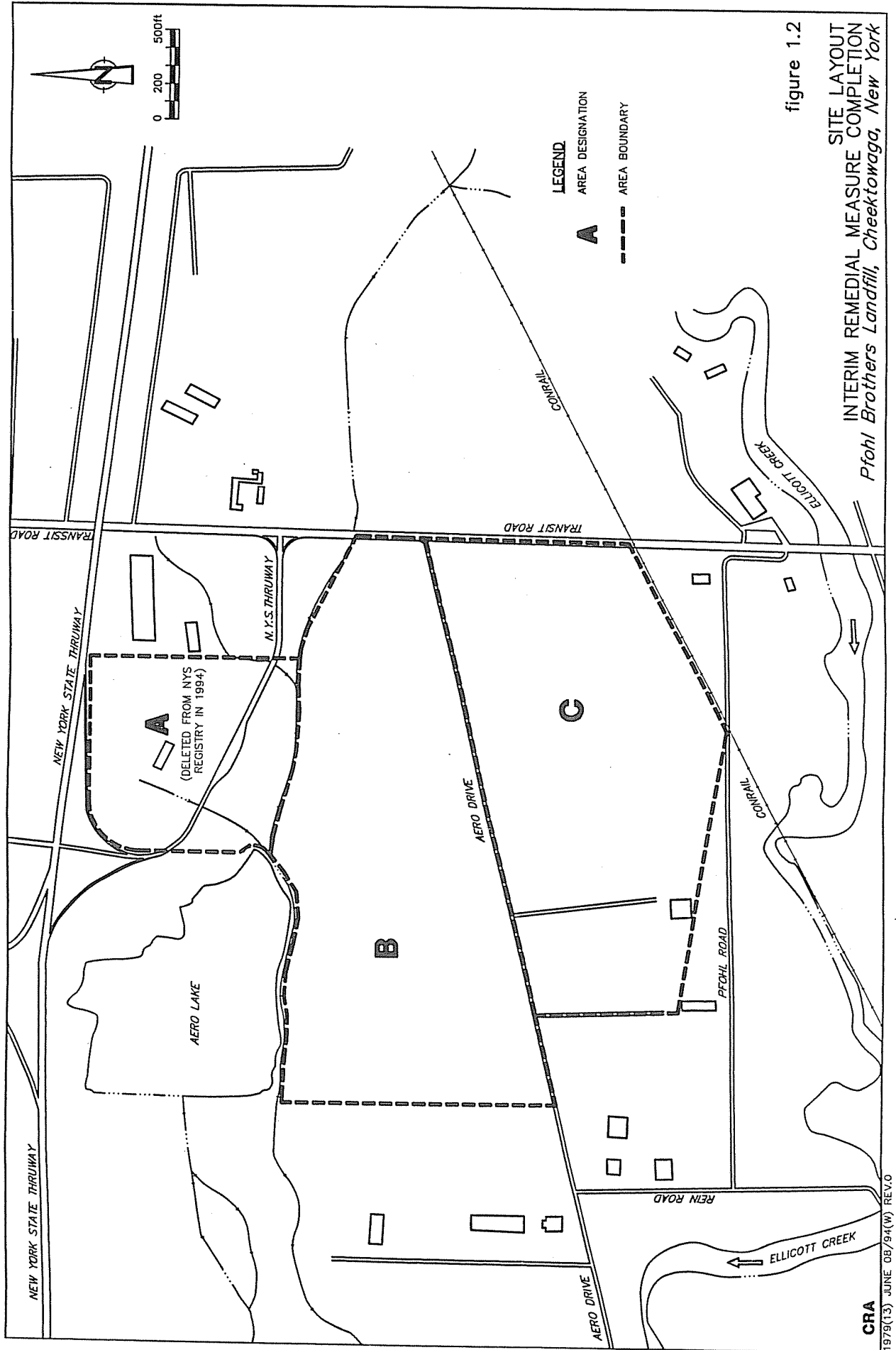


figure 1.2

SITE LAYOUT  
 INTERIM REMEDIAL MEASURE COMPLETION  
 Pfohl Brothers Landfill, Cheektowaga, New York

**TABLES**



TABLES

TABLE 1.1  
 CHRONOLOGY OF IRM COMPLETION ACTIVITIES  
 IRM COMPLETION REPORT  
 PFOHL BROTHERS LANDFILL  
 CHEEKTOWAGA, NEW YORK

<i>Activity</i>	<i>Date</i>	<i>Comments</i>
Effective Date of Order of Consent	10/04/93	
Public Availability Session	10/26/93	
IRM Completion Contractor	Selected - 12/07/93 Approved - 12/27/93	
Perform Site Walkover	12/03/93	
Obtain Access Permission	10/04/93 to 02/14/94	
Implement Real Estate Plan	10/04/93 to ongoing	
Mobilization to the Site	12/15/93 to 01/19/94	
Pre-construction Meeting	12/17/94	
Emergency Response and Contingency Plan Meeting	12/27/94	
Perform Background Air Monitoring	12/27/94 to 01/07/94	
Finalize Waste Handling Procedure	01/04/94	(incorporated in IRM Completion Work Plan, Jan. 94)
Contractor's QAPP	Submitted - 01/04/94 Approved - 02/11/94	
Letter certifying Contractor's HSP conforms to IRM Work Plan	Submitted - 01/07/94	
Contractors 24-hour Security Plan	Submitted - 01/07/94 Approved - 01/14/94	
Analytical Laboratory for Air Monitoring Samples	Submitted - 12/27/93 Approved (Verbal) - 01/04/94 (Written) - 01/11/94	

TABLE 1.1  
 CHRONOLOGY OF IRM COMPLETION ACTIVITIES  
 IRM COMPLETION REPORT  
 PFOHL BROTHERS LANDFILL  
 CHEEKTOWAGA, NEW YORK

<i>Activity</i>	<i>Date</i>	<i>Comments</i>
Perform Investigative Activities in Area B	01/10/94 to 03/10/94	
Contractor's Project Schedule	Submitted - 01/11/94	
Distribution of emergency phone lists and truck route	01/17/94	
Arrange for Nuisance Control Agent	01/24/94	
Consolidation and off-Site disposal of NYSDEC Staged Drums and Visibly Impacted Soils	01/24/94 to 03/29/94	
Excavation, Staging and off-Site disposal of and Drums and Visibly Impacted Soils from Area B and Area C	01/25/94 to 03/31/94	
Perform Investigative Activities in Area C	02/02/94 to 03/25/94	
Excavation, Staging and off-Site disposal of "Tar Pit" Materials	03/14/94 to 03/31/94	
Final IRM Completion Inspection	03/24/94	
Interim Site Inspection	04/06/94	
Selection of Contractor for Drums with Radioactive Materials	Submitted - 04/19/94 Approved - 04/25/94	

TABLE 1.1  
CHRONOLOGY OF IRM COMPLETION ACTIVITIES  
IRM COMPLETION REPORT  
PFOHL BROTHERS LANDFILL  
CHEEKTOWAGA, NEW YORK

<i>Activity</i>	<i>Date</i>	<i>Comments</i>
Transport of Decon. Waters to CWM	05/27/94	
Collection of Samples from Drums with Radioactive Materials	06/02/94 to 06/03/94 and 03/28/95	
Removal of Frac Tanks	06/14/94	
Complete Demobilization by IT From the Site	06/15/94	
Removal of Drums with Radioactive Materials	03/28/95 and 08/11/95	

TABLE 2.1

**LIST OF REPORTED PROPERTY OWNERS  
FROM WHOM ACCESS WAS OBTAINED FOR THE IRM COMPLETION  
PFOHL BROTHERS LANDFILL**

<i>Tax Records Designation</i>	<i>Lot Number</i>	<i>Description</i>
82.03-4	5	Transit Road Pfohl, Dolores M. & Paul & Bernice c/o Joseph Di Matteo Fiddler & Company One Towne Center W Amherst, N.Y. 14228
	6	Aero Drive Pfohl Enterprises c/o Joseph Di Matteo Fiddler & Company One Towne Center W Amherst, N.Y. 14228
	7	Transit Road Pfohl Enterprises c/o Joseph Di Matteo Fiddler & Company One Towne Center W Amherst, N.Y. 14228
	8	Transit Road Pfohl Enterprises c/o Joseph Di Matteo Fiddler & Company One Towne Center W Amherst, N.Y. 14228
	9.11	Aero Drive Hirsch, Jerome F. 215 California Drive Williamsville, N.Y. 14221

TABLE 2.1

**LIST OF REPORTED PROPERTY OWNERS  
FROM WHOM ACCESS WAS OBTAINED FOR THE IRM COMPLETION  
PFOHL BROTHERS LANDFILL**

<i>Tax Records Designation</i>	<i>Lot Number</i>	<i>Description</i>
82.03-4	9.12	Aero Drive Stuart Jenkins 42 Willowbrook Williamsville, N.Y. 14221
	9.2	1101 Aero Road Hirsch, Jerome F. 215 California Drive Williamsville, N.Y. 14221
	10	Pfohl Road McBride, Elizabeth L. Hilltop Drive Goshen, N.Y. 10924
	11	232 Pfohl Road Mac Peek, Robina Cheektowaga, N.Y. 14225
	12 & 13	E. NY State Elec. & Gas c/o Bob Malicki P.O. Box 287 Ithaca, N.Y. 14851
	14	Con Rail Corp. Property Tax Dept. P.O. Box 8433 Philadelphia, PA 13101
81.04-1	25	Niagara Mohawk Power Corp. Real Estate Tax Dept. 300 Erie Blvd. W. Syracuse, N.Y. 13208

TABLE 2.1

**LIST OF REPORTED PROPERTY OWNERS  
FROM WHOM ACCESS WAS OBTAINED FOR THE IRM COMPLETION  
PFOHL BROTHERS LANDFILL**

<i>Tax Records Designation</i>	<i>Lot Number</i>	<i>Description</i>
81.04-1	26	Aero Drive Pfohl, William A. & I. 83 Pfohl Road Cheektowaga, N.Y. 14225
	27	Aero Drive Pfohl Enterprises c/o Joseph Di Matteo Fiddler & Company One Towne Center W Amherst, N.Y. 14228
	28.1	Aero Drive Pfohl Enterprises c/o Joseph Di Matteo Fiddler & Company One Towne Center W Amherst, N.Y. 14228
81.04-2	9.1	Aero Drive Pfohl Enterprises c/o Joseph Di Matteo Fiddler & Company One Towne Center W Amherst, N.Y. 14228
	9.211*	Pfohl Road Pfohl, Robert W. Phillips, Marlene A. 559 Harris Hill Road Lancaster, N.Y. 14086

TABLE 2.1

**LIST OF REPORTED PROPERTY OWNERS  
FROM WHOM ACCESS WAS OBTAINED FOR THE IRM COMPLETION  
PFOHL BROTHERS LANDFILL**

<i>Tax Records Designation</i>	<i>Lot Number</i>	<i>Description</i>
	9.22*	136-144 Pfohl Road Zelasko, Fred P. & Etal 121 Foisset Avenue Cheektowaga, N.Y. 14225
81.04-2	9.212*	130 Pfohl Road Zelasko, Fred P. & Etal 121 Foisset Avenue Cheektowaga, N.Y. 14225
	10.1	Pfohl Road Pfohl Enterprises c/o Joseph Di Matteo Fiddler & Company One Towne Center W Amherst, N.Y. 14228
	11	Pfohl Road Pfohl Enterprises c/o Joseph Di Matteo Fiddler & Company One Towne Center W Amherst, N.Y. 14228
Right of Way (Aero Drive)		Guy Puccio Erie County Department of Public Works Division of Highways 95 Franklin Street Buffalo, New York 14202

## Notes:

- \* Residents addressed by Real Estate Plan. May require access if residents do not respond favorably to Real Estate Plan.



TABLE 2.2  
PRE-CONSTRUCTION MEETING ATTENDEE LIST  
DECEMBER 17, 1993  
IRM COMPLETION REPORT  
PFOHL BROS. LANDFILL  
CHEEKTOWAGA, NEW YORK

<i>Name</i>	<i>Organization</i>	<i>Phone</i>
Klaus Schmidtke	CRA	519-884-0510
Patrick Garrity	OCC	716-286-3157
Craig Gebhardt	CRA	716-283-6720
John Falbo	URS	716-856-5636
Lech Dolata	NYSDEC	518-457-9285
Jim Tuk	NYSDEC	716-851-7220
Mark Kleiman	CRA	716-283-6720
Bob Young	IT Corp.	412-372-7701
Robert Hoffman	URS	716-856-5636
Bob Fisher	CRA	716-283-6720

**TABLE 2.3**  
**EMERGENCY RESPONSE AND CONTINGENCY PLAN MEETING ATTENDEE LIST**  
**DECEMBER 27, 1993**  
**IRM COMPLETION REPORT**  
**PFOHL BROTHERS LANDFILL**  
**CHEEKTOWAGA, NEW YORK**

<i>Name</i>	<i>Organization</i>	<i>Phone Number</i>
Herb Davidson	IT, Corp.	412-372-7701
Dan Hatfield	Chief of Hy-View Fire Department	715-684-0667
James Roughton	IT, Corp.	412-372-7701
Bob Young	IT, Corp.	716-634-3864
Frank Vish	IT, Corp.	716-634-3864
Earl Loder	Town of Cheektowaga Disaster Services	716-896-8091
Bob Hoffman	URS	716-856-5636
Jim Tuk	NYSDEC	716-851-7220
Jim Kay	CRA	519-884-0510
Craig Gebhardt	CRA	716-283-6720

TABLE 4.1  
**LISTING OF DRUMS CONTAINING RADIOACTIVE MATERIALS**  
**IRM COMPLETION REPORT**  
**PFOHL BROS. LANDFILL**  
**CHEEKTOWAGA, NEW YORK**

<i>Waste Description</i>	<i>Radioactive Drum Numbers</i>	<i>Source</i>	<i>Radiation Reading of Drum Contents (CPM)</i>	<i>PID (ppm)</i>	<i>Explosimeter</i>
Solid, black, opaque	6	Fenced Area C	400	<40	0
Solid, black, opaque	7	Fenced Area C	600	<40	0
Concrete, metal	2102	Drum Pad Area B	600	<40	0
Concrete, metal	2103	Drum Pad Area B	400	<40	0
Concrete, metal	2104	Drum Pad Area B	600	<40	0
Concrete, metal	2105	Drum Pad Area B	600	<40	0
Concrete, metal	2106	Drum Pad Area B	200	<40	0
Concrete, metal	2335	Drum Pad Area C	200	<40	0
Solid, black, brown, opaque	2470	Drum Pad Area C	300	<40	0
Solid, black, opaque	2471	Drum Pad Area C	70	<40	0
Solid, red, yellow, green, opaque	2488	Drum Pad Area C	100	<40	0
Solid, black, brown, opaque	2489	Drum Pad Area C	80	<40	0
Solid, black, opaque	2490	Drum Pad Area C	80	<40	0
Sludge, black, opaque	2540	Drum Pad Area C	50	<40	0
Solid, black, brown, opaque	2542	Drum Pad Area C	80	<40	0
Solid, brown, opaque	2543	Drum Pad Area C	80	<40	0
Solid, brown, opaque	2593	Drum Pad Area C	80	<40	0
Concrete	3089	Drum Pad Area B	50	<40	0
Soil	3121	Drum Pad Area B	70	<40	0
Soil	3149	Drum Pad Area B	80	<40	0
Soil	3151	Drum Pad Area B	80	<40	0
Soil	3180	Drum Pad Area B	80	<40	0

**Notes:**

- (1) All above drums were previously staged by NYSDEC.
- (2) CPM - Count Per Minute.
- (3) PPM - Parts Per Million.
- (4) Radiation readings measured using a Dosimeter Model 3007A equipped with a Model 3011 probe. Calibration of instrument is 100 CPM = 0.05 mR/hr (3 times background = 0.028 mR/hr = 60 CPM).

TABLE 5.1

**WASTE TRANSPORT/DISPOSAL REPORT  
IRM COMPLETION REPORT  
PFOHL BROTHERS LANDFILL  
CHEEKTOWAGA, NEW YORK**

<i>Load Number</i>	<i>Manifest Number</i>	<i>Bill of Lading Number</i>	<i>Date</i>	<i>Transporter</i>	<i>Rolloff Box Number</i>	<i>Received Weight (tons)</i>
0001		5000	02/08/94	CWM	380-B	13
0002		5001	02/08/94	CWM	249133	13
0003	NYB6353928		02/08/94	CWM	319014-D	8
0004		5002	02/10/94	CWM	319009	9
0005	NYB7007679		02/10/94	CWM	219552	10
0006	NYB7007661		02/10/94	CWM	240442	9
0007	NYB7007652		02/10/94	CWM	219471	13
0008	NYB7007643		02/10/94	CWM	319241-B	10
0009	NYB7007598		02/10/94	CWM	319411-B	15
0010	NYB7007571		02/10/94	CWM	249016	10
0011	NYB7007634		02/10/94	CWM	319204-B	13
0012		5003	02/10/94	BFC	379-B	13
0013		5004	02/10/94	BFC	370-B	10
0014	NYB7007796		02/10/94	BFC	362-B	11
0015		5005	02/10/94	CWM	7198	10
0016	NYB7007697		02/10/94	CWM	7326	9
0017	NYB7007589		02/11/94	CWM	7301	8
0018	NYB7007562		02/14/94	CWM	H447-C	13
0019	NYB7008642		02/14/94	CWM	378-B	12
0020	NYB7007805		02/14/94	CWM	249015	10
0021	NYB7008498		02/14/94	BFC	WRB31025	13
0022	NYB7008759		02/14/94	CWM	7352	10
0023	NYB7008741		02/14/94	BFC	WRB48425	12
0024	NYB7008732		02/14/94	CWM	319028-D	10
0025	NYB7008723		02/14/94	CWM	H417-C	16
0026	NYB7008714		02/14/94	CWM	RB50	12
0027	NYB7008705		02/14/94	BFC	RB69	9
0028	NYB7008696		02/15/94	HAZMAT	RB39	12
0029	NYB7008687		02/15/94	HAZMAT	RB61	11
0030	NYB7008678		02/15/94	BFC	WRB22925	13
0031	NYB7008624		02/15/94	CWM	RB55	9
0032	NYB7008669		02/15/94	CWM	RB54	10
0033	NYB7008651		02/15/94	CWM	319009-D	8
0034	NYB7008606		02/16/94	BFC	RB24	14
0035		5006	02/16/94	CWM	RB64	8
0036	NYB7008597		02/15/94	CWM	RB2003	8
0037	NYB7008588		02/15/94	CWM	RB2005	8
0038	NYB7008579		02/15/94	BFC	189-25	10
0039	NYB7027398		02/16/94	HAZMAT	2013	7
0040	NYB7027389		02/16/94	HAZMAT	2012	9

TABLE 5.1

**WASTE TRANSPORT/DISPOSAL REPORT  
IRM COMPLETION REPORT  
PFOHL BROTHERS LANDFILL  
CHEEKTOWAGA, NEW YORK**

<i>Load Number</i>	<i>Manifest Number</i>	<i>Bill of Lading Number</i>	<i>Date</i>	<i>Transporter</i>	<i>Rolloff Box Number</i>	<i>Received Weight (tons)</i>
0041	NYB7027371		02/16/94	BFC	370-B	8
0042	NYB7027362		02/16/94	BFC	2014	8
0043	NYB7027353		02/16/94	HAZMAT	RB25	16
0044	NYB7027344		02/17/94	BFC	366-B	11
0045	NYB7027326		02/17/94	CWM	RB56	15
0046	NYB7027335		02/17/94	CWM	3322	14
0047	NYB7027317		02/17/94	BFC	249084	11
0048	NYB7027407		02/17/94	BFC	379-B	11
0049	NYB7027425		02/17/94	CWM	319405-B	17
0050	NYB7027434		02/17/94	CWM	7301	9
0051	NYB7027443		02/17/94	HAZMAT	339393	12
0052	NYB7027461		02/17/94	HAZMAT	2011	8
0053	NYB7027479		02/17/94	BFC	7326	8
0054	NYB7027488		02/17/94	CWM	5026	7
0055	NYB7027497		02/17/94	CWM	249442	7
0056		5007	02/17/94	BFC	2009	8
0057		5008	02/17/94	BFC	2002	8
0058	NYB7027506		02/17/94	CWM	319435-B	17
0059	NYB7027515		02/17/94	CWM	319415-B	13
0060	NYB7027524		02/18/94	CWM	249426	15
0061		5009	02/18/94	CWM	219471	8
0062	NYB7027533		02/18/94	CWM	H417-C	11
0063	NYB7027542		02/18/94	CWM	249476	7
0064	NYB7027092		02/22/94	BFC	362-B	7
0065	NYB7027101		02/22/94	BFC	2010	6
0066	NYB7027137		02/22/94	HAZMAT	H402-A	9
0067		5010	02/22/94	CWM	319204-B	9
0068		5011	02/22/94	CWM	249142	8
0069	NYB7008525		02/22/94	BFC	319241-B	10
0070	NYB7027119		02/22/94	BFC	H477-C	12
0071	NYB7027128		02/22/94	HAZMAT	249015	6
0072		5012	02/22/94	HAZMAT	3010	14
0073	NYB7027164		02/23/94	HAZMAT	RB31	15
0074		5013	02/23/94	HAZMAT	319014-D	5
0075	NYB7027173		02/23/94	HAZMAT	219552	12
0076	NYB7029279		02/24/94	CWM	7198	8
0077	NYB7029261		02/24/94	PRICE	2007	17
0078		5014	02/24/94	PRICE	2006	21
0079		5015	02/24/94	PRICE	2001	21
0080	NYB7029252		02/24/94	PRICE	2004	11

TABLE 5.1

**WASTE TRANSPORT/DISPOSAL REPORT  
IRM COMPLETION REPORT  
PFOHL BROTHERS LANDFILL  
CHEEKTOWAGA, NEW YORK**

<i>Load Number</i>	<i>Manifest Number</i>	<i>Bill of Lading Number</i>	<i>Date</i>	<i>Transporter</i>	<i>Rolloff Box Number</i>	<i>Received Weight (tons)</i>
0081	NYB7029243		02/25/94	HAZMAT	WRB21725	10
0082	NYB7029288		03/08/94	BFC	182-25	8
0083	NYB7029315		03/08/94	HAZMAT	RB24	10
0084	NYB7029306		03/08/94	HAZMAT	RB39	11
0085	NYB7029297		03/08/94	BFC	286-25	10
0086		5017	03/08/94	HAZMAT	379-B	10
0087		5016	03/08/94	HAZMAT	RB61	7
0088	NYB7029333		03/09/94	BFC	RB50	10
0089		5018	03/09/94	BFC	249033	6
0090		5019	03/09/94	HAZMAT	249133	7
0091		5020	03/09/94	HAZMAT	RB25	13
0092	NYB7029342		03/09/94	BFC	WRB28525	13
0093		5021	03/09/94	BFC	319009-D	9
0094	NYB7029351		03/10/94	CWM	3322	8
0095	NYB7029369		03/10/94	BFC	248974	7
0096	NYB7029387		03/10/94	BFC	46183	8
0097		5022	03/10/94	CWM	RB56	8
0098		5023	03/16/94	CWM	189-25	16
0099		5024	03/18/94	CWM	7198	10
0100		5025	03/16/94	CWM	RB370-B	12
0101	NYB7029405		03/17/94	HAZMAT	RB68	14
0102	NYB7029414		03/17/94	HAZMAT	RB69	11
0103	NYB7029423		03/17/94	PRICE	2013	9
0104	NYB7029432		03/17/94	CWM	222-25	10
0105		5026	03/18/94	CWM	378	16
0106		5027	03/22/94	HAZMAT	RB24	14
0107		5028	03/22/94	HAZMAT	RB64	11
0108		5029	03/22/94	HAZMAT	RB39	13
0109		5030	03/22/94	HAZMAT	RB23	14
0110		5031	03/22/94	BFC	313-25	17
0111		5032	03/22/94	HAZMAT	RB15	16
0112		5033	03/22/94	HAZMAT	RB65	13
0113		5034	03/22/94	HAZMAT	RB56	17
0114		5035	03/24/94	PRICE	2004	12
0115		5036	03/23/94	PRICE	2011	12
0116		5037	03/23/94	BFC	286-25	13
0117		5038	03/23/94	HAZMAT	319241-B	11
0118		5039	03/23/94	PRICE	3001	0(1)
0119		5040	03/23/94	BFC	2013	18
0120		5041	03/23/94	HAZMAT	RB68	0(2)

TABLE 5.1

**WASTE TRANSPORT/DISPOSAL REPORT  
IRM COMPLETION REPORT  
PFOHL BROTHERS LANDFILL  
CHEEKTOWAGA, NEW YORK**

<i>Load Number</i>	<i>Manifest Number</i>	<i>Bill of Lading Number</i>	<i>Date</i>	<i>Transporter</i>	<i>Rolloff Box Number</i>	<i>Received Weight (tons)</i>
0121		5042	03/30/94	PRICE	2003	0(3)
0122		5043	03/23/94	CWM	9347	8
0123		5044	03/24/94	HAZMAT	368-B	12
0124		5045	03/24/94	CWM	319043-B	17
0125	NYB7029441		03/24/94	CWM	249426	16
0126	NYB7029459		03/24/94	CWM	380-B	7
0127	NYB7029468		03/24/94	CWM	429	14
0128	NYB7029477		03/24/94	CWM	339393	8
0129	NYB7029486		03/25/94	HAZMAT	RB61	8
0130	NYB7029504		03/25/94	HAZMAT	2012	6
0131		5046	03/25/94	CWM	319214-B	13
0132		5047	03/25/94	CWM	H406-B	16
0133		5048	03/25/94	CWM	319009-D	16
0134		5049	03/25/94	CWM	249033	11
0135	NYB7029513		03/25/94	CWM	2010	7
0136		5050	03/25/94	CWM	362-B	11
0137		5051	03/25/94	CWM	379-B	17
0138		5052	03/28/94	HAZMAT	RB68	0(4)
0139		5053	03/28/94	BFC	484-25	15
0140		5054	03/28/94	HAZMAT	RB73	15
0141		5055	03/28/94	BFC	222-25	14
0142		5056	03/28/94	BFC	189-25	18
0143		5057	03/28/94	CWM	229003	10
0144		5058	03/28/94	HAZMAT	RB69	14
0145		5059	03/28/94	CWM	366-B	18
0146		5060	03/29/94	PRICE	2002	17
0147		5061	03/29/94	PRICE	2006	18
0148		5062	03/29/94	BFC	282-25	18
0149		5063	03/29/94	PRICE	3011	18
0150		5064	03/29/94	HAZMAT	RB50	0(5)
0151		5065	03/29/94	PRICE	2003	18
0152		5066	03/29/94	PRICE	3005	16
0153		5067	03/29/94	BFC	310-25	15
0154		5068	03/29/94	HAZMAT	RB55	0(6)
0155		5069	03/29/94	BFC	197-25	14
0156		5070	03/30/94	HAZMAT	RB15	8
0157		5071	03/30/94	HAZMAT	RB50	13
0158		5072	03/30/94	HAZMAT	RB25	18
0159		5073	03/30/94	HAZMAT	RB55	12
0160		5074	03/30/94	BFC	189-25	19

TABLE 5.1

**WASTE TRANSPORT/DISPOSAL REPORT  
IRM COMPLETION REPORT  
PFOHL BROTHERS LANDFILL  
CHEEKTOWAGA, NEW YORK**

<i>Load Number</i>	<i>Manifest Number</i>	<i>Bill of Lading Number</i>	<i>Date</i>	<i>Transporter</i>	<i>Rolloff Box Number</i>	<i>Received Weight (tons)</i>
0161		5075	03/30/94	HAZMAT	RB39	10
0162		5076	03/30/94	HAZMAT	RB65	12
0163		5077	03/30/94	HAZMAT	RB24	0(7)
0164		5078	03/30/94	HAZMAT	RB68	18
0165		5079	03/30/94	CWM	219488	10
0166		5080	03/30/94	HAZMAT	RB54	8
0167	NYB7029558		03/31/94	PRICE	2014	7
0168		5081	03/31/94	PRICE	2001	19
0169	NYB7029549		03/31/94	HAZMAT	RB23	12
0170		5082	03/31/94	PRICE	2007	13
0171		5083	03/31/94	PRICE	3001	7
0172		5084	03/31/94	CWM	H405-B	17
0173		5085	03/31/94	CWM	378-B	13
0174	NYB7029531		04/07/94	CWM		14
0175						
0176						

*ACCUMULATED TOTALS:*

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## Notes:

1. Rolloff leaking, returned to Site and reshipped as load number 0171
2. Rolloff leaking, returned to Site and reshipped as load number 0138
3. Rolloff leaking, returned to Site and reshipped as load number 0151
4. Rolloff leaking, returned to Site and reshipped as load number 0164
5. Rolloff leaking, returned to Site and reshipped as load number 0157
6. Rolloff leaking, returned to Site and reshipped as load number 0159
7. Rolloff leaking, returned to Site and reshipped as load number 0173



TABLE 5.2

SUMMARY OF REMOVED DRUMS  
CONTAINING RADIOACTIVE MATERIALS  
IRM COMPLETION REPORT  
PFOHL BROTHERS LANDFILL  
CHEEKTOWAGA, NEW YORK

<i>Drum Number</i>		<i>Original Size</i>	<i>Overpack Size</i>	<i>Date Shipped</i>	<i>Facility</i>
<i>DEC</i>	<i>SEG</i>				
7	SEG-01	55-gallon	85-gallon	08/11/95	Oak Ridge
NA(1)	NA	NA	55-gallon	08/11/95	Oak Ridge
6	SEG-02 (2)	55-gallon	110-gallon	03/28/95	Model City
NA	SEG-02 (empty)	85-gallon	NA	03/28/95	Model City
3089	SEG-03	55-gallon	85-gallon	03/28/95	Model City
3180	SEG-04	55-gallon	85-gallon	03/28/95	Model City
3121	SEG-05	55-gallon	85-gallon	03/28/95	Model City
3151	SEG-06	55-gallon	85-gallon	03/28/95	Model City
2103	SEG-07	85-gallon	110-gallon	03/28/95	Model City
2470	SEG-08	85-gallon	110-gallon	03/28/95	Model City
2471	SEG-09	85-gallon	110-gallon	03/28/95	Model City
2540	SEG-10	85-gallon	110-gallon	03/28/95	Model City
2488	SEG-11	85-gallon	110-gallon	03/28/95	Model City
2489	SEG-12	85-gallon	110-gallon	03/28/95	Model City
2490	SEG-13	85-gallon	110-gallon	03/28/95	Model City
3149	SEG-14	55-gallon	85-gallon	03/28/95	Model City
2106	SEG-15	85-gallon	110-gallon	03/28/95	Model City
2543	SEG-16	85-gallon	110-gallon	03/28/95	Model City
2593	SEG-17	85-gallon	110-gallon	03/28/95	Model City
2335	SEG-18	85-gallon	110-gallon	03/28/95	Model City
2105	SEG-19	85-gallon	110-gallon	03/28/95	Model City
2542	SEG-20 (3)	110-gallon	110-gallon	03/28/95	Model City
NA	SEG-20 (empty)	110-gallon	NA	03/28/95	Model City
2104	SEG-21	110-gallon	110-gallon	03/28/95	Model City
2102	SEG-22	85-gallon	110-gallon	03/28/95	Model City

## Notes:

- (1) - For shipping purposes, a portion of the contents of SEG-01 was transferred to a new 55-gallon drum. This drum also contained used PPE and the liner which was placed on the ground during repacking.
- (2) - SEG-2 was originally placed in an 85-gallon overpack. On March 27, 1995 the 55-gallon drum was removed from the 85-gallon overpack and placed in 110-gallon overpack for shipping. The 85-gallon overpack was shipped as an empty drum.
- (3) - SEG-20 was a damaged 110-gallon overpack, containing a 55-gallon drum within an 85-gallon drum. The 85- and 55-gallon drums were transferred into a new 110-gallon overpack. The original 110-gallon overpack was shipped as an empty drum.

NA - Not Applicable.

TABLE 6.1

DECON WATER ANALYTICAL RESULTS  
IRM COMPLETION REPORT  
PFOHL BROTHERS LANDFILL  
CHEEKTOWAGA, NEW YORK

<i>Sample I.D.</i>		<i>0317-010 (1)</i>	<i>0331-001 (1)</i>	<i>0401-001 (1)</i>
<i>Sample Type</i>		<i>Water</i>	<i>Water</i>	<i>Water</i>
<i>Date</i>		<i>3/17/94</i>	<i>3/31/94</i>	<i>4/1/94</i>
<i>Parameter</i>	<i>Units</i>			
Aroclor 1016	µg/L	ND(0.74)	NA	ND(0.53)
Aroclor 1221	µg/L	ND(1.5)	NA	ND(1.0)
Aroclor 1232	µg/L	ND(0.74)	NA	ND(0.53)
Aroclor 1242	µg/L	ND(0.74)	NA	ND(0.53)
Aroclor 1248	µg/L	ND(0.74)	NA	ND(0.53)
Aroclor 1254	µg/L	ND(0.74)	NA	ND(0.53)
Aroclor 1260	µg/L	ND(0.74)	NA	ND(0.53)
Lead	mg/L	NA	ND(0.1)	NA
Iron	mg/L	NA	1.33	NA
Suspended Solids	mg/L	NA	513	NA
Chemical Oxygen Demand	mg/L	NA	613	NA
pH	S.U.	NA	7.58	NA

Notes:

NA - Not Analyzed.

(1) Analysis performed by RECRA Environmental Services, Inc.

(2) Analysis performed by City of North Tonawanda WWTP.

TABLE 8.1  
FINAL IRM COMPLETION INSPECTION ATTENDEE LIST  
MARCH 24, 1994  
IRM COMPLETION REPORT  
PFOHL BROTHERS LANDFILL  
CHEEKTOWAGA, NEW YORK

<i>Name</i>	<i>Organization</i>	<i>Phone Number</i>
Klaus Schmidtke	CRA	519-884-0510
Lech Dolata	NYSDEC	518-877-7263
Jim Tuk	NYSDEC	716-851-7220
John Falbo	URS	716-856-5636
Herb Davidson	IT CORP.	412-372-7701
John Goelz	IT CORP.	716-634-3864
Bob Fisher	TREATEK-CRA	716-634-3224 (Site) 716-283-6720 (Office)

TABLE 8.2

OUTSTANDING ITEMS IDENTIFIED DURING FINAL  
IRM COMPLETION INSPECTION  
IRM COMPLETION REPORT  
PFOHL BROTHERS LANDFILL  
CHEEKTOWAGA, NEW YORK

<i>Item</i>	<i>Description</i>
1.	14 Roll-offs staged in Area B - Complete analytical and dispose properly off Site.
2.	Crushed overpacks, drum lids and drum parts without waste located in waste handling area in Area B - Place in investigative trenches cut in area 13, AI and cover with Site materials.
3.	One Surface Drum in Drum Alley - Remove drum and handle/dispose appropriately.
4.	Complete Additional Investigative Trenches in Area C, remove drums encountered and handle/dispose appropriately, backfill trenches.
5.	21 Roll-offs staged in Area C - Complete analytical and dispose properly off Site.
6.	Decontamination of concrete drum staging pads and decontamination pads using pressurized hot water. PCB wipe samples will be taken to confirm decontamination.
7.	Deeply rutted excavated area south of Quonset Hut in Area C - Let area dry to extent practical, grade and place thin layer of crushed stone on surface.
8.	Reinstall fence separating Quonset Hut area from rest of Site.
9.	22 Radioactive Drums Stored in Fenced/Locked Enclosure in Area B - Analyze and dispose appropriately.

TABLE 8.3  
INTERIM SITE INSPECTION ATTENDEE LIST  
APRIL 6, 1994  
IRM COMPLETION REPORT  
PFOHL BROTHERS LANDFILL  
CHEEKTOWAGA, NEW YORK

<i>Name</i>	<i>Organization</i>	<i>Phone Number</i>
Jim Tuk	NYSDEC	716-851-7220
John Falbo	URS	716-856-5636
Bob Fisher	TreaTek-CRA	716-283-6720

TABLE 10.1

WIPE SAMPLE ANALYTICAL RESULTS  
IRM COMPLETION REPORT  
PFOHL BROTHERS LANDFILL  
CHEEKTOWAGA, NEW YORK

Sample Location	South		North		Decon		Drum		Visibly Impacted		Decon		Drum Shredder	
	Drum Pad Area C	Wipe	Drum Pad Area C	Wipe	Pad Area C	Wipe	Pad Area B	Wipe	Soil Pad Area B	Wipe	Pad Area B	Wipe	Wipe	Wipe
Sample I.D.	001		002		003		004		005		006		0309-PCB-1	0309-PCB-2
Sample Type	Wipe		Wipe		Wipe		Wipe		Wipe		Wipe		Wipe	Wipe
Date	4/6/94		4/6/94		4/6/94		4/6/94		4/6/94		4/6/94		3/9/94	3/9/94
Parameter	µg/wipe		µg/wipe		µg/wipe		µg/wipe		µg/wipe		µg/wipe		µg/wipe	µg/wipe
Aroclor 1016	ND(0.50)		ND(0.50)		ND(0.50)		ND(0.50)		ND(0.50)		ND(0.50)		ND(10)	ND(10)
Aroclor 1221	3.4		4.3		ND(1.0)		ND(1.0)		ND(1.0)		ND(1.0)		ND(20)	ND(20)
Aroclor 1232	ND(0.50)		ND(0.50)		ND(0.50)		ND(0.50)		ND(0.50)		ND(0.50)		ND(10)	ND(10)
Aroclor 1242	ND(0.50)		ND(0.50)		ND(0.50)		ND(0.50)		ND(0.50)		ND(0.50)		ND(10)	ND(10)
Aroclor 1248	ND(0.50)		ND(0.50)		ND(0.50)		ND(0.50)		ND(0.50)		ND(0.50)		ND(10)	ND(10)
Aroclor 1254	ND(0.50)		ND(0.50)		ND(0.50)		ND(0.50)		ND(0.50)		ND(0.50)		ND(10)	ND(10)
Aroclor 1260	ND(0.50)		ND(0.50)		ND(0.50)		ND(0.50)		ND(0.50)		ND(0.50)		ND(10)	ND(10)