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***REMOVAL ACTION IMPLEMENTATION REPORT***

***2250 MILITARY ROAD  
TOWN OF TONAWANDA  
COUNTY OF ERIE, NEW YORK***

***(NYSDEC Site Number 915010)***

***Prepared for:***

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## **1.0 INTRODUCTION**

### **1.1 General**

A Removal Action Work Plan ("RAP") was prepared by Waste Stream Technologies, Inc., a subsidiary of Severson Environmental Services, Inc., for 2251 Military Road Associates, Inc. ("MRA") and its legal representative, Harter, Secrest & Emery for the removal of contaminants at the property located at 2250 Military Road, Tonawanda, New York. The RAP was submitted to the New York State Department of Environmental Conservation ("DEC") at the request of MRA. Subsequently, the New York State Department of Environmental Conservation and MRA entered into an Order on Consent, Index # B9-0389-91-10 (Appendix A). The RAP, which included the Health and Safety Plan (HASP) by incorporation by reference, was incorporated within the Order on Consent. The RAP and HASP are presented in Appendix B.

The property, as noted above, is located at 2250 Military Road, in the Town of Tonawanda, County of Erie, New York (the "site"). The site is in the northern section of the Town of Tonawanda. The site fronts upon Military Road to the east and is bounded to the north by a commercial lumber facility; to the west by vacant property; and to the south by vacant property utilized for power transmission lines (utility easement). Figure 1, Attachment C, is a site location map.

The site is generally described and listed on DEC's Registry of Hazardous Waste Disposal Sites as Site No. 915010. The site is presently listed as a Class 3 site on the Registry. This classification code indicates that the site does not present a significant threat to the public health or environment, and that action may be deferred.

MRA is not the present owner or operator of the site or any portion of it. Nor does MRA have any prior or present corporate relationship with any of the prior owner(s) or operator(s) of the site. There are and were no common officers, shareholders, or employees (interlocking or otherwise) between MRA and prior owner(s) or operator(s).

MRA specifically submitted the RAP and subsequently entered into the Order on Consent, Index # B9-0389-91-10, to further its plans to recycle and develop the parcel(s) or a portion of them for viable commercial/industrial purposes. MRA proposed in the RAP to remediate by soil removal the former landspreading area and the former tank area. In this regard, MRA implemented the RAP for the purposes of having these areas delisted or the site boundaries modified to exclude these areas from the site listing for purposes of commercial/industrial development.

The future use of the site is to include the building of a mini-storage warehouse complex on the former landspreading site and the creation of parking areas by use of chip-and-seal asphalt application over remaining areas, as needed.

## **2.0            *SITE DESCRIPTION***

### **2.1            *Site Topography***

2250 Military Road, Tonawanda, New York (the "site") is located in a topographically flat area at an elevation of approximately 610 feet above mean sea level (MSL). Run-off from the property enters the storm sewers located adjacent to the site. Run-off from the western portion of the site, which includes the former lagoon, probably drains to the railroad track bed which is approximately ten feet below grade. The railroad tracks are located along the western boundary of the plant property (see Figure ES-2, RAP, Appendix B).

The site is located in the greater than 500 year flood zone (Zone C) as designated by the Federal Emergency Management Agency (FEMA).

### **2.2            *Geology***

#### **2.2.1        *Physiography***

New York State is subdivided into nine distinct physiographic provinces on the basis of relief and geology. The site is located within the Erie-Ontario Lowlands, which are characterized as a relatively low, flat-lying area south of Lake Erie and Lake Ontario. In Erie County, the area within this province typifies the topography of an abandoned lake bed with elevations ranging from approximately 570 feet MSL to approximately 1000 feet MSL. The site lies at an elevation of approximately 610 feet MSL and the topography in the vicinity of the site slopes gently toward the Niagara River, located approximately one mile to the northwest.

#### **2.2.2        *Surficial Deposits***

Unconsolidated deposits of clay, sand and till of Pleistocene (glacial) and Holocene (recent) age underlie the site. These materials consist of glacially derived material deposited during the latter part of the Pleistocene, as well as lacustrine material (clay and silt) deposited during the Holocene. The United States Department of Agriculture (USDA) - Soil Conservation Service has classified the soils as Urban Land - Schoharie Complex. The soils are well-drained and moderately well-drained clayey soils and are predominantly lake-laid sediments dominated by clay and silt. The permeability of the subsoils and substratum (i.e., 10 inches plus below ground surface) is slow or very slow. Permeability of these soils ranges from  $10^{-5}$  centimeters per second (cm/sec) to  $10^{-7}$  cm/sec.

### **2.2.3      *Bedrock***

Bedrock underlying the site consists of the Camillus Shale of the Salina Group of Upper Silurian age. The Camillus Shale varies in thickness from thin-bedded shale to massive mudstone; it is gray to brownish gray with some reddish or greenish beds. Studies of the Camillus Shale indicate the presence of gray limestones and dolostones interbedded with the shales. Gypsum has also been noted as a significant part of the Camillus Shale with beds being as thick as five feet. The Camillus Shale is estimated to be approximately 400 feet thick with a southward dip of approximately 40 feet per mile.

Two wells at the Linde Division, Union Carbide Corporation, approximately two miles south of the site, encountered the Camillus Shale at approximately 86 feet below the ground surface. Depth to bedrock at the Town of Tonawanda Landfill immediately to the west (Figure 1, Appendix C) ranged from 56.0 to 95.5 feet BGS, while depth to bedrock at the former Spaulding Composites plant, approximately 2,000 feet to the northwest (Figure 1), ranged from 40.0 to 55.0 feet BGS.

### **2.3      *Groundwater***

The depth to groundwater in the overburden deposits was determined during the PSA (refer to Section 3.0) to be approximately four to ten feet below ground surface (BGS). Regional groundwater flow through the more permeable horizons within the till overburden was thought to be to the west or northwest toward the Niagara River. However, groundwater elevations measured in the site wells are inconclusive as to the direction of groundwater flow.

The Camillus Shale, which underlies the site at an unknown depth, is a very productive bedrock aquifer due to its extensive network of joints, fractures, and solution cavities. Cavities that yield significant quantities of water were formed by the solution of gypsum in groundwater. Yields of wells installed in the Camillus Shale have high productivity with specific capacities of up to 83 gallons per minute per foot. Well records from two industrial wells drilled in 1944, two miles south of the site, indicated depth to water at approximately 90 feet in a gypsiferous zone of the Camillus Shale. This water level probably represents the piezometric surface in this confined aquifer.

The degree to which the site may be hydraulically connected to the underlying bedrock is uncertain at this point due to limited site information. However, based upon information from adjacent and nearby sites, and the high clay content and associated low permeability of the surficial deposits, the degree of hydraulic connection is likely to be limited.

## **2.4            *Surface Water***

The site is located one mile from Two Mile Creek and 1.5 miles from the Niagara River. Two Mile Creek has been designated as a Class B waterway making it suitable for primary contact recreation and any other uses except as a source of drinking water. The Niagara River has been classified as Class A Special (international boundary waters) and is a source of drinking water.

There are no Federally designated endangered or threatened species within a three mile radius of the site. However, there is a NYSDEC Significant Coastal Fish and Wildlife Habitat 1.9 miles from the site. The small white ladyslipper, *Cypripedium Candidum*, was found 2.6 miles from the site. This plant is a State-designated endangered species.

## **2.5            *Population***

A wood storage building (part of an adjacent commercial lumber company) is located approximately 20 feet north of the site. The nearest commercial building where people work on a regular basis (besides the site employees) is the lumber company's main building located approximately 150-200 feet to the north of the site, and a self-serve gas station located directly across Military Road to the east of the site. Additional commercial buildings are located north of the site on both the east and west sides of Military Road. Immediately to the south and west of the site are undeveloped fields and a closed landfill, respectively. The nearest private residences are located directly east across Military Road approximately 300-500 feet from the site.

The City and Town of Tonawanda are highly developed with both commercial and residential areas. It is estimated that approximately 107,000 people reside within a three-mile radius of the site. However, there are no wells used as a source of drinking water within three miles of the site. Drinking water for the Buffalo/Tonawanda area is supplied from the Niagara River. There is an unused farm well on the property south of the office, however, no information could be found referencing this well (see Figure ES-2, RAP, Appendix B). The well opening (approximately two feet in diameter) is presently covered by a granite boulder.

## **2.6            *Agricultural Land***

A review of topographic maps and aerial photographs, as well as the site reconnaissance, indicate that Tonawanda is a highly urbanized area. No agricultural land is located within three miles of the site.

## **2.7            *Commercial Land***

The surrounding area is predominantly commercial with a lumber yard adjacent to the north side of the site. A self-serve gasoline station is located across Military Road to the east. Undeveloped fields and a closed landfill are located immediately south and west of the site, respectively.

### **3.0 SITE HISTORY AND DESCRIPTION**

#### **3.1 Operational History**

The property was formerly operated by the Bisonite Co., Inc. ("Bisonite"). Prior to 1978, spent solvents, amounting to approximately 1800 gallons of mineral spirits per year, and paint pigments, were landspread over a one-acre portion of the property to the south. In addition, a lagoon approximately 50 feet long, 30 feet wide, and 8 to 10 feet deep, located in the northwest corner of the property, was used to dispose of metal paint pigments and by-products from the manufacture of water-based paints. This waste reportedly contained titanium dioxide, calcium carbonate, lime, clay, and calcium hypochlorite.

The landspreading operation ceased in 1978 when the DEC notified Bisonite that wastes must be hauled off-site for disposal at an approved facility. Use of the waste lagoon also ceased in 1978. Conflicting reports indicate uncertainty as to whether the lagoon was dredged prior to its backfill and closure. Over a period of approximately four years, the lagoon was filled in and by early 1983 it was finally capped and seeded. A site inspection conducted on November 20, 1985, during a previous DEC Phase I Investigation, noted that the lagoon was not properly covered and leachate was observed in small ponded areas on the ground surface. Also observed was a small 3 feet by 7 feet area of stained ground on the side of the former lagoon sloping west to the railroad tracks.

On July 27, 1990, a site reconnaissance was performed by a DEC contractor. The area where the lagoon was located appeared to be completely covered and was overgrown with grassy vegetation. This was also the case for the field south of the resin building where mineral spirits and other solvents had been used for weed control. A second site inspection was conducted on December 12, 1990. No additional contamination was observed during the second inspection, but several filled waste drums previously stored on the drum storage pad, west of the resin building, were removed.

Bisonite manufacturing operations apparently ceased in May, 1991. The closing of the site prompted DEC to prepare for entering into a Consent Order with Bisonite. While Bisonite and DEC negotiated the terms of the Consent Order, Bisonite proceeded with a clean up of the site and addressed many of the concerns identified in an early draft of the Consent Order. A final Consent Order was issued to Bisonite on December 4, 1991. Bisonite completed the site clean up in the fall of 1992.

### **3.2 RCRA Consent Order and Clean-up**

Some early document searches identify a 1972 aerial photograph showing a somewhat messy operation, prompting a DEC RCRA inspection in April 1991. A number of concerns regarding the handling, storage, and disposal of paint, paint wastes, and solvents were identified.

A formal RCRA inspection was triggered when, on September 18, 1991, two abandoned box trailers containing nearly 300 drums of waste paint from Bisonite were discovered in the City of Buffalo outside a warehouse. The subsequent inspection identified approximately 50,000 gallons of waste materials stored in tanks, drums, and 5-gallon pails at the site. Samples collected from waste drums and tanks indicated the presence of several solvents including xylene, toluene, methyl ethyl ketone, and methyl isobutyl ketone at concentrations ranging from low part-per-million (ppm) to percent levels.

Bisonite manufacturing operations apparently ceased in May, 1991. The closing of the site prompted DEC to prepare for entering into a Consent Order with Bisonite. While Bisonite and DEC negotiated the terms of the Consent Order, Bisonite proceeded with a clean up of the site and addressed many of the concerns identified in an early draft of the Consent Order. A final Consent Order was issued to Bisonite on December 4, 1991. Bisonite completed the site clean up in the fall of 1992.

The activities under the Consent Order addressed on-site tanks, drums, debris, and obviously contaminated surficial areas of the site, but did not address soil or groundwater contamination. As a result, a field investigation for a Preliminary Site Assessment was performed in the fall of 1993.

### **3.3 The Preliminary Site Assessment**

A Preliminary Site Assessment ("PSA") was initiated by the DEC in 1993. A field investigation for the PSA was conducted in the fall of 1993. The PSA Investigation included the collection of surficial soil samples, subsurface soil samples (borings) and the collection of groundwater samples. While the RCRA inspection confirmed the presence of hazardous waste at the site, the goal of the field investigation for the PSA was to assess whether buried waste (i.e., the former lagoon) existed, and whether the waste at the site could pose a significant threat to human health or the environment through direct contact with surface soil contamination or through migration of contaminated groundwater.

Engineering Investigations at Inactive Hazardous Waste Sites, Final Draft, Preliminary Site Assessment prepared for DEC by Dunn Engineering Company, dated March, 1994 (the "PSA").

The PSA identified three (3) areas of concern at the site:

- (1) a former landspreading area previously employed by a prior owner for disposal of spent solvents and/or paint pigments;
- (2) a former tank area where solvents may have been handled; and
- (3) a lagoon of approximately 50 feet by 30 feet and 8 to 10 feet deep previously used to dispose of metal paint pigments and by-products from the manufacture of water-based paints.

The Site Features Map identifying these areas of concern is attached as Figure ES-2 to the RAP, Appendix B.

The PSA concluded that certain subsurface soils exhibited levels of VOC's and metals in excess of background for eastern U.S. soils, but that groundwater did not appear to be impacted. On the basis of the PSA, the site was reclassified as a Class 3 site indicating that the site did not present a significant threat to the public health or the environment, and that any further action could be deferred.

### **3.4            *Supplemental Test Pit Investigation***

It was determined that a Supplemental Test Pit Investigation of the landspreading area would be required to delineate the extent (i.e., horizontal and vertical) of the surficial soil contamination referred to in the PSA (specifically soil sampling areas SS-1, SS-2, and SS-3). Contaminants of concern were identified (indicator compounds) as lead and chromium. A Work Plan for the Supplemental Test Pit Investigation was submitted and approved by DEC on April 25, 1996.

The initial Supplemental Test Pit Investigation was implemented by MRA on April 26, 1996. Analytical results of soil samples taken indicated exceedances in certain areas. As a result, it was agreed that an expanded test pit investigation would be conducted beyond those initially sampled which was conducted on May 28, 1996.

The analytical results for both phases of the Supplemental Test Pit Investigation in areas SS-1, SS-2, and SS-3 have been compiled and tabulated on the Sample Locator Map. As discussed with and agreed by DEC, the target contaminants of concern for this site are lead and chromium and the analytical results for these substances have been so mapped. The Sample Locator Map is attached as Figure ES-3 to the RAP, Appendix B.

### **3.5            *Summary of Nature and Extent of Concern***

The previous investigations undertaken at the site have indicated the presence of organic and inorganic compounds at various areas of the site, but for the purposes of this Removal Action, soil removal activities would be limited to and focused upon the landspreading area to the south and the former tank farm.

The primary constituents of concern in the landspreading area were metals in the shallow subsurface soils, including chromium, lead, zinc, arsenic, and mercury. Previous analytical results indicated that the removal of soils that exceed the soil cleanup guidance values for lead and chromium would also remove soils containing the highest concentrations of zinc, arsenic, and mercury. The landspreading area would be addressed through soil removal.

The primary constituents of concern in the tank farm area were ethylbenzene and xylene. The area of contamination has been fully characterized and delineated and would be addressed through soil removal.

Groundwater analytical results obtained previously indicate that groundwater does not appear to have been impacted by disposal practices at the site.

### **3.6            *Purpose and Objectives of the Removal Action***

The purpose of the Removal Action is to remove the contaminated soils from the landspreading area and the former tank farm area sufficient to eliminate these areas from the delineated site boundaries. Areas in which soil removal is to be implemented have been delineated, based on previous investigative results, and shown on Figure ES-4 in the RAP, Appendix B, by cross-hatching. The areas to be excavated have been identified as areas A, B, and C (in the SS-1 area); D, E, and F (in the SS-2 area; H and I (in the SS-3 area); and G (in the former tank storage area).

The overall objectives of the removal action are :

- Removal of contaminated soil from the delineated areas within the landspreading area (i.e., Areas A through F and Areas H and I) which contain total lead and chromium above the Target Soil Cleanup Goals of 1,000 ppm and 50 ppm, respectively.
- Removal of contaminated soil from the area delineated as Area G until screening with a PID confirms removal.
- Transport excavated soils off site to approved disposal/treatment facilities with transportation in full compliance with all applicable federal, state and local regulations and requirements.

## **4.0 REMOVAL ACTION ACTIVITIES**

### **4.1 Site Specific Health and Safety Plan**

The site specific Health and Safety Plan (H&SP) is presented in Appendix B. This plan describes the procedures and protocols that were followed during the Removal Action activities to ensure the health and safety of the on-site workers and the surrounding public. As part of the H&SP, air monitoring was conducted at the perimeter of the work zones for compliance with action levels. Air monitoring was conducted for both vapor emissions and particulates during excavation and stockpiling. During off-loading of the stockpiled excavated soil, monitoring for particulates was performed. Vapor emissions were monitored using PID and O<sub>2</sub>/LEL meters. Monitoring for particulates was performed using a MINIRAM PDM-3 Personal Aerosol Monitor. The air monitoring equipment was calibrated daily prior to use.

The results of the air monitoring for vapor emissions and particulates, which were performed during the Removal Action activities, are presented in Appendix D. As the data indicates, no action levels, as set forth in the H&SP, Appendix B, were exceeded during monitored site activities.

### **4.2 Site Preparation**

On October 12, 1996, personnel from MRA and *Buffalo Drilling Company, Inc. (BDC) and Barron & Associates, P.C. (B&A)* met at the site to establish in the field the nine areas to be excavated. Utilizing Figure ES-4, attached to the RAP, Appendix B, and existing field stakes identifying previous sample points, the corners of the areas to be excavated were located and marked with stakes. The boundaries of the excavations were then delineated by spray painting the boundaries.

On October 14, 1996, MRA and *BDC/B&A* personnel returned to the site to continue site preparation. Concurrent with site preparation activities, Glenn M. May, CPG, NYSDEC, inspected the nine delineated areas and agreed that the areas had been marked correctly. During Mr. May's inspection of the delineated areas, a representative of MRA brought to Mr. May's attention that one of the areas (i.e., Area H) was located entirely on the adjacent Niagara Mohawk property south of 2250 Military Road. As a result of this area being located off the property, the representative from MRA requested a decision as to whether this area should be excavated. Following a conversation between Mr. May and the Region 9, NYSDEC office, the decision was made by the NYSDEC that Area H would not be included in the Removal Action activities.

Site preparation activities performed on October 14 and 15, 1996 consisted of the following tasks:

- Preparation of two staging areas for stockpiling the excavated soil. The two staging areas, which were located in the areas shown on Figure 2, Appendix C, were prepared by placing 4"x4"x6' timbers around the edges of the two areas, covering the staging areas with plastic and securing the edges of the plastic with the timbers.
- Preparation of a decontamination area and drum staging area. The location of these two areas are also shown on Figure 2, Appendix C. The preparation of these two area was similar to the staging areas in that plastic was placed on the ground and subsequently secured to timbers at the edge of both areas. A ramp was constructed at the south end of the decon area for access.
- Securing the exclusion zones (areas to be excavated) and the stockpiled soil areas with orange snow fence at the locations shown on Figure 2, Appendix C.

#### **4.3        *Excavation/Removal Activities***

On October 14, 1996, following completion of site preparation, *B&A* personnel, who monitored the H&SP compliance and provided direction and supervision for the Removal Action activity, remedial personnel and equipment from *B&A's* affiliated company, *BDC*, and a 20-yard dump truck and driver from Pariso Trucking Company, Inc. initiated excavation activities. During the soil removal activities conducted on October 14, 15, and 16, 1996, a NYSDEC representative, Glenn M. May, CPG, was present on site.

Excavation activities were initiated in Area A on October 14, 1996. Area A was excavated using a JCB 1400 B Backhoe. The excavated soil was placed directly into the on-site dump truck and subsequently transported to a staging area and placed in separate stockpiles. Five stockpiles were staged on October 14, 1996 and are identified on Figure A, Appendix C, as stockpile #'s 3, 4, 5, 6, and 7. During the removal of the soil from Area A, the *B&A* representative observed that within discrete areas of the excavation, paint waste was encountered. As a result of encountering observable paint waste in discrete portions of the excavation, an attempt was made to segregate this material from excavated soil without visible paint waste; hence, on occasion, the dump truck was not filled to capacity prior to dumping, subsequently some of the stockpiles were not approximately 20 cubic yards. This procedure of monitoring and attempting to segregate obvious paint waste containing soil was followed throughout the remaining excavations.

Upon completion of the soil removal activities on October 14, 1996, the backhoe and dump truck were secured within the exclusion zone. The stockpiled soil in the staging area adjacent to and south of the concrete building that is located in the northwest portion of the property was covered with plastic prior to exiting the site.

On October 15, 1996, *B&A*, *BDC* and Pariso personnel continued to perform excavation and stockpiling activities. In addition to the backhoe, a CAT 312 excavator was also used during the excavation activities on October 15, 1996. On October 15, 1996, Areas B, C, D, E, F and I were excavated with the excavated material being placed in the staging areas in separate stockpiles that are identified on Figure A, Appendix C, as stockpile numbers 1, 2, 8, 9, 10, 11, and 13 through 21. Stockpile #'s 22, 23 and 24 were staged on plastic adjacent to Areas B and C due to logistical problems of transporting this material to the staging areas. Of the soils stockpiled on October 15, 1996, stockpile #'s 11, 13, 18 and 24 contained visible paint waste. Prior to exiting the site on October 15, 1996, the backhoe, excavator, and dump truck were secured within the exclusion zone and the staged stockpiles covered with plastic. Concurrent with the aforementioned activities associated with exiting the site, confirmatory samples were obtained by the on-site *B&A* representative with the NYSDEC representative in attendance (see Section 4.4).

On October 16, 1996, *B&A*, *BDC* and Pariso personnel returned to the site to initiate and complete the excavation of Area G. Area G excavation, due to elevated PID readings at the originally delineated boundaries, was expanded beyond the initial boundaries until the PID readings of the floor and sidewalls were detected in the range of 1 ppm or less, to 3 ppm. Upon achieving these PID readings, the on-site NYSDEC representative, Glenn M. May, CPG, inspected the excavation and confirmed completion of the excavation in Area G. The excavated soils from Area G were placed in stockpile # 12, Figure A, Appendix C.

Following completion of Area G and prior to demobilization of equipment and personnel from the site, the confirmatory sample analytical results were received from the contracted analytical laboratory (refer to Section 4.4). As discussed in Section 4.4, the confirmatory analytical results for the excavations completed on October 14 and 15, 1996 were below the Target Soil Cleanup Goals (i.e., lead @ 1,000 ppm and chromium @ 50 ppm). Based on these results, the on-site NYSDEC representative concurred that the areas to be excavated as set forth in the RAP were complete and that equipment and personnel could be demobilized from the site.

Prior to removal of equipment off site, the dump truck, backhoe and excavator were decontaminated. The decontamination procedure consisted of removing soil from the equipment using brooms and shovels followed by steam cleaning. The decon water generated during steam cleaning was contained in the decon pad and then drummed. Personnel exited the site after covering the stockpiled soils and securing the fence around the exclusion zone.

The final horizontal and vertical extent of the areas excavated were established by Matthew F. Wilson, L.S., 637 Oliver Street, Tonawanda, New York. Figure 3, Appendix C, presents the results of this survey.

#### **4.4 Confirmation Sampling and Analysis**

Upon completion of excavating the soils from Areas A through I, excluding Area H, confirmatory sampling of the excavated areas, in compliance with the RAP, was performed on October 15 and 16, 1996 to confirm that Target Soil Clean-up Goals had been achieved. The confirmatory sampling procedures that were followed were:

- Area A: Two (2) composite samples of the excavation floor. Please note that the RAP proposed a sidewall sample from the southernmost sidewall of this excavation. As a result of this excavation extending to the southern property line, the NYSDEC on-site representative agreed that a southern sidewall sample was not required.
- Area B and C: One (1) composite excavation floor samples from each area.
- Area D: One (1) composite excavation floor sample.
- Area E, F, and H: One (1) composite excavation floor sample for each area.
- Area I: Two (2) composite excavation floor samples.
- Area G: No confirmatory sampling were performed in this area because the area had been fully delineated and characterized. Soils from the floor and sidewalls of the excavation were screened with a PID to ensure the completeness of the removal. In addition, the on-site NYSDEC representative performed a final inspection of the excavation and deemed the excavation complete.

Each composite sample consisted of three (3) discrete soil samples. The discrete samples were then composited in the field and placed in precleaned laboratory containers, labelled and the chain-of-custody initiated. The samples were submitted under chain-of-custody to Waste Stream Technology, Inc. (WST) for analysis. The confirmatory composite samples were analyzed for total lead and chromium. The laboratory analytical and quality control results are presented in Appendix E. Figure A 3, Appendix C, presents the results of the confirmatory sampling and analysis. As shown on Figure 3, Appendix C, the results for total lead and chromium were below the Target Soil Cleanup Goals; hence, confirming that the excavations in Areas A, B, C, D, E, F and I were complete and in compliance with the goals set forth in the RAP.

Area G was deemed complete and in compliance with the goals set forth in the RAP as a result of screening the floor and sidewalls of the excavation with a PID and final inspection by the on-site NYSDEC representative, Glenn M. May, CPG. Subsequent to field approval by the on-site NYSDEC representative, a letter from Daniel K. King, P.E., NYSDEC, to Mr. Craig A. Slater, Harter, Secrest & Emery, dated October 24, 1996, documented NYSDEC's approval that "the extent of contaminated soil excavated at the site meets the objectives of this element of the work plan" (Appendix F).

#### **4.5 Waste Characterization**

On October 17, 1996, B&A personnel returned to the site for the purpose of sampling the stockpiled soils for disposal purposes. A composite sample was obtained from each stockpile, excluding stockpile #'s 11 and 24. Stockpiles #11 and #24 contained numerous visible paint waste; as such, these stockpiles were assumed to be hazardous (i.e., the paint waste/soils within these two stockpiles would exceed the regulatory limits for TCLP - lead and chromium). The composite samples were placed in precleaned laboratory containers, labelled and transported under chain-of-custody to WST for analysis. Upon receipt of the samples, a subsequent compositing program was performed by WST at the direction of B&A. The compositing program consisted of compositing stockpiles which contained visible paint waste as follows (refer to Figure A, Appendix C):

- Composite 5 - Stockpiles #13 and #18
- Composite 9 - Stockpiles #3, #5 and #6

The remaining stockpiles, which did not contain visible paint waste, were composited, based on the stockpiled material originating from the same excavation and/or an adjacent excavations, as follows:

- Composite 1 - Stockpiles #1, #2, #8 and #9 from excavation Area I
- Composite 2 - Stockpiles #4 and #7 from excavation Area A
- Composite 3 - Stockpile #12 from excavation Area G
- Composite 4 - Stockpiles #10, #15, #16 and #17 from excavation Area I
- Composite 6 - Stockpiles #14 and #21 from excavation Areas E and Stockpile #20 from excavation Area F
- Composite 7 - Stockpile #19
- Composite 8 - Stockpiles #22 and #23 from excavation Area C

Upon compositing of the above samples by WST, the samples underwent TCLP analysis for volatiles, semi-volatiles and metals. The laboratory analytical and quality

control results for this analysis with the chain-of-custody are presented in Appendix G. Based on the results of the aforementioned analysis, composite samples #5 and #9 exceed the regulatory limit for leachable lead and chromium.

In addition to the above analysis, individual stockpile samples were analyzed for total lead and chromium to confirm that the material in the individual stockpiles did exceed the Target Soil Cleanup Goals and required off-site disposal in a regulated Part 360 facility. The stockpiles analyzed for total lead and chromium were Stockpiles #1, #2, #3, #4, #7, #8, #9, #10, #12, #14, #15, #16, #17, #20 and #21. The laboratory analytical and quality control results for this analysis with the chain-of-custody are presented in Appendix H. Based on this analysis, the following stockpiles did not exceed the Target Soil Cleanup Goals (i.e. lead @ 1,000 ppm and chromium @ 50 ppm). The stockpiles and analytical are:

- Stockpile #1 - lead @ 151 ppm and chromium @ 26.6 ppm
- Stockpile #2 - lead @ 211 ppm and chromium @ 28.8 ppm
- Stockpile #7 - lead @ 340 ppm and chromium @ 29.7 ppm
- Stockpile #12 - lead @ 21.7 ppm and chromium @ 17.4 ppm
- Stockpile #20 - lead @ 230 ppm and chromium @ 44 ppm

Analysis for volatile organics via US EPA Method 8240 was performed on Stockpile #12 which contained the excavated soils from Area G. The purpose of this analysis, which was suggested by the on-site NYSDEC representative, was to obtain baseline concentrations of the primary volatile organic compounds of concern in Area G (i.e., ethylbenzene and xylene). The baseline concentrations would enable a determination of the feasibility to aerate the excavated soils on site and subsequently reuse this material on site. The laboratory analytical and quality control results for this analysis is presented in Appendix G.

Based on the results of this analysis, the detected volatile organic compound concentrations were below recommended soil cleanup objectives at inactive hazardous waste sites set forth in a NYSDEC Technical and Administrative Guidance Memorandum (TAGM): Determination of Soil Cleanup Objectives and Cleanup Levels, January 24, 1994. As a result of the detected volatile organic compound concentrations being below guidance values and the total lead and chromium concentrations being below Target Soil Cleanup Goals, Stockpile #12 could be reused on site.

#### **4.6            *Disposal of Non-Hazardous and Hazardous Material***

In a letter to Dan King, P.E., NYSDEC, from Craig A. Slater, Harter, Secrest & Emery, dated November 13, 1996 (Appendix I), Mr. Slater summarized the above waste characterization results and requested NYSDEC approval of the following disposal items:

- Place Stockpile #'s 1, 2, 7, 12, 14 and 20 into the on-site excavation areas.
- Transport Stockpile #'s 4, 8, <sup>9</sup>10, 15, 16, 17, 19, 21, 22 and 23 to a permitted Part 360 facility.
- Restage Stockpile #'s 3, 5, 6, 11, 13, 18 and 24 (on and covered with plastic) in the staging area adjacent to the concrete building in the northwest portion of the property. Upon receipt of TSDF wastestream approval, transport off-site to a permitted Part 370 facility for treatment and disposal.

Approval of the above disposal program was transmitted to Mr. Craig A. Slater, Harter, Secrest & Emery, from Mr. Glenn M. May, CPG, NYSDEC, in a letter dated November 20, 1996 (Appendix I).

On November 25, 1996, following acceptance for disposal of the non-hazardous stockpile material at Waste Management, Inc.'s High Acres Landfill, 425 Perinton Parkway, Fairport, New York, *BDC/B&A* mobilized personnel and equipment to the site for the purpose of relocating the aforementioned six stockpiles of excavated soil which had NYSDEC-approved for reuse on site, off-loading the non-hazardous soil for transport to and disposal at High Acres Landfill, and, the restaging of the hazardous material on site for subsequent disposal upon receipt of TSDF wastestream approval. The on-site equipment that was used for the performance of the above tasks were a dump truck, JCB 1400 B backhoe and a CAT 312 excavator.

The non-hazardous soils were loaded into lined-trucks provided by Zoladz Construction Company, Inc., Alden, New York and Big K Trucking, Inc., Marilla, New York, both licensed haulers of non-hazardous waste. The loading of the trucks was performed on plastic adjacent to the staging areas. Prior to exiting the lined area, the truck tires were inspected to minimize the possibility of transferring potentially contaminated soil off site. Prior to leaving the site, the loads were covered.

The removal of the non-hazardous soils required ten trucks, equating to a total of 224 tons. The Non-Hazardous Special Waste Manifest and weight ticket for each of the ten trucks are presented in Appendix J. Removal of the non-hazardous stockpiles was completed on November 25, 1996. Following removal of the non-hazardous stockpiles and the relocating of the stockpiles that will be reused on site, the remaining hazardous stockpiles were temporarily staged in the staging area adjacent to the concrete building in the northwest portion of the property. These stockpiles were staged on plastic, covered with plastic and a fence was placed around the stockpiles. Prior to exiting the site, the dump truck was decontaminated. The remaining site equipment was secured on site.

On November 26, 1996, *BDC/B&A* personnel returned to the site to consolidated the hazardous waste stockpiles in the area immediately south of the concrete pad adjacent to the concrete building in the northwest portion of the site. These stockpiles were placed on and covered with plastic. An orange snow fence was then placed around this area. Before removing the equipment from the site both the excavator and backhoe were decontaminated and the generated solids placed with the stockpiled soil and the water placed in a drum within the drum containment area.

On December 11, 1996, Chemical Waste Management, Inc. approved the wastestream for receipt, treatment and disposal at their NYSDEC-approved facility at Model City, New York. On December 12, 1996, *BDC/B&A* personnel and equipment (i.e., backhoe and steam cleaner) mobilized to the site for the purpose of off loading the remaining soils which had been characterized as hazardous material. Prior to off loading the material, the truck loading area, which was located adjacent to the staged material to be loaded, was lined with plastic.

The material was transported off site by trucks supplied by CWM Chemical Services, Inc., Model City, New York and Frank's Vacuum Truck Services, Inc., Niagara Falls, New York who are both licensed haulers of hazardous material. Removal of the staged soil required six trucks. The six Uniform Hazardous Waste Manifests are presented in Appendix K. Also, presented in Appendix K is the profile report received from CWM Chemical Services, Inc. identifying the individual State Manifest Number, time of receipt of the material at the facility, and the net weight of each truck. Based on this information 129.91 tons of material was transported off site to CWM Chemical Services, Inc. facility in Model City, New York for treatment and disposal.

During the loading of the soil, the waters generated during the decontamination process to date, approximately three-quarters of a 55-gallon drum, was intermixed with the soil to be loaded. The aforementioned drum was steam cleaned and that water was intermixed with the soil. Prior to the last truck exiting the site, the following activities were performed:

- The staging area was scrapped to remove the plastic liner which was placed in the truck.
- The staging area was inspected and any areas of visible paint waste was either scrapped with the backhoe or removed with shovels. This material was placed in the last truck.

- The backhoe was cleaned with brushes and shovels and the solids placed in the last truck.
- The plastic liner from the loading area was removed and placed in the last truck and the loading area inspected.

Upon completion of the above activities, *BDC/B&A* personnel and equipment demobilized from the site on December 12, 1996.

## **5.0 CERTIFICATE OF CLOSURE**

Based on the information and documentation set forth in this document, the Removal Action that was performed at 2250 Military Road, Town of Tonawanda, New York, site meets the objective of the work elements set forth in the RAP. The RAP has been conducted and completed consistent with the National Contingency Plan (40 CFR Part 300).

*APPENDIX A*

*ORDER ON CONSENT, INDEX # B9-0389-91-10*

STATE OF NEW YORK: DEPARTMENT OF ENVIRONMENTAL CONSERVATION

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In the Matter of the  
Development and Implementation  
of an Interim Remedial Measure Program  
for an Inactive Hazardous Waste Disposal  
Site, Under Article 27, Title 13,  
and Article 71, Title 27 of the  
Environmental Conservation Law  
of the State of New York  
by

ORDER  
ON  
CONSENT  
INDEX # B9-0389-91-10

2251 Military Road Associates, Inc.  
Respondent.

Site Code #915010

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WHEREAS,

1. The New York State Department of Environmental Conservation (the "Department") is responsible for enforcement of Article 27, Title 13 of the Environmental Conservation Law of the State of New York ("ECL"), entitled "Inactive Hazardous Waste Disposal Sites." This Order is entered into pursuant to the Department's authority under ECL Article 27, Title 13 and ECL 3-0301.

2. Bisonite Co. Inc. and 2251 Military Road Associates, Inc. are corporations organized and existing under the laws of the State of New York and conduct business in the State of New York. Bisonite Co. Inc., owns certain real property located at 2250 Military Road, Town of Tonawanda, Erie County, State of New York (the "Site"). Presently, 2251 Military Road Associates, Inc. ("Respondent") has options to purchase or lease portions of the Site and conduct certain commercial activities at that location. A map of the Site is attached as Appendix "A" and is hereby incorporated into this Order.

3. The Department has determined that hazardous wastes, as that term is defined at ECL 27-1301.2, have been disposed of at the Site and the Site has been listed in the Registry of Inactive Hazardous Waste Disposal Sites in New York State as Site Number 915010. The Department has classified the Site as a Classification "3" pursuant to ECL 27-1305.4.b.

4. The Department also has the power, inter alia, to provide for the prevention and abatement of all water, land,

and air pollution. ECL 3-0301.1.i.

5. Respondent has submitted, and the Department has approved, a Work Plan for an Interim Remedial Measure for soil removal and other activities for the Site which is incorporated into this Order as Appendix "B".

6. The Department and Respondent agree that the goals of this Order is for Respondents to (1) implement an Interim Remedial Measure Program ("IRM Program") for the Site pursuant to Appendix "B", and (ii) reimburse the State's administrative costs pursuant to Paragraph VII.

7. Respondent, having waived its right to a hearing herein as provided by law, and having consented to the issuance and entry of this Order, agree to be bound by its terms. Respondent consents to and agrees not to contest the authority or jurisdiction of the Department to issue or enforce this Order, and agrees not to contest the validity of this Order or its terms.

NOW, having considered this matter and being duly advised, IT IS ORDERED THAT:

I. Information Submittal

Within 60 days after the effective date of this Order, Respondent shall submit to the Department all data within its possession or control regarding the presence or suspected presence of hazardous wastes at the Site, to the extent that such data have not previously been provided to the Department. The data shall include:

A. a brief history and description of the Site to the extent known, an identification of the types, estimated quantities, physical state, location and dates of disposal of hazardous waste, as well as the names of "responsible parties" and their relationship to the waste and to the Site;

B. a description of the results of any previous environmental investigations of the Site performed by or on behalf of the Respondent together with copies of topographic surveys, property surveys, engineering studies and aerial photographs in the possession of the Respondent.

## II. Performance and Reporting of IRM Program

A. Pursuant to the schedule in Appendix "B", Respondent shall commence and perform the IRM Program.

B. During the performance of the IRM Program, Respondent must have on-Site a full-time representative who is qualified to supervise the work done.

C. Within the time frame set forth in the IRM Work Plan, Respondent must prepare an IRM report ("IRM Report") that includes all data generated and all other information obtained during the IRM Program and identifies any additional data relevant to the remediation of the Site that must be collected. The IRM Report shall be prepared by and have the signature and seal of a professional engineer who shall certify that the IRM Report was prepared in accordance with this Order.

## III. Progress Reports

A. If the IRM field work requires more than two months for completion, Respondent shall submit to the parties identified in subparagraph XI in the numbers specified therein copies of written monthly progress reports that: (i) describe the actions which have been taken toward achieving compliance with this Order during the previous month; (ii) include all results of sampling and tests and all other data relevant to the remediation of the Site generated by Respondent or Respondent's contractors or agents in the previous month, including quality assurance/quality control information, whether conducted pursuant to this Order or conducted independently by Respondent; (iii) identify all work plans, reports, and other deliverables required by this Order that were completed and submitted during the previous month; (iv) describe all actions, including, but not limited to, data collection and implementation of work plans, that are scheduled for the next month and provide other information relating to the progress at the Site; (v) include information regarding percentage of completion, unresolved delays encountered or anticipated that may affect the future schedule for implementation of Respondent's obligations under the Order, and

efforts made to mitigate those delays or anticipated delays; and (vi) include any modifications to any work plans that Respondent has proposed to the Department or that the Department has approved. Respondent shall submit these progress reports to the Department by the tenth day of every month following the effective date of this Order in the event that the foregoing requirements of subparagraph III(A) of this Order are brought into effect by performance of IRM field work requiring more than two months for completion.

B. Respondent shall allow the Department to attend, and shall provide the Department at least seven days advance notice pursuant to paragraph XI herein of the occurrence of any of the following, if any such meetings or inspections take place: prebid meetings, job progress meetings, substantial completion meeting and inspection, and final inspection and meeting.

#### IV. Review of Submittals

A. (1) The Department shall review each of the submittals Respondent makes pursuant to this Order to determine whether it was prepared, and whether the work done to generate the data and other information in the submittal was done, in accordance with this Order and generally accepted technical and scientific principles. The Department shall notify Respondent in writing of its approval or disapproval of the submittal. All Department-approved submittals shall be incorporated into and become an enforceable part of this Order.

(2) (a) If the Department disapproves a submittal, it shall so notify Respondent in writing and shall specify the reasons for its disapproval. Within the period of time specified in the notice of disapproval, but not less than sixty 60 days, Respondent shall make a revised submittal to the Department that addresses and resolves all of the Department's stated reasons for disapproving the first submittal.

(b) After receipt of the revised submittal, the Department shall notify Respondent in writing of its approval or disapproval. If the Department disapproves the

revised submittal, the Department shall notify Respondent in writing of the Department's objections and reasons therefore. Respondent shall make a re-revised submittal to the Department that addresses and resolves all of the Department's stated reasons for disapproving the re-revised submittal within sixty (60) days of its receipt of the Department's objections to the submittal. If the Department disapproves the re-revised submittal, Respondent shall be in violation of this Order and the Department may take any action or pursue whatever rights it has pursuant to any provision of statutory or common law unless Respondent invokes the dispute resolution mechanism provided in paragraph XII herein within 20 days of its receipt of the notice of disapproval of the re-revised submittal. If the Department approves the revised or re-revised submittal, it shall be incorporated into and become an enforceable part of this Order.

B. The Department may request in writing that Respondent modify and/or amplify and expand a submittal, and associated work, if the Department determines, as a result of reviewing data generated by an activity required under this Order or as a result of reviewing any other data or facts, that further work is necessary. Any request so made by the Department shall include an explanation of the basis for the request. In the event that Respondent refuse to undertake the request within the period of time specified therein, Respondent shall be in violation of this Order and the Department may take any action or pursue whatever rights it has pursuant to statutory or common law, unless Respondent invokes the dispute resolution mechanism provided in paragraph XII herein within twenty days of their receipt of any written request by the Department to modify and/or amplify and expand a submittal.

V. Penalties

A. Respondent's failure to comply with any term of this Order constitutes a violation of this Order and the ECL.

B. Respondent shall not suffer any penalty under this Order or be subject to any proceeding or action for any

remedy or relief if it cannot comply with any scheduling requirements of this Order because of an act of God, war, or riot or because of any condition or event entirely beyond the control of Respondent or its agent or agents carrying out Respondent's obligations under this Order. Respondent shall immediately notify the Department in writing when it obtains knowledge of any such condition and request an appropriate extension or modification of this Order.

Increased costs or expenses of any work to be performed under this Order, the financial inability of Respondent to perform such work, the failure of Respondent to make complete and timely application for any required approval or permit, and nonattainment of the goals, standards and requirements of this Order do not constitute conditions or events warranting the relief set forth in this subparagraph.

C. (1) As long as Respondent complies with the terms of this Order and any Appendix thereto, the Department shall not bring any action relative hereto which seeks relief which is inconsistent with or duplicative of relief provided for in this Order except as provided in subparagraph VIII.B and Department's right to bring any criminal action against the Respondent and/or any of Respondent's directors, officers, employees, servants, agents, successors and assigns.

(2) Upon the Department's approval of all submittals identified in paragraph IV herein, and upon payment of all monies specified in paragraph VII herein, Respondent, shall have fulfilled its obligations pursuant to this Order, and their obligations under this Order shall terminate with the exception of paragraph IX herein.

#### VI. Entry upon Site

Respondent hereby consents, following reasonable notice to Respondent, to the entry upon the Site or areas in the vicinity of the Site which may be under the control of Respondent by any duly designated employee, consultant, contractor, or agent of the Department or any State agency for purposes of inspection, sampling, and testing and to ensure

Respondent's compliance with this Order. Respondent shall provide the Department with suitable office space at the Site, including access to a telephone, and shall permit the Department full access to all records relating to matters addressed by this Order and job meetings.

VII. Payment of State Costs

Within 30 days after receipt of an itemized invoice from the Department, Respondent shall pay to the Department a sum of money which shall not exceed \$5,000.00 and which shall represent reimbursement for the State's expenses including, but not limited to, direct labor, fringe benefits, indirect costs, travel, analytical costs, and contractor costs incurred by the State of New York for work performed at the Site for negotiating this Order, reviewing and revising submittals made pursuant to this Order, overseeing activities conducted pursuant to this Order, collecting and analyzing samples, and administrative costs associated with this Order. Such payment shall be made by certified check payable to the Department of Environmental Conservation. Payment shall be sent to the Bureau of Program Management, Division of Environmental Remediation, N.Y.S.D.E.C., 50 Wolf Road, Albany, NY 12233-7010. Itemization of the costs shall include an accounting of personal services indicating the employee name, title, biweekly salary, and time spent (in hours) on the project during the billing period, as identified by an assigned time and activity code. This information shall be documented by quarterly reports of Direct Personal Service. Approved agency fringe benefit and indirect cost rates shall be applied. Non-personal service costs shall be summarized by category of expense (e.g., supplies, materials, travel, contractual) and shall be documented by expenditure reports.

VIII. Department Reservation of Rights

A. Nothing contained in this Order shall be construed as barring, diminishing, adjudicating, or in any way affecting any of the Department's civil, criminal, equitable or administrative rights or authority.

B. Nothing contained in this Order shall be construed to prohibit the Commissioner or his duly authorized representative from exercising any summary abatement powers.

IX. Indemnification

Respondent shall indemnify and hold the Department, the State of New York, and their representatives and employees harmless for all claims, suits, actions, damages, and costs of every name and description arising out of or resulting from the fulfillment or attempted fulfillment of this Order by Respondent and/or any of Respondent's directors, officers, employees, servants, agents, successors, and assigns; provided however, that Respondent shall not be required to indemnify and hold the Department, the State of New York or their representatives and employees harmless for any claims, suits, actions, damages and costs of any name and description arising out of or resulting from the negligence of the Department or State of New York, or their representatives or employees.

X. Public Notice

A. If Respondent propose to convey the whole or any part of Respondent's ownership interest in the Site prior to obtaining a de-listing of the Site or portions thereof, from the Department, Respondent shall, not fewer than 60 days before the date of conveyance, notify the Department in writing of the identity of the transferee and of the nature and proposed date of the conveyance and shall notify the transferee in writing, with a copy to the Department, of the applicability of this Order.

B. Within thirty days after the effective date of this Order, Respondent shall file a deed notification with the Clerk of the County wherein the site is located to give all parties who may subsequently acquire any interest in the site notice of this Consent Order. Such notification may be withdrawn when Respondent's obligations pursuant to this Order have been completed by the Respondent.

XI. Communications

A. All written communications required by this

Order shall be transmitted by United States Postal Service, by private courier service, or hand delivered as follows:

Communication from Respondent shall be sent to:

1. Regional Director, Region 9  
New York State Department of Environmental Conservation  
270 Michigan Avenue  
Buffalo, New York 14203
2. Director, Bureau of Environmental Exposure Investigation  
New York State Department of Health  
2 University Place  
Albany, New York 12203
3. Daniel King, P.E.  
New York State Department of Environmental Conservation  
Region 9  
270 Michigan Avenue  
Buffalo, New York 14203
4. Joseph P. Ryan, Esq.  
Division of Environmental Enforcement  
New York State Department of Environmental Conservation  
270 Michigan Avenue  
Buffalo, New York 14203

B. Copies of work plans and reports shall be submitted as follows:

1. Four copies (one unbound) to  
Daniel King, P.E., Region 9  
Division of Environmental Remediation
2. Two copies to the Director, Bureau of Environmental Exposure Investigation.
3. Director, Division of Environmental Remediation  
New York State Department of Environmental Conservation  
50 Wolf Road  
Albany, New York 12233-7050
4. Joseph P. Ryan, Esq., Division of Environmental Enforcement  
New York State Department of Environmental Conservation  
270 Michigan Avenue  
Buffalo, New York 14203

C. Communication to be made from the Department to Respondent shall be sent to:

Mr. James Cornell  
470 Niagara Parkway  
North Tonawanda, New York 14120-0630

Harter, Secrest & Emery  
800 Olympic Towers  
300 Pearl Street  
Buffalo, New York 14202

D. The Department and Respondent reserve the right to designate additional or different addressees for communication or written notice to the other.

#### XII. Dispute Resolution

A. Unless otherwise expressly provided for in this Order, the dispute resolution procedures of this subparagraph shall be the exclusive mechanism to resolve any disputes arising under or with respect to this Order between Respondent and the Department. However, the procedures set forth in this subparagraph shall not apply to actions by the Department to enforce obligations of the Respondent that have not been disputed in accordance with this subparagraph.

B. Any dispute which arises under or with respect to this Order shall in the first instance be the subject of informal negotiations shall not exceed twenty (20) days from the time that the dispute arises, unless it is modified by written agreement. The dispute shall be considered to have arisen when one party sends to the other party a Written Notice of Dispute in accordance with subparagraph XI herein.

C. If the Department disapproves a re-revised submittal, Respondent shall be in violation of this Order unless, within 20 days of receipt of the Department's notice of disapproval, Respondent serves on the Department's Director of Environmental Remediation ("the Director") a written statement of the issues in dispute, the relevant facts upon which the dispute is based, and factual data, analysis or opinion supporting its position, and all supporting documentation on which respondent relies (hereinafter called the "Statement of

Position"). The Department shall serve its Statement of Position, including supporting documentation no later than twenty (20) days after receipt of Respondent's Statement of Position. In the event that these 20-day time periods for exchange of Statements of Position may cause a delay in the work being performed under this Order, the time periods may be shortened upon and in accordance with notice by the Department as agreed to by Respondent.

An administrative record of any dispute under this Paragraph shall be maintained by the Department. The record shall include the Statement of Position of each party served pursuant to the preceding Subparagraph, and any relevant information provided by the parties hereto. The record shall be available for review of all parties and the public.

Upon review of the administrative record as developed pursuant to this Paragraph, the Director shall issue a final decision and Order resolving the dispute. Respondent shall revise the submittal in accordance with the Department's specific comments, as may be modified by the Director, with the exception of those portions of the submittal which have been withdrawn by the Director, and shall submit a revised submittal. The period of time within which the submittal must be revised (as specified by the Department in its notice of disapproval) shall control unless the Director revises the time frame in the Director's final decision and Order resolving the dispute.

After receipt of the revised submittal, the Department shall notify Respondent in writing of its approval or disapproval of the revised submittal.

If the revised submittal fails to address the Department's specific comments, as modified, and the Department disapproves the revised submittal for this reason, Respondent shall be in violation of this Order and the ECL.

In review by the Director of any dispute pursued under this Paragraph, Respondent shall have the burden of proving that there is no rational basis for the Department's position.

The invocation of the procedures stated in this Paragraph shall not extend, postpone, or modify Respondent's obligations under this Order with respect to any other nondisputed items, unless and until the Department agrees or a court determines otherwise. The Director's final decision issued pursuant to this paragraph shall serve as the final agency position for the purposes of any Article 78 action on that matter.

XIII. Contribution

A. Nothing in this Order shall be construed to create any rights in, or grant any cause of action to, any person not a party to this Order. The proceeding sentence shall not be construed to waive or nullify any rights that any person not a signatory to this Order may have under applicable law. The Department and Respondent expressly reserve any and all rights (including, but not limited to, any right to contribution), defenses, claims, demands, and causes of action which each party may have with respect to any matter, transaction, or occurrence relating in any way to the Site against any person not a party hereto.

B. With respect to potential actions claims for contribution against Respondent for matters addressed in this Order, the Department agrees that Respondent is entitled to whatever protection from any such contribution action and/or claim in a manner equivalent to that provided by the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"), §113(f)(2), 42 U.S.C. §9613(f)(2), as may be otherwise provided by law.

XIV. Miscellaneous

A. All activities and submittals required by this Order shall address both on-Site and known off-Site contamination resulting from the disposal of hazardous waste at the Site.

B. Respondent shall retain professional consultants, contractors, laboratories, quality assurance/quality control personnel, and data validators acceptable to the Department to perform the technical,

engineering, and analytical obligations required by this Order. The experience, capabilities, and qualifications of the firms or individuals selected by Respondent have been and shall be submitted to the Department. The Department's approval of these firms or individuals shall be obtained before the start of any activities for which Respondent and such firms or individuals will be responsible. The responsibility for the performance of the professionals retained by Respondent shall rest solely with Respondent.

C. The Department shall have the right to obtain split samples, duplicate samples, or both, of all substances and materials sampled by Respondent, and the Department also shall have the right to take its own samples. Respondent shall make available to the Department the results of all sampling and/or tests or other data generated by Respondent with respect to implementation of this Order and shall submit these results in the progress reports required by this Order.

D. Respondent shall notify the Department at least 10 working days in advance of any field activities to be conducted pursuant to this Order.

E. Respondent shall obtain all permits, easements, rights-of-way, rights-of-entry, approvals, or authorizations necessary to perform Respondent's obligations under this Order. The Department shall assist the Respondent to the extent practicable in the event that such assistance is requested or required by Respondent to secure any such necessary permits, easements, right-of-way, rights-of-entry, approvals or authorizations needed to perform this Order.

F. Respondent and Respondent's successors and assigns shall be bound by this Order. Any change in ownership or corporate status of Respondent including, but not limited to, any transfer of assets or real or personal property shall in no way alter Respondent's responsibilities under this Order. Respondent's officers, directors, employees, servants, and agents shall be obliged to comply with the relevant provisions of this Order in the performance of their designated duties on

behalf of Respondent.

G. Respondent shall provide a copy of this Order to each contractor hired to perform work required by this Order and to each person representing Respondent with respect to the Site and shall condition all contracts entered into in order to carry out the obligations identified in this Order upon performance in conformity with the terms of this Order. Respondent or Respondent's contractors shall provide written notice of this Order to all subcontractors hired to perform any portion of the work required by this Order. Respondent shall nonetheless be responsible for ensuring that Respondent's contractors and subcontractors perform the work in satisfaction of the requirements of this Order.

H. "Interim Remedial Measure" shall have the meaning set forth in the Department's "Division Technical and Administrative Guidance Memorandum: Interim Remedial Measures" (# HWR-91-4042, dated February 12, 1991) and 6 NYCRR 375-1.3(n) or modifications thereto.

I. Respondent acknowledges that and agree to cooperate with the Department when the Department engages in citizen participation activities related to this Order outlined in the Department's publication, "New York State Inactive Hazardous Waste Citizen Participation Plan" dated August 30, 1988, and any subsequent revisions thereto and 6 NYCRR Part 375.

J. All references to "professional engineer" in this Order are to an individual registered as a professional engineer in accordance with Article 145 of the New York State Education Law.

K. All references to "days" in this Order are to calendar days unless otherwise specified.

L. The section headings set forth in this Order are included for convenience of reference only and shall be disregarded in the construction and interpretation of any of the provisions of this Order.

M. (1) The terms of this Order shall constitute

the complete and entire Order between Respondent and the Department concerning the Site. No term, condition, understanding, or agreement purporting to modify or vary any term of this Order shall be binding unless made in writing and subscribed by the party to be bound. No informal advice, guidance, suggestion, or comment by the Department regarding any report, proposal, plan, specification, schedule, or any other submittal shall be construed as relieving Respondent of Respondent's obligation to obtain such formal approvals as may be required by this Order.

(2) If Respondent desires that any provision of this Order be changed, Respondent shall make timely written application, signed by the Respondent, to the Commissioner setting forth reasonable grounds for the relief sought. Copies of such written application shall be delivered or mailed by Respondent to the parties identified in subparagraph XI.A.

N. The effective date of this Order shall be the date it is signed by the Commissioner or his designee.

DATED:                               , New York  
                                      , 1996

MICHAEL D. ZAGATA  
Commissioner  
New York State Department  
of Environmental Conservation

---

By: Michael J. O'Toole, Jr.

CONSENT BY RESPONDENT

Respondent hereby consents to the issuing and entering of this Order, waives Respondent's right to a hearing herein as provided by law, and agrees to be bound by this Order.

By: \_\_\_\_\_

JAMES W. CORNELL  
(Type Name of Signer)

Title: \_\_\_\_\_

Date: \_\_\_\_\_

STATE OF NEW YORK )

) s.s.:

COUNTY OF ERIE )

On this 11th day of OCTOBER, 1996,  
before me personally came JAMES W. CORNELL, to me  
known, who, being by me duly sworn, did depose and say that he  
resides in Akron, New York; that he is the  
President of ~~the~~ 2251 Military Road Associates, Inc.  
the corporation described in and which executed the foregoing  
instrument; that he knew the seal of said corporation; that the  
seal affixed to said instrument was such corporate seal; that  
it was so affixed by the order of the Board of Directors of  
said corporation, and that he signed his name thereto by like  
order.

Craig A. Slater  
Notary Public

CRAIG A. SLATER  
Notary Public, State of New York  
Qualified in Erie County  
My Commission Expires March 30, 1997

7/30/97

***APPENDIX B***

***REMOVAL ACTION WORK PLAN  
&  
HEALTH & SAFETY PLAN***

## REMOVAL ACTION WORK PLAN

2250 Military Road  
Town of Tonawanda  
County of Erie, New York

Site Number 915010

Prepared for:

**2251 MILITARY ROAD ASSOCIATES, INC..**  
2250 Military Road  
Tonawanda, New York 14221

Prepared by:

Waste Stream Technologies, Inc.  
*A Subsidiary of Severson Environmental Services, Inc.*  
302 Grote Street  
Buffalo, New York 14207

October 2, 1996

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# REMOVAL ACTION WORK PLAN

2250 MILITARY ROAD  
TONAWANDA, NEW YORK  
Site No. 915010

## 1.0 INTRODUCTION

### 1.1 General

This Removal Action Work Plan ("RAP") was prepared by Waste Stream Technologies, Inc., a subsidiary of Severson Environmental Services, Inc., for 2251 Military Road Associates, Inc. ("MRA") and its legal representative, Harter, Secrest & Emery to provide for the removal of contaminants at the property located at 2250 Military Road, Tonawanda, New York. This RAP is submitted to the New York State Department of Environmental Conservation ("DEC") at the request of MRA.

MRA is not the present owner or operator of the site or any portion of it. Nor does MRA have any prior or present corporate relationship with any of the prior owner(s) or operator(s) of the site. There are and were no common officers, shareholders, or employees (interlocking or otherwise) between MRA and prior owner(s) or operator(s).

MRA specifically submits this RAP to further its plans to recycle and develop the parcel(s) or a portion of them for viable commercial/industrial purposes. MRA proposes in this RAP to remediate by removal the former landspread area and the former tank area, but not the lagoon area, as described below. In this regard, MRA implements this RAP for the purposes of having these areas delisted or the site boundaries modified to exclude these areas from the site listing for purposes of commercial/industrial development and does not intend to nor has it agreed to remediate or investigate the former lagoon area.

As discussed more fully below, the anticipated future use of the site is envisioned to include the building of a mini-storage warehouse complex on the former landspread site and the creation of parking areas by use of chip-and-seal asphalt application over remaining areas, as needed.

### 1.2 Site Location and Description

The site is located at 2250 Military Road, in the Town of Tonawanda, County of Erie, New York (the "site"). The site is located in the southern section of the Town of Tonawanda. The site fronts upon Military Road to the east and is bounded to the north by a commercial lumber facility; to the west by vacant property; and to the south by vacant property utilized for power transmission lines (utility easement). Attached Figure ES-1 is a site locator map.

The site is generally described and listed on DEC's Registry of Hazardous Waste Disposal Sites as Site No. 915010. The site is presently listed as a Class 3 site on the Registry. This classification code indicates that the site does not present a significant threat to the public health or environment, and that action may be deferred.

### **1.3 Nature and Extent of Concern**

Previous investigation undertaken at the site (refer to Section 2.0) have indicated the presence of organics and inorganics at various areas of the site, but for the purposes of this RAP, the Removal Action shall be limited to and focused upon the landspreading area to the south and the former tank farm.

The primary constituents of concern in the landspread area are metals only in subsurface soils, including chromium, lead, zinc, arsenic, and mercury. Previous analytical results have indicated that the removal of soils that exceed the soil cleanup guidance value for lead and chromium will also remove soils containing the highest concentrations of zinc, arsenic, and mercury. The landspread area will be addressed through soil removal.

The primary constituents of concern in the tank farm area are ethylbenzene and xylene. The area of contamination has been fully characterized and delineated and will be addressed through soil removal.

Groundwater analytical results obtained previously indicate that groundwater does not appear to have been impacted by disposal practices at the site.

### **1.4 Purpose and Objective of the Removal Action**

The purpose of this RAP is to describe in detail the plan for the removal of contaminated soils from the landspreading area and the former tank farm area sufficient to eliminate these areas from the delineated site boundaries and to provide instructions, guidelines, and protocols to be followed during the removal action. In order to fulfill the purpose of this RAP, the following tasks have been established:

- \* Preparation of this RAP and the Health and Safety Plan ("HASP");
- \* Preparation of all support documentation;
- \* Excavation of contaminated soils in the former landspreading area and the former tank farm area;
- \* The storage, transportation, and on- or off-site disposal as determined during implementation of the RAP;
- \* Sampling and Analytical Program; and
- \* Field documentation of Construction Activities.

The RAP has been prepared by Waste Stream Technologies in conjunction with and pursuant to on-going negotiations for a final IRM Order on Consent between MRA and NYSDEC. The RAP, which includes the HASP by incorporation by reference, will be incorporated within the final Order on Consent for the removal action undertaken as part of the RAP for the project site.

## **2.0 SITE HISTORY AND DESCRIPTION**

### **2.1 Site Description**

The site subject to the RAP is approximately three (3) acres in size and is located at 2250 Military Road, Tonawanda, New York.

### **2.2 Operational History**

The property was formerly operated by the Bisonite Co., Inc. ("Bisonite"). Prior to 1978, spent solvents, amounting to approximately 1800 gallons of mineral spirits per year, and paint pigments, were landspread over a one-acre portion of the property to the south. In addition, a lagoon approximately 50 feet long, 30 feet wide, and 8 to 10 feet deep, located in the northwest corner of the property, was used to dispose of metal paint pigments and by-products from the manufacture of water-based paints. This waste reportedly contained titanium dioxide, calcium carbonate, lime, clay, and calcium hypochlorite.

The landspreading operation ceased in 1978 when the DEC notified Bisonite that wastes must be hauled off-site for disposal at an approved facility. Use of the waste lagoon also ceased in 1978. Conflicting reports indicate uncertainty as to whether the lagoon was dredged prior to its backfill and closure. Over a period of approximately four years, the lagoon was filled in and by early 1983 it was finally capped and seeded. A site inspection conducted on November 20, 1985 during a previous DEC Phase I Investigation noted that the lagoon was not properly covered and leachate was observed in small ponded areas on the ground surface. Also observed was a small 3 feet by 7 feet area of stained ground on the side of the former lagoon sloping west to the railroad tracks.

On July 27, 1990, a site reconnaissance was performed by a DEC contractor. The area where the lagoon was located appeared to be completely covered and was overgrown with grassy vegetation. This was also the case for the field south of the resin building where mineral spirits and other solvents had been used for weed control. A second site inspection was conducted on December 12, 1990. No additional contamination was observed during the second inspection, but several filled waste drums previously stored on the drum storage pad, west of the resin building, were removed.

Bisonite manufacturing operations apparently ceased in May, 1991. The closing of the site prompted DEC to prepare for entering into a Consent Order with Bisonite. While Bisonite and DEC negotiated the terms of the Consent Order, Bisonite proceeded with a clean up of the site and addressed many of the concerns identified in an early draft of the

Consent Order. A final Consent Order was issued to Bisonite on December 4, 1991. Bisonite completed the site clean up in the fall of 1992.

### **2.3 RCRA Consent Order and Clean-up**

Some early document searches identify a 1972 aerial photograph showing a somewhat messy operation, prompting a DEC RCRA inspection in April 1991. A number of concerns regarding the handling, storage, and disposal of paint, paint wastes, and solvents were identified.

A formal RCRA inspection was triggered when, on September 18, 1991, two abandoned box trailers containing nearly 300 drums of waste paint from Bisonite were discovered in the City of Buffalo outside a warehouse. The subsequent inspection identified approximately 50,000 gallons of waste materials stored in tanks, drums, and 5-gallon pails at the site. Samples collected from waste drums and tanks indicated the presence of several solvents including xylene, toluene, methyl ethyl ketone, and methyl isobutyl ketone at concentrations ranging from low part-per-million (ppm) to percent levels.

Bisonite manufacturing operations apparently ceased in May, 1991. The closing of the site prompted DEC to prepare for entering into a Consent Order with Bisonite. While Bisonite and DEC negotiated the terms of the Consent Order, Bisonite proceeded with a clean up of the site and addressed many of the concerns identified in an early draft of the Consent Order. A final Consent Order was issued to Bisonite on December 4, 1991. Bisonite completed the site clean up in the fall of 1992.

The activities under the Consent Order addressed on-site tanks, drums, debris, and obviously contaminated surficial areas of the site, but did not address soil or groundwater contamination. As a result, a field investigation for a Preliminary Site Assessment was performed in the fall of 1993.

### **2.4 The Preliminary Site Assessment**

A Preliminary Site Assessment ("PSA") was initiated by the DEC in 1993. A field investigation for the PSA was conducted in the fall of 1993. The PSA Investigation included the collection of surficial soil samples, subsurface soil samples (borings) and the collection of groundwater samples. While the RCRA inspection confirmed the presence of hazardous waste at the site, the goal of the field investigation for the PSA was to assess whether buried waste (i.e., the former lagoon) existed, and whether the waste at the site could pose a significant threat to human health or the environment through direct contact with surface soil contamination or through migration of contaminated groundwater. Engineering Investigations at Inactive Hazardous Waste Sites. Final Draft. Preliminary Site Assessment prepared for DEC by Dunn Engineering Company, dated March, 1994 (the "PSA").

The PSA identified three (3) areas of concern at the site:

- (1) a former landspread area previously employed by a prior owner for disposal of spent solvents and/or paint pigments;
- (2) a former tank area where solvents may have been handled; and
- (3) a lagoon of approximately 50 feet by 30 feet and 8 to 10 feet deep previously used to dispose of metal paint pigments and by-products from the manufacture of water-based paints.

The Site Features Map identifying these areas of concern is attached as Figure ES-2.

The PSA concluded that certain subsurface soils exhibited levels of VOC's and metals in excess of background for eastern U.S. soils, but that groundwater did not appear to be impacted. On the basis of the PSA, the site was reclassified as a Class 3 site indicating that the site did not present a significant threat to the public health or the environment, and that any further action could be deferred.

## **2.5 Supplemental Test Pit Investigation**

It was determined that a Supplemental Test Pit Investigation of the landspreading area would be required to delineate the areal (horizontal and vertical) extent of the surficial soil contamination referred to in the PSA (specifically soil sampling areas SS-1, SS-2, and SS-3). Contaminants of concern were identified (indicator compounds) as lead and chromium. A Work Plan for the Supplemental Test Pit Investigation was submitted and approved by DEC on April 25, 1996.

The initial Supplemental Test Pit Investigation was implemented by MRA on April 26, 1996. Analytical results of soil samples taken indicated further identified exceedances in certain areas. As a result, it was agreed that a further test pit investigation would be conducted beyond those initially sampled which was conducted on May 28, 1996.

The analytical results for both phases of the Supplemental Test Pit Investigation in areas SS-1, SS-2, and SS-3 have been compiled and tabulated on the Sample Locator Map. As discussed with and agreed by DEC, the target contaminants of concern for this site are lead and chromium and the analytical results for these substances have been so mapped. The Sample Locator Map is attached as Figure ES-3.

## **3.0 SITE DESCRIPTION/ASSESSMENT**

### **3.1 Site Topography**

The site is located in a topographically flat area at an elevation of approximately 610 feet above mean sea level (MSL). Run-off from the property can enter storm sewers located adjacent to the site. Run-off from the western portion of the site, which includes the former lagoon, probably drains to the railroad track bed which is approximately ten feet

below grade. The railroad tracks are located along the western boundary of the plant property (Figure ES-2).

The site is located in the greater than 500 year flood zone (Zone C) as designated by the Federal Emergency Management Agency (FEMA).

## **3.2 Geology**

### **3.2.1 Physiography**

New York State is subdivided into nine distinct physiographic provinces on the basis of relief and geology. The site is located within the Erie-Ontario Lowlands, which are characterized as a relatively low, flat-lying area south of Lake Erie and Lake Ontario. In Erie County, the area within this province typifies the topography of an abandoned lake bed with elevations ranging from approximately 570 feet MSL to approximately 1000 feet MSL. The site lies at an elevation of approximately 610 feet MSL and the topography in the vicinity of the site slopes gently toward the Niagara River, located approximately one mile to the northwest.

### **3.2.2 Surficial Deposits**

Unconsolidated deposits of clay, sand and till of Pleistocene (glacial) and Holocene (recent) age underlie the site. These materials consist of glacially derived material deposited during the latter part of the Pleistocene, as well as lacustrine material (clay and silt) deposited during the Holocene. The United States Department of Agriculture (USDA) - Soil Conservation Service has classified the soils as Urban Land - Schoharie Complex. The soils are well-drained and moderately well-drained clayey soils and are predominantly lake-laid sediments dominated by clay and silt. Permeability of these soils ranges from  $10^{-5}$  centimeters per second (cm/sec) to  $10^{-7}$  cm/sec.

### **3.2.3 Bedrock**

Bedrock underlying the site consists of the Camillus Shale of the Salina Group of Upper Silurian age. The Camillus Shale varies in thickness from thin-bedded shale to massive mudstone; it is gray to brownish gray with some reddish or greenish beds. Studies of the Camillus Shale indicate the presence of gray limestones and dolostones interbedded with the shales. Gypsum has also been noted as a significant part of the Camillus Shale with beds being as thick as five feet. The Camillus Shale is estimated to be approximately 400 feet thick with a southward dip of approximately 40 feet per mile.

Two wells at the Linde Division, Union Carbide Corporation, approximately two miles south of the site, encountered the Camillus Shale at approximately 86 feet below the ground surface. Depth to bedrock at the Town of Tonawanda Landfill immediately to the west (Figure ES-1) ranged from 56.0 to 95.5 feet BGS, while depth to bedrock at the former Spaulding Composites plant to the northwest (Figure ES-1) ranged from 40.0 to 55.0 feet BGS.

### 3.3 Groundwater

The depth to groundwater in the overburden deposits was determined during the PSA to be approximately four to ten feet below ground surface (BGS). Regional groundwater flow through the more permeable horizons within the till overburden was thought to be to the west or northwest toward the Niagara River. However, groundwater elevations measured in the site wells are inconclusive as to the direction of groundwater flow.

The Camillus Shale, which underlies the site at an unknown depth, is a very productive bedrock aquifer due to its extensive network of joints, fractures, and solution cavities. Cavities that yield significant quantities of water were formed by the solution of gypsum in groundwater. Yields of wells installed in the Camillus Shale have high productivity with specific capacities of up to 83 gallons per minute per foot (Reference A-6). Well records from two industrial wells drilled in 1944, two miles south of the site, indicated depth to water at approximately 90 feet in a gypsiferous zone of the Camillus Shale. This water level probably represents the piezometric surface in this confined aquifer (Reference A-6).

The degree to which the site may be hydraulically connected to the underlying bedrock is uncertain at this point due to limited site information. However, based upon information from adjacent and nearby sites, and the high clay content and associated low permeability of the surficial deposits, the degree of hydraulic connection is likely to be limited.

### 3.4 Surface Water

The site is located one mile from Two Mile Creek and 1.5 miles from the Niagara River. Two Mile Creek has been designated as a Class B waterway making it suitable for primary contact recreation and any other uses except as a source of drinking water. The Niagara River has been classified as Class A Special (international boundary waters) and is a source of drinking water.

There are no Federally designated endangered or threatened species within a three mile radius of the site. However, there is a NYSDEC Significant Coastal Fish and Wildlife Habitat 1.9 miles from the site. The small white ladyslipper, *Cypripedium Candidum*, was found 2.6 miles from the site. This plant is a State-designated endangered species.

### 3.5 Population

As observed during the site reconnaissance of July 27, 1990, a wood storage building (part of an adjacent commercial lumber company) is located approximately 20 feet north of the site. The nearest commercial building where people work on a regular basis (besides the site employees) is the lumber company's main building located approximately 150-200 feet to the north of the site, and a self-serve gas station located directly across Military Road to the east of the site. Additional commercial buildings are located north of the site on both the east and west sides of Military Road. Immediately to the south and west

of the site are undeveloped fields and a closed landfill, respectively. The nearest private residences are located directly east across Military Road approximately 300-500 feet from the site.

The City and Town of Tonawanda are highly developed with both commercial and residential areas. It is estimated that approximately 107,000 people reside within a three-mile radius of the site. However, there are no wells used as a source of drinking water within three miles of the site. Drinking water for the Buffalo/Tonawanda area is supplied from the Niagara River. There is an unused farm well on the property south of the office, however, no information could be found referencing this well (Figure ES-2). The well opening (approximately two feet in diameter) is presently covered by a granite boulder.

### **3.6 Agricultural Land**

A review of topographic maps and aerial photographs, as well as the site reconnaissance, indicate that Tonawanda is a highly urbanized area. No agricultural land is located within three miles of the site.

### **3.7 Commercial Land**

The surrounding area is predominantly commercial with a lumber yard adjacent to the north side of the site. A self-serve gasoline station is located across Military Road to the east. Undeveloped fields and a closed landfill are located immediately south and west of the site, respectively.

### **3.8 Site Classification**

The site is presently listed on DEC's Registry of Hazardous Waste Disposal Sites as a Class 3 site. This classification code indicates that the site does not present a significant threat to the public health or environment and that action may be deferred.

## **4.0 REMOVAL ACTION PLAN**

Based upon the PSA and the data obtained from the Supplemental Test Pit Investigation, MRA proposes a Removal Action Plan which will consist of the removal of metal-impacted (lead and chromium) soils in delineated areas. The soils will be removed until target clean-up goals (as described below) are met. Contaminated soils removed will be either deposited in the lagoon area or transported to a Part 360 facility for disposal. All soils to date have indicated that TCLP criteria has been met and passed.

The areas identified for soil removal and excavation have been located on the map attached as Figure ES-4. Figure ES-4 is the Site Locator Map with the proposed excavation and soil removal areas identified by cross-hatching. The excavation areas have been identified as areas A, B, and C (in the SS-1 area); D, E, and F (in the SS-2 area); H and I (in the SS-3 area); and G (in the former tank storage area).

Upon removal and excavation and upon completion of all confirmatory testing (as described below), all contaminated soils above the Target Soil Cleanup Goals will have been removed from the landspread area of the site.

Upon completion of the soil removal activities, the areas will be backfilled with clean fill, as more fully discussed below.

Depending on the quantity of the soils generated during the removal activities the impacted soils will either (1) be characterized and transported to a permitted waste facility; or (2) placed in the lagoon area. Field decisions will be made in this regard upon discussion with and approval from the NYSDEC.

## **5.0 SITE PREPARATION, MOBILIZATION, AND CONTROL**

### **5.1 Site Preparation and Mobilization**

Prior to the commencement of any removal activities, the following site preparation and mobilization activities will be performed by the Contractors:

- \* Mobilization and set-up of field offices and sanitary facilities within adjacent office facilities;
- \* Maintenance and inspection of security fences;
- \* Delineation of excavation area;
- \* Placement of plastic on adjacent areas for the staging of contaminated soils; and
- \* Providing available plastic for coverage of contaminated soil piles.
- \* Provide temporary security fence around all excavation areas during removal activities.

### **5.2 Site Control**

In addition to the items mentioned above, the following requirements will be met:

- All on-site employees must have 40 hours of health and safety training in accordance with OSHA regulations (29 CFR 1910.120).
- Contractor must (through testing or documentation of virgin origin) certify that the backfill material is not contaminated.
- The excavated soils may have the potential for having a high water content. The contractor will be required to develop and supplement a contingency

plan to sufficiently solidify the soils prior to transportation to the landfill. The contractor will implement the contingency plan at the discretion and supervision of the on-site construction inspector and NYSDEC field representative.

- The excavated soil will be placed into dump trucks that will have plastic liners to prevent water from leaking during transport to the landfill. However, in the event that soil needs to be stockpiled, plastic will be placed on the ground and a contaminant berm constructed around the stored soils. Additional plastic will then be placed over the staged soil pile including the berm to eliminate precipitation coming in contact with the soil.

### **5.3 Control of Water During Excavation**

Prior to any excavation, the contractor will prepare and submit to the on-site inspector and NYSDEC field representative a written plan to control surface water runoff and to maintain separation of potentially contaminated water from uncontaminated water during any phase of the removal action. Surface water runoff will be prevented from entering areas of exposed waste or other known areas of contamination.

Surface water and/or groundwater from areas of exposed waste or other known areas of contamination will be collected and transferred to on-site storage tanks (i.e., tanker truck). All containerized waste water will be sent to an approved treatment facility if analytical results so warrant.

Surface water within designated "clean" areas will be collected and allowed to be discharged on the ground surface away from the delineated waste/excavated area. Care must be taken when discharging surface water collected from "clean" areas to avoid surface runoff across the parking lot. Surface water designated as "clean" can be discharged into the catch basins.

### **5.4 Waste Material Storage and Transportation**

#### **5.4.1 Water - Bulk**

All water associated with dewatering activities conducted at the site will be transferred and stored in a tanker truck. Before any dewatering/storage work begin, the on-site construction inspection will review the spill contingency measures (refer to Section 5.6) with the contractor to insure compliance. In addition to the water collected during the excavation work, decontamination wash water will also be collected and transferred to the tanker truck. The contractor will be responsible for the storage of the waste water within the tanker pending analytical results characterizing the combined waste streams for final treatment and/or disposition. After the waste water has been accepted by the treatment facility, the contractor will transport the tanker to the approved facility.

#### **5.4.2 Transportation Requirements**

The contractor will be responsible for the transportation of all wastes from the site to the approved disposal/treatment facility. Transportation of these wastes will be conducted in full compliance with all applicable federal, state, and local regulations and requirements.

#### **5.5 Anticipated Disposal Requirements**

Based on the review of analytical data and discussions with the NYSDEC, it is anticipated that the excavated soils, waste and debris will be classified as non-hazardous and will be disposed off-site in a permitted solid waste landfill or in the lagoon area.

In addition, it is anticipated that all liquid wastes (i.e., dewatering from the excavation and decon water) will be classified as non-hazardous and will be treated at an approved water treatment facility.

The names of the selected disposal and treatment facilities will be provided to the NYSDEC.

#### **5.6 Spill Contingency Measures**

In order to prevent and/or mitigate adverse effects due to a spill during the pumping and temporary storage of water near the excavation pit, the following spill contingencies have been developed.

Pumping will be constantly observed by an experienced operator, who will continually inspect the pump, the filter, the tank, its valves, and all transfer lines. In the event that a problem is detected, the operator will cease pumping operations immediately, promptly secure the tank, and initiate spill response actions such as spreading absorbents. A backup pump will be on site at all times. In order to contain minor releases from the tank trailer, the tank trailer will be stored on a plastic lined and bermed staging area.

In the event of a spill of either liquid or solid material all apparently contaminated material will be removed and disposed of in a proper manner. The NYSDEC field representative will be notified immediately in the event of a spill.

#### **5.7 Air Monitoring**

Air monitoring is being implemented to insure public safety on and off the site. Real-time monitoring will be performed on a continuous basis during any intrusive work. Organic vapors, combustible gas, oxygen and particulate dust will be monitored and documented within the work site.

## **5.8 Water Sampling**

Water samples will be collected to characterize the waste stream for disposal. A representative sample will be taken from each truck prior to shipment. Samples will be analyzed for Target Compound List (TCL) volatile organics, TCL semi-volatile compounds and target analyte metals. The results of the analysis will be used to characterize and document the quality of the water.

## **5.9 Decontamination Procedures and Requirements**

The following decontamination procedures have been established to reduce the possibility of the migration of potentially contaminated material from the immediate area of the excavation.

In order to facilitate the decontamination of heavy equipment, the Contractor will construct a decontamination pad at a specified location within the site.

The pad will be constructed on an 80-mil plastic liner (or acceptable equivalent) in such a manner that the water used to decontaminate the equipment will flow towards a prepared sump area. Care will be taken when constructing the decon pad to avoid puncturing the liner. Wash and rinse water will be pumped from the sump to drums or other containers for temporary storage and finally to a tanker truck for disposal. At the conclusion of all removal action activities, all excavation equipment and general Contractor equipment such as pumps and hoses, will undergo the following decontamination procedures.

- Equipment will first be steam-cleaned with potable water,
- Finally, the equipment will be rinsed thoroughly with clean potable water.

Decontamination of each piece of equipment will be of sufficient duration to remove all surficial material and dirt.

Specific decontamination procedures for personnel and sampling equipment can be found in the Health and Safety Plan.

## **5.10 Field Documentation of Construction Activities**

The documents to be generated and maintained by the contractor as a permanent record of all removal construction activities will include the following:

- Daily construction inspection logs;
- Chain-of-Custody records;
- Accident reports;

- Incident/contact reports;
- Waste material inventory;
- Photograph documentation (noting time, date, location, direction and frame);
- Site sketches and maps;
- Analytical results - solids and liquids; and
- Documentation air monitoring for airborne particulates, HNu readings, and explosimeter/oxygen readings supplied by the SSO.

Copies of the above-mentioned documents will be maintained on site. The NYSDEC field representative will be provided daily access to field documentation reports.

The contractor will also be responsible for providing documentation of all removal activities.

## 6.0 CONFIRMATORY SAMPLING AND TESTING

Upon completion of the excavation of soils in areas A through I at the site in conformance with this RAP, confirmatory sampling of the excavation areas shall be completed as follows to confirm that target soil clean-up goals have been achieved:

- \* Area A: One (1) composite sidewall sample on the southernmost wall only and two (2) composite sample of the excavation floor.
- \* Area B and C: Three (3) composite excavation floor samples for each area.
- \* Area D: One (1) composite excavation floor sample.
- \* Area E, F, and H: One (1) composite excavation floor sample for each area.
- \* Area I: Two (2) composite excavation floor samples.
- \* Area G: No confirmatory sampling will be performed in this area because the area has been fully delineated and characterized. Nevertheless, soils from the floor and sidewalls of the excavation shall be screened with an OVA or PID to ensure the completeness of the removal.

Each composite sample should consist of no more than three (3) individual soil samples. All confirmatory sampling shall be for total amounts of lead and chromium. TCLP analysis of stockpile soils, as appropriate, shall be completed for disposal purposes.

## **7.0 TARGET SOIL CLEANUP GOALS**

The primary constituents of concern in the landspread area are metals only in subsurface soils, including chromium, lead, zinc, arsenic, and mercury. Previous analytical results have indicated that the removal of soils that exceed the soil cleanup guidance value for lead and chromium will also remove soils containing the highest concentrations of zinc, arsenic, and mercury. The landspread area will be addressed through soil removal.

The primary constituents of concern in the tank farm area are ethylbenzene and xylene. The area of contamination has been fully characterized and delineated and will be addressed through soil removal.

The target soil cleanup goals for this site have been set as:

Lead:	1000 ppm
Chromium:	50 ppm
Zinc:	Not required

## **8.0 GROUNDWATER**

As confirmed in the PSA, groundwater has not been impacted in this area.

## **9.0 ANTICIPATED FUTURE USE**

Two structures comprising approximately 14,000 sq. ft. will be erected on the vacant land area located on the south side of the property. The site will be graded to level excavation areas and to remove vegetation.

The entire graded area will be encapsulated by installing a woven geotextile cloth which will then be covered by six to twelve inches of stone. Each of the buildings will be erected upon a four to six inch concrete slab (3,000 psi min.) which will be thickened to approximately 18 inches at load-bearing points.

Upon completion of concrete and building erection, the balance of this area will be sealed over utilizing the chip-and-asphalt seal method of paving. Grades at the site will promote run-off water to the east side of the property in that the existing grades will allow for a west-to-east pitch of approximately 3 ft. If necessary to accommodate excess fill, a berm will be established at the west end of the site which will be covered with 12 inches of clean soil which will be grass seeded. In the event a berm is constructed, a sampling plan for testing the berm soils for total lead and chromium concentrations shall be undertaken to assure these soils do not exceed Target Soil Cleanup Goals.

The existing monitoring well on the site will be lowered to grade level to protect it from damage. Four (4) bollards will be installed, if necessary, to protect it from damage from vehicle traffic.

The structures will be constructed with steel siding over a structural steel framework. No water or sewer services are envisioned except at the extreme east end of the main structure for the purposes of installing a single lavatory facility in the office established for operating the complex. No residence will be established on the site.

The building situate on the former tank farm parcel will be rehabilitated by repairing and painting the existing exterior walls and installing commercial grade overhead doors. Once complete, this will be used as additional rental space. The uncovered land area of this parcel will be graded to permit the installation of a chip-and-seal parking area in the same manner as described above. Also, the grading of this area will be performed in such a manner as to accept run-off water from the contiguous former lagoon parcel which will be directed by the establishment of grades allowing such water to flow toward the mini-storage parcel and thereafter to the east of the property at the street. As dictated by site grade conditions, a single culvert may be installed at the property boundary between this area and the mini-storage site to collect water which will be connected to existing on-site storm sewers.

If MRA elects to utilize the surface area of the former lagoon area, the area will be brought up to grade with clean fill. The area would then be graded to promote run-off water to run from the northern and western boundaries of this parcel to flow toward the former tank farm area. This parcel would be covered with a woven geotextile cloth, stone, and sealed utilizing the chip-and-seal method of paving. In that event and upon completion of the above, the western boundary of the parcel would be fenced between the existing buildings which are situate at either side of this area.

The chip-and-seal method of paving is performed by applying asphalt in spreadable form over the geotextile fabric and then applying a layer of crushed stone with a final topping of spreadable asphalt base to complete the sealing. Thus, a water-resistant barrier of several inches is created which, as compacted, has similar utility to traditional densely bound asphaltic products. The method is broadly used in commercial and industrial environments where large areas are required to be covered.

Existing wood debris and concrete rubble on the site will be removed and disposed of in the traditional manner.

The parking areas created would be utilized for rental storage of vehicles and equipment.

## **10.0 QUALITY ASSURANCE/QUALITY CONTROL**

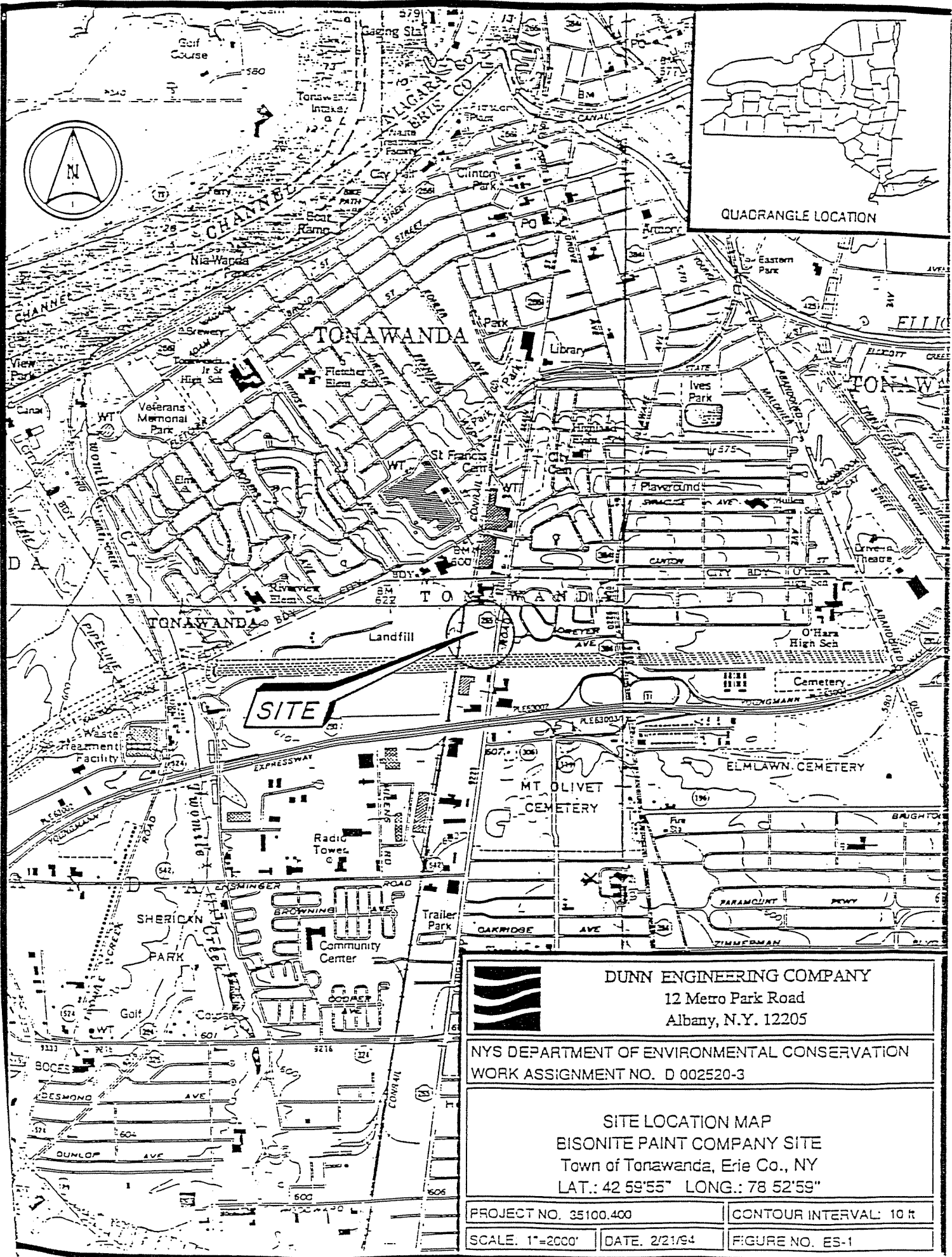
Analytical services will be provided by Waste Stream Technologies, Inc., a NYSDOH-approved and certified laboratory located in Buffalo, New York. The selected

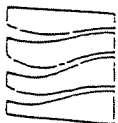
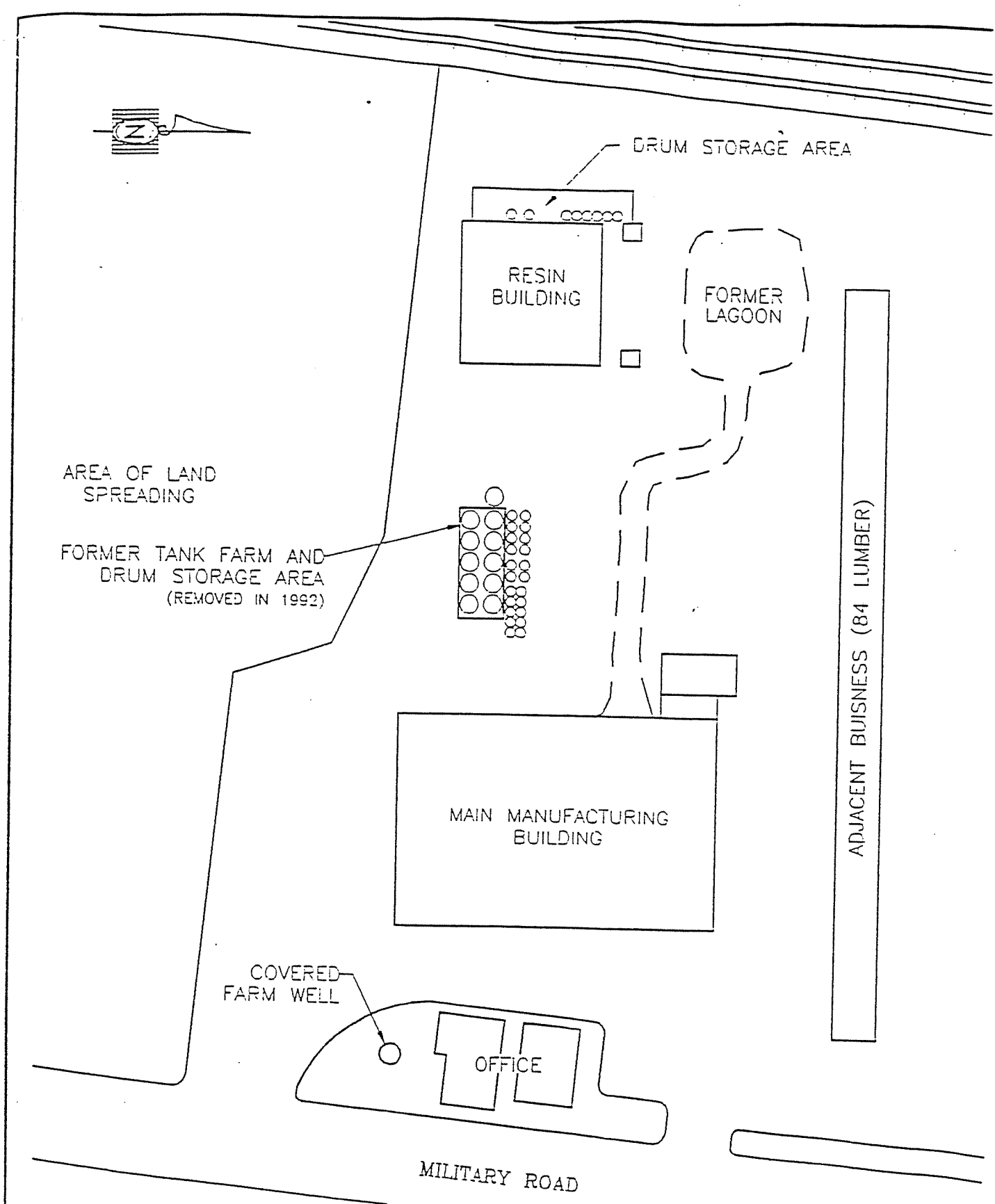
laboratory was required to meet all applicable documentation, data reduction, and reporting protocols as specified in SW-846. All analytical data from confirmatory soil samples will be reviewed by the Consultant to determine their acceptability.

Field/rinse blanks will be collected to assess the effectiveness of the cleaning procedures used on the sampling equipment. These blank samples will be defined as the final rinse of the cleaning procedure using deionized water. Each blank sample will be analyzed for the same indicator as the confirmatory soil samples collected that day. Concentrations of indicator chemicals in all field/blank samples collected will be monitored.

## **11.0 REMOVAL ACTION IMPLEMENTATION REPORT**

Upon completion of the IRM Removal Action, MRA and Waste Stream Technologies will prepare a brief report that will summarize the field activities that have been undertaken at the site. In addition, the report will include a discussion about significant observations made during the Removal Action and present the analytical results associated with the Confirmatory Sampling Program.





DUNN ENGINEERING COMPANY  
495 Commerce Drive  
Amherst, NY 14228

# SITE FEATURES MAP

NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
WORK ASSIGNMENT NUMBER: 0002520-J  
BISONITE PAINT Co.

Town of Tonawanda, NY

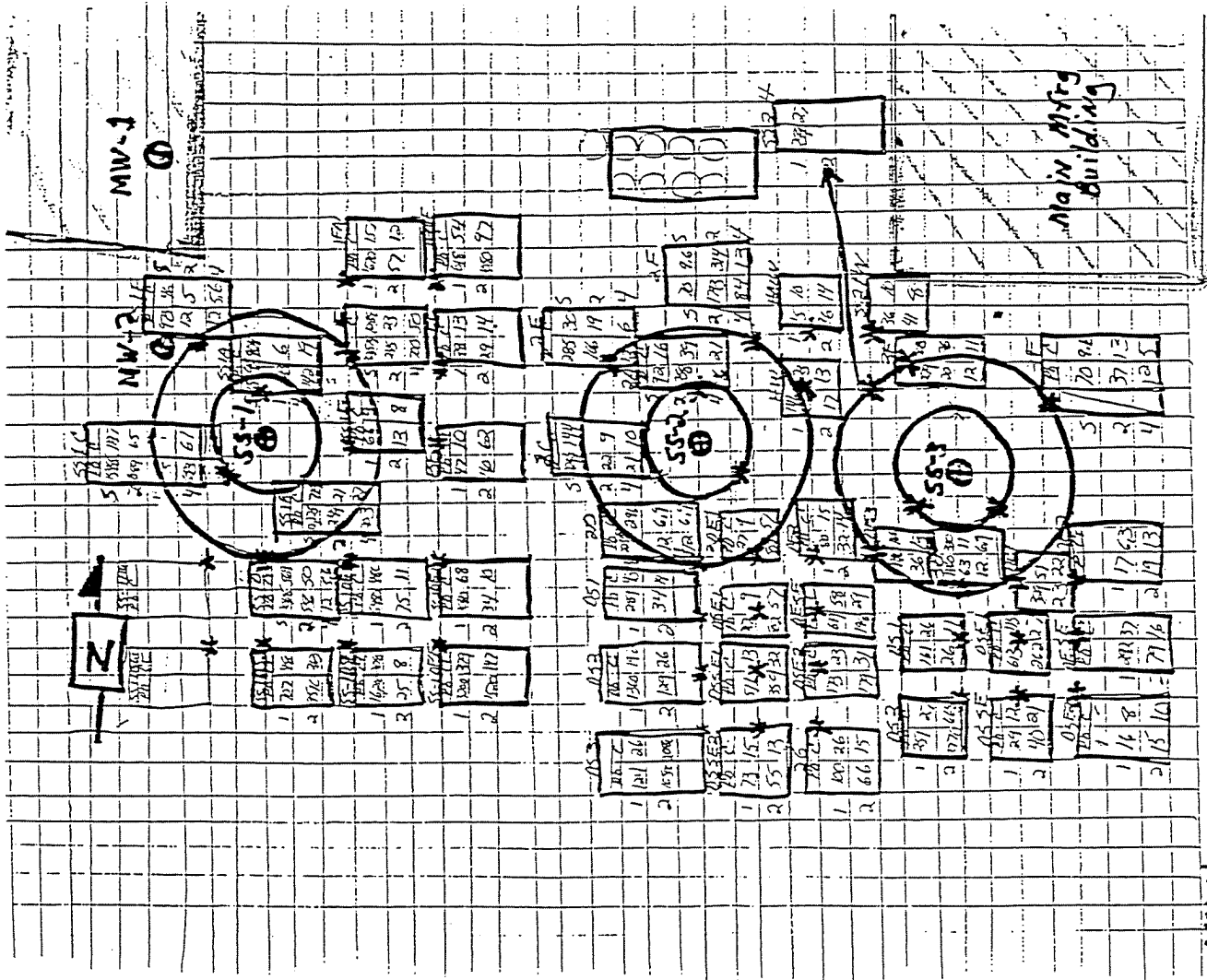
PROJECT NO. 35100

DATE Feb., 1994

DWG. NO. 4A0081SD

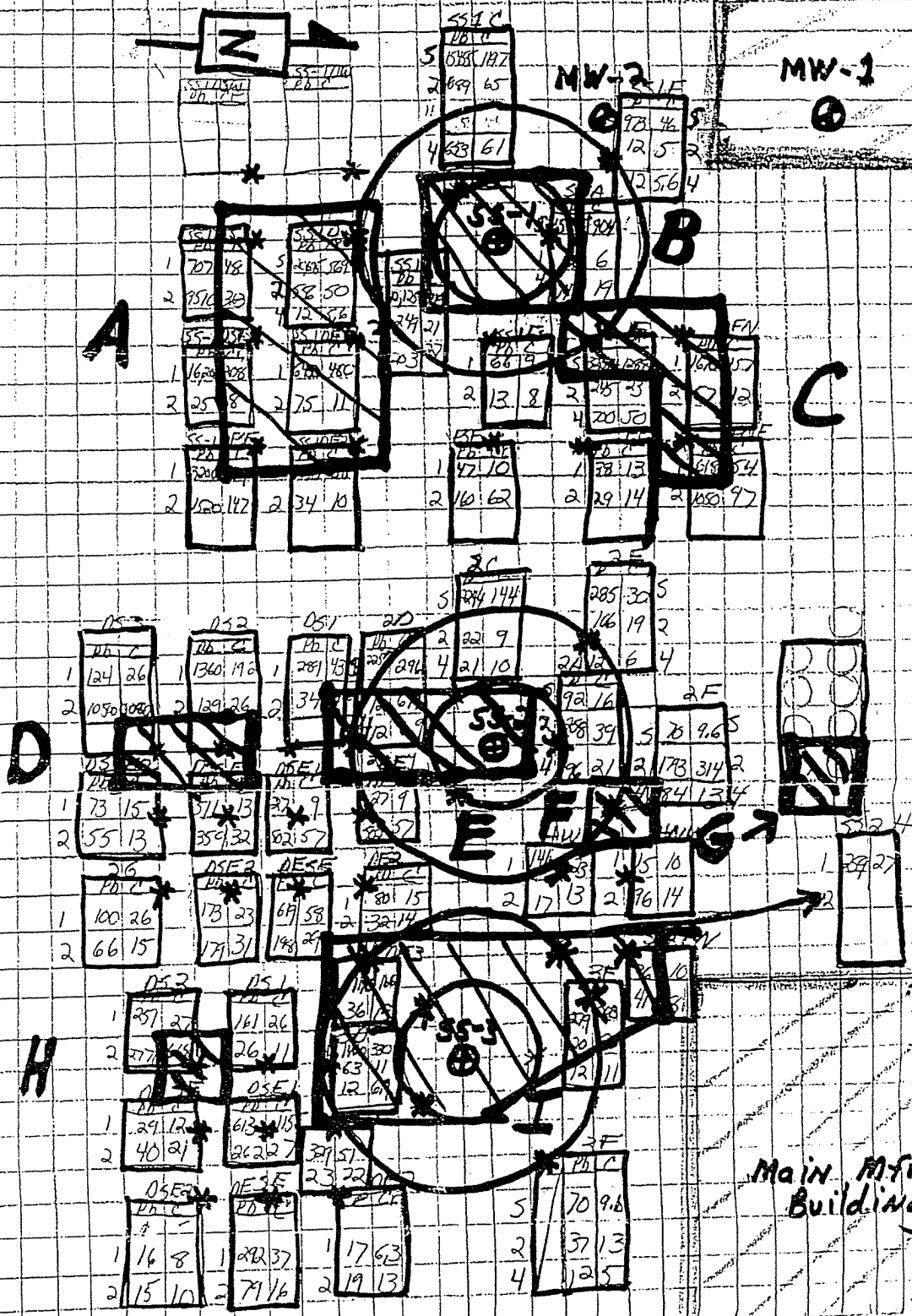
SCALE Not To Scale

FIGURE NO. ES-2



PAMM 16065  
Initial and Supplemental Sampling Program

2250 Military Rd.



PPM values  
Initial and Supplemental Sampling Program

2250 Military Rd.  
Tonawanda, N.Y.

**HEALTH AND SAFETY PLAN**

2250 Military Road  
Town of Tonawanda  
County of Erie, New York

Site Number 915010

Prepared for:

**2251 MILITARY ROAD ASSOCIATES, INC..**  
2251 Military Road  
Tonawanda, New York 14221

Prepared by:

Waste Stream Technologies, Inc.  
*A Subsidiary of Severson Environmental Services, Inc.*  
302 Grote Street  
Buffalo, New York 14207

October 1, 1996

## HEALTH AND SAFETY PLAN

2250 MILITARY ROAD  
TONAWANDA, NEW YORK  
Site No. 915010

### 1.0 GENERAL INFORMATION

Site Name: NYSDEC Inactive Hazardous Waste Site Number 915010  
Address: 2250 Military Road  
Town of Tonawanda, New York

Waste Stream Technologies  
Contact & Site Manager: Michael Barnhardt  
Phone Number: (716) 693-1097

Client Contact: Craig A. Slater, Esq.  
Harter, Secrest & Emery  
3550 Marine Midland Center  
Buffalo, New York 14203  
Phone Number: (716) 853-1616

2251 Military Road Associates, Inc. Contact: James Cornell  
Phone Number: (716) 542-5888

### 1.1 INTRODUCTION

This site-specific Health and Safety Plan ("HASP") has been prepared in accordance with Part 1910 of Title 29, Section 1910.120 of the Code of Federal Regulations entitled Hazardous Waste Operations and Emergency Response. The purpose of this Health and Safety Plan is to provide employees governed by the plan with the site information, training, medical monitoring and personal monitoring, and protective equipment necessary so that they will be protected from hazards at the site during all work tasks.

### 2.0 SITE DESCRIPTION

The "Site" is located in a commercial area of the Town of Tonawanda, New York. Immediately east of the site is Military Road; to the west is vacant land (railroad tracks); to the north commercial property; and to the south vacant utility easement property (power

lines). The "Site" is approximately three acres in areal extent, with the majority of it paved for parking. The remainder of the area is grass.

### **3.0 PROJECT DESCRIPTION**

The purpose of the Removal Action Work Plan ("RAP") is to remove contaminated soil previously identified at the "Site" and to develop the property for commercial industrial purposes.

Field activities during this RAP shall be comprised of both disruptive and non-disruptive activities. Non-disruptive activities are site inspection and observation and/or survey activities. Disruptive activities are those activities which may result in the handling, excavation, or transportation of potentially contaminated materials. All field activities planned are briefly described below:

#### **3.1 NON-DISRUPTIVE ACTIVITIES**

##### **3.1.1 Base Map and Survey**

Sampling locations and excavation areas will be located by field survey and superimposed on a base map.

#### **3.2 DISRUPTIVE ACTIVITIES**

##### **3.2.1 RAP**

The RAP will implement a soil removal and excavation program as outlined in the RAP Work Plan.

##### **3.2.2 Sampling and Analysis**

Environmental samples will be collected for analysis from the waste/soil and sediments. A detailed description of the sampling locations, the analytical program and their respective procedures can be found in RAP.

### **4.0 HAZARD ASSESSMENT**

#### **4.1 GENERAL**

The RAP activities will include the following:

- Mobilization and Demobilization
- Maintenance and Inspection of Security Fences
- Delineation of Excavation Area

- Excavation
- Environmental Confirmatory Sampling

If any additional tasks are added to the RAP, an addendum to this safety plan must be developed to address the specific hazards associated with those tasks.

The potential hazards associated with mobilization and demobilization activities include physical hazards associated with heavy equipment and construction activities, direct contact with contaminated soils, and the inhalation of organic and inorganic vapors, contaminated dusts and wash waters during equipment decontamination procedures.

The specific hazards associated with implementation of the RAP:

- Inhalation of volatile organic and inorganic vapors
- Inhalation of contaminated dusts
- Direct contact with contaminated media (i.e., waste, soils, sediments, groundwater)
- Potential oxygen deficient and/or explosive conditions
- Physical injuries, such as heat stress, frostbite, noise, abrasions
- Physical hazards associated with heavy equipment (ie., drilling, rigs, backhoes)
- Exposure to biological hazards, such as poisonous plants, and insect bites

#### 4.2 POTENTIAL CHEMICAL CONTAMINANTS

The following is a list of chemical contaminants that may be encountered while working on the site. The list was derived from contaminants found in soil during previous sampling conducted on the site and contaminants the New York State Department of Environmental Conservation feel may be present due to the type of waste found at the site and other types of wastes found in the area.

##### Organic Compounds

Methylene Chloride  
Benzene  
Toluene  
Ethylbenzene  
Xylene

##### Metals

Chromium  
Lead  
Mercury  
Zinc

A Chemical Hazard Data Sheet has been prepared for each of the above chemical substances. These data sheets contain information on the physical, chemical, and toxicological properties of the chemical constituents, and can be found in Appendix A. The potential for exposure from these contaminants is mainly through inhalation and through direct contact with contaminated media. In order to reduce potential routes of exposure (inhalation, skin absorption, skin contact or ingestion), several controls will be implemented. These controls include air monitoring for organic and inorganic vapors and dusts, and the use

of personal protective clothing, respiratory protection equipment, and site control measures. This combination will reduce the potential for exposure to field personnel.

## **5.0 PERSONAL HYGIENIC MEASURES**

### **5.1 GENERAL**

To prevent injuries and to minimize potential exposure, the following general safe work practices will be adhered to at the facility. These procedures are particularly important when dealing with situations of known or unknown toxic hazards, and/or when relying on portable field monitoring equipment. These practices serve as a guideline of general precautionary measures for reducing the risks associated with on-site work activities/operations at potentially hazardous locations.

### **5.2 PERSONAL HYGIENE**

1. Eating, drinking, chewing gum or tobacco, taking medication, smoking, and the application of makeup is prohibited in any contaminated or potentially contaminated area or where the possibility for the transfer of contamination exists.
2. All contact with potentially contaminated substances will be avoided. Do not walk through puddles, pools, mud, etc. Avoid, kneeling on the ground, leaning or sitting on drums, equipment, or ground. Do not place monitoring equipment on potentially contaminated surfaces (i.e., drums, ground, etc.). Limit the number of individuals entering a known contaminated or restricted work zone.
3. No beard or facial hair may be worn by individuals working in areas that require respiratory protection.
4. Minimize and avoid dust generation. Dusts may contain hazardous components; dust concentration should be minimized using wet methods or other dust control methods.
5. Only properly trained and equipped personnel shall be allowed to work in potentially contaminated areas.
6. The number of personnel and equipment in the contaminated areas will be kept to a minimum, consistent with safe site operations.
7. All workers shall adhere to the "Buddy System" while working downrange and in designated exclusion areas. Visual contact shall be maintained between pairs on site in order to assist each other in case of emergencies. Whenever personnel are required to wear respiratory protective equipment, the workers "Buddy" must be another Waste Stream employee.

8. Workers shall not exit the contaminated reduction zone until contaminated equipment and clothing have been removed and decontaminated or properly disposed.
9. All safety equipment, especially respiratory protective equipment, shall be regularly inspected before each days use to ensure proper operation.
10. All respiratory protective equipment use and maintenance shall meet, as a minimum, the OSHA requirements of 29 CFR 1910.134, including the prohibitions on facial hair and other facepiece-seal obstructions.
11. All personnel entering the site shall be instructed in emergency procedures including locations of emergency equipment, procedures for site evacuation, emergency assembly areas and head count procedures, alarm systems, and site communications.
12. If sampling personnel perceive an unsafe condition or situation the Health and Safety Officer should be immediately notified.
13. All operations should be planned and discussed with the sampling personnel prior to beginning operations.

### **5.3 PERSONAL PROTECTION**

1. Be familiar with and knowledgeable about standard operating safety procedures. USE YOUR COMMON SENSE.
2. Be familiar, knowledgeable, and adhere to all instructions in the site safety plan. Any individual that continually fails to adhere to this plan will not be permitted to return to work at the site.
3. Identify and be aware of arrangements for emergency medical assistance.
4. While working, consider fatigue, heat stress, and other environmental factors such as motor traffic influencing personal safety.
5. Observe other crew members for evidence of impaired performance.

## **6.0 MONITORING PROCEDURES**

### **6.1 PERIODIC MONITORING**

Air monitoring shall be conducted periodically while work is being conducted on the site. During non-intrusive activities, monitoring shall be conducted in the breathing zone, at least every 30 minutes, or more often if deemed necessary by the site safety officer or the

site manager. During intrusive activities, monitoring shall be conducted continually in the breathing zone, and periodically at the exclusion zone boundary downwind.

Monitoring shall be conducted using a flame ionization detector (FID), Foxboro OVA or equivalent or a photoionization detector (PID), HNu IS-101 with 11.7 lamp or equivalent. The area and the breathing zone shall also be monitored using an oxygen/explosive meter (O<sub>2</sub>/LEL).

## 6.2 ACTION LEVELS

An action level is a point at which increased protection is required due to the concentration of contaminants in the work zone. Each action level is determined by the concentrations above background levels and the ability of the personal protective equipment to protect against that specific contaminant. A clean zone background level will be established away from the specific work area. All field investigation activities must be conducted initially in the level of personal protective equipment specified in Table 1.

The action levels for upgrading and downgrading levels of protection or expansion of exclusion zones are listed below. Monitoring (using PID or FID, and O<sub>2</sub>/LEL) shall be performed continuously during all sampling operations. A PID or FID detector shall be utilized to monitor the breathing zone, and any materials collected during the sampling operations.

TABLE 1  
LEVELS OF PROTECTION FOR FIELD ACTIVITIES

Activity	Level of Protection
Intrusive Activities within Potentially Contaminated Areas	D
Non-Intrusive Field Activities in Potentially Contaminated Areas	D

An upgrade to Level C is required if:

- Concentrations of total organic vapors recorded in the work area by air monitoring equipment are above 5 ppm.
- Requested by an individual performing the task.

An upgrade to Level B is required if:

- Concentrations of organic vapors recorded by air monitoring equipment in the work area reach or exceed 25 ppm above background.
- Concentrations of oxygen recorded on the O<sub>2</sub>/LEL are less than 19.5 percent.

A work stoppage and evacuation (cease and desist) at the specific work area is required if:

- Concentrations of organic vapors recorded in the work area are greater than 100 ppm.
- Concentrations of combustible gases recorded on the O<sub>2</sub>/LEL are greater than 25 percent of the LEL.
- Concentration of oxygen recorded on the O<sub>2</sub>/LEL are greater than 25 percent oxygen.

Personnel should be able to upgrade or downgrade their level of protection with the concurrence of the Site Safety Officer and Project Manager. If Level B personal protective equipment becomes necessary and it is not available at the site, a work stoppage shall occur until Level B personal protective equipment becomes available.

## **7.0 MEDICAL MONITORING**

All personnel involved in site activities at the facility are required to have completed and satisfactorily passed a baseline and subsequent periodic medical examination. Baseline examinations shall include, as a minimum, the following: medical history, general physical examination, electrocardiogram, complete blood count, blood chemistry profiles, urinalysis, chest x-ray, pulmonary function testing, and other tests as determined necessary by the physician. Re-examination of affected personnel shall be performed annually for the above criteria.

All Waste Stream personnel are required to comply with the medical surveillance and examination requirements outlined in the latest edition of the Waste Stream or Severson Environmental Corporate Health and Safety Program Manual. As part of the bid process, subcontractors, to be used on the site, will be required to provide Waste Stream with documentation that their firms have a medical surveillance program which complies with 29 CFR OSHA 1910-120.

## **8.0 PERSONAL PROTECTION REQUIREMENTS**

### **8.1 GENERAL**

The purpose of personal protective equipment is to shield or isolate individuals from the chemical and physical hazards that may be encountered during work activities. The level of protection must correspond to the level of hazard known, or suspected, in the specific work area. There are four basic levels (A, B, C, and D) of personal protection, as established by the US EPA. Level A provides the highest level of protection and Level D, the lowest.

The level of protection to be worn by field personnel will be defined and controlled by the Health and Safety Officer. Where more than one hazard area is indicated, further definition shall be provided by review of the site hazard, conditions and proposed operational requirements, and by monitoring at the particular operation being conducted. Protection may be upgraded or downgraded, as appropriate, by the Health and Safety Officer. A summary of the personal protective equipment requirements are presented in Table 2.

## 8.2 ANTICIPATED ACTIVITY LEVEL

Two activity levels were briefly described earlier in the introduction; disruptive activities and non-disruptive activities. Subsequently, field activities listed in the Scope of Work were categorized into disruptive and non-disruptive activities and are shown again below:

### Non-Disruptive Activities

Base Map and Survey

### Disruptive Activities

Soil Excavation/Implementation of RAP  
Soils/Environmental Sampling

Although the level of contaminants previously detected at the "Site" are in the part-per-million range in the soils, the primary contaminants are metals not easily volatilized into air. Therefore, protective equipment described is commensurate with the characteristics of the contaminant and the concentrations previously reported.

**Disruptive Activities - Level D.**

**Non-Disruptive Activities - Level D.**

TABLE 2 PERSONAL PROTECTIVE EQUIPMENT LEVELS	
Level D will contain the following:	
	Steel-toed/steel shanked boots; gloves; safety glasses (in areas or test borings, construction, etc.); hard hat (if overhead hazards are present), and hearing protection (if in high noise area).
Level C will consist of:	
	White Tyvek or Sarnex coveralls; full-faced air purifying respirator equipped with organic vapor, acid gas combination cartridge with attached HEPA filter; inner chemical resistant latex gloves and outer neoprene or viton gloves; steel-toed/steel shank boots; chemical resistant boot coves; hard hat, and hearing protection (where applicable).

Level B will consist of:

White Tyvek or Sarnex coveralls; positive pressure, full-faced self contained breathing apparatus (SCBA) or supplied air respirator; inner chemical resistant-latex gloves and outer neoprene or viton gloves; chemical resistant boot covers; steel-toed/steel shanked boots; hard hat (where applicable).

In all cases gloves and boots or boot covers shall be adequately taped to appropriate suit to prevent contact of contaminated media with exposed skin or underclothing.

## **9.0 SITE CONTROL/WORK AREAS**

To minimize the spread of contamination, the site has been divided into three zones. The exclusion zone, the contamination reduction zone, and the support zone. The attached map, Figure 1 delineates these three initial zones. If site conditions warrant, the zones may be changed to afford better protection of personnel and the environment. It will be the responsibility of the site safety officer to monitor the area, and determine the extent of such changes. To control access to the site, fencing will be installed around the perimeter of the site.

### **9.1 EXCLUSION ZONES**

The exclusion zone is the area where the contamination is known or suspected to be located. This is in this area that the work is to be conducted. Prior to entering the exclusion zone, the following conditions must be met: personnel shall be suited in the designated level of protection; a decontamination station shall be established at the entrance to the exclusion zone; and all personnel leaving the area shall decontaminate and dispose of the disposable garments. The garments shall be placed in garbage bags which shall be drummed, and disposed of.

#### **9.1.1 Contamination Reduction Zone (CRZ)**

A CRZ shall be established between the exclusion zone boundary and the support area. The purpose of the CRZ is to limit the spread of contamination from the exclusion zone to the support area. The decontamination line and decontamination pad shall be established within the CRZ. The CRZ will also contain appropriate safety and emergency equipment.

#### **9.1.2 Support Zone**

The Support Zone is considered to be an uncontaminated area and will be separated from the CRZ by "Contamination Control Lines". The majority of site operations will be controlled from the support zone. The support zone will provide for team communications, emergency response, (i.e., first aid station) and sanitary facilities (i.e., potable water). Appropriate safety and support equipment will also be located in this zone.

The support zone will be located upwind of site operations if possible, and should be used as a potential evacuation point if appropriate. No potentially contaminated personnel or materials are allowed in this zone except appropriately packaged decontaminated and labeled samples. Meteorological conditions should be observed and noted from this zone, as well as those factors pertinent to heat and cold stress.

## **10.0 DECONTAMINATION AND DISPOSAL PROCEDURES**

### **10.1 PERSONNEL AND EQUIPMENT DECONTAMINATION**

All personnel and portable equipment used in the exclusion zone shall be subject to a thorough decontamination process. Sampling equipment shall be decontaminated in accordance with procedures outlined in the Field Sampling and Analysis Plan. All boots and gloves will be decontaminated using soap and water solution and scrub brushes before removal and disposal. When Level B or C protection is employed, the protective suite will be subject to a gross wash and rinse using a spray-applied soap and water solution, before removal and disposal. Figures, 3 and 4 illustrate the personal decontamination procedures to be employed for each protection level. All used respiratory protective equipment will be decontaminated daily and sanitized with appropriate sanitizer solution. Equipment need for personnel decontamination include buckets, wash basins, brushes, soap and clean water, chairs, and sprayers.

All storage drums generated as a result of decontamination, drilling or well development activities, will be stored at a designated area at the site until the materials can be disposed of appropriately. Drums should be disposed of periodically to prevent the build up of drum storage in the area.

All non-expendable sampling equipment will be decontaminated following the procedures identified in the Field Sampling and Analysis Plan. This usually entails the use of Alconox®, solvent and distilled/deionized water rinses to eliminate contaminants. The solvent rinse will be segregated from the water rinses.

### **10.2 HEAVY EQUIPMENT DECONTAMINATION PROCEDURES**

The heavy equipment decontamination will take place at the designated decontamination area. A decontamination pad will be constructed to collect all solids and fluids for off-site disposal. Items needed for the heavy equipment decontamination operation include a steam generator, empty containers, and equipment support structures.

### **10.3 DISPOSAL PROCEDURES**

All discarded materials, waste material, or other objects will be handled in a manner to preclude the potential for spreading contamination, creating a sanitary hazard or causing litter to be left on-site. All potentially contaminated materials, (e.g. suits, gloves, etc.) will be

bagged and drummed as necessary and segregated for future disposal. All non-contaminated materials will be collected and bagged for appropriate disposal as normal domestic waste. All containers will be labeled as to contents and hazard.

## **11.0 EDUCATION AND TRAINING REQUIREMENTS**

All personnel will receive 40 hours of health and safety training in accordance with OSHA Regulation, 29 CFR 1910.120 prior to performing any work at the site. The goal of this safety training will be the development of safety awareness as a part of the thought process of all personnel. To accomplish this, safety training will be provided to all personnel commensurate with the activities they will perform at the site.

Additional safety training and education at the site prayed basic on-the-job instruction in the following areas:

- An introduction to the Site.
- An overview of the existing contamination profile and safety concerns associated with working at the site.
- Instruction on organization and reporting procedures.
- Instruction on the use of personal protection, safety, and monitoring equipment.
- Instruction on decontamination and disposal measures.
- An overview of accident and emergency response procedures.

With regard to respirator usage, training and education activities will follow the procedures set forth by 29 CFR 1910.134, "Respiratory Protection," of the U.S. Department of Labor, Occupation Safety and Health Administration (OSHA), General Industry Standards.

As a minimum, training and education in respiratory protection will focus on the following items:

- Proper use of respirators and their limitations in both routine and emergency situations.
- Cleaning, decontamination, and disinfection procedures.
- Storage requirements.
- Inspection, maintenance, and repair requirements.

All personnel will be instructed in how to properly fit a respirator to achieve the required face-piece-to-face seal for respiratory protective purposes. Conditions which could affect this face seal will be highlighted, including the presence of beards, sideburns, eyeglasses, and the absence of one or both dentures. All employees will be subjected to an initial qualitative respirator fit test with annual qualitative fit test thereafter.

At least one person on the site shall be trained in basic first aid and C.P.R.

## **12.0 EMERGENCY PROCEDURES**

### **12.1 GENERAL**

As a result of the hazards on-site, and the condition under which operations are conducted. The potential for an emergency situation exists. Various individual site characteristics will determine preliminary action to be taken to assure that these emergency procedures are successfully implemented in the event of an emergency.

### **12.2 COMMUNITY HEALTH AND SAFETY MEASURES**

#### **12.2.1 General**

The site is adjacent to other commercial and retail establishments and local motor traffic, the health and welfare of the surrounding populations must be considered during the work conducted on the site. Protection of the surrounding community will take place by: limiting access to the work site; coordinating emergency response actions; and initiating a vapor and particulate emissions response plan.

#### **12.2.2 Site Access**

Reasonable site control measures shall be implements as required. Only authorized personnel shall enter the work area, and admission into this area shall be at the discretion of the Site Manager.

#### **12.2.3 Community Relations and Communication**

Mr. Craig Slater, Esquire of Harter, Secrest & Emery or in his absence, his designated representative shall act as the Community Relations Coordinator. The Community Relations Coordinator shall be responsible for all levels of communication on site. This includes the public, media and/or other

In the event that an emergency threatens the safety of motorists travelling along the adjacent road, the road will be blocked off in both directions, and the city street and police departments contacted along with appropriate emergency personnel.

## 12.2.4 Vapor and Particulate Emissions Response Plan

### Vapor Emission Response Plan

#### 1. Definition

- a. Minor Vapor Emission occurs whenever the ambient air concentration of organic vapors exceeds 5 ppm above background at the perimeter of the Site. If this occurs, activities should cease and the monitoring continued. If the organic vapors decrease below 5 ppm over background, activities can resume but more frequent monitoring intervals should be established. If the organic vapor levels are greater than 5 ppm over background but less than 25 ppm over background at the perimeter of the Site, activities can resume providing:
- 1) The LEL level at the boring well head is less than 25 percent.
  - 2) The organic vapor level 200 feet downwind of the Site or half the distance to the nearest downwind residential or commercial structure whichever is less, is below 5 ppm over background.
  - 3) More frequent monitoring intervals are established.

If the LEL level is above 25 percent, all activities at the Site should be immediately suspended and all engine ignition sources be turned off. If LEL is 25% or greater within 6 feet of the adjacent road, the road shall be closed to through traffic until the LEL falls below 25%. When this type of work shutdown occurs, downwind air monitoring should be implemented to ensure the vapor does not impact the nearest residential or commercial structure at levels exceeding those specified in the Major Vapor Emission section.

When the level of organic vapors exceed 25 ppm above background at the perimeter of the site, the organic vapors should be sampled the same day and at the same location. The analysis should attempt to identify the component(s) of the organic vapors. The analytical results should be reviewed by the Health and Safety Officer, contractor and NYSDEC representative to determine if any additional corrective action is needed. Sample collection and analysis can be conducted either with a portable gas chromatograph, or using charcoal tubes connected to air sampling pump, and subsequent laboratory analysis of the samples. A portable gas chromatograph (G.C.) is the instrument of choice as it provides direct reading analytical results. However, if the compounds in question are not in the portable G.C.'s library, samples will have to be submitted for laboratory analysis.

- b. Major Vapor Emission - if the organic vapor level measured 200 feet downwind of the Site or half the distance to the nearest downwind residence or commercial structure is more than 5 ppm over background, activities at the Site should be suspended and the air quality monitored within 20 feet of the nearest residential or commercial structure downwind of the Site (20 foot zone).

All active operations at the Site should remain shut down if any of the following levels are identified within the 20 foot zone:

1. Organic vapor levels approaching 5 ppm over background, or
2. LEL levels exceed 50 percent.

### **Major Vapor Emission Response Plan**

Once activated, the following should be immediately initiated:

1. Advise local authorities, e.g., police, fire etc. of the situation.
2. Advise client contact.
3. Begin air monitoring at 30 minute intervals within the 20 foot zone. If two successive readings are below the action level, the monitoring frequency can be modified.
4. Notify the appropriate State authorities of the situation and the actions that have been taken.

### **Particulate Emission Response Plan**

#### **1. Definition**

Air particulate monitoring at the site perimeter must be continuous. Continuous downwind air monitoring for respirable dust (particulate less than ten microns in diameter) should be performed using a real-time particulate monitoring integrated over a period not to exceed 15 minutes. If particulate levels are detected in excess of the action level ( $150 \text{ ug/m}^3$ ) the upwind background level must be measured immediately using the same monitor. If the downwind particulate levels is less than 2.5 times the background level, continuous hourly measurements of the upwind background level should be made until downwind particulate levels fall below the action level. If the downwind particulate level exceeds 2.5 times the upwind background level, all work activity is suspended and DEC is notified promptly.

### **12.3 SITE EMERGENCY COORDINATION**

The Site Manager shall make contact with local fire, police and other emergency units prior to beginning work on site. In these contacts the Site Manager will inform the emergency units about the nature and duration of work expected on the site, and the type of contaminants and possible health or safety effects of emergencies involving these contaminants. Also at this time site manager and the emergency response units shall make arrangements to handle any emergencies that might be anticipated. The Site Manager shall implement the contingency plan whenever conditions at the Site warrant the action. The Site Manager will be responsible for assuring the evacuation, emergency treatment, emergency transport of site personnel as necessary, and notification of emergency response units and the appropriate management staff.

### **12.4 EVACUATION**

In the event of an emergency situation such as fire, explosion, significant release of toxic gases, etc., an air horn will be sounded for approximately ten seconds indicating the initiation of evacuation procedures. All personnel in both the restricted and non-restricted areas will evacuate and assemble near the Support Zone or other safe area as identified by the Health and Safety Officer prior to the beginning of field operations. The location shall be upwind of the site if possible. For efficient and safe evacuation and assessment of the emergency situation, the Site Manager will have authority to initiate proper action if outside services are required. Under no circumstances will incoming personnel or visitors be allowed to proceed into the area once the emergency signal has been given. The Health and Safety Officer or Site Manager must see that access for emergency equipment is provided and that all combustion apparatus has been shut down (this may include motor vehicle traffic on adjacent road) once the alarm has been sounded. Once the safety of all personnel is established, the Town of Tonawanda Fire Department and other emergency response groups will be notified by telephone of the emergency. The evacuation procedures shall be rehearsed regularly as part of the overall training program for site operation. o

## **12.5 POTENTIAL OR ACTUAL FIRE OR EXPLOSION**

If the lower explosive limit (LEL) values are above 25 percent in the general work zone, or if an actual fire or explosion has taken place, immediately evacuate the site (air horn will sound for ten-second intervals). Notify local fire and police departments and other appropriate emergency response groups.

## **12.6 ENVIRONMENTAL INCIDENT RELEASE OR SPREAD OF CONTAMINATION**

If a spill has occurred the first step is controlling the spread of contamination if possible. The Site Manager should instruct a person on-site to immediately contact local authorities to inform them of the possible or immediate need for community evacuations. If a significant release has occurred, the National Response Center shall be contacted. This group will alert National or Regional Response Teams as necessary. Following these emergency calls, the reporting individual should then notify the Contact Person, Site Manager, Corporate Health and Safety Director, Project Manager and Health and Safety Officer. o

National Response Center (800) 424-8802

## **12.7 EMERGENCY PROCEDURES FOR CONTAMINATED PERSONNEL**

Whenever possible personnel should be decontaminated before administering first aid. In the contamination reduction zone there will be a separate decontamination line for emergency use only in order to reduce the risk of exposure.

*Skin Contact:* Remove contaminated clothing, wash immediately with water, and soap.

*Inhalation:* Remove any respiratory protective equipment, give artificial respiration if necessary. Transport to the hospital.

*Ingestion:* Remove from contaminated atmosphere. Do not induce vomiting if victim is unconscious. Also never induce vomiting when acids, alkalines, or petroleum products are suspected. If site personnel have unexplainable collapsed, all personnel must evacuate work area. Rescue personnel must don Supplied Air respiratory protection before evacuating victim from work area.

In case of fire, all personnel must evacuate work area and contact local fire department.

## **12.8 PHYSICAL INJURIES AND TEMPERATURE STRESS**

Basic first aid supplies (bandages, gauze, tape) will be located in the first aid box. The first aid box, along with first aid manuals will be located in the Support Zone.

Temperature stress is one of the most common illnesses at hazardous waste sites. Acclimatization and frequent rest periods must be established for conducting activities where temperature stress may occur. Below are listed signs and symptoms of heat stress; personnel should follow appropriate guidelines if any personnel exhibit these symptoms:

*Heat Rash:* Redness of skin. Frequent rest and change of clothing.

*Heat Cramps:* Painful muscle spasms in hands, feet, and/or abdomen. Administer lightly salted water by mouth, unless there are medical restriction.

*Heat Exhaustion:* Clammy, moist, pale skin, along with dizziness, nausea, rapid pulse, fainting. Remove to cooler area and administer fluids.

*Heat Stroke:* Dry hot skin, red spotted or bluish skin, high body temperature of 104°F, mental confusion, loss of consciousness, convulsions or coma. Immediately cool victim by immersion in cool water. Wrap with wet sheet while fanning, sponge with cool liquid while fanning, treat for shock. **DO NOT DELAY TREATMENT. COOL BODY WHILE AWAITING AMBULANCE. HEAT STROKE IS A MEDICAL EMERGENCY.**

Ambient air temperatures during site activities may create cold stress for on site workers. Procedures for recognizing and avoiding cold stress must be followed. Cold stress can range from frostbite to hypothermia. Below are listed the signs and symptoms for cold stress. Personnel should follow the appropriate guidelines if any personnel exhibit these symptoms:

*Frostbite:* Pain in the extremities and loss of manual dexterity. "Frost nip" or reddening of the tissue, accompanied by a tingling or loss of sensation in the extremities.

*Hypothermia:* Pain in the extremities and loss of manual dexterity. Severe, uncontrollable shivering. Inability to maintain level of activity. Excessive fatigue, drowsiness, irritability, or euphoria. Severe hypothermia: clouded consciousness, low blood pressure, pupil dilation, cease of shivering, unconsciousness, and possible death.

Remove patient to a warm, dry place. If clothing is wet, remove and replace with dry clothing. Keep patient warm. Rewarming of patient should be gradual to avoid stroke symptoms. Dehydration due to the loss of body fluids may result in cold injury due to a significant change in blood flow to the extremities. If patient is conscious and alert, warm sweet liquids should be provided. Coffee and other caffeinated liquids should be avoided because of diuretics and circulatory effects. Extremities affected by frostbite should be gradually warmed up and returned to normal temperature. Moist compresses should be applied; begin with lukewarm compressed and slowly increase the temperature as changes in skin temperature are detected. Keep patient warm and clam, remove to a medical facility as soon as possible.

## **12.9 INCIDENT REPORTING**

Following an accident or emergency episode, an incident report will completed by the responsible individual in charge at the scene of the incident. Personnel that witnessed the episode will be questioned as necessary. Information to be included in the incident report will include, as a minimum, the following items:

- Name of person or persons involved
- Date and time
- Exact location
- Description
- Type of exposure suspected or nature of injury
- Nature of emergency response or medical attention received
- Witnesses/other personnel involved
- Corrective measures recommended to prevent the repeat of the incident

All incident reports will be filed with the Project Manager.

## **12.10 EMERGENCY PHONE NUMBERS**

DEC Contact:

Glenn May (716) 851-7220

Twin City Ambulance: (716) 692-2100

Police: (716) 876-5300

Fire: (716) 876-1212

Erie County Environmental

Field Office (716) 874-1070

Poison Information Center (716) 278-4511 or 297-4800

Hospital: (716) 694-4500 (DeGraff Memorial)

Dig Safe (716) 893-1133

Streets/Engineering  
Department (716) 877-8805

National Response Center: (800) 424-8802

Project Manager:  
Michael Barnhardt (716) 693-1097

2251 Military Road Associates, Inc. Contact:  
James Cornell (716) 542-5888

Client Contact:  
Craig Slater (716) 853-1616

#### **12.11 DIRECTIONS TO HOSPITAL**

The nearest hospital is DeGraff Memorial Hospital located at 445 Tremont, North Tonawanda, NY, Ph: (716) 694-4500. Proceed north on Route 290 and get off at the Colvin Exit. Proceed north (turn left) on to the Twin Cities Memorial Parkway (otherwise known as the Colvin Extension). Follow the "H" signs northerly on the Twin Cities Memorial Parkway and turn right (east) onto Tremont. The hospital is located at the intersection of Tremont and Twin Cities Memorial Parkway.

#### **13.0 FIELD TEAM REVIEW**

Each field team member shall sign this section after site-specific training is completed and before being permitted to work on-site. A copy of this signed form shall be sent to the Health and Safety Officer.

I have read and understand the Site-Specific Health and Safety Plan for the 2250 Military Road Site and I will comply with the provisions contained therein.

<u>Name Printed</u>	<u>Signature</u>	<u>Date</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____


## FIGURES

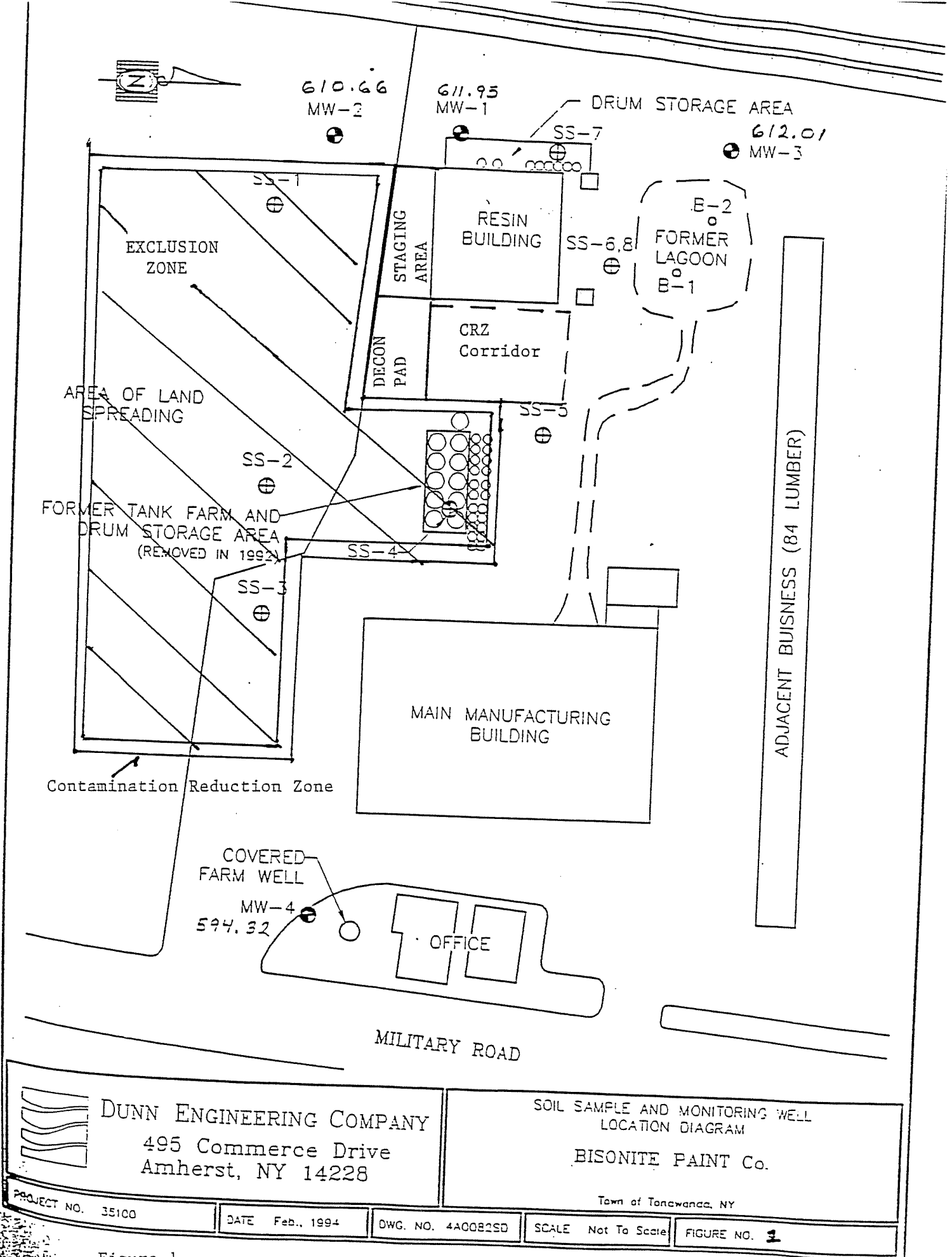
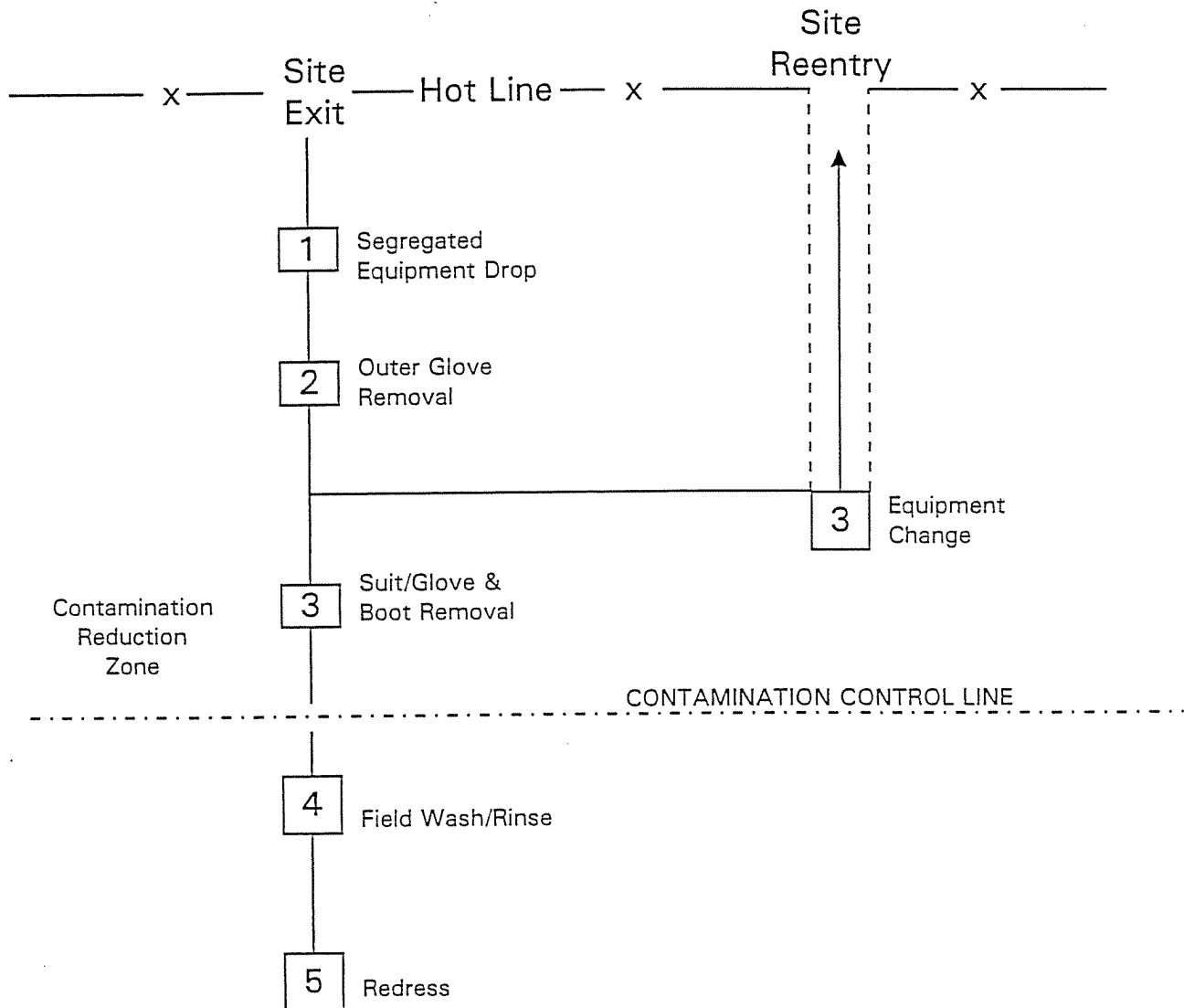


Figure 1

# LEVEL D DECONTAMINATION PROCEDURES

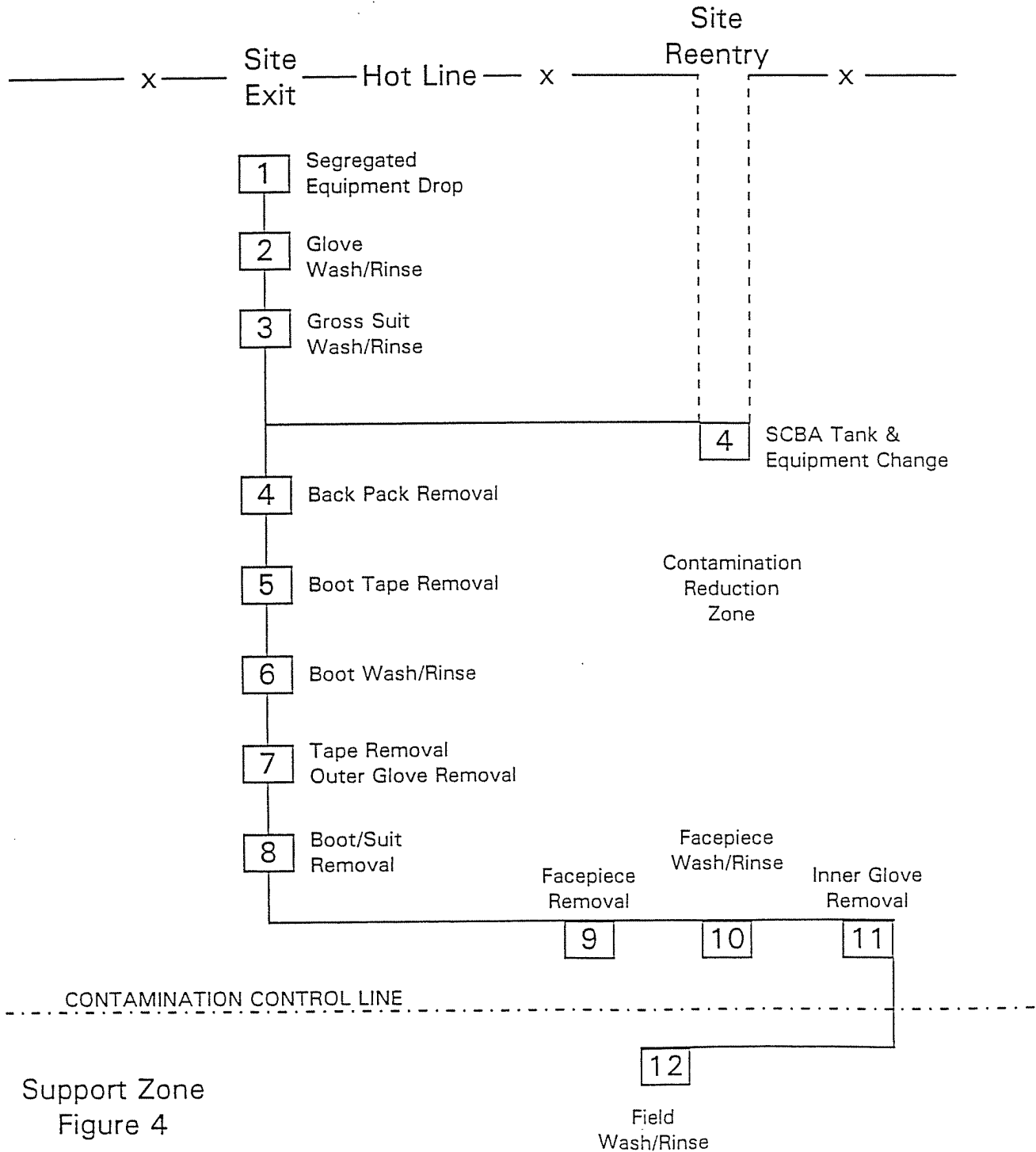
EXCLUSION ZONE



Support Zone  
Figure 2

# LEVEL B DECONTAMINATION PROCEDURES

## EXCLUSION ZONE



Support Zone  
Figure 4

o

## APPENDIX A

### Chemical Fact Sheets

o

ZINC

The information in this sheet applies to workplace exposure resulting from processing, manufacturing, storing or handling and is not designed for the population at large. Any generalization beyond occupational exposures should not be made. The best industrial hygiene practice is to maintain concentrations of all chemicals at levels as low as is practical.

Chemical Names: CAS 7440-66-6.

Trade Names: Blue powder, Asareo L15, C.I. Pigment Black 16, and others.

Uses: In galvanizing sheet metal; in bronze, brass, Babbit metal and German silver alloys; in casting, printing, batteries and electrical equipment; as a chemical reagent; as a nutritional trace element; and others.

PHYSICAL INFORMATION

Appearance: Silvery metal.

Odor: None.

Behavior in Water: Insoluble; materials will sink.

HEALTH HAZARD INFORMATION

OSHA Standard: None established.

NIOSH Recommended Limit: None established.

ACGIH Recommended Limit: None established.

Short Term Exposure:

Note: Zinc metal is not considered very toxic but when combined with other materials such as mineral acids or oxygen, the resulting compounds can have toxic effects. See specific compounds.

Inhalation: No information found on exposure to zinc metal. However, when heated, zinc can form zinc oxide fumes which can cause "Metal Fume Fever". See zinc oxide.

Skin: No information found on exposure to zinc metal. See specific zinc compound.

Eyes: No information found on exposure to zinc metal. See specific zinc compound.

Ingestion: 12 grams (1/3 ounce) of zinc metal taken over 2 days has caused sluggishness, light-headedness, a staggering gait and difficulty in writing. See specific zinc compounds.

Long Term Exposure:

No information found on zinc metal. See specific zinc compounds.

\*Prepared by the Bureau of Toxic Substance Assessment, New York State Department of Health. For an explanation of the terms and abbreviations used, see "Toxic Substances: How Toxic is Toxic" available from the New York State Department of Health.

CHROMIUM (metal)

The information in this sheet applies to workplace exposure resulting from processing, manufacturing, storing or handling and is not designed for the population at large. Any generalization beyond occupational exposures should not be made. The best industrial hygiene practice is to maintain concentrations of all chemicals at levels as low as is practical.

Chemical Names: CAS 7440-47-3.

Trade Names: Chrome.

Uses: In the manufacture of chrome-steel and chrome-nickel-steel alloys and for chrome plating of other metals.

PHYSICAL INFORMATION

Appearance: Steel-gray metal or silver metal powder.

Odor: None.

Behavior in Water: Insoluble.

HEALTH HAZARD INFORMATION

OSHA Standard: Average 8 hour exposure -- 1 mg/m<sup>3</sup>.

NIOSH Recommended Limit: None established.

ACGIH Recommended Limit: Average 8 hour exposure -- 0.5 mg/m<sup>3</sup>.

Short Term Exposure:

Note: Chromium metal is not considered to be very hazardous and is primarily a dust irritant. However, welding or plating with chromium may produce hexavalent chromium (chromium VI) compounds, some of which are considered to be carcinogenic. See specific compounds.

Inhalation: Dust may cause irritation of the nose, throat and lungs.

Skin: Dust may cause irritation.

Eyes: Dust may cause irritation.

Ingestion: Dust may cause irritation of the mouth and throat.

Long Term Exposure:

No information found on exposure to chromium metal. See specific chromium compounds.

\*Prepared by the Bureau of Toxic Substance Assessment, New York State Department of Health. For an explanation of the terms and abbreviations used see "Toxic Substances: How Toxic Toxic" available from the New York State Department of Health.

LEAD (Metallic and Inorganic Compounds)

The information in this sheet applies to workplace exposure resulting from processing, manufacturing, storing or handling and is not designed for the population at large. Any generalization beyond occupational exposures should not be made. The best industrial hygiene practice is to maintain concentrations of all chemicals at levels as low as is practical.

Chemical Names: Lead, CAS 7439-92-1; lead carbonate, CAS 598-63-0; lead chloride, CAS 7758-95-4; lead monoxide, CAS 1317-36-8; lead sulfide, CAS 1314-87-0; and others.

Trade Names: C.I. Pigment Metal 4, C.I. 77575, Lead flake, Whole lead, Litharge and others.

Uses: Tank linings, piping and other chemical reaction equipment; petroleum refining; manufacture of gasoline additives; pigments for paint; storage batteries, solder and fusible alloys; radiation shielding and others.

PHYSICAL INFORMATION

Appearance: Bluish white to silvery grey solid (lead metal).

Odor: None.

Behavior in Water: Insoluble.

HEALTH HAZARD INFORMATION

OSHA Standard: Average 8 hour exposure -- 0.05 mg/m<sup>3</sup> (lead).

NIOSH Recommended Limit: Average 10 hour day or 40 hour week exposure -- 0.1 mg/m<sup>3</sup> (lead).

ACGIH Recommended Limit: Average 8 hour exposure -- 0.15 mg/m<sup>3</sup> (lead).

NOTE: Blood-lead level is a good indicator of total lead exposure. Current OSHA regulations require that if an individual has a blood-lead level greater than or equal to .050 mg lead per 100 ml. blood, he or she must be removed from all exposures to lead and cannot return to the exposure environment until the blood level falls to .040 mg lead per 100 ml. blood or less.

Short Term Exposure:

Note: Lead is a cumulative poison. Increasing amounts can build up in the body eventually reaching a point where symptoms and disability occur. Lead dust carried home on contaminated clothing can result in exposure and symptoms in other family members. Standards only protect for inhalation exposure. Extra precautions should be taken if skin exposure also occurs.

Inhalation: The effects of exposure to fumes and dusts of inorganic lead may not develop quickly. Symptoms may include decreased physical fitness, fatigue, sleep disturbance, headache, aching bones, and muscles, constipation, abdominal pains and decreased appetite. These effects are reported to be reversible if exposure ceases. Inhalation of large amounts of lead may lead to seizures, coma and death.

Skin: May cause irritation.

Eyes: May cause irritation.

Ingestion: See effects listed for inhalation. Ingestion of large amounts of lead may lead to seizures, coma and death.

Long Term Exposure:

Lead can accumulate in the body over a period of time. Therefore, long term exposures to lower levels can result in a build up of lead in the body and more severe symptoms. These may include anemia, pale skin, a blue line at the gum margin, decreased hand-grip strength, abdominal pain, severe constipation, nausea, vomiting, and paralysis of the wrist joint. Prolonged exposure may also result in kidney damage. If the nervous system is affected, usually due to very high exposures, the resulting effects include severe headache, convulsions, coma, delirium and death. In non-fatal cases, recovery is slow and not always complete. Alcohol ingestion and physical exertion may bring on symptoms. Continuous exposure can result in decreased fertility. Elevated lead exposure of either parent before pregnancy can increase the chances of miscarriage or birth defects. Exposure of the mother during pregnancy can cause birth defects.

\*Prepared by the Bureau of Toxic Substance Assessment, New York State Department of Health. For an explanation of the terms and abbreviations used, see "Toxic Substances: How Toxic is Toxic" available from the New York State Department of Health.

BENZENE

The information in this sheet applies to workplace exposure resulting from processing, manufacturing, storing or handling and is not designed for the population at large. Any generalization beyond occupational exposures should not be made. The best industrial hygiene practice is to maintain concentrations of all chemicals at levels as low as is practical.

Chemical Names: Benzol, phenyl hydride, cyclohexatriene; CAS 71-43-2.

Trade Names: Benzole, Benzelene, Carbon Oil, Carbon Naphtha, Mineral Naphtha, Motor benzol, Nitration benzene, Phene, Pyrobenzol and others.

Uses: In the manufacture of styrene, phenol, detergents, organic chemicals, pesticides, plastics and resins, synthetic rubber, aviation fuel, pharmaceuticals, dyes, explosives, gasoline, flavors and perfumes, paints and coatings. Used in the industrial processing of nylon, certain food products and photographic chemicals.

PHYSICAL INFORMATION

Appearance: Colorless liquid.

Odor: Strong, pleasant.

Minimum Detectable by Odor: 5 ppm.

Behavior in Water: Slightly soluble, floats.

Evaporation: Rapid.

HEALTH HAZARD INFORMATION

OSHA Standard: Average 8 hour exposure limit -- 10 ppm.

NIOSH Recommended Limit: 1 ppm.

ACGIH Recommended Limit: Average 8 hour exposure limit -- 10 ppm.

Short Term Exposure:

Inhalation: Benzene may produce both nerve and blood effects. Irritation of the nose, throat and lungs may occur (3,000 ppm may be tolerated for only 30 to 60 minutes). Lung congestion may occur. Nerve effects may include an exaggerated feeling of well-being, excitement, headache, dizziness and slurred speech. At high levels, slowed breathing and death may result. Death has occurred at 20,000 ppm for 5 to 10 minutes, or 7,500 ppm for 30 minutes.

Skin: Irritation may occur, with redness and blistering if not promptly removed. Benzene is poorly absorbed. Whole body exposure for 30 minutes has been reported with no health effects.

Eyes: May cause severe irritation.

Ingestion: May cause irritation of mouth, throat and stomach. Symptoms are similar to those listed under inhalation. One tablespoon may cause collapse, bronchitis, pneumonia and death.

Long Term Exposure:

May cause loss of appetite, nausea, weight loss, fatigue, muscle weakness, headache, dizziness, nervousness and irritability. Mild anemia has been reported from exposures of 25 ppm for several years and 100 ppm for 3 months. At levels between 100 and 200 ppm for periods of 6 months, or more, severe irreversible blood changes and damage to liver and heart may occur. Temporary partial paralysis has been reported.

Benzene is a known human carcinogen. Exposure has been linked to increased risk of several forms of leukemia. Periodic blood tests of occupationally exposed individuals should be conducted.

\*Prepared by the Bureau of Toxic Substance Assessment, New York State Department of Health. For an explanation of the terms and abbreviations used, see "Toxic Substances: How Toxic is Toxic" available from the New York State Department of Health.

METHYLENE CHLORIDE

The information in this sheet applies to workplace exposure resulting from processing, manufacturing, storing or handling and is not designed for the population at large. Any generalization beyond occupational exposures should not be made. The best industrial hygiene practice is to maintain concentrations of all chemicals at levels as low as is practical.

Chemical Names: Dichloromethane, Methylene dichloride; CAS 75-09-2.

Trade Names: Solaestine, Aerothene MM, Norkotel, Somethine, R30 and others.

Uses: The liquid is used as a solvent, degreasing and cleaning fluid, aerosol propellant, anesthetic and refrigerant. Also used in paint removers, blowing agents in foams, in the process of decaffeinating coffee and extraction of spices.

PHYSICAL INFORMATION

Appearance: Clear, colorless liquid.

Odor: Sweetish (like chloroform or ether). Minimum Detectable by Odor: 214 ppm.

Behavior in Water: Slightly soluble (1.32 g/100 g water), remainder will sink.

Evaporation: Liquid evaporates rapidly.

HEALTH HAZARD INFORMATION

OSHA Standard: Average 8 hour exposure limit -- 500 ppm.

NIOSH Recommended Limit: Reduce exposure to the lowest feasible level.

ACGIH Recommended Limit: Average 8 hour exposure -- 100 ppm.  
(Proposed for change in 1988: 50 ppm).

Short Term Exposure:

Notes: Methylene chloride is changed to carbon monoxide in the human body. This is a particularly hazardous condition for those who have a history of heart trouble or those who are also exposed to carbon monoxide. See carbon monoxide fact sheet. These persons should take extra precautions.

Inhalation: Levels of 300-700 ppm for 3-5 hours has caused slight loss of muscle control and coordination. Effects of higher concentrations include stupor, dizziness, chest pain, arm and leg pains, loss of feeling, loss of appetite, hot flashes and death.

Skin: May be irritating if confined on the skin by gloves or clothing. May be absorbed slowly through the skin to cause symptoms listed under inhalation.

Eyes: May cause pain, irritation and burns.

Ingestion: Accidental ingestion of paint removers containing methylene chloride as the main ingredient have reportedly caused headache, nausea, vomiting, visual disturbance, presence of blood in the urine, and unconsciousness.

Long Term Exposure:

Same symptoms as above. Prolonged exposure can cause changes in blood, hallucinations and decreased response to visual and auditory stimulation. Some long term exposures have also resulted in damage to the liver. Most of the effects will disappear after exposure stops. Methylene chloride caused genetic effects in certain bacteria and caused birth defects in chickens. In laboratory studies, methylene chloride has also been shown to cause tumors in mice and rats. Whether methylene chloride causes birth defects or tumors in humans is not known.

\*Prepared by the Bureau of Toxic Substance Assessment, New York State Department of Health. For an explanation of the terms and abbreviations used, see "Toxic Substances: How Toxic is Toxic" available from the New York State Department of Health.

MERCURY (metallic)

The information in this sheet applies to workplace exposure resulting from processing, manufacturing, storing or handling and is not designed for the population at large. Any generalization beyond occupational exposures should not be made. The best industrial hygiene practice is to maintain concentrations of all chemicals at levels as low as is practical.

Chemical Names: Hydrargyrum; CAS 7439-97-6.

Trade Names: Quicksilver, liquid silver and others.

Uses: Used in the manufacture of scientific instruments, in electrical equipment, synthetic silk, solder, electrolytic processes, metal plating, tanning, dyeing, textiles, photography, photoengraving, paints and pigments.

PHYSICAL INFORMATION

Appearance: A silvery-white, heavy liquid.

Odor: Odorless.

Behavior in Water: Does not mix. Will sink.

Evaporation: Slow, but even at room temperature, may evaporate to cause symptoms as listed under inhalation.

HEALTH HAZARD INFORMATION

OSHA Standard: 0.1 mg/m<sup>3</sup>.

NIOSH Recommended Limit: Average 8 hour exposure -- 0.05 mg/m<sup>3</sup>.

ACGIH Recommended Limit: Average 8 hour exposure -- 0.05 mg/m<sup>3</sup>.

Short Term Exposure:

Inhalation: Exposure to levels below 1 mg/m<sup>3</sup> has been shown to produce nonspecific symptoms such as shyness, insomnia, anxiety and loss of appetite. At higher levels (1-3 mg/m<sup>3</sup> for 2-3 hours) may cause headache, salivation, metallic taste, chills, cough, fever, tremors, abdominal cramps, diarrhea, nausea, vomiting, tightness in the chest, difficult breathing, fatigue, lung irritation and possible lung tissue damage. Symptoms may begin several hours after exposure and may last a week. Large doses may result in flu-like symptoms, which, in severe cases, may result in death due to pneumonia.

Skin: Can be absorbed through the skin. May cause irritation. Prolonged contact with skin can result in symptoms listed above.

Eyes: Can cause eye irritation.

Ingestion: Generally does not produce ill effects.

Long Term Exposure:

Mercury accumulates in the brain quickly during exposure but is released from the brain very slowly. This will result in a build-up in brain tissue over a long time. The liver and kidneys may also be damaged by mercury accumulation.

It may cause headache, dizziness, restlessness, irritability, sleepiness, tremors, defective muscle control, increased salivation, loose teeth, irritation of the gums with a blue line between teeth and gums, loss of appetite, nausea, vomiting, diarrhea, liver damage, changes in urine, raised red areas and blisters of skin, impaired memory and possible permanent brain damage.

Frequency of complaints and severity of symptoms increase with levels of exposure, most noted above 0.1 mg/m<sup>3</sup>. However, many of these symptoms have been reported at levels below recommended limits due to the accumulation of mercury over long term exposure.

\*Prepared by the Bureau of Toxic Substance Assessment, New York State Department of Health. For explanation of the terms and abbreviations used, see "Toxic Substances: How Toxic is Toxic" available from the New York State Department of Health.

## EMERGENCY AND FIRST AID INSTRUCTIONS

Reagents

Inhalation: Remove to fresh air. Give artificial respiration or oxygen if necessary. Seek medical attention.

Skin: Remove soiled clothing immediately. Wash thoroughly with soap and water for at least 5 minutes. Seek medical attention, if necessary.

Eyes: Irrigate eyes with water for at least 15 minutes. Seek medical attention.

Ingestion: Do not try to induce vomiting. Seek medical attention immediately.

Note to Physician: Severe exposure may require supportive measures for pulmonary edema.

## FIRE AND EXPLOSION INFORMATION

General: Flammable, vapor may spread considerable distance to a source of ignition and flash back. Ignites at -110C (120F).

Explosive Limit: Upper -- 7.1%, Lower -- 1.3%.

Extinguisher: Carbon dioxide, dry chemical or foam.

## REACTIVITY

Materials to Avoid: Contact with strong oxidizers, or iron in the presence of chlorine or bromine.

Conditions to Avoid: Exposure to sources of ignition.

## PROTECTIVE MEASURES

Storage and Handling: Protect containers against physical damage. Storage preferred in an outdoor or detached building. If storage is indoor, use a standard flammable liquid storage room.

Engineering Controls: Use only with efficient ventilation.

Protective Clothing (Should not be substituted for proper handling and engineering controls): If direct contact is likely, wear protective rubber clothing, gloves and eye goggles.

Protective Equipment: For any detectable levels use a self-contained breathing apparatus with a full facepiece and operated a positive pressure mode or a combination Type C supplied-air respirator with an auxiliary self-contained breathing apparatus, both with full facepiece and operated in a positive pressure mode. For escape from a contaminated area use a gas mask with organic vapor canister or an escape self-contained breathing apparatus.

## PROCEDURES FOR SPILLS AND LEAKS

Get all workers out of spill area. Put on protective clothing and equipment when entering spill area for clean-up. Spread absorbent material on spill, sweep up and keep contained in fiber carton tightly sealed. For final disposal, contact your regional office of the New York State Department of Environmental Conservation.

For more information:

Contact the Industrial Hygienist or Safety Officer at your worksite or the New York State Department of Health, Bureau of Toxic Substance Assessment, 2 University Place, Albany, New York 12203.

# Material Safety Data Sheet

Genium Publishing Corporation  
1145 Catalyn Street, Schenectady, NY 12303  
(518) 377-8854  
From Genium's collection, to be used as reference

Product: TOLUENE  
MSDS No: Genium / 317  
Revision: 0  
Date: April, 1966

National Paint  
and Coatings  
Association  
  
Hazardous Material  
Identification  
System

HEALTH HAZARD	2 - Moderate
FLAMMABILITY HAZARD	3 - Serious
REACTIVITY HAZARD	0 - Minimal
PERSONAL PROTECTION	SEE SECTION 8

## SECTION I. MATERIAL IDENTIFICATION

Trade/Material Name: TOLUENE

Other Designations: Methyl Benzene, Methyl Benzol, Phenylmethane, Toluol,  $C_7H_8$

CAS: 0108-88-3

Available from many suppliers, including:

Manufacturers: Allied Corp.  
PO Box 2064R  
Morristown, NJ 07960  
  
Phone: (201) 455-4400

Ashland Chemical Co.  
Industrial Chemicals & Solvents Div.  
  
PO Box 2219  
Columbus, OH 43216  
  
Phone: (614) 889-3844

## SECTION II. INGREDIENTS AND HAZARDS

Ingredient Name:

Toluene

Percent:

ca 100

Exposure Limits:

8-hr TLV: 100 ppm,  
or 375 mg/m<sup>3</sup>\* (Skin)  
\*\*

Man, Inhalation,  
TCLo: 100 ppm:  
Psychotropic \*\*\*

Rat, Oral, LD<sub>50</sub>:  
5000 mg/kg  
Rat, Inhalation,  
LCLo: 4000 ppm/4  
hrs.

## Material Safety Data Sheet

Genium Publishing Corporation  
1145 Catalyn Street, Schenectady, NY 12303  
(518) 377-8854  
From Genium's collection, to be used as reference

Product: TOLUENE

MSDS No: Genium / 317

Revision: D

Date: April, 1986

### INGREDIENTS AND HAZARDS continued from page 1

Rabbit, Skin,  
LD<sub>50</sub>: 14 gm/kg

Human, Eye: 300 ppm

\* Current (1985-86) ACGIH TLV. The OSHA PEL is 200 ppm with an acceptable ceiling concentration of 300 ppm and an acceptable maximum peak of 500 ppm/10 minutes.

\*\* Skin designation indicates that toluene can be absorbed through intact skin and contribute to overall exposure.

\*\*\* Affects the mind.

### SECTION III. PHYSICAL DATA

Appearance & Odor: Clear, colorless liquid with a characteristic aromatic odor. The odor is detectable to most individuals in the range of 10 to 15 ppm. Because olfactory fatigue occurs rapidly upon exposure to toluene, odor is not a good warning property.

Boiling point: 231°F (111°C)  
Vapor pressure: @ 20°C, mm Hg: 2  
Water solubility (%): @ 20°C, wt. %: 0.05  
Vapor density (air=1): 3.14

Evaporation rate: (BuAc=1): 2.24  
Specific gravity (H<sub>2</sub>O=1): 0.866  
Melting point: -139°F (-95°C)  
% volatile by volume: ca 100  
Molecular weight: 92.15

### SECTION IV. FIRE AND EXPLOSION DATA

Flash Point (method): 40°F (4°C) CC Limits: LEL %: 1.27 UEL %: 7.1

Extinguishing Media: Carbon dioxide, dry chemical, alcohol foam. Do not use a solid stream of water because the stream will scatter and spread the fire. Use water spray to cool tanks/containers that are exposed to fire and to disperse vapors.

Autoignition Temp:  
896°F (480°C)

Unusual fire or explosion hazards: This OSHA class IB flammable liquid is a dangerous fire hazard. It is a moderate fire hazard when exposed to oxidizers, heat, sparks, or open flame. Vapors are heavier than air and may travel a considerable distance to an ignition source and flash back.

Special fire-fighting procedures: Fire fighters should wear self-contained breathing apparatus with full facepiece operated in a positive-pressure mode when fighting fires involving toluene.

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Revision: 0

Date: April, 1986

### SECTION V. REACTIVITY DATA

Material is stable in closed containers at room temperature under normal storage and handling conditions. Hazardous polymerization does not occur

**Chemical incompatibilities:** This material is incompatible with strong oxidizing agents, dinitrogen tetroxide, silver perchlorate, tetranitromethane, and uranium hexafluoride. Contact with these materials may cause fire or explosion. Nitric acid and toluene, especially in the presence of sulfuric acid, will produce nitrated compounds that are dangerously explosive.

**Conditions to avoid:** Avoid exposure to sparks, open flame, hot surfaces, and all sources of heat and ignition. Toluene will attack some forms of plastics, rubber, and coatings. Thermal decomposition or burning produces carbon dioxide and/or carbon monoxide.

### SECTION VI. HEALTH HAZARD INFORMATION

This product is not considered a carcinogen by the NTP, IARC, or OSHA.

**Summary of risks:** Vapors of toluene may cause irritation of the eyes, nose, upper respiratory tract, and skin. Exposure to 200 ppm for 8 hours causes mild fatigue, weakness, confusion, lacrimation (tearing), and paresthesia (a sensation of prickling, tingling, or creeping on the skin that has no objective cause). Exposure to higher concentrations may cause headache, nausea, dizziness, dilated pupils, and euphoria, and, in severe cases, may cause unconsciousness and death. The liquid is irritating to the eyes and skin. Contact with the eyes may cause transient corneal damage, conjunctival irritation, and burns if not promptly removed. Repeated and/or prolonged contact with the skin may cause drying and cracking. It may be absorbed through the skin in toxic amounts. Ingestion causes irritation of the gastrointestinal tract and may cause effects resembling those from inhalation of the vapor. Chronic overexposure to toluene may cause reversible kidney and liver injury.

#### First aid:

**Eye contact:** Immediately flush eyes, including under eyelids, with running water for at least 15 minutes. Get medical attention if irritation persists.\*

**Skin contact:** Immediately flush skin (for at least 15 minutes) while removing contaminated shoes and clothing. Wash exposed areas with soap and water. Get medical attention if irritation persists or if a large area has been exposed.\*

**Inhalation:** Remove victim to fresh air. Restore and/or support breathing as required. Keep victim warm and quiet. Get medical help.\*

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Revision: 0  
Date: April, 1986

### HEALTH HAZARD INFORMATION continued from page 3

Ingestion: Give victim 1 to 2 glasses of water or milk. Contact a poison control center. Do not induce vomiting unless directed to do so. Transport victim to a medical facility. Never give anything by mouth to a person who is unconscious or convulsing.

\* GET MEDICAL ASSISTANCE = In plant, paramedic, community. Get medical help for further treatment, observation, and support after first aid, if indicated.

### SECTION VII. SPILL, LEAK AND DISPOSAL PROCEDURES

Spill / Leak procedures: Notify safety personnel of large spills or leaks. Remove all sources of heat and ignition. Provide maximum explosion-proof ventilation. Limit access to spill area to necessary personnel only. Remove leaking containers to safe place if feasible. Cleanup personnel need protection against contact with liquid and inhalation of vapor (see sect. 8).

Waste management / Disposal: Absorb small spills with paper towel or vermiculite. Contain large spills and collect if feasible, or absorb with vermiculite or sand. Place waste solvent or absorbent into closed containers for disposal using nonsparking tools. Liquid can be flushed with water to an open holding area for handling. Do not flush to sewer, watershed, or waterway.

Place in suitable container for disposal by a licensed contractor or burn in an approved incinerator. Consider reclaiming by distillation. Contaminated absorbent can be buried in a sanitary landfill. Follow all Federal, state, and local regulations. Tlm 96: 100-10 ppm. Toluene is designated as a hazardous waste by the EPA. The EPA (RCRA) HW No. is U220 (40 CFR 261). The reportable quantity (RQ) is 1000 lbs/454 kg (40 CFR 117).

### SECTION VIII. SPECIAL PROTECTION INFORMATION

#### Personal protective equipment:

Goggles: Safety glasses or splash goggles should be worn in all work areas.

Gloves: Neoprene gloves should be worn.

Respirator: For emergency or nonroutine exposures where the TLV may be exceeded, use an organic chemical cartridge respirator if concentration is less than 200 ppm and an approved canister gas mask or self-contained breathing apparatus with full facepiece if concentration is greater than 200 ppm.

## Material Safety Data Sheet

Genium Publishing Corporation  
1145 Catalyn Street, Schenectady, NY 12303  
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Product: TOLUENE

MSDS No: Genium / 317  
Revision: D  
Date: April, 1986

### SPECIAL PROTECTION INFORMATION continued from page 4

Other: Apron, face shield, boots, and other appropriate protective clothing and equipment should be available and worn as necessary to prevent skin and eye contact.

Remove contaminated clothing immediately and do not wear it until it has been properly laundered.

#### Workplace considerations:

Ventilation: Provide general and local exhaust ventilation to meet TLV requirements. Ventilation fans and other electrical service must be nonsparking and have an explosion-proof design. Exhaust hoods should have a face velocity of at least 100 lfm (linear feet per minute) and be designed to capture heavy vapor.

#### Safety stations:

Eyewash stations and safety showers should be readily available in use and handling areas.

Contact lenses pose a special hazard; soft lenses may absorb irritants and all lenses concentrate them.

### SECTION IX. SPECIAL PRECAUTIONS

Storage segregation: Store in a cool, dry, well-ventilated area away from oxidizing agents, heat, sparks, or open flame. Storage areas must meet OSHA requirements for class IB flammable liquids. Use metal safety cans for handling small amounts. Protect containers from physical damage. Use only with adequate ventilation. Avoid contact with eyes, skin, or clothing. Do not inhale or ingest. Use caution when handling this compound because it can be absorbed through intact skin in toxic amounts.

Special handling / storage: Ground and bond metal containers and equipment to prevent static sparks when making transfers. Do not smoke in use or storage areas. Use nonsparking tools.

Engineering controls: Preplacement and periodic medical exams emphasizing the liver, kidneys, nervous system, lungs, heart, and blood should be provided. Workers exposed to concentrations greater than the action level (50 ppm) should be examined at least once a year. Use of alcohol can aggravate the toxic effects of toluene.

Emptied containers contain product residues. Handle accordingly! Toluene is designated as a hazardous substance by the EPA (40 CFR 116).

DOT Class: Flammable Liquid

UN Register: UN1294

Data source code(s): 1-9, 12, 16, 20, 21, 24, 26, 34, 81, 82. CR

Prepared/revised by: Genium Publishing Corp.

Material Safety Data Sheet

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Revision: 0

Date: April, 1986

SPECIAL PRECAUTIONS continued from page 5

April, 1986

Judgements as to the suitability of information herein for purchaser's purposes are necessarily purchaser's responsibility. Therefore, although reasonable care has been taken in the preparation of such information, Genium Publishing Corporation extends no warranties, makes no representations and assumes no responsibility as to the accuracy or suitability of such information for application to purchaser's intended purposes or for the consequences of its use.

XYLENES

The information in this sheet applies to workplace exposure resulting from processing, manufacturing, storing or handling and is not designed for the population at large. Any generalization beyond occupational exposures should not be made. The best industrial hygiene practice is to maintain concentrations of all chemicals at levels as low as is practical.

Chemical Names: Xylene, CAS 1330-20-7; 1,3-Dimethylbenzene, meta-xylene, CAS 108-38-3; 1,2-Dimethylbenzene, ortho-xylene, CAS 95-47-6; 1,4-Dimethylbenzene, para-xylene, CAS 104-42-3.

Trade Names: Mixed aromatic hydrocarbons, p-Xylol, o-Xylol, m-Xylol and others.

Uses: Used as an intermediate in the manufacture of dyes; found in solvent mixtures, certain insecticides and aviation fuel; degreasing and cleaning agent; raw material for terephthalic acid. Used in pharmaceutical synthesis and raw material for phthalic anhydrides.

PHYSICAL INFORMATION

Appearance: Clear, colorless liquid which may form crystals at temperatures below 57°F (14°C).

Odor: Strong; pleasant.

Minimum Detectable by Odor: 20 ppm.

Behavior in Water: Xylene is not soluble in water, it will float.

HEALTH HAZARD INFORMATION

OSHA Standard: Average 8 hour exposure -- 100 ppm.

NIOSH Recommended Limit: Average 10 hour day/40 hour week -- 100 ppm.

ACGIH Recommended Limit: Average 8 hour exposure -- 100 ppm.

Note: The health effects and standards for all the xylenes are similar.

Short Term Exposure:

Inhalation: Exposure to vapor can be irritating to the nose and throat. Inhalation of vapor at concentrations above 200 ppm or 3-5 minutes can lead to xylene intoxication. Symptoms include headache, dizziness and nausea. If exposure should continue, central nervous system depression characterized by shallow breathing and weak pulse can occur. Levels of 230 ppm for 15 minutes may cause lightheadedness without loss of equilibrium. Reversible liver and kidney damage in man has followed exposure to sudden high concentrations of vapor. Such high levels may also give rise to lung congestion. Exposure to extremely high concentrations (10,000 ppm) of xylene vapors can lead to a strong narcotic effect with symptoms of slurred speech, stupor and coma.

Skin: Contact with vapor or liquid can cause drying and defatting which may lead to irritation.

Eyes: Vapor and liquid may be irritating to the eye and eyelids at levels of 100 ppm for 15 minutes.

Ingestion: Swallowing liquid xylene will bring about an immediate burning sensation in the mouth and throat. Irritation of the stomach and intestine can give rise to sharp stomach pains. Symptoms are the same as inhalation, except that lung congestion will not usually develop.

Long Term Exposure:

Inhalation of xylene vapor and skin contact with liquid are the two most probable routes of long term exposure. Symptoms of inhalation are dizziness, headache and nausea. Long term exposure has been associated with liver and kidney damage, intestinal tract disturbances and central nervous system depression. These effects are reversible and disappear once the chemical has been removed. Prolonged contact with skin can lead to irritation.

\*Prepared by the Bureau of Toxic Substance Assessment, New York State Department of Health. For an explanation of the terms and abbreviations used, see "Toxic Substances: How Toxic is Toxic" available from the New York State Department of Health.

## EMERGENCY AND FIRST AID INSTRUCTIONS

Xylenes

Inhalation: Move person to fresh air and give artificial respiration if breathing has stopped. Seek medical attention if necessary.

Skin: Wash with soap and water for at least 5 minutes. Seek medical attention if necessary.

Eyes: Wash with water for at least 15 minutes. Seek medical attention.

Ingestion: Do not try to induce vomiting. Seek medical attention immediately.

Note to Physician: May require supportive measures for pulmonary edema.

## FIRE AND EXPLOSION INFORMATION

General: Liquid and vapor are both flammable. Vapor can spread to a source of ignition and flash back. Ignites at 84°F (30°C).

Explosive Limits: Upper -- 7%, Lower -- 1.1%.

Extinguisher: Foam, dry chemical or carbon dioxide.

## REACTIVITY

Materials to Avoid: Oxidizing agents such as permanganate and chlorine.

Conditions to Avoid: Any source of ignition.

## PROTECTIVE MEASURES

Storage and Handling: Protect containers against physical damage. Store, if possible, outdoors or in a detached building. If indoors, a standard flammable liquid storage room should be used.

Engineering Controls: Proper ventilation of storage area and work area. Sink, showers, eyewash stations should be available.

Protective Clothing (Should not be substituted for proper handling and engineering controls): If contact with xylene is likely, wear rubber gloves, chemical goggles and impervious protective clothing.

Protective Equipment: For levels up to 1,000 ppm use a supplied-air respirator, a self-contained breathing apparatus, a chemical cartridge respirator with organic vapor cartridges or a powered air-purifying respirator with organic vapor cartridges. For levels up to 2,500 ppm use a supplied-air respirator operated in continuous flow mode. For levels up to 5,000 ppm use a gas mask with an organic vapor canister, a self-contained breathing apparatus with a full facepiece or a supplied-air respirator with a full facepiece. For levels up to 10,000 ppm use a Type C supplied-air respirator with full facepiece operated in a positive pressure mode. For levels above 10,000 ppm or use in areas of unknown concentrations use a self-contained breathing apparatus with full facepiece operated in a positive pressure mode or a Type C supplied-air respirator with an auxiliary self-contained breathing apparatus, both with a full facepiece and operated in a positive pressure mode. For escape from a contaminated area use a gas mask with an organic vapor canister or an escape self-contained breathing apparatus.

## PROCEDURES FOR SPILLS AND LEAKS

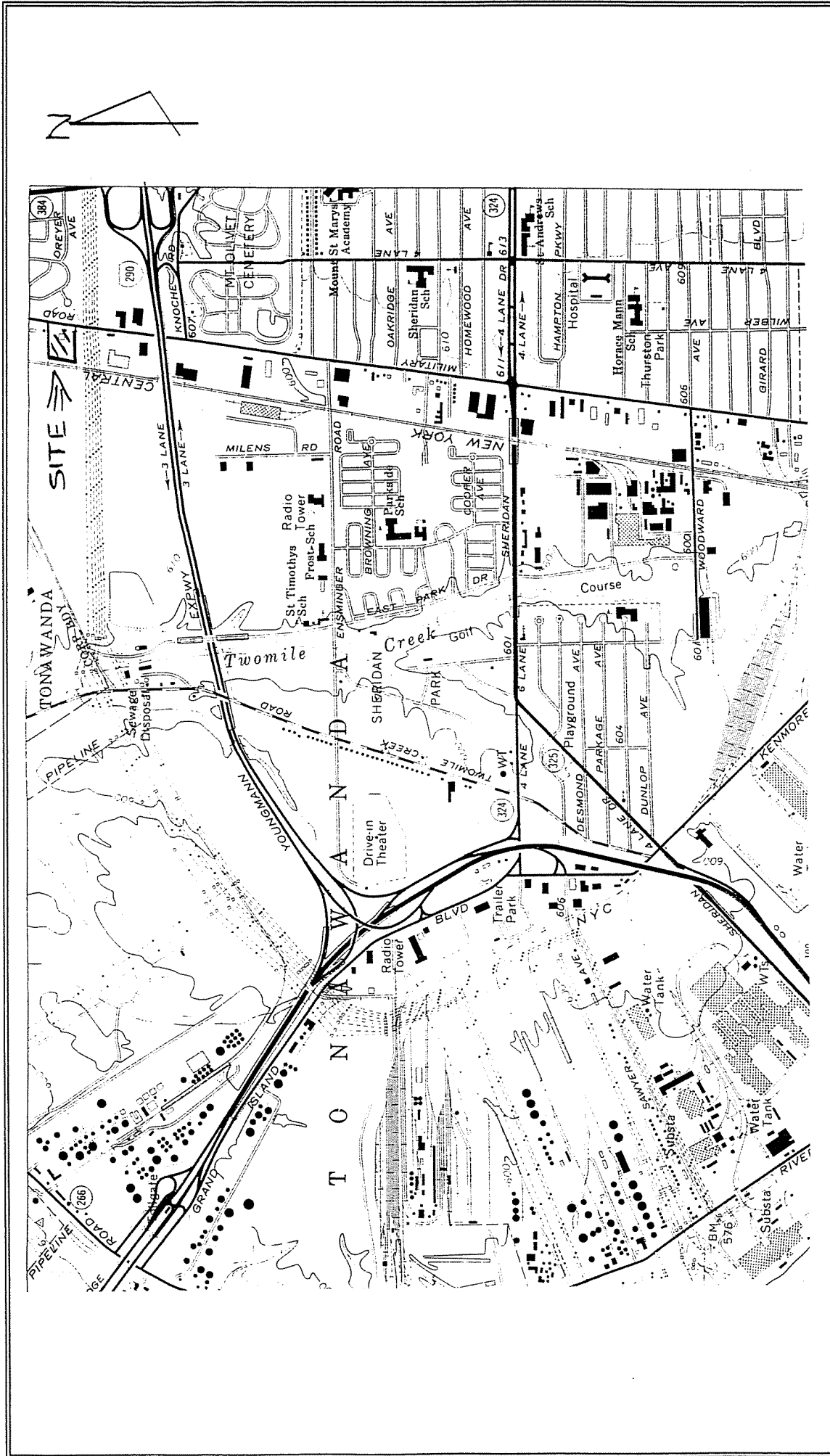
Get all workers out of spill area. After putting on protective clothing and equipment, spread absorbent material on spill area. Sweep and place absorbent into fiber carton container. For final disposal contact your regional office of the New York State Department of Environmental Conservation.

For more information:

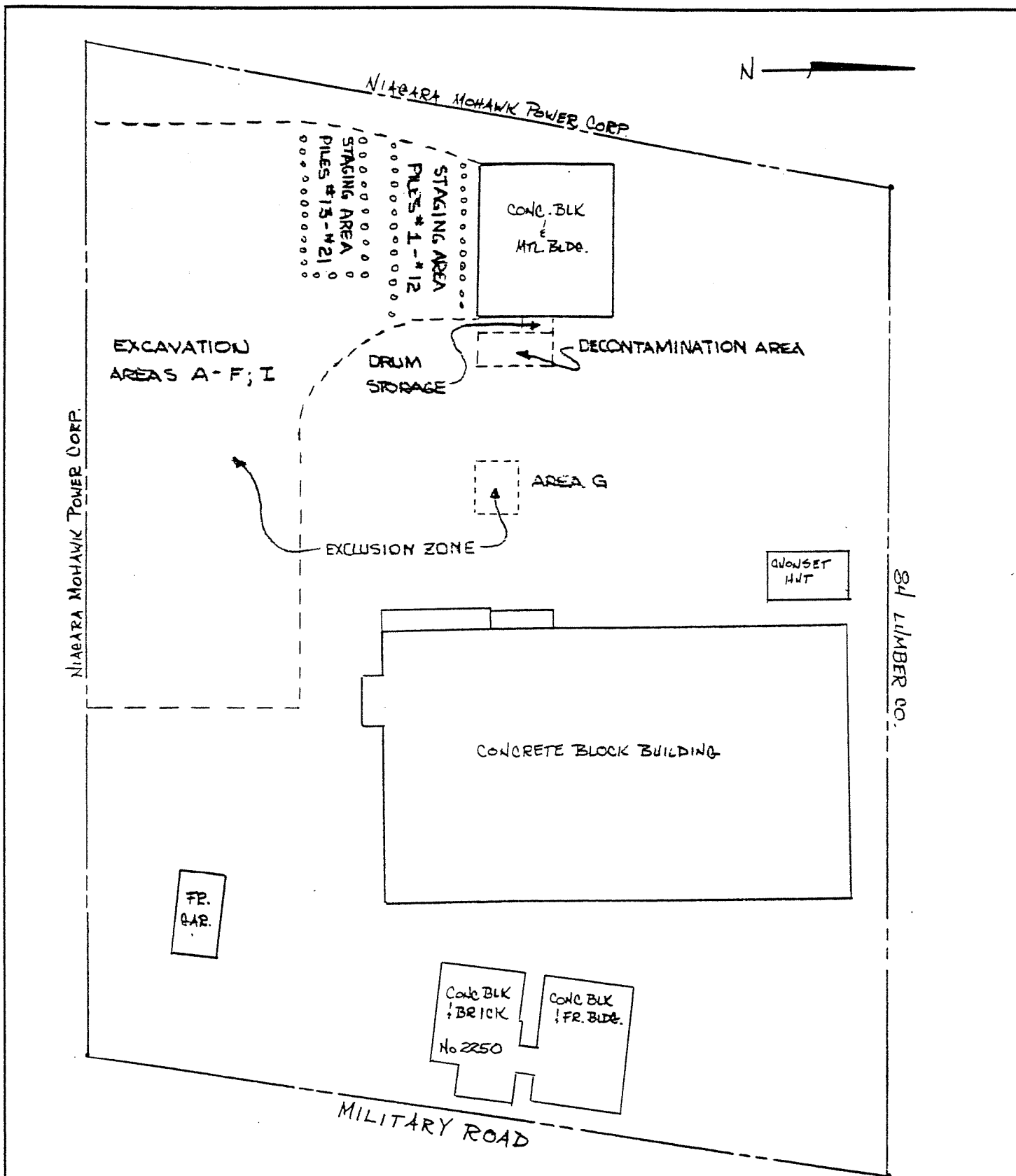
Contact the Industrial Hygienist or Safety Officer at your worksite or the New York State Department of Health, Bureau of Toxic Substance Assessment, 2 University Place, Albany, New York 12203.

***APPENDIX C***

***FIGURES***

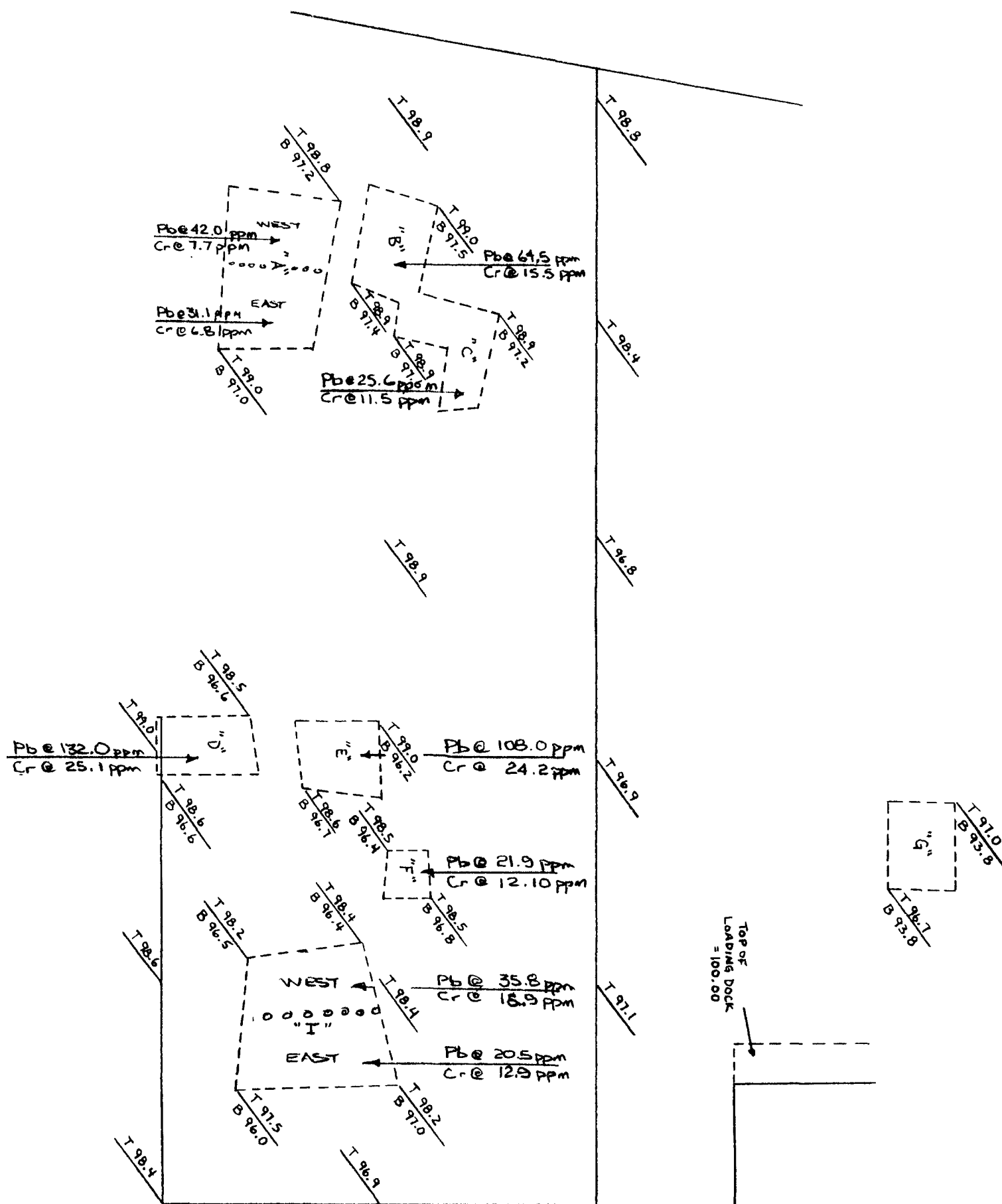
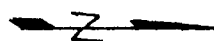


<p>           BUFFALO DRILLING COMPANY, INC.            10440 Main Street            Clarence, New York            Town of Tonawanda, New York         </p>	<p>           REMOVAL ACTION            2250 Military Road            Town of Tonawanda, New York         </p>	<p>           SITE            LOCATION MAP         </p>	<p>           DATE            12/11/96         </p>	<p>           JOB NO.            BDC 96-289         </p>	<p>           FIGURE            1         </p>
---	--	---	---	--	--



Base map referenced from property survey map 'Town of Tonawanda, County of Erie, New York; Part of Lot 45, T/2, R/8' by Matthew F. Wilson L.S., dated 12/5/94.

<b>BUFFALO DRILLING COMPANY, INC.</b> 10440 Main Street Clarence, New York		<b>SITE MAP</b>	
		<b>REMOVAL ACTION; 2250 MILITARY ROAD</b> <b>TOWN OF TONAWANDA, NEW YORK</b>	
<b>DATE: 12/5/96</b>	<b>JOB NO: 96-298</b>	<b>SCALE: 1" = 50'</b>	<b>FIG NO: 2</b>



LEGEND

---- Boundaries of Excavations

$\frac{T 98.2}{B 97.0}$  Ground Surface Elevation  
Bottom of Excavation Elevation

$\frac{Pb @ 34.1 ppm}{Cr @ 6.8 ppm}$  Confirmatory Sample  
Results for Excavation

Base map referenced from "Excavation Location and Elevations" map, Town of Tonawanda, County of Erie, New York; Part of Lot 45 T 12, R8, by Matthew F. Wilson L.S., dated 11/12/96

BUFFALO DRILLING COMPANY, INC. 10440 Main Street Clarence, New York		EXCAVATION LOCATION MAP	
		REMOVAL ACTION; 2250 MILITARY ROAD TOWN OF TONAWANDA, NEW YORK	
DATE: 12/11/96	JOB NO: 96-298	SCALE: 1" = 30'	FIG NO: 3

**- TCLP EXCEEDANCE**

COMPOSITE #5 - Pb @ 68 ppm  
(STOCKPILES #13,18)  
COMPOSITE #9 - Pb @ 40.5 ppm  
(STOCKPILES #3,5,6)

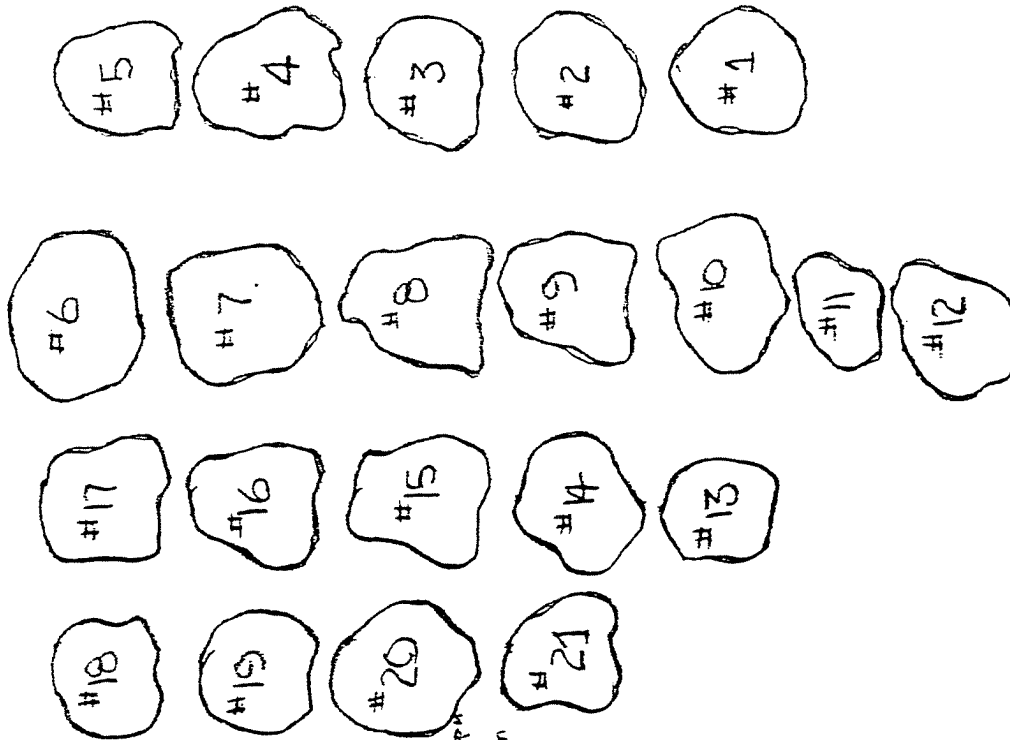
NOTE: STOCKPILES #11 & 24 WERE

NOT SAMPLED FOR TCLP ANALYSIS  
DUE TO HIGH % PAINT WASTE  
IN MATERIAL; AS SUCH WILL  
ALSO BE DEEMED IN TCLP  
EXCEEDANCE

- STOCKPILE #12 ANALYZED USING EPA METHOD 8240  
THE DETECTABLE RESULTS BELOW GUIDANCE VALUES

- STOCKPILES NOT IN EXCEEDANCE OF TOTAL Pb & Cr  
TARGET SOIL CLEANUP GOALS:

STOCKPILES - 1 Pb @ 151 ppm; Cr @ 26.6 ppm  
2 Pb @ 211 ppm; Cr @ 28.5 ppm  
7 Pb @ 340 ppm; Cr @ 29.7 ppm  
14 Pb @ 185 ppm; Cr @ 35.5 ppm  
20 Pb @ 230 ppm; Cr @ 44 ppm



BUFFALO DRILLING COMPANY, INC.  
10440 Main Street  
Clarence, New York 14031

REMOVAL ACTION  
2250 MILITARY ROAD  
TOWN OF TONAWANDA, NEW YORK

SCHEMATIC  
OF  
STOCKPILED SOIL AREAS

DATE:  
NOVEMBER 9, 1996

JOB NO.:  
96-298

SCALE:  
NO SCALE

FIGURE  
A

## ***APPENDIX D***

### ***HSAP AIR MONITORING RESULTS***

## DAILY FIELD REPORT

Barron & Associates, P.C.  
10440 Main Street  
Clarence, New York 14031

Job No: 96-298  
Client: 2251 MILITARY ED ASSOC.  
Project: REMOVAL ACTION  
Date: 10/14/96

Name: RICK GROUCH  
Hours on Site: 8:00 AM - 5:30 AM

Weather: PARTLY CLOUDY, 50°-55°  
Travel Time: N/A

## SUMMARY OF FIELD OBSERVATIONS

## EXCAVATING AREA A

## MINIRAM REAL TIME READINGS

TIME	UPWIND	DOWNDOWN
12:40 PM	.13	.13
12:58		.13
1:08		.11
1:22		.15
1:30		.15
1:52	.07	.10
2:10	.09	.13
2:38	.09	.05
2:52	.11	.13
3:11	.09	.13
3:28	.11	.13
3:40	.09	.13
3:50	.11	.11
4:15	.09	.13
4:30	.09	.13
4:47	.11	.13

## PID READINGS DURING EXCAVATION A

@ 1:10	PID=0
@ 1:52	PID=0
@ 2:20	PID=0
@ 2:55	PID=0
@ 3:15	PID=0
@ 3:45	PID=3
@ 4:00	PID=2
@ 4:10	PID=5
@ 4:35	PID=0

## DAILY FIELD REPORT

Barron &amp; Associates, P.C.

10440 Main Street

Clarence, New York 14031

Job No:

96-298

Client:

2251 MILITARY RD ASSA

Project:

REMOVAL ACTION

Date:

10/15/96

Name:

RICK CROUCH

Weather:

SUNNY 40° - 45°

Hours on Site:

7:30AM - 5:30PM

Travel Time:

N/A

## SUMMARY OF FIELD OBSERVATIONS

EXCAVATING AREAS A, B, C, D, E, F, I

## MINIRAM REAL TIME READINGS

TIME	UPWIND	DOWNDOWN	EXCAVATION
8:20 AM	0.13	0.13	A
NO EXCAVATING, CONSTRUCTING 2ND STAGING AREA			
9:40	0.15	0.15	A
9:48		0.04	A
10:16	0.13	0.07	I
10:20		0.09	B
10:28		0.05	I
10:30		0.03	B
10:45	0.05	0.06	I
10:50	0.03	0.03	B
11:05		0.06	I
11:09		0.03	B
BREAK TILL 11:25			
11:30	0.05	0.09	I
11:35		0.03	B
11:48		0.07	I
11:50		0.03	B
12:05	0.06	0.07	I
12:22	0.06	0.07	I
12:25		0.04	B
12:55		0.07	I
12:58	0.05	0.03	C
1:12	0.04	0.03	I
1:16		0.07	C
1:30	0.04	0.04	D
1:33		0.09	C
1:41	0.11	0.13	D
1:45	0.07	0.15	C

Total Hours:

DAILY FIELD REPORT		Job No:	96-298
Barron & Associates, P.C.		Client:	2251 MILITARY RD ASST
10440 Main Street		Project:	REMOVAL ACTION
Clarence, New York 14031		Date:	10/13/96

Name:	RICK CEDUCH	Weather:	SUNNY, 40° - 45°
Hours on Site:	7:30 AM - 5:30 PM	Travel Time:	N/A

SUMMARY OF FIELD OBSERVATIONS

MINIRAM			
TIME	UPWIND	DOWNWIND	EXCAVATION
2:05	0.08	0.11	F
2:10	0.08	0.12	C
2:14	NO WORK		E
2:19		0.12	C
2:31		0.11	G
2:35		0.12	C
2:43		0.11	E

EXCAVATIONS COMPLETED

PID SCREENINGS OF EXCAVATION CONDUCTED THROUGHOUT THE PERFORMANCE OF THE EXCAVATIONS, NO DETECTABLE READINGS WHEN SCREENING EXCAVATIONS A, B, C, D, E, F, I

## DAILY FIELD REPORT

Barron &amp; Associates, P.C.

10440 Main Street

Clarence, New York 14031

Job No: 96-298

Client: 2251 MILITARY RD ASSO

Project: REMOVAL ACTION

Date: 10/16/96

Name: RICK CEDUCH

Weather: SUNNY, 60° - 65°

Hours on Site: 7:30 AM - 5:15 PM

Travel Time: N/A

## SUMMARY OF FIELD OBSERVATIONS

EXCAVATING AREA 9

## MILITARY REAL TIME READINGS

TIME	UPWIND	DOWNWIND
8:03	.09	.09
8:30		.10
8:53	.07	.09
9:57		.11
10:02	.13	.17
10:37		.17
10:58	.14	.16
11:23		.16
11:48		.17
12:16	.19	.24
12:37		.16
12:58	.11	.13
1:08		.13
1:37	.13	.16
1:52		.13
2:28		.14
2:47		.15

## EXCAVATING COMPLETE

NOTE PID WAS ONLY USED TO SCREEN FLOOR & SIDEWALL OF EXCAVATION & NOT USED TO MONITOR WORKERS AIR SPACE AS A RESULT OF PID USING BATTERY CHARGE AND REQUIRING PID TO BE CHARGED BETWEEN USE. NO OLFACTORY ODORS WERE OBSERVED OUTSIDE EXCAVATION EXCEPT IN CLOSE PROXIMITY TO STOCKPILED SOIL

## DAILY FIELD REPORT

Barron & Associates, P.C.  
10440 Main Street  
Clarence, New York 14031

Job No: 16-295  
Client: ~~US MILITARY RD A52~~  
Project: REMEDIAL ACTION  
Date: 11/25/96

Name: RICK GREGORY  
Hours on Site: 10:45 AM - 5:30 PM

Weather: CLOUDY 34-57°F, FOG  
Travel Time: N/A

## SUMMARY OF FIELD OBSERVATIONS

OFF LOADING NOW-HAZ SOIL 12:30-4:30

## MIDRAN REAL TIME READINGS

TIME	UPWIND	DOWNWIND
12:30	0.23	0.23
12:45		0.24
1:03		0.11
1:15	0.26	0.25
1:31		0.28
1:46		0.23
1:59	0.24	0.24
2:22		0.23
2:41		0.25
2:56	0.23	0.21
3:11		0.22
3:25	0.22	0.21
3:52		0.26
4:12	0.22	0.27

PID SCREENING CONDUCTED PERIODICALLY DURING  
THE LOADING OF THE BARGE LOADINGS

# DAILY FIELD REPORT

Barron & Associates, P.C.  
10440 Main Street  
Clarence, New York 14031

Job No: 96-228  
Client: 2251 MILITARY RD ACQUICAM  
Project: REMOVAL ACTION  
Date: 12/12/96

Name: RICK CROUCH  
Hours on Site: 8 HRS

Weather: CLOUDY, INTERMEDIATE RAIN  
35°, HIGH HUMIDITY  
Travel Time: NA

## SUMMARY OF FIELD OBSERVATIONS

OFF LOADING HAZ MATERIAL TO CUMM CHEMICAL SERVICES 10:30 - 2:45

### MINIMUM

TIME	WIND	DOWNWIND
@ 10:30	0.23	0.22
@ 11:01	0.24	0.25
SLIGHT RAIN		
@ 1:25	0.25	0.29
SLIGHT RAIN		

DEMOS AND LEFT SITE @ 4:30

***APPENDIX E***

***CONFIRMATORY SAMPLES  
LABORATORY ANALYTICAL AND QUALITY CONTROL RESULTS***

# WASTE STREAM TECHNOLOGY, INC.

302 Grote Street  
Buffalo, NY 14207  
(716) 876-5290

## Analytical Data Report

Report Date : 10/16/96  
Group Number : 9601-529

Prepared For :  
Mr. Rick Crouch  
Buffalo Drilling Company, Inc.  
10440 Main Street  
Clarence, New York 14031

Site: 2250 Military Road

### Field and Laboratory Information

Client Id	WST Lab #	Matrix	Date Sampled	Date Received	Time
EXCAVATION A (EAST)	WS30623	Soil	10/15/96	10/16/96	0800
EXCAVATION A (WEST)	WS30624	Soil	10/15/96	10/16/96	0800
EXCAVATION B	WS30625	Soil	10/15/96	10/16/96	0800
EXCAVATION C	WS30626	Soil	10/15/96	10/16/96	0800
EXCAVATION D	WS30627	Soil	10/15/96	10/16/96	0800
EXCAVATION E	WS30628	Soil	10/15/96	10/16/96	0800
EXCAVATION F	WS30629	Soil	10/15/96	10/16/96	0800
EXCAVATION I (EAST)	WS30630	Soil	10/15/96	10/16/96	0800
EXCAVATION I (WEST)	WS30631	Soil	10/15/96	10/16/96	0800
Sample Status Upon Receipt : No irregularities.					

### Analytical Parameters

Total Lead  
Total Chromium

### Analytical Services

#### Number of Samples

9  
9

### Turnaround Time

1 Business Day  
1 Business Day

Report Released By : Daniel W. Voer

ENVIRONMENTAL LABORATORY ACCREDITATION  
CERTIFICATION NUMBER (ELAP) 11179

## METHODOLOGIES

The specific methodologies employed in obtaining the analytical data reported are indicated on each of the result forms. The method numbers shown refer to the following analytical method references:

Methods for Chemical Analysis of Water and Wastes. EPA 600/4-79-020, March 1979, Revised 1983, U.S. Environmental Monitoring and Support Laboratory, Cincinnati, Ohio 45268.

Federal Register, 40 CFR Part 136: Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act. Revised July 1992.

Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. Third Edition, Revised September 1994, United States EPA SW-846.

Annual Book of ASTM Standards, Volume II. ASTM, 1916 Race Street, Philadelphia, Pennsylvania 19103.

Standard Methods for the Examination of Water and Wastewater. (18th Edition). American Public Health Association, 1105 18th Street, NW, Washington, D.C. 20036.

# Waste Stream Technology, Inc.

Lead by ICP

SW-846 6010

Site: 2250 MILITARY ROAD

Date Sampled: 10/15/96

Date Received: 10/16/96

Date Digested: 10/16/96

Group Number: 9601-529

Report Units: mg/Kg

Matrix: Soil

WST Lab ID	Client ID	Analysis Date	Detection Limit	Result
WS30623	EXCAVATION A (EAST)	10/16/96	12.0	34.1
WS30624	EXCAVATION A (WEST)	10/16/96	12.0	42.0
WS30625	EXCAVATION B	10/16/96	12.0	64.5
WS30626	EXCAVATION C	10/16/96	12.0	25.6
WS30627	EXCAVATION D	10/16/96	12.0	132.0
WS30628	EXCAVATION E	10/16/96	12.0	108.0
WS30629	EXCAVATION F	10/16/96	12.0	21.9
WS30630	EXCAVATION I (EAST)	10/16/96	12.0	20.5
WS30631	EXCAVATION I (WEST)	10/16/96	12.0	35.8

**Waste Stream Technology, Inc.**  
**Chromium by ICP**  
**SW-846 6010**

Site: 2250 MILITARY ROAD  
Date Sampled: 10/15/96  
Date Received: 10/16/96  
Date Digested: 10/16/96

Group Number: 9601-529  
Report Units: mg/Kg  
Matrix: Soil

WST Lab ID	Client ID	Analysis Date	Detection Limit	Result
WS30623	EXCAVATION A (EAST)	10/16/96	1.10	6.80
WS30624	EXCAVATION A (WEST)	10/16/96	1.10	7.70
WS30625	EXCAVATION B	10/16/96	1.10	15.50
WS30626	EXCAVATION C	10/16/96	1.10	11.50
WS30627	EXCAVATION D	10/16/96	1.10	25.10
WS30628	EXCAVATION E	10/16/96	1.10	24.20
WS30629	EXCAVATION F	10/16/96	1.10	12.10
WS30630	EXCAVATION I (EAST)	10/16/96	1.10	12.90
WS30631	EXCAVATION I (WEST)	10/16/96	1.10	15.90

**Waste Stream Technology, Inc.**  
**Metals Method Blank Analysis Result Report**

Site: 2250 MILITARY ROAD  
Date Sampled: NA  
Date Received: NA

Group Number: 9601-529  
Report Units: PPM

<b>Lab ID Number:</b>	MB101696-S1
<b>Client ID:</b>	NA
<b>Date Digested:</b>	10/16/96

<b>Analyte</b>	<b>Detection Limit</b>	<b>Result</b>	<b>Date Analyzed</b>	<b>Analysis Method</b>
Pb soil Method Blank	12.00	< 12.00	10/16/96	SW 846 6010
Cr soil Method Blank	1.10	< 1.10	10/16/96	SW-846 6010

MB denotes Method Blank.  
NA denotes Not Applicable.



***APPENDIX F***

***NYSDEC'S OCTOBER 24, 1996 LETTER TO CRAIG A. SLATER***

**New York State Department of Environmental Conservation**  
270 Michigan Avenue, Buffalo, New York 14203-2995  
(716) 851-7220



Michael D. Zagata  
Commissioner

October 24, 1996

Mr. Craig A. Slater  
Harter, Secrest & Emery  
One Marine Midland Center, Suite 3550  
Buffalo, New York 14203-2884

Dear Mr. Slater:

Bisonite Paint Site  
No. 915010

We have reviewed the analytical results of the confirmatory sampling conducted as part of the Removal Action Work Plan for the Bisonite Paint site. This data, coupled with Mr. Glenn May's in-field observations made during the October 14-16, 1996 soil excavation project, indicates that the extent of contaminated soil excavated at the site meets the objective of this element of the work plan. Backfilling and grading of the excavated areas, as per the work plan, can proceed.

As noted in your October 23, 1996 letter to Mr. May, the excavated soils presently staged at the site are being sampled and analyzed to determine appropriate use or disposal options for these materials. We look forward to receipt of this data so that this element of the removal action can be finalized.

Should you have any questions regarding the above, please do not hesitate to contact me.

Sincerely,

Daniel K. King, P.E.  
Regional Environmental Remediation  
Engineer

DKK:sz

cc: Mr. Joseph Ryan - NYSDEC, Division of Environmental Enforcement  
Mr. Glenn May - NYSDEC, Division of Environmental Remediation

***APPENDIX G***

***WASTE CHARACTERIZATION  
LABORATORY ANALYTICAL AND QUALITY CONTROL RESULTS  
FOR  
TCLP AND USEPA METHOD 8240***

# WASTE STREAM TECHNOLOGY, INC.

302 Grote Street  
Buffalo, NY 14207  
(716) 876-5290

## Analytical Data Report

Report Date : 11/05/96  
Group Number : 9601-541

Prepared For :  
Mr. Kevin McMahon  
2251 Military Road Associates, Inc.  
13550 Bloomingdale Road  
Akron, NY 14001

Site: 2250 Military Road

### Field and Laboratory Information

Client Id	WST Lab #	Matrix	Date Sampled	Date Received	Time
Composite #1 Stockpiles 1,2,8,9	WS30708	Soil	10/17/96	10/17/96	1720
Composite #2 Stockpiles 4,7	WS30709	Soil	10/17/96	10/17/96	1720
Composite #3 Stockpile 12	WS30710	Soil	10/17/96	10/17/96	1720
Composite #4 Stockpiles 10,15,16,17	WS30711	Soil	10/17/96	10/17/96	1720
Composite #5 Stockpiles 13,18	WS30712	Soil	10/17/96	10/17/96	1720
Composite #6 Stockpiles 14,20,21	WS30713	Soil	10/17/96	10/17/96	1720
Composite #7 Stockpile 19	WS30714	Soil	10/17/96	10/17/96	1720
Composite #8 Stockpiles 22,23	WS30715	Soil	10/17/96	10/17/96	1720
Composite #9 Stockpiles 3,5,6	WS30727	Soil	10/17/96	10/17/96	1720

Sample Status Upon Receipt : No irregularities.

### Analytical Services

#### Analytical Parameters

TCLP 8240  
TCLP 8270  
TCLP Metals  
8240

#### Number of Samples

9  
9  
9  
1

#### Turnaround Time

Standard  
Standard  
Standard  
Standard

Report Released By :

Daniel W. Voer

ENVIRONMENTAL LABORATORY ACCREDITATION  
CERTIFICATION NUMBER (ELAP) 11179

## METHODOLOGIES

The specific methodologies employed in obtaining the analytical data reported are indicated on each of the result forms. The method numbers shown refer to the following analytical method references:

Methods for Chemical Analysis of Water and Wastes. EPA 600/4-79-020, March 1979, Revised 1983, U.S. Environmental Monitoring and Support Laboratory, Cincinnati, Ohio 45268.

Federal Register, 40 CFR Part 136: Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act. Revised July 1992.

Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. Third Edition, Revised September 1994, United States EPA SW-846.

Annual Book of ASTM Standards, Volume II. ASTM, 1916 Race Street, Philadelphia, Pennsylvania 19103.

Standard Methods for the Examination of Water and Wastewater. (18th Edition). American Public Health Association, 1105 18th Street, NW, Washington, D.C. 20036.

## ORGANIC DATA QUALIFIERS

- U - Indicates compound was analyzed for but not detected.
- J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicates the presence of a compound that meets identification criteria, but the result is less than the sample quantitation limit but greater than zero.
- C - This flag applies to pesticide results where the identification has been confirmed by GC/MS.
- B - This flag is used when the analyte is found in the associated blank as well as the sample.
- E - This flag identifies all compounds whose concentrations exceed the calibration range of the GC/MS instrument or that specific analysis.
- D - This flag identifies all compounds identified in an analysis at a secondary dilution factor.
- G - Matrix spike recovery is greater than the expected upper limit of analytical performance.
- L - Matrix spike recovery is less than the expected lower limit of analytical performance.
- # - Indicates that a surrogate recovery was found to be outside the expected limits of analytical performance.
- \$ - Indicates that the surrogate compound was diluted out because the sample had to be diluted to obtain analytical results and a recovery could not be calculated.
- (%) Indicates that the compound is a surrogate and the values reported for these compounds are in percent recovery. The quality control recovery limits (QC Limits) are indicated in the detection limit column.

**Waste Stream Technology, Inc.**

TCLP 8240 Volatile Organics

1311/8240

Site: 2250 MILITARY ROAD

Date Sampled: 10/17/96

Date Received: 10/17/96

Group Number: 9601-541

Report Units: ug/L

Matrix: TCLP Extract

	Lab ID Number Client ID TCLP Date Date Analyzed	WS30708 COMPOSITE 1 - STOCKPILES 1,2,8,9 10/28/96 10/30/96	
Compound	Detection Limit/ QC Limits (%)	Result	Q
vinyl chloride	100	100	U
1,1-dichloroethene	50	50	U
chloroform	50	50	U
2-butanone	1000	1000	U
1,2-dichloroethane	50	50	U
carbon tetrachloride	50	50	U
trichloroethene	50	50	U
benzene	50	50	U
tetrachloroethene	50	50	U
chlorobenzene	50	50	U
1,4-dichlorobenzene	50	50	U
1,2-Dichloroethane-d4 (%)	70-121	111	
Toluene-d8 (%)	81-117	101	
Bromofluorobenzene (%)	74-121	103	

Dilution Factor 1

**Waste Stream Technology, Inc.**

TCLP 8240 Volatile Organics

1311/8240

Site: 2250 MILITARY ROAD

Date Sampled: 10/17/96

Date Received: 10/17/96

Group Number: 9601-541

Report Units: ug/L

Matrix: TCLP Extract

	Lab ID Number Client ID TCLP Date Date Analyzed	WS30709 COMPOSITE 2 - STOCKPILE 4,7 10/28/96 10/30/96	
Compound	Detection Limit/ QC Limits (%)	Result	Q
vinyl chloride	100	100	U
1,1-dichloroethene	50	50	U
chloroform	50	50	U
2-butanone	1000	1000	U
1,2-dichloroethane	50	50	U
carbon tetrachloride	50	50	U
trichloroethene	50	50	U
benzene	50	50	U
tetrachloroethene	50	50	U
chlorobenzene	50	50	U
1,4-dichlorobenzene	50	50	U
1,2-Dichloroethane-d4 (%)	70-121	114	
Toluene-d8 (%)	81-117	101	
Bromofluorobenzene (%)	74-121	104	

Dilution Factor 1

**Waste Stream Technology, Inc.**

TCLP 8240 Volatile Organics

1311/8240

Site: 2250 MILITARY ROAD

Date Sampled: 10/17/96

Date Received: 10/17/96

Group Number: 9601-541

Report Units: ug/L

Matrix: TCLP Extract

	Lab ID Number Client ID TCLP Date Date Analyzed	WS30710 COMPOSITE 3 - STOCKPILE 12 10/28/96 10/30/96	
Compound	Detection Limit/ QC Limits (%)	Result	Q
vinyl chloride	100	100	U
1,1-dichloroethene	50	50	U
chloroform	50	50	U
2-butanone	1000	1000	U
1,2-dichloroethane	50	50	U
carbon tetrachloride	50	50	U
trichloroethene	50	50	U
benzene	50	50	U
tetrachloroethene	50	50	U
chlorobenzene	50	50	U
1,4-dichlorobenzene	50	50	U
1,2-Dichloroethane-d4 (%)	70-121	118	
Toluene-d8 (%)	81-117	103	
Bromofluorobenzene (%)	74-121	105	

Dilution Factor 1

**Waste Stream Technology, Inc.**

TCLP 8240 Volatile Organics

1311/8240

Site: 2250 MILITARY ROAD

Date Sampled: 10/17/96

Date Received: 10/17/96

Group Number: 9601-541

Report Units: ug/L

Matrix: TCLP Extract

	<b>Lab ID Number</b> <b>Client ID</b> <b>TCLP Date</b> <b>Date Analyzed</b>	WS30711 COMPOSITE 4 - STOCKPILES 10,15,16,17 10/28/96 10/30/96	
<b>Compound</b>	<b>Detection Limit/ QC Limits (%)</b>	<b>Result</b>	<b>Q</b>
vinyl chloride	100	100	U
1,1-dichloroethene	50	50	U
chloroform	50	50	U
2-butanone	1000	1000	U
1,2-dichloroethane	50	50	U
carbon tetrachloride	50	50	U
trichloroethene	50	50	U
benzene	50	50	U
tetrachloroethene	50	50	U
chlorobenzene	50	50	U
1,4-dichlorobenzene	50	50	U
1,2-Dichloroethane-d4 (%)	70-121	113	
Toluene-d8 (%)	81-117	100	
Bromofluorobenzene (%)	74-121	102	

Dilution Factor 1

**Waste Stream Technology, Inc.**

TCLP 8240 Volatile Organics

1311/8240

Site: 2250 MILITARY ROAD

Date Sampled: 10/17/96

Date Received: 10/17/96

Group Number: 9601-541

Report Units: ug/L

Matrix: TCLP Extract

	Lab ID Number Client ID TCLP Date Date Analyzed	WS30712 COMPOSITE 5 - STOCKPILES 13,18 10/28/96 10/30/96	
Compound	Detection Limit/ QC Limits (%)	Result	Q
vinyl chloride	100	100	U
1,1-dichloroethene	50	50	U
chloroform	50	50	U
2-butanone	1000	1000	U
1,2-dichloroethane	50	50	U
carbon tetrachloride	50	50	U
trichloroethene	50	50	U
benzene	50	50	U
tetrachloroethene	50	50	U
chlorobenzene	50	50	U
1,4-dichlorobenzene	50	50	U
1,2-Dichloroethane-d4 (%)	70-121	115	
Toluene-d8 (%)	81-117	103	
Bromofluorobenzene (%)	74-121	104	

Dilution Factor

1

**Waste Stream Technology, Inc.**

TCLP 8240 Volatile Organics

1311/8240

Site: 2250 MILITARY ROAD

Date Sampled: 10/17/96

Date Received: 10/17/96

Group Number: 9601-541

Report Units: ug/L

Matrix: TCLP Extract

	Lab ID Number Client ID TCLP Date Date Analyzed	WS30713 COMPOSITE 6 - STOCKPILES 14,20,21 10/28/96 10/31/96	
Compound	Detection Limit/ QC Limits (%)	Result	Q
vinyl chloride	100	100	U
1,1-dichloroethene	50	50	U
chloroform	50	50	U
2-butanone	1000	1000	U
1,2-dichloroethane	50	50	U
carbon tetrachloride	50	50	U
trichloroethene	50	50	U
benzene	50	50	U
tetrachloroethene	50	50	U
chlorobenzene	50	50	U
1,4-dichlorobenzene	50	50	U
1,2-Dichloroethane-d4 (%)	70-121	97	
Toluene-d8 (%)	81-117	93	
Bromofluorobenzene (%)	74-121	95	

Dilution Factor 1

**Waste Stream Technology, Inc.**

TCLP 8240 Volatile Organics

1311/8240

Site: 2250 MILITARY ROAD

Date Sampled: 10/17/96

Date Received: 10/17/96

Group Number: 9601-541

Report Units: ug/L

Matrix: TCLP Extract

	Lab ID Number Client ID TCLP Date Date Analyzed	WS30714 COMPOSITE 7 - STOCKPILE 19 10/30/96 10/31/96	
Compound	Detection Limit/ QC Limits (%)	Result	Q
vinyl chloride	100	100	U
1,1-dichloroethene	50	50	U
chloroform	50	50	U
2-butanone	1000	1000	U
1,2-dichloroethane	50	50	U
carbon tetrachloride	50	50	U
trichloroethene	50	50	U
benzene	50	50	U
tetrachloroethene	50	50	U
chlorobenzene	50	50	U
1,4-dichlorobenzene	50	50	U
1,2-Dichloroethane-d4 (%)	70-121	101	
Toluene-d8 (%)	81-117	92	
Bromofluorobenzene (%)	74-121	93	

Dilution Factor 1

**Waste Stream Technology, Inc.**

TCLP 8240 Volatile Organics

1311/8240

Site: 2250 MILITARY ROAD

Date Sampled: 10/17/96

Date Received: 10/17/96

Group Number: 9601-541

Report Units: ug/L

Matrix: TCLP Extract

	Lab ID Number Client ID TCLP Date Date Analyzed	WS30715 COMPOSITE 8 - STOCKPILES 22,23 10/30/96 10/31/96	
Compound	Detection Limit/ QC Limits (%)	Result	Q
vinyl chloride	100	100	U
1,1-dichloroethene	50	50	U
chloroform	50	50	U
2-butanone	1000	1000	U
1,2-dichloroethane	50	50	U
carbon tetrachloride	50	50	U
trichloroethene	50	50	U
benzene	50	50	U
tetrachloroethene	50	50	U
chlorobenzene	50	50	U
1,4-dichlorobenzene	50	50	U
1,2-Dichloroethane-d4 (%)	70-121	99	
Toluene-d8 (%)	81-117	92	
Bromofluorobenzene (%)	74-121	94	

Dilution Factor

1

**Waste Stream Technology, Inc.**

TCLP 8240 Volatile Organics

1311/8240

Site: 2250 MILITARY ROAD

Date Sampled: 10/17/96

Date Received: 10/17/96

Group Number: 9601-54.1

Report Units: ug/L

Matrix: TCLP Extract

	Lab ID Number Client ID TCLP Date Date Analyzed	WS30727 COMPOSITE 9 - STOCKPILES 3,5,6 10/30/96 10/31/96	
Compound	Detection Limit/ QC Limits (%)	Result	Q
vinyl chloride	100	100	U
1,1-dichloroethene	50	50	U
chloroform	50	50	U
2-butanone	1000	1000	U
1,2-dichloroethane	50	50	U
carbon tetrachloride	50	50	U
trichloroethene	50	50	U
benzene	50	50	U
tetrachloroethene	50	50	U
chlorobenzene	50	50	U
1,4-dichlorobenzene	50	50	U
1,2-Dichloroethane-d4 (%)	70-121	103	
Toluene-d8 (%)	81-117	93	
Bromofluorobenzene (%)	74-121	94	

Dilution Factor

1

**Waste Stream Technology, Inc.**  
**TCLP Method Blank**

Site: 2250 MILITARY ROAD  
Date Sampled: NA  
Date Received: NA

Group Number: 9601-541  
Report Units: PPB

	Lab ID Number Client ID TCLP Date Date Analyzed	MB102896 NA 10/28/96 10/30/96	
Compound	Detection Limit/ QC Limits (%)	Result	Q
Vinyl Chloride	100	100	U
1,1-Dichloroethene	50	50	U
Chloroform	50	50	U
2-Butanone	1000	1000	U
1,2-Dichloroethane	50	50	U
Carbon Tetrachloride	50	50	U
Trichloroethene	50	50	U
Benzene	50	50	U
Tetrachloroethene	50	50	U
Chlorobenzene	50	50	U
1,4-Dichlorobenzene	50	50	U
Bromofluorobenzene (%)	74-121	101	
1,2-Dichloroethane-d4 (%)	70-121	111	
Toluene-d8 (%)	81-117	100	

**Dilution Factor** 1

MB denotes Method Blank.

NA denotes Not Applicable.

**Waste Stream Technology, Inc.**  
**TCLP Method Blank**

Site: 2250 MILITARY ROAD  
 Date Sampled: NA  
 Date Received: NA

Group Number: 9601-541  
 Report Units: PPB

		Lab ID Number	MB103096
		Client ID	NA
		TCLP Date	10/30/96
		Date Analyzed	10/31/96
Compound	Detection Limit/ QC Limits (%)	Result	Q
Vinyl Chloride	100	100	U
1,1-Dichloroethene	50	50	U
Chloroform	50	50	U
2-Butanone	1000	1000	U
1,2-Dichloroethane	50	50	U
Carbon Tetrachloride	50	50	U
Trichloroethene	50	50	U
Benzene	50	50	U
Tetrachloroethene	50	50	U
Chlorobenzene	50	50	U
1,4-Dichlorobenzene	50	50	U
Bromofluorobenzene (%)	74-121	96	
1,2-Dichloroethane-d4 (%)	70-121	102	
Toluene-d8 (%)	81-117	95	

Dilution Factor 1

MB denotes Method Blank.

NA denotes Not Applicable.

**Waste Stream Technology, Inc.**

8270 TCLP Semivolatile Organics

1311/8270

Site: 2250 MILITARY ROAD

Date Sampled: 10/17/96

Date Received: 10/17/96

TCLP Extraction Date: 10/28/96

Group Number: 9601-541

Report Units: ug/L

Matrix: TCLP Extract

	Lab ID Number Client ID Date Extracted Date Analyzed	WS30708 COMPOSITE 1 - STOCKPILES 1,2,8,9 10/31/96 10/31/96	
Compound	Detection Limit/ QC Limits (%)	Result	Q
pyridine	11	11	U
1,4-dichlorobenzene	11	11	U
Total cresols(o,m & p)	32	32	U
nitrobenzene	11	11	U
hexachloroethane	11	11	U
hexachlorobutadiene	11	11	U
2,4,6-trichlorophenol	11	11	U
2,4,5-trichlorophenol	11	11	U
2,4-dinitrotoluene	11	11	U
hexachlorobenzene	11	11	U
pentachlorophenol	54	54	U
2-Fluorophenol (%)	21-100	46	
Phenol-d6 (%)	10-94	37	
Nitrobenzene-d5 (%)	35-114	90	
2-Fluorobiphenyl (%)	43-116	86	
2,4,6-Tribromophenol (%)	10-123	109	
Terphenyl-d14 (%)	33-141	98	

Dilution Factor

1.1

**Waste Stream Technology, Inc.**  
 8270 TCLP Semivolatile Organics  
 1311/8270

Site: 2250 MILITARY ROAD  
 Date Sampled: 10/17/96  
 Date Received: 10/17/96  
 TCLP Extraction Date: 10/28/96

Group Number: 9601-541  
 Report Units: ug/L  
 Matrix: TCLP Extract

	Lab ID Number Client ID Date Extracted Date Analyzed	WS30709 COMPOSITE 2 - STOCKPILE 4,7 10/31/96 10/31/96	
Compound	Detection Limit/ QC Limits (%)	Result	Q
pyridine	10	10	U
1,4-dichlorobenzene	10	10	U
Total cresols(o,m & p)	30	30	U
nitrobenzene	10	10	U
hexachloroethane	10	10	U
hexachlorobutadiene	10	10	U
2,4,6-trichlorophenol	10	10	U
2,4,5-trichlorophenol	10	10	U
2,4-dinitrotoluene	10	10	U
hexachlorobenzene	10	10	U
pentachlorophenol	50	50	U
2-Fluorophenol (%)	21-100	42	
Phenol-d6 (%)	10-94	34	
Nitrobenzene-d5 (%)	35-114	85	
2-Fluorobiphenyl (%)	43-116	83	
2,4,6-Tribromophenol (%)	10-123	112	
Terphenyl-d14 (%)	33-141	93	

Dilution Factor 1

**Waste Stream Technology, Inc.**

8270 TCLP Semivolatile Organics

1311/8270

Site: 2250 MILITARY ROAD

Date Sampled: 10/17/96

Date Received: 10/17/96

TCLP Extraction Date: 10/28/96

Group Number: 9601-541

Report Units: ug/L

Matrix: TCLP Extract

	Lab ID Number Client ID Date Extracted Date Analyzed	WS30710 COMPOSITE 3 - STOCKPILE 12 10/31/96 10/31/96	
Compound	Detection Limit/ QC Limits (%)	Result	Q
pyridine	10	10	U
1,4-dichlorobenzene	10	10	U
Total cresols(o,m & p)	30	30	U
nitrobenzene	10	10	U
hexachloroethane	10	10	U
hexachlorobutadiene	10	10	U
2,4,6-trichlorophenol	10	10	U
2,4,5-trichlorophenol	10	10	U
2,4-dinitrotoluene	10	10	U
hexachlorobenzene	10	10	U
pentachlorophenol	50	50	U
2-Fluorophenol (%)	21-100	44	
Phenol-d6 (%)	10-94	35	
Nitrobenzene-d5 (%)	35-114	94	
2-Fluorobiphenyl (%)	43-116	83	
2,4,6-Tribromophenol (%)	10-123	116	
Terphenyl-d14 (%)	33-141	103	

Dilution Factor

1

**Waste Stream Technology, Inc.**

8270 TCLP Semivolatile Organics

1311/8270

Site: 2250 MILITARY ROAD

Date Sampled: 10/17/96

Date Received: 10/17/96

TCLP Extraction Date: 10/28/96

Group Number: 9601-541

Report Units: ug/L

Matrix: TCLP Extract

	<b>Lab ID Number</b> <b>Client ID</b> <b>Date Extracted</b> <b>Date Analyzed</b>	WS30711 COMPOSITE 4 - STOCKPILES 10,15,16,17 10/31/96 10/31/96	
<b>Compound</b>	<b>Detection Limit/ QC Limits (%)</b>	<b>Result</b>	<b>Q</b>
pyridine	10	10	U
1,4-dichlorobenzene	10	10	U
Total cresols(o,m & p)	30	2	J
nitrobenzene	10	10	U
hexachloroethane	10	10	U
hexachlorobutadiene	10	10	U
2,4,6-trichlorophenol	10	10	U
2,4,5-trichlorophenol	10	10	U
2,4-dinitrotoluene	10	10	U
hexachlorobenzene	10	10	U
pentachlorophenol	50	50	U
2-Fluorophenol (%)	21-100	20	
Phenol-d6 (%)	10-94	33	
Nitrobenzene-d5 (%)	35-114	88	
2-Fluorobiphenyl (%)	43-116	83	
2,4,6-Tribromophenol (%)	10-123	110	
Terphenyl-d14 (%)	33-141	98	

Dilution Factor

1

**Waste Stream Technology, Inc.**  
 8270 TCLP Semivolatile Organics  
 1311/8270

Site: 2250 MILITARY ROAD  
 Date Sampled: 10/17/96  
 Date Received: 10/17/96  
 TCLP Extraction Date: 10/28/96

Group Number: 9601-541  
 Report Units: ug/L  
 Matrix: TCLP Extract

	Lab ID Number Client ID Date Extracted Date Analyzed	WS30712 COMPOSITE 5 - STOCKPILES 13,18 10/31/96 10/31/96	
Compound	Detection Limit/ QC Limits (%)	Result	Q
pyridine	10	10	U
1,4-dichlorobenzene	10	10	U
Total cresols(o,m & p)	30	30	U
nitrobenzene	10	10	U
hexachloroethane	10	10	U
hexachlorobutadiene	10	10	U
2,4,6-trichlorophenol	10	10	U
2,4,5-trichlorophenol	10	10	U
2,4-dinitrotoluene	10	10	U
hexachlorobenzene	10	10	U
pentachlorophenol	50	50	U
2-Fluorophenol (%)	21-100	43	
Phenol-d6 (%)	10-94	33	
Nitrobenzene-d5 (%)	35-114	89	
2-Fluorobiphenyl (%)	43-116	83	
2,4,6-Tribromophenol (%)	10-123	113	
Terphenyl-d14 (%)	33-141	99	

Dilution Factor 1

**Waste Stream Technology, Inc.**  
**8270 TCLP Semivolatile Organics**  
**1311/8270**

Site: 2250 MILITARY ROAD  
 Date Sampled: 10/17/96  
 Date Received: 10/17/96  
 TCLP Extraction Date: 10/28/96

Group Number: 9601-541  
 Report Units: ug/L  
 Matrix: TCLP Extract

	<b>Lab ID Number</b> <b>Client ID</b> <b>Date Extracted</b> <b>Date Analyzed</b>	WS30713 COMPOSITE 6 - STOCKPILES 14,20,21 10/31/96 10/31/96	
Compound	Detection Limit/ QC Limits (%)	Result	Q
pyridine	10	10	U
1,4-dichlorobenzene	10	10	U
Total cresols(o,m & p)	30	30	U
nitrobenzene	10	10	U
hexachloroethane	10	10	U
hexachlorobutadiene	10	10	U
2,4,6-trichlorophenol	10	10	U
2,4,5-trichlorophenol	10	10	U
2,4-dinitrotoluene	10	10	U
hexachlorobenzene	10	10	U
pentachlorophenol	50	50	U
2-Fluorophenol (%)	21-100	45	
Phenol-d6 (%)	10-94	33	
Nitrobenzene-d5 (%)	35-114	90	
2-Fluorobiphenyl (%)	43-116	84	
2,4,6-Tribromophenol (%)	10-123	112	
Terphenyl-d14 (%)	33-141	103	

Dilution Factor                      1

**Waste Stream Technology, Inc.**

8270 TCLP Semivolatile Organics

1311/8270

Site: 2250 MILITARY ROAD

Date Sampled: 10/17/96

Date Received: 10/17/96

TCLP Extraction Date: 10/29/96

Group Number: 9601-541

Report Units: ug/L

Matrix: TCLP Extract

	Lab ID Number Client ID Date Extracted Date Analyzed	WS30714 COMPOSITE 7 - STOCKPILE 19 10/31/96 10/31/96	
Compound	Detection Limit/ QC Limits (%)	Result	Q
pyridine	10	10	U
1,4-dichlorobenzene	10	10	U
Total cresols(o,m & p)	30	30	U
nitrobenzene	10	10	U
hexachloroethane	10	10	U
hexachlorobutadiene	10	10	U
2,4,6-trichlorophenol	10	10	U
2,4,5-trichlorophenol	10	10	U
2,4-dinitrotoluene	10	10	U
hexachlorobenzene	10	10	U
pentachlorophenol	50	50	U
2-Fluorophenol (%)	21-100	43	
Phenol-d6 (%)	10-94	33	
Nitrobenzene-d5 (%)	35-114	88	
2-Fluorobiphenyl (%)	43-116	79	
2,4,6-Tribromophenol (%)	10-123	106	
Terphenyl-d14 (%)	33-141	91	

Dilution Factor

1

**Waste Stream Technology, Inc.**

8270 TCLP Semivolatile Organics

1311/8270

Site: 2250 MILITARY ROAD

Date Sampled: 10/17/96

Date Received: 10/17/96

TCLP Extraction Date: 10/29/96

Group Number: 9601-541

Report Units: ug/L

Matrix: TCLP Extract

	Lab ID Number Client ID Date Extracted Date Analyzed	WS30715 COMPOSITE 8 - STOCKPILES 22,23 10/31/96 10/31/96	
Compound	Detection Limit/ QC Limits (%)	Result	Q
pyridine	10	10	U
1,4-dichlorobenzene	10	10	U
Total cresols(o,m & p)	30	30	U
nitrobenzene	10	10	U
hexachloroethane	10	10	U
hexachlorobutadiene	10	10	U
2,4,6-trichlorophenol	10	10	U
2,4,5-trichlorophenol	10	10	U
2,4-dinitrotoluene	10	10	U
hexachlorobenzene	10	10	U
pentachlorophenol	50	50	U
2-Fluorophenol (%)	21-100	46	
Phenol-d6 (%)	10-94	37	
Nitrobenzene-d5 (%)	35-114	91	
2-Fluorobiphenyl (%)	43-116	82	
2,4,6-Tribromophenol (%)	10-123	111	
Terphenyl-d14 (%)	33-141	90	

Dilution Factor

1

**Waste Stream Technology, Inc.**  
 8270 TCLP Semivolatile Organics  
 1311/8270

Site: 2250 MILITARY ROAD  
 Date Sampled: 10/17/96  
 Date Received: 10/17/96  
 TCLP Extraction Date: 10/28/96

Group Number: 9601-541  
 Report Units: ug/L  
 Matrix: TCLP Extract

	Lab ID Number Client ID Date Extracted Date Analyzed	WS30727 COMPOSITE 9 - STOCKPILES 3,5,6 10/31/96 11/01/96	
Compound	Detection Limit/ QC Limits (%)	Result	Q
pyridine	10	10	U
1,4-dichlorobenzene	10	10	U
Total cresols(o,m & p)	30	30	U
nitrobenzene	10	10	U
hexachloroethane	10	10	U
hexachlorobutadiene	10	10	U
2,4,6-trichlorophenol	10	10	U
2,4,5-trichlorophenol	10	10	U
2,4-dinitrotoluene	10	10	U
hexachlorobenzene	10	10	U
pentachlorophenol	50	50	U
2-Fluorophenol (%)	21-100	40	
Phenol-d6 (%)	10-94	30	
Nitrobenzene-d5 (%)	35-114	75	
2-Fluorobiphenyl (%)	43-116	75	
2,4,6-Tribromophenol (%)	10-123	99	
Terphenyl-d14 (%)	33-141	86	

Dilution Factor                      1

# Waste Stream Technology, Inc.

## Method Blank TCLP Semivolatiles

1311/8270

Site: 2250 MILITARY ROAD

Date Sampled: NA

Date Received: NA

TCLP Extraction Date: 10/28/96

Group Number: 9601-541

Report Units: PPB

	Lab ID Number Client ID Date Extracted Date Analyzed	MB103196 NA 10/31/96 10/31/96	
Compound	Detection Limit/ QC Limits (%)	Result	Q
Pyridine	10	10	U
1,4-Dichlorobenzene	10	10	U
Total Cresols(o,m,&p)	30	30	U
Nitrobenzene	10	10	U
Hexachloroethane	10	10	U
Hexachlorobutadiene	10	10	U
2,4,6-Trichlorophenol	10	10	U
2,4,5-trichlorophenol	10	10	U
2,4-Dinitrotoluene	10	10	U
Hexachlorobenzene	10	10	U
Pentachlorophenol	50	50	U
2-Fluorophenol (%)	21-100	39	
Phenol-d6 (%)	10-94	30	
Nitrobenzene-d5 (%)	35-114	82	
2-Fluorobiphenyl (%)	43-116	78	
2,4,6-Tribromophenol (%)	10-123	104	
Terphenyl-d14 (%)	33-141	92	

Dilution Factor 1

MB denotes Method Blank

NA denotes Not Applicable.

# Waste Stream Technology, Inc.

## TCLP Metals Analysis Result Report

Site: 2250 MILITARY ROAD

Date Sampled: 10/17/96

Date Received: 10/17/96

Group Number: 9601-541

Report Units: mg/L

Matrix: TCLP Extract

TCLP Extraction Date: 10/28/96

<b>Lab ID Number:</b>	WS30708
<b>Client ID:</b>	COMPOSITE 1 - STOCKPILES 1,2,8,9
<b>Date Digested:</b>	10/29/96

Analyte	Detection Limit	Result	Date Analyzed	Analysis Method
Lead by ICP	0.120	< 0.120	10/30/96	SW-846 6010
Cadmium by ICP	0.015	< 0.015	10/30/96	SW-846 6010
Barium by ICP	0.011	0.774	10/30/96	SW-846 6010
Chromium by ICP	0.011	0.012	10/30/96	SW-846 6010
Silver by ICP	0.015	< 0.015	10/30/96	SW-846 6010
Arsenic by GFAA	0.005	< 0.005	11/01/96	SW-846 7060
Selenium by GFAA	0.003	< 0.003	11/01/96	SW-846 7740
Mercury by Cold Vapor	0.001	< 0.001	11/01/96	SW-846 7470

# Waste Stream Technology, Inc.

## TCLP Metals Analysis Result Report

Site: 2250 MILITARY ROAD

Date Sampled: 10/17/96

Date Received: 10/17/96

Group Number: 9601-541

Report Units: mg/L

Matrix: TCLP Extract

TCLP Extraction Date: 10/28/96

<b>Lab ID Number:</b>	WS30709
<b>Client ID:</b>	COMPOSITE 2 - STOCKPILE 4,7
<b>Date Digested:</b>	10/29/96

Analyte	Detection Limit	Result	Date Analyzed	Analysis Method
Lead by ICP	0.120	1.400	10/30/96	SW-846 6010
Cadmium by ICP	0.015	< 0.015	10/30/96	SW-846 6010
Barium by ICP	0.011	0.872	10/30/96	SW-846 6010
Chromium by ICP	0.011	0.028	10/30/96	SW-846 6010
Silver by ICP	0.015	< 0.015	10/30/96	SW-846 6010
Arsenic by GFAA	0.005	< 0.005	11/01/96	SW-846 7060
Selenium by GFAA	0.003	< 0.003	11/01/96	SW-846 7740
Mercury by Cold Vapor	0.001	< 0.001	11/01/96	SW-846 7470

# Waste Stream Technology, Inc.

## TCLP Metals Analysis Result Report

Site: 2250 MILITARY ROAD

Date Sampled: 10/17/96

Date Received: 10/17/96

Group Number: 9601-541

Report Units: mg/L

Matrix: TCLP Extract

TCLP Extraction Date: 10/28/96

<b>Lab ID Number:</b>	WS30710
<b>Client ID:</b>	COMPOSITE 3 - STOCKPILE 12
<b>Date Digested:</b>	10/29/96

Analyte	Detection Limit	Result	Date Analyzed	Analysis Method
Lead by ICP	0.120	< 0.120	10/30/96	SW-846 6010
Cadmium by ICP	0.015	< 0.015	10/30/96	SW-846 6010
Barium by ICP	0.011	0.898	10/30/96	SW-846 6010
Chromium by ICP	0.011	< 0.011	10/30/96	SW-846 6010
Silver by ICP	0.015	< 0.015	10/30/96	SW-846 6010
Arsenic by GFAA	0.005	< 0.005	11/01/96	SW-846 7060
Selenium by GFAA	0.003	< 0.003	11/01/96	SW-846 7740
Mercury by Cold Vapor	0.001	< 0.001	11/01/96	SW-846 7470

# Waste Stream Technology, Inc.

## TCLP Metals Analysis Result Report

Site: 2250 MILITARY ROAD

Date Sampled: 10/17/96

Date Received: 10/17/96

Group Number: 9601-541

Report Units: mg/L

Matrix: TCLP Extract

TCLP Extraction Date: 10/28/96

<b>Lab ID Number:</b>	WS30711
<b>Client ID:</b>	COMPOSITE 4 - STOCKPILES 10,15,16,17
<b>Date Digested:</b>	10/29/96

Analyte	Detection Limit	Result	Date Analyzed	Analysis Method
Lead by ICP	0.120	< 0.120	10/30/96	SW-846 6010
Cadmium by ICP	0.015	< 0.015	10/30/96	SW-846 6010
Barium by ICP	0.011	0.807	10/30/96	SW-846 6010
Chromium by ICP	0.011	0.026	10/30/96	SW-846 6010
Silver by ICP	0.015	< 0.015	10/30/96	SW-846 6010
Arsenic by GFAA	0.005	< 0.005	11/01/96	SW-846 7060
Selenium by GFAA	0.003	< 0.003	11/01/96	SW-846 7740
Mercury by Cold Vapor	0.001	< 0.001	11/01/96	SW-846 7470

# Waste Stream Technology, Inc.

## TCLP Metals Analysis Result Report

Site: 2250 MILITARY ROAD  
Date Sampled: 10/17/96  
Date Received: 10/17/96

Group Number: 9601-541  
Report Units: mg/L  
Matrix: TCLP Extract  
TCLP Extraction Date: 10/28/96

Lab ID Number:	WS30712
Client ID:	COMPOSITE 5 - STOCKPILES 13,18
Date Digested:	10/29/96

Analyte	Detection Limit	Result	Date Analyzed	Analysis Method
Lead by ICP	0.120	6.800	10/30/96	SW-846 6010
Cadmium by ICP	0.015	< 0.015	10/30/96	SW-846 6010
Barium by ICP	0.011	1.100	10/30/96	SW-846 6010
Chromium by ICP	0.011	0.033	10/30/96	SW-846 6010
Silver by ICP	0.015	< 0.015	10/30/96	SW-846 6010
Arsenic by GFAA	0.005	< 0.005	11/01/96	SW-846 7060
Selenium by GFAA	0.003	< 0.003	11/01/96	SW-846 7740
Mercury by Cold Vapor	0.001	< 0.001	11/01/96	SW-846 7470

# Waste Stream Technology, Inc.

## TCLP Metals Analysis Result Report

Site: 2250 MILITARY ROAD  
Date Sampled: 10/17/96  
Date Received: 10/17/96

Group Number: 9601-541  
Report Units: mg/L  
Matrix: TCLP Extract  
TCLP Extraction Date: 10/28/96

<b>Lab ID Number:</b>	WS30713
<b>Client ID:</b>	COMPOSITE 6 - STOCKPILES 14,20,21
<b>Date Digested:</b>	10/29/96

Analyte	Detection Limit	Result	Date Analyzed	Analysis Method
Lead by ICP	0.120	0.308	10/30/96	SW-846 6010
Cadmium by ICP	0.015	< 0.015	10/30/96	SW-846 6010
Barium by ICP	0.011	0.756	10/30/96	SW-846 6010
Chromium by ICP	0.011	0.017	10/30/96	SW-846 6010
Silver by ICP	0.015	< 0.015	10/30/96	SW-846 6010
Arsenic by GFAA	0.005	< 0.005	11/01/96	SW-846 7060
Selenium by GFAA	0.003	< 0.003	11/01/96	SW-846 7740
Mercury by Cold Vapor	0.001	< 0.001	11/01/96	SW-846 7470

# Waste Stream Technology, Inc.

## TCLP Metals Analysis Result Report

Site: 2250 MILITARY ROAD

Date Sampled: 10/17/96

Date Received: 10/17/96

Group Number: 9601-541

Report Units: mg/L

Matrix: TCLP Extract

TCLP Extraction Date: 10/29/96

<b>Lab ID Number:</b>	WS30714
<b>Client ID:</b>	COMPOSITE 7 - STOCKPILE 19
<b>Date Digested:</b>	10/30/96

Analyte	Detection Limit	Result	Date Analyzed	Analysis Method
Lead by ICP	0.120	0.773	11/04/96	SW-846 6010
Cadmium by ICP	0.015	< 0.015	11/04/96	SW-846 6010
Barium by ICP	0.011	0.748	11/04/96	SW-846 6010
Chromium by ICP	0.011	0.154	11/04/96	SW-846 6010
Silver by ICP	0.015	< 0.015	11/04/96	SW-846 6010
Arsenic by GFAA	0.005	< 0.005	11/01/96	SW-846 7060
Selenium by GFAA	0.003	< 0.003	11/01/96	SW-846 7740
Mercury by Cold Vapor	0.001	< 0.001	11/01/96	SW-846 7470

# Waste Stream Technology, Inc.

## TCLP Metals Analysis Result Report

Site: 2250 MILITARY ROAD

Date Sampled: 10/17/96

Date Received: 10/17/96

Group Number: 9601-541

Report Units: mg/L

Matrix: TCLP Extract

TCLP Extraction Date: 10/29/96

<b>Lab ID Number:</b>	WS30715
<b>Client ID:</b>	COMPOSITE 8 - STOCKPILES 22,23
<b>Date Digested:</b>	10/30/96

Analyte	Detection Limit	Result	Date Analyzed	Analysis Method
Lead by ICP	0.120	0.731	11/04/96	SW-846 6010
Cadmium by ICP	0.015	< 0.015	11/04/96	SW-846 6010
Barium by ICP	0.011	0.728	11/04/96	SW-846 6010
Chromium by ICP	0.011	0.154	11/04/96	SW-846 6010
Silver by ICP	0.015	< 0.015	11/04/96	SW-846 6010
Arsenic by GFAA	0.005	< 0.005	11/01/96	SW-846 7060
Selenium by GFAA	0.003	< 0.003	11/01/96	SW-846 7740
Mercury by Cold Vapor	0.001	< 0.001	11/01/96	SW-846 7470

# Waste Stream Technology, Inc.

## TCLP Metals Analysis Result Report

Site: 2250 MILITARY ROAD

Date Sampled: 10/17/96

Date Received: 10/17/96

Group Number: 9601-541

Report Units: mg/L

Matrix: TCLP Extract

TCLP Extraction Date: 10/28/96

<b>Lab ID Number:</b>	WS30727
<b>Client ID:</b>	COMPOSITE 9 - STOCKPILES 3,5,6
<b>Date Digested:</b>	10/29/96

Analyte	Detection Limit	Result	Date Analyzed	Analysis Method
Lead by ICP	0.120	40.500	10/30/96	SW-846 6010
Cadmium by ICP	0.015	0.024	10/30/96	SW-846 6010
Barium by ICP	0.011	0.923	10/30/96	SW-846 6010
Chromium by ICP	0.011	0.194	10/30/96	SW-846 6010
Silver by ICP	0.015	< 0.015	10/30/96	SW-846 6010
Arsenic by GFAA	0.005	< 0.005	11/01/96	SW-846 7060
Selenium by GFAA	0.003	< 0.003	11/01/96	SW-846 7740
Mercury by Cold Vapor	0.001	< 0.001	11/01/96	SW-846 7470

# Waste Stream Technology, Inc.

## Method Blank For TCLP Metals

Site: 2250 MILITARY ROAD

Date Sampled: NA

Date Received: NA

Group Number: 9601-541

Report Units: PPM

TCLP Extraction Date: 10/28/96

	<b>Lab ID Number:</b>	MBRR3753-T1		
	<b>Client ID:</b>	NA		
	<b>Date Digested:</b>	10/29/96		
Analyte	Detection Limit	Result	Date Analyzed	Analysis Method
Pb TCLP Method Blank	0.120	< 0.120	10/30/96	SW-846 6010
Cd TCLP Method Blank	0.015	< 0.015	10/30/96	SW-846 6010
Ba TCLP Method Blank	0.011	< 0.011	10/30/96	SW-846 6010
Cr TCLP Method Blank	0.011	< 0.011	10/30/96	SW-846 6010
Ag TCLP Method Blank	0.015	< 0.015	10/30/96	SW-846 6010
As TCLP Method Blank	0.005	< 0.005	11/01/96	SW-846 7060
Se TCLP Method Blank	0.003	< 0.003	11/01/96	SW-846 7740
Hg TCLP Method Blank	0.001	< 0.001	11/01/96	SW-846 7470

MB denotes Method Blank

NA denotes Not Applicable

**Waste Stream Technology, Inc.**  
Volatile Organics in Solids  
Method 8240

Site: 2250 MILITARY ROAD  
Date Sampled: 10/17/96  
Date Received: 10/17/96

Group Number: 9601-541  
Report Units: ug/Kg  
Matrix: Soil

		Lab ID Number Client ID Date Extracted Date Analyzed	WS30710 COMPOSITE 3 - STOCKPILE 12 NA 10/23/96
Compound	Detection Limit/ QC Limits (%)	Result	Q
chloromethane	10	10	U
bromomethane	10	10	U
vinyl chloride	10	10	U
chloroethane	10	10	U
methylene chloride	5	26	B
acetone	100	100	U
carbon disulfide	5	5	U
1,1-dichloroethene	5	5	U
1,1-dichloroethane	5	5	U
trans-1,2-dichloroethene	5	5	U
chloroform	5	5	U
2-butanone	100	100	U
1,2-dichloroethane	5	5	U
1,1,1-trichloroethane	5	5	U
carbon tetrachloride	5	5	U
vinyl acetate	50	50	U
bromodichloromethane	5	5	U
1,2-dichloropropane	5	5	U
cis-1,3-dichloropropene	5	5	U
trichloroethene	5	5	U
benzene	5	5	U
dibromochloromethane	5	5	U
trans-1,3-dichloropropene	5	5	U
1,1,2-trichloroethane	5	5	U
2-chloroethylvinyl ether	10	10	U
bromoform	5	5	U
4-methyl-2-pentanone	50	50	U
2-hexanone	50	50	U
tetrachloroethene	5	5	U
1,1,2,2-tetrachloroethane	5	5	U
toluene	5	6	
chlorobenzene	5	5	U
ethylbenzene	5	20	
styrene	5	5	U
m,p-xylene	5	399	D
o-xylene	5	86	
1,2-Dichloroethane-d4 (%)	70-121	106	
Toluene-d8 (%)	81-117	92	
Bromofluorobenzene (%)	74-121	93	

Dilution Factor

1

**Waste Stream Technology, Inc.****VOC Soil Method Blank Results****Method 8240**

Site: 2250 MILITARY ROAD

Date Sampled: NA

Date Received: NA

Group Number: 9601-541

Report Units: PPB

	Lab ID Number Client ID Date Extacted Date Analyzed	IB102396 NA NA 10/23/96	
Compound	Detection Limit/ QC Limits (%)	Result	Q
chloromethane	10	10	U
bromomethane	10	10	U
vinyl chloride	10	10	U
chloroethane	10	10	U
methylene chloride	5	7	
acetone	100	100	U
carbon disulfide	5	5	U
1,1-dichloroethene	5	5	U
1,1-dichloroethane	5	5	U
trans-1,2-Dichloroethene	5	5	U
chloroform	5	5	U
1,2-dichloroethane	5	5	U
2-butanone	100	100	U
1,1,1-trichloroethane	5	5	U
carbon tetrachloride	5	5	U
vinyl acetate	5	5	U
bromodichloromethane	5	5	U
1,2-dichloropropene	5	5	U
cis-1,3-dichloropropene	5	5	U
trichloroethene	5	5	U
benzene	5	5	U
dibromochloromethane	5	5	U
trans-1,3-dichloropropene	5	5	U
1,1,2-trichloroethane	5	5	U
2-chloroethylvinyl ether	10	10	U
bromoform	5	5	U
4-methyl-2-pentanone	50	50	U
2-hexanone	50	50	U
tetrachloroethene	5	5	U
1,1,2,2-tetrachloroethane	5	5	U
toluene	5	5	U
chlorobenzene	5	5	U
ethylbenzene	5	5	U
styrene	5	5	U
m,p-xylene	5	5	U
o-xylene	5	5	U
1,2-Dichloroethane-d4 (%)	70-121	100	
Toluene-d8 (%)	81-117	99	
Bromofluorobenzene (%)	74-121	96	

Dilution Factor 1

IB denotes Instrument Blank.

NA denotes Not Applicable.

## Waste Stream Technology

9601-541

Buffalo Drilling Company  
Site: 2250 Military Road  
Project #: 96-298  
Date: 10/17/96

Composite 1  
Composite 2  
Composite 3  
Composite 4  
Composite 5  
Composite 6  
Composite 7  
Composite 8  
Composite 9

WST ID#	Sample Description	Number of Containers	Matrix
WS30708	Stockpiles 1,2,8,9	8	Soil
30709	Stockpiles 4,7	5	Soil
30710	Stockpile 12	3	Soil
30711	Stockpiles 10,15,16,17	8	Soil
30712	Stockpiles 13,18	6	Soil
30713	Stockpiles 14,20,21	6	Soil
30714	Stockpile 19	2	Soil
30715	Stockpiles 22,23	6	Soil
30727	Stockpiles 3,5,6	9	Soil

All samples to be analyzed  
for: TCLP(Metals, 8240, 8270)  
and WS30710 for 8240.

10 BD TAT

Received at Laboratory by:

Debra Ressler

Date/Time:

10/17/96 17:20

## CHAIN OF CUSTODY RECORD

PROJECT NO:		SITE NAME:		SIZE & NO. OF CON-TAINERS		PRESERVATIVES		REMARKS	
96-298		2250 MILITARY RD							
SAMPLERS (SIGNATURE):		10/17/96		10/17/96		10/17/96			
SAMPLE NO	DATE	TIME	COMP	GRAB	MATRIX	SAMPLE LOCATION	16 oz Glass	2oz Glass	
1	10/17/96	2:00 PM	X	X	SOIL	STOCKPILE #1	1	1	30728
2	10/17/96	2:05 PM	X	X	SOIL	STOCKPILE #2	1	1	30729
3	10/17/96	2:15 PM	X	X	SOIL	STOCKPILE #3	1	2	
4	10/17/96	2:20 PM	X	X	SOIL	STOCKPILE #4	1	1	30730
5	10/17/96	2:25 PM	X	X	SOIL	STOCKPILE #5	1	2	
6	10/17/96	2:27 PM	X	X	SOIL	STOCKPILE #6	1	2	
7	10/17/96	2:29 PM	X	X	SOIL	STOCKPILE #7	1	2	30731
8	10/17/96	2:30 PM	X	X	SOIL	STOCKPILE #8	1	1	30732
9	10/17/96	2:35 PM	X	X	SOIL	STOCKPILE #9	1	1	30733
10	10/17/96	2:42 PM	X	X	SOIL	STOCKPILE #10	1	1	30734
12	10/17/96	2:48 PM	X	X	SOIL	STOCKPILE #12	1	2	
13	10/17/96	3:19 PM	X	X	SOIL	STOCKPILE #13	1	1	
14	10/17/96	3:21 PM	X	X	SOIL	STOCKPILE #14	1	1	30735
RELINQUISHED BY (SIGNATURE)		DATE/TIME		RECEIVED BY (SIGNATURE)		RELINQUISHED BY (SIGNATURE)		RECEIVED BY (SIGNATURE)	
Rick Rensler		10/17/96 5:15 PM		Shirley H. H. H.					
RELINQUISHED BY (SIGNATURE)		DATE/TIME		RECEIVED BY (SIGNATURE)		RELINQUISHED BY (SIGNATURE)		RECEIVED BY (SIGNATURE)	

SPECIAL INSTRUCTIONS:

TURNAROUND TIME

LAB USE: REFRIGERATOR #

SHELF #

GROUP #

DUE DATE

## CHAIN OF CUSTODY RECORD

9601.545

[illegible]

LAB USE: REFRIGERATOR # \_\_\_\_\_

-#F7EHS;

GROUP #

DUE DATE

***APPENDIX H***

***WASTE CHARACTERIZATION  
LABORATORY ANALYTICAL AND QUALITY CONTROL RESULTS  
FOR  
TOTAL LEAD AND CHROMIUM***

# WASTE STREAM TECHNOLOGY, INC.

302 Grote Street  
Buffalo, NY 14207  
(716) 876-5290

## Analytical Data Report

Report Date : 10/30/96  
Group Number : 9601-545

Prepared For :  
Mr. Rick Crouch  
Buffalo Drilling Company, Inc.  
10440 Main Street  
Clarence, New York 14031

Site: 2250 Military Road

### Field and Laboratory Information

Client Id	WST Lab #	Matrix	Date Sampled	Date Received	Time
STOCKPILE #1	WS30728	Soil	10/17/96	10/17/96	1715
STOCKPILE #2	WS30729	Soil	10/17/96	10/17/96	1715
STOCKPILE #4	WS30730	Soil	10/17/96	10/17/96	1715
STOCKPILE #7	WS30731	Soil	10/17/96	10/17/96	1715
STOCKPILE #8	WS30732	Soil	10/17/96	10/17/96	1715
STOCKPILE #9	WS30733	Soil	10/17/96	10/17/96	1715
STOCKPILE #10	WS30734	Soil	10/17/96	10/17/96	1715
STOCKPILE #14	WS30735	Soil	10/17/96	10/17/96	1715
STOCKPILE #15	WS30736	Soil	10/17/96	10/17/96	1715
STOCKPILE #16	WS30737	Soil	10/17/96	10/17/96	1715
STOCKPILE #17	WS30738	Soil	10/17/96	10/17/96	1715
STOCKPILE #20	WS30739	Soil	10/17/96	10/17/96	1715
STOCKPILE #21	WS30740	Soil	10/17/96	10/17/96	1715
Sample Status Upon Receipt : No irregularities.					

#### Analytical Parameters

Total Chromium  
Total Lead

#### Analytical Services

##### Number of Samples

13  
13

##### Turnaround Time

Standard  
Standard

Report Released By : Daniel W. Voel

ENVIRONMENTAL LABORATORY ACCREDITATION  
CERTIFICATION NUMBER (ELAP) 11179

## METHODOLOGIES

The specific methodologies employed in obtaining the analytical data reported are indicated on each of the result forms. The method numbers shown refer to the following analytical method references:

Methods for Chemical Analysis of Water and Wastes. EPA 600/4-79-020, March 1979, Revised 1983, U.S. Environmental Monitoring and Support Laboratory, Cincinnati, Ohio 45268.

Federal Register, 40 CFR Part 136: Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act. Revised July 1992.

Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. Third Edition, Revised September 1994, United States EPA SW-846.

Annual Book of ASTM Standards, Volume II. ASTM, 1916 Race Street, Philadelphia, Pennsylvania 19103.

Standard Methods for the Examination of Water and Wastewater. (18th Edition). American Public Health Association, 1105 18th Street, NW, Washington, D.C. 20036.

# Waste Stream Technology, Inc.

Lead by ICP

SW-846 6010

Site: 2250 MILITARY ROAD

Date Sampled: 10/17/96

Date Received: 10/17/96

Date Digested: 10/28/96

Group Number: 9601-545

Report Units: mg/Kg

Matrix: Soil

WST Lab ID	Client ID	Analysis Date	Detection Limit	Result
WS30728	STOCKPILE #1	10/28/96	12.0	151.0
WS30729	STOCKPILE #2	10/28/96	12.0	211.0
WS30730	STOCKPILE #4	10/28/96	12.0	2110.0
WS30731	STOCKPILE #7	10/28/96	12.0	340.0
WS30732	STOCKPILE #8	10/28/96	12.0	397.0
WS30733	STOCKPILE #9	10/28/96	12.0	413.0
WS30734	STOCKPILE #10	10/28/96	12.0	1920.0
WS30735	STOCKPILE #14	10/28/96	12.0	185.0
WS30736	STOCKPILE #15	10/28/96	12.0	332.0
WS30737	STOCKPILE #16	10/28/96	12.0	476.0
WS30738	STOCKPILE #17	10/28/96	12.0	269.0
WS30739	STOCKPILE #20	10/28/96	12.0	230.0
WS30740	STOCKPILE #21	10/28/96	12.0	928.0

**Waste Stream Technology, Inc.**  
**Chromium by ICP**  
**SW-846 6010**

Site: 2250 MILITARY ROAD  
Date Sampled: 10/17/96  
Date Received: 10/17/96  
Date Digested: 10/28/96

Group Number: 9601-545  
Report Units: mg/Kg  
Matrix: Soil

WST Lab ID	Client ID	Analysis Date	Detection Limit	Result
WS30728	STOCKPILE #1	10/28/96	1.10	26.60
WS30729	STOCKPILE #2	10/28/96	1.10	28.80
WS30730	STOCKPILE #4	10/28/96	1.10	145.00
WS30731	STOCKPILE #7	10/28/96	1.10	29.70
WS30732	STOCKPILE #8	10/28/96	1.10	58.30
WS30733	STOCKPILE #9	10/28/96	1.10	57.20
WS30734	STOCKPILE #10	10/28/96	1.10	474.00
WS30735	STOCKPILE #14	10/28/96	1.10	35.30
WS30736	STOCKPILE #15	10/28/96	1.10	83.00
WS30737	STOCKPILE #16	10/28/96	1.10	92.50
WS30738	STOCKPILE #17	10/28/96	1.10	88.80
WS30739	STOCKPILE #20	10/28/96	1.10	44.00
WS30740	STOCKPILE #21	10/28/96	1.10	168.00

**Waste Stream Technology, Inc.**  
**Metals Method Blank Analysis Result Report**

Site: 2250 MILITARY ROAD  
Date Sampled: NA  
Date Received: NA

Group Number: 9601-545  
Report Units: PPM

<b>Lab ID Number:</b>	MB102896-S1
<b>Client ID:</b>	NA
<b>Date Digested:</b>	10/28/96

<b>Analyte</b>	<b>Detection Limit</b>	<b>Result</b>	<b>Date Analyzed</b>	<b>Analysis Method</b>
Pb soil Method Blank	12.000	< 12.000	10/28/96	SW 846 6010
Cr soil Method Blank	1.100	< 1.100	10/28/96	SW-846 6010

MB denotes Method Blank.  
NA denotes Not Applicable.

**WASTE STREAM TECHNOLOGY, INC.**

302 Grote Street  
Buffalo, NY 14207  
(716) 876-5290

**Analytical Data Report**  
Report Date: 11/13/96  
Group Number: 9601-541

Prepared For:  
Mr. Kevin McMahon  
2251 Military Road Associates, Inc.  
13550 Bloomingdale Road  
Akron, NY 14301

Site: 2250 Military Road

**Field and Laboratory Information**

Client Id	WST Lab #	Matrix	Date Sampled	Date Received	Time
Composite 3 - Stockpile 12	WS30710	Soil	10/17/96	10/17/96	1720
Sample Status Upon Receipt: No irregularities.					

**Analytical Parameters**  
Total Metals

**Analytical Services**  
Number of Samples  
1

**Turnaround Time**  
Standard

Report Released By: Daniel W. Voer

**ENVIRONMENTAL LABORATORY ACCREDITATION**  
CERTIFICATION NUMBER (ELAP) 11179

**Waste Stream Technology, Inc.**  
**Metals Analysis Result Report**

Site: 2250 MILITARY ROAD  
Date Sampled: 10/17/96  
Date Received: 10/17/96

Group Number: 9601-541  
Report Units: mg/Kg  
Matrix: Soil

Lab ID Number:	WS30710
Client ID:	COMPOSITE 3 - STOCKPILE 12
Date Digested:	11/12/96

Analyte	Detection Limit	Result	Date Analyzed	Analysis Method
Chromium by ICP	1.10	17.40	11/12/96	SW-846 6010
Lead by ICP	12.00	21.70	11/12/96	SW-846 6010

## METHODOLOGIES

The specific methodologies employed in obtaining the analytical data reported are indicated on each of the result forms. The method numbers shown refer to the following analytical method references:

Methods for Chemical Analysis of Water and Wastes. EPA 600/4-79-020, March 1979, Revised 1983, U.S. Environmental Monitoring and Support Laboratory, Cincinnati, Ohio 45268.

Federal Register, 40 CFR Part 136: Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act. Revised July 1992.

Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. Third Edition, Revised September 1994, United States EPA SW-846.

Annual Book of ASTM Standards, Volume II. ASTM, 1916 Race Street, Philadelphia, Pennsylvania 19103.

Standard Methods for the Examination of Water and Wastewater. (18th Edition). American Public Health Association, 1105 18th Street, NW, Washington, D.C. 20036.

*APPENDIX I*

*CRAIG A. SLATER'S NOVEMBER 13, 1996 LETTER TO NYSDEC  
AND  
NYSDEC'S NOVEMBER 20, 1996 RESPONSE*

**HARTER, SECRET & EMERY**

ATTORNEYS AT LAW

700 Midtown Tower  
Rochester, New York 14604-2070  
716-232-6500  
Fax 716-232-2152

111 Washington Avenue, Suite 206  
Albany, New York 12210-2206  
518-434-4377  
Fax 518-449-4025

A PARTNERSHIP INCLUDING PROFESSIONAL ASSOCIATIONS  
ONE MARINE MIDLAND CENTER, SUITE 355C  
BUFFALO, NEW YORK 14203-2884  
716-853-1616  
Fax 716-853-1617

431 East Fayette Street  
Syracuse, New York 13202-1910  
315-474-4000  
Fax 315-474-7789

800 Laurel Oak Drive, Suite 400  
Naples, Florida 34108-2738  
941-598-4444  
Fax 941-598-2781

November 13, 1996

Please Reply To: Buffalo

**BY TELEFAX**

Dan King, P.E.  
Environmental Geologist I  
NYS Department of Environmental Conservation  
270 Michigan Avenue  
Buffalo, New York 14203-2999

Re: 2250 Military Road, Tonawanda, NY  
Site No. 915010  
Our File No. 32130.2

Dear Dan:

We are writing to you instead of Glenn because we know Glenn is unavailable out in the field. We would like your office to approve certain proposed activities related to the above-site and would like to implement them as soon as possible before the full onset of winter (for construction purposes).

As you know, we had previously forwarded to Glenn the excavation confirmatory samples and your office thereafter confirmed (by your letter of October 24th) that the work plan objectives had been met. For these reasons, you approved backfilling and grading.

As we advised you, we had staged all excavated soils on plastic on site, took samples, and had analysis completed for disposal characterization. We now have those results.

Enclosed is (1) a soil pile schematic outlining the number (24) and location of staged piles and (2) the analytical results for each pile. The results have been summarized by Rick in handwriting on the face of the schematic. As you can see, we have seven (7) piles (#3, 5, 6, 11, 13, 18, and 24) which have failed TCLP and will be transported for off-site disposal at a permitted TSDF facility; eleven (11) piles which pass TCLP but exceed target clean-up levels for the site as established by the Work Plan (#4, 8, 9, 10, 15, 16, 17, 19, 21, 22, and 23) which will be transported off-site to a permitted Part 360 facility; and six (6) piles (#1, 2, 7, 12, 14, and 20) that passed TCLP criteria and do not exceed target clean-up goals which will be placed back in the excavation.

Wastestream applications for disposal of the solid wastes (Part 360) and for disposal of the hazardous wastes (and manifests) are being completed now. As customary,

September 24, 1996

Page 2

approval for the Part 360 dump will occur within the next couple of days, but approval for the hazardous waste dump will take several weeks.

In light of this, we would like your approval of the following:

1. Mobilize for backfilling and grading immediately.
2. Place Piles #1, 2, 7, 12, 14, and 20 (TCLP and TAGM pass) into the excavation area(s).
3. Backfill on-site concrete into the excavation area(s).
4. Transport Piles #4, 8, 10, 15, 16, 17, 19, 21, 22, and 23 (TCLP pass/TAGM fail solid waste) to a permitted Part 360 facility (Modern is the likely choice) as soon as wastestream approval is given.
5. Stage Piles # 3, 5, 6, 11, 13, 18, and 24 (TCLP fail) (on plastic and covered with plastic) in the Exclusion Zone nearest the Concrete Block Building to the North until TSDF wastestream approval is obtained. Moving and consolidating these soils in the exclusion zone (out of the way of the construction areas) will allow clearing, grading, and construction activities to occur on the former landspread parcel.

We would like your approval to undertake these steps as soon as possible. We expect Part 360 approval in the next couple of days so we could mobilize relatively soon.

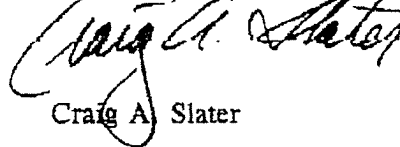
Of most importance, we would also request your approval of the commencement of construction of the mini-storage units as soon as these approved tasks are completed. We desperately need to put concrete in the ground before the full onset of winter. At a minimum, we would like to clear, grub, and pour the slabs as soon as possible. Of course, we feel that there is no environmental impediment to full construction at this time and we hope you agree. Please advise.

In the meantime, Rick is proceeding with the drafting of the IRM Closure Report. At that point, we would like to discuss further the mechanics of redelineating the site boundaries to exclude the now-remediated landspread area.

Once again, I can't thank you enough for your timely assistance and efforts. If you have any questions, please call.

Very truly yours,

HARTER, SECRET & EMERY



Craig A. Slater

CAS:jp  
Enclosures

cc: Glenn May, CPG  
James Cornell

HARTER, SECREST &amp; EMERY

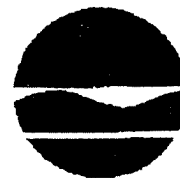
Fax: 716-853-1616

Nov 22, 1996

04:47

P.02

**New York State Department of Environmental Conservation**  
270 Michigan Avenue, Buffalo, New York, 14203-2999



Michael D. Zagala  
Commissioner

November 20, 1996

Mr. Craig A. Slater, Esq.  
Harter, Secrest & Emery  
One Marine Midland Center  
Suite 3550  
Buffalo, New York 14203-1616

Dear Craig:

2250 Military Road, Tonawanda, NY

The Department has received your letter dated November 13, 1996 transmitting the analytical results from the excavated soils staged on site, and the request to approve the following activities so that construction of the mini-storage units can commence before the onset of winter:

1. Mobilize for backfilling and grading.
2. Place soil from stockpiles 1, 2, 7, 12, 14, and 20 (TCLP/Target Cleanup Goal pass) back into the excavation area(s).
3. Backfill on-site concrete into the excavation area(s).
4. Transport soil from stockpiles 4, 8, 9, 10, 15, 16, 17, 19, 21, 22, and 23 (TCLP pass/Target Cleanup Goal fail) to a permitted Part 360 facility for disposal.
5. Move and consolidate soils from stockpiles 3, 5, 6, 11, 13, 18, and 24 (TCLP fail) in the Exclusion Zone to allow clearing, grading, and construction of the mini-storage units.

As stated in your letter, the Department previously notified you that the Target Cleanup Goals for lead and chromium were achieved in all excavation areas and that excavation activities were complete. Mr. Daniel King, by letter dated October 24, approved backfilling and grading activities. As a result, mobilization for backfilling and grading (Number 1 above) can commence immediately.

Regarding request Number 2, the analytical results from the stated stockpiles, while greater in concentration than the confirmatory analytical results, are still, in most instances, well within the Target Cleanup Goals for lead and chromium. Since delineation of the "Hot Spot" areas appeared to be consistent with periodic disposal of paint wastes rather than the uniform spreading of these wastes over the land surface, it is reasonable to expect that relatively "clean" soils were also excavated during "Hot Spot" removal activities. As a result, the Department has no objection to these soils being utilized as backfill.

HARTER SECRET

Fax: 716-853-1616

Nov 22 1996

9:44

F.05

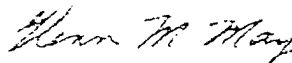
In the event, however, that paint wastes are visually identified during backfilling activities, backfilling with these soils should cease immediately. Furthermore, we see no reason that the on-site concrete (Number 3 above) cannot be utilized as backfill.

Regarding request Number 4, the stated stockpiles can be disposed off-site when landfill approval is obtained. Should the disposal facility require Department approval to accept these soils, these soils can be temporarily stockpiled on-site to promote the clearing, grading, and construction of the mini-storage units. The Department also has no objection to the stockpiling of soils that failed TCLP pending approval of off-site disposal. Please be reminded, however, that under RCRA regulations these soils must be disposed of within ninety (90) days of the day in which the soils were determined to be hazardous.

By way of this letter, therefore, the Department is giving Mr. James Cornell formal approval to commence construction of the mini-storage units.

Should you have any questions or comments, please feel free to contact me at 851-7220.

Sincerely yours,



Glenn M. May, CPG  
Engineering Geologist I

cc: Mr. Daniel King

***APPENDIX J***

***NON-HAZARDOUS SPECIAL WASTE MANIFESTS***

HIGH ACRES LANDFILL WASTE MANAGEMENT  
425 LINDEN LANE  
FAIRPORT, NY 14450  
(716) 223-6132

DATE: #184050  
TIME: 11:25/86  
15:10

CUSTOMER: 1717 JENSEN LAKEVIEW LANDFILL

WEIGH MASTER: KIM VILLARD

TRUCK: Z27

WASTE: COX CONT. SOIL (TAXE

ORIGIN: 189 TONAWANDA (NI)

PROFILE: 357413  
2251 MILITARY ROAD ASSOC. INC. CONTA

GROSS: 77460 LBS CELL: 3

TARE: 32680 LBS

NET: 44780 LBS = 22.39 TONS

TO THE BEST OF MY  
KNOWLEDGE THIS TRUCK  
CONTAINS NO HAZARDOUS  
OR UNACCEPTABLE WASTE

OUT-OF-STATE SOLID WASTE TRANSPORTER DECLARATION: I certify under penalty of perjury that the information provided is true and correct to the best of my knowledge and belief.

00001717 REMARKS:

SIGN

*J.P. Villard*

High Acres Landfill  
425 Perinton Parkway  
Fairport, NY 14450  
(716)223-6132

Manifest

2287

Western Expansion Site Permit No. NYS DEC 8-2644-00048/00021-0  
High Acres Site Permit No. NYSDEC 8-2644-00048/00003

**NON-HAZARDOUS SPECIAL WASTE MANIFEST**

**Generator Section**

Generator of Waste (must be filled in by producer) 2251 MILITARY RD ASSOC., INC  
EPA. ID. NO. \_\_\_\_\_

Company Address:

(Print or Type) 13550 BLOOMINGDALE RD, AKRON, N.Y. 14001  
(No.) (Street) (City) (State) (Zip)

Pick-up Address: 2250 MILITARY RD. TONAWANDA, N.Y. 14150  
(No.) (Street) (City) (State) (Zip)

Telephone Number: 716/542-5888

Waste Stream Identification: PB & CR CONTAMINATED SOIL BELOW TCLP  
REGULATORY LEVELS

This manifest represents a non-hazardous waste as per E.P.A. and N.Y.S. D.E.C. regulations

Est Tons: 20 Other (Specify): \_\_\_\_\_

Special Handling instructions, if any: None TARP LOAD

This is to certify that the above named materials are properly classified, described, packages, marked and labeled and are in proper condition for transportation according to applicable state and federal law. The wastes were consigned to the transporter named. I certify that the foregoing is true and correct to the best of my knowledge.

Date: 11/25/96

Signature: [Signature]  
(Name and Title)

**Transportation Section**

Hauler of Waste (must be filled in by hauler) ZOLADZ CONSTRUCTION CO., INC.

ADDRESS: 13989 BROADWAY, ALDEN, N.Y.

Pick-up Date: 11/25/96 Truck No. 27 Vehicle Lic. No. PR7554 N.Y.

The above described waste was picked up and hauled by me to the disposal facility named below and was accepted. I certify that the foregoing is true and correct to the best of my knowledge.

Signature of authorized agent and title [Signature]

Date: 11-25-96

**Disposal Facility**

Disposer of Waste (must be filled in by the disposer)

Company Name: High Acres Landfill

Site Location: 425 Perinton Parkway Fairport, NY 14450

Waste subject to this manifest was delivered by the above hauler to this disposal facility and accepted on:

Disposal Date: 11/25/96 Total Tons: \_\_\_\_\_

Signature of authorized agent and title: [Signature]

White & Canary - Landfill

Pink - Hauler

Golden Rod - Generator

HIGH ACRES LANDFILL - WASTE MANAGEMENT  
425 PERINTON PARKWAY

# 184094  
DATE: 11/26/96  
TIME: 08:05

FAIRPORT, NY 14450  
(716) 223-6132

CUSTOMER: 1717 LAKEVIEW LANDFILL

WEIGH MASTER: KIM VILLARD

TRUCK: K8 WASTE: COX CONT: SOIL (TAXE

ORIGIN: 189 TONAWANDA (NJ)

PROFILE: 357413  
2251 MILITARY ROAD ASSOC. INC. CONTA

GROSS: 72020 LBS

CELL: 3

TARE: 27420 LBS

NET: 44600 LBS = 22.30 TONS

TO THE BEST OF MY  
KNOWLEDGE THIS TRUCK  
CONTAINS NO HAZARDOUS  
OR UNACCEPTABLE WASTE

OUT-OF-STATE SOLID WASTE TRANSPORTER DECLARATION: I certify under penalty of  
perjury that the information provided is true and correct to the best of my  
knowledge and belief.

0001717 REMARKS:

SIGN

200B #8

High Acres Landfill  
425 Perinton Parkway  
Fairport, NY 14450  
(716)223-6132

Manifest

1449

Western Expansion Site Permit No. NYS DEC 8-2644-00048/00021-0  
High Acres Site Permit No. NYSDEC 8-2644-00048/00003

NON-HAZARDOUS SPECIAL WASTE MANIFEST

NY-5

**Generator Section**

Generator of Waste (must be filled in by producer) 2251 MILITARY RD ASSOC, INC  
EPA. ID. NO. \_\_\_\_\_

Company Address:

(Print or Type) 13550 BLOOMINGDALE RD, ALBANY, NY 14001  
(No.) (Street) (City) (State) (Zip)

Pick-up Address: 2250 MILITARY RD, TENAWANDA, N.Y 14150  
(No.) (Street) (City) (State) (Zip)

Telephone Number: 716/542-5888

Waste Stream Identification: NON HAZARDOUS PD & CR CONTAINING SOILS

This manifest represents a non-hazardous waste as per E.P.A. and N.Y.S. D.E.C. regulations

Est Tons: 22 Other (Specify): \_\_\_\_\_

Special Handling instructions, if any: T/L None \_\_\_\_\_

This is to certify that the above named materials are properly classified, described, packages, marked and labeled and are in proper condition for transportation according to applicable state and federal law. The wastes were consigned to the transporter named. I certify that the foregoing is true and correct to the best of my knowledge.

Date: 11/25/96

Signature: [Signature]  
(Name and Title)

**Transportation Section**

Hauler of Waste (must be filled in by hauler) Big K Trucking

ADDRESS: 5225 Two Rod Rd MARILLA N.Y.

Pick-up Date: 11-25-96 Truck No. 8 Vehicle Lic. No. PR 9523

The above described waste was picked up and hauled by me to the disposal facility named below and was accepted. I certify that the foregoing is true and correct to the best of my knowledge.

Signature of authorized agent and title Robert Tweedy Date: 11-25-96

**Disposal Facility**

Disposer of Waste (must be filled in by the disposer)

Company Name: High Acres Landfill

Site Location: 425 Perinton Parkway Fairport, NY 14450

Waste subject to this manifest was delivered by the above hauler to this disposal facility and accepted on:

Disposal Date: 11/26/96 Total Tons: \_\_\_\_\_ Other (Specify): \_\_\_\_\_  
Signature of authorized agent and title: [Signature]

White & Canary - Landfill

Pink - Hauler

Golden Rod - Generator

HIGH ACRES LANDFILL WASTE MANAGEMENT

425 PERINTON PARKWAY  
FAIRPORT, NY 14450  
(716) 223-6132

# 184096  
DATE: 11/26/96  
TIME: 08:07

CUSTOMER: *8268*  
*Lawrence*  
LAKVIEW LANDFILL

WEIGH MASTER: KIM VILLARD

TRUCK: BK10

WASTE: COX CONT. SOIL (TAXE

ORIGIN: 189 TONAWANDA (NY)

PROFILE: 357413

2251 MILITARY ROAD ASSOC. INC CONTA

GROSS: 76140 LBS

CELL: 3

TARE: 26600 LBS

NET: 49540 LBS = 24.77 TONS

TO THE BEST OF MY  
KNOWLEDGE THIS TRUCK  
CONTAINS NO HAZARDOUS  
OR UNACCEPTABLE WASTE

OUT-OF-STATE SOLID WASTE TRANSPORTER DECLARATION: I certify under penalty of perjury that the information provided is true and correct to the best of my knowledge and belief.

00001717 REMARKS:

SIGN

*R. J. 10*

High Acres Landfill  
425 Perinton Parkway  
Fairport, NY 14450  
(716)223-6132

Manifest 1798

Western Expansion Site Permit No. NYS DEC 8-2644-00048/00021-0  
High Acres Site Permit No. NYSDEC 8-2644-00048/00003

NON-HAZARDOUS SPECIAL WASTE MANIFEST

NH-6

**Generator Section**

Generator of Waste (must be filled in by producer) 2251 MILITARY RD ASSOC, INC  
EPA. ID. NO. \_\_\_\_\_

Company Address:

(Print or Type) 13550 BLOOMINGDALE RD. AKRON NY 14001  
(No.) (Street) (City) (State) (Zip)

Pick-up Address: 2250 MILITARY RD. TONAWANDA, N.Y. 14150  
(No.) (Street) (City) (State) (Zip)

Telephone Number: 716/542-5888

Waste Stream Identification: NON HAZARDOUS PCB & CO CONTAINING SOILS

This manifest represents a non-hazardous waste as per E.P.A. and N.Y.S. D.E.C. regulations

Est Tons: 22 Other (Specify): \_\_\_\_\_

Special Handling instructions, if any: \_\_\_\_\_ None TAZPLD

This is to certify that the above named materials are properly classified, described, packages, marked and labeled and are in proper condition for transportation according to applicable state and federal law. The wastes were consigned to the transporter named. I certify that the foregoing is true and correct to the best of my knowledge.

Date: 11/25/96

Signature: [Signature] Vice President  
(Name and Title)

**Transportation Section**

Hauler of Waste (must be filled in by hauler) Big K Trucking

ADDRESS: 5-225 Two Rd Rd. Tonawanda, NY 14102

Pick-up Date: \_\_\_\_\_ Truck No. 10 Vehicle Lic. No. PR 9591

The above described waste was picked up and hauled by me to the disposal facility named below and was accepted. I certify that the foregoing is true and correct to the best of my knowledge.

Signature of authorized agent and title [Signature] Date: 11/25/96

**Disposal Facility**

Disposer of Waste (must be filled in by the disposer)

Company Name: High Acres Landfill

Site Location: 425 Perinton Parkway Fairport, NY 14450

Waste subject to this manifest was delivered by the above hauler to this disposal facility and accepted on:

Disposal Date: 11/26/96 Total Tons: \_\_\_\_\_ Other (Specify): \_\_\_\_\_  
Signature of authorized agent and title: [Signature]

White & Canary - Landfill

Pink - Hauler

Golden Rod - Generator

# 104102  
DATE: 11/26/96  
TIME: 08:08

HIGH ACRES LANDELL - WASTE MANAGEMENT  
425 PERINTON PARKWAY  
FAIRPORT, NY 14450  
(716) 223-6132

CUSTOMER: 1717 *8268*  
*Landell*  
LANDELL

WEIGH MASTER: KIM VILLARD

TRUCK: BK6

WASTE: COX CONT. SOIL (TAXE

ORIGIN: 109 TONAWANDA (NI)

PROFILE: 357413  
2251 MILITARY ROAD ASSOC. INC. CONTA

GROSS: 72600 LBS CELL: 3

TARE: 26640 LBS

NET: 46040 LBS = 23.02 TONS

TO THE BEST OF MY  
KNOWLEDGE THIS TRUCK  
CONTAINS NO HAZARDOUS  
OR UNACCEPTABLE WASTE

OUT-OF-STATE SOLID WASTE TRANSPORTER DECLARATION: I certify under penalty of perjury that the information provided is true and correct to the best of my knowledge and belief.

*[Signature]*

0001717 REMARKS:

SIGN

High Acres Landfill  
425 Perinton Parkway  
Fairport, NY 14450  
(716)223-6132

Manifest 1466  
Western Expansion Site Permit No. NYS DEC 8-2644-00048/00021-0  
High Acres Site Permit No. NYSDEC 8-2644-00048/00003

NON-HAZARDOUS SPECIAL WASTE MANIFEST

UH-3

**Generator Section**

Generator of Waste (must be filled in by producer) 2251 MILITARY RD ASSOC, INC  
EPA. ID. NO. \_\_\_\_\_

Company Address:

(Print or Type) 13550 BLOOMINGDALE RD, AKRON, N.Y. 14001  
(No.) (Street) (City) (State) (Zip)

Pick-up Address: 2250 Military Rd, Tonawanda NY 14150  
(No.) (Street) (City) (State) (Zip)

Telephone Number: 716/542-5888

Waste Stream Identification: NON HAZARDOUS Pb & Cr CONTAMINATED SOIL

This manifest represents a non-hazardous waste as per E.P.A. and N.Y.S. D.E.C. regulations

Est Tons: 20 Other (Specify): \_\_\_\_\_

Special Handling instructions, if any: T/L None \_\_\_\_\_

This is to certify that the above named materials are properly classified, described, packages, marked and labeled and are in proper condition for transportation according to applicable state and federal law. The wastes were consigned to the transporter named. I certify that the foregoing is true and correct to the best of my knowledge.

Date: 11/25/96

Signature: [Signature], PRES.  
(Name and Title)

**Transportation Section**

Hauler of Waste (must be filled in by hauler) Big K Trucking Inc.

ADDRESS: 5-225 Two Rod Rd., Marilla NY 14102

Pick-up Date: 11/25/96 Truck No. 6 Vehicle Lic. No. PR 9574

The above described waste was picked up and hauled by me to the disposal facility named below and was accepted. I certify that the foregoing is true and correct to the best of my knowledge.

Signature of authorized agent and title [Signature] Date: 11/25/96

**Disposal Facility**

Disposer of Waste (must be filled in by the disposer)

Company Name: High Acres Landfill

Site Location: 425 Perinton Parkway Fairport, NY 14450

Waste subject to this manifest was delivered by the above hauler to this disposal facility and accepted on:

Disposal Date: 11/26/96 Total Tons: \_\_\_\_\_ Other (Specify): \_\_\_\_\_

Signature of authorized agent and title: [Signature]

White & Canary - Landfill

Pink - Hauler

Golden Rod - Generator

# 184095  
DATE: 11/26/96  
TIME: 08:12

HIGH ACRES LANDFILL - WASTE MANAGEMENT  
425 PERINTON PARKWAY  
FAIRPORT, NY 14450  
(716) 223-6132

CUSTOMER: *8968* *Kenyon*  
~~LAKEVIEW LANDFILL~~

WEIGH MASTER: KIM VILLARD

TRUCK: K7

WASTE: COX CONT. SOIL (TAXE

ORIGIN: 189 TONAWANDA (NI)

PROFILE: 357413  
2251 MILITARY ROAD ASSOC. INC CONTA

GROSS: 70300 LBS

CELL: 3

TARE: 25700 LBS

NET: 44520 LBS = 22.26 TONS

TO THE BEST OF MY  
KNOWLEDGE THIS TRUCK  
CONTAINS NO HAZARDOUS  
OR UNACCEPTABLE WASTE

OUT-OF-STATE SOLID WASTE TRANSPORTER DECLARATION: I certify under penalty of  
perjury that the information provided is true and correct to the best of my  
knowledge and belief.

00001717 REMARKS:

SIGN

*Kim Villard*

High Acres Landfill  
425 Perinton Parkway  
Fairport, NY 14450  
(716)223-6132

Manifest

1712

Western Expansion Site Permit No. NYS DEC 8-2644-00048/00021-0  
High Acres Site Permit No. NYSDEC 8-2644-00048/00003

NON-HAZARDOUS SPECIAL WASTE MANIFEST

NH-4

**Generator Section**

Generator of Waste (must be filled in by producer) 2251 MILITARY RD. ASSOC. INC.  
EPA. ID. NO. \_\_\_\_\_

Company Address:

(Print or Type) 13550 BLOOMINGDALE RD. AKRON OH 14001  
(No.) (Street) (City) (State) (Zip)

Pick-up Address: 2250 MILITARY RD. TONAWANDA, NY 14150  
(No.) (Street) (City) (State) (Zip)

Telephone Number: 716/542-5888

Waste Stream Identification: NON-HAZARDOUS PB & C CONTAMINATE SOIL

This manifest represents a non-hazardous waste as per E.P.A. and N.Y.S. D.E.C. regulations

Est Tons: 20 Other (Specify): \_\_\_\_\_

Special Handling instructions, if any: \_\_\_\_\_ None TARP LOAD

This is to certify that the above named materials are properly classified, described, packages, marked and labeled and are in proper condition for transportation according to applicable state and federal law. The wastes were consigned to the transporter named. I certify that the foregoing is true and correct to the best of my knowledge.

Date: 11/25/96

Signature: \_\_\_\_\_

(Name and Title)

**Transportation Section**

Hauler of Waste (must be filled in by hauler) BIG K TRUCKING, INC.

ADDRESS: S-225 TWO RD RD. MARILLA, NY 14102

Pick-up Date: 11/25/96 Truck No. 7 Vehicle Lic. No. PR 9575

The above described waste was picked up and hauled by me to the disposal facility named below and was accepted. I certify that the foregoing is true and correct to the best of my knowledge.

Signature of authorized agent and title Tim M. Walsh Date: 11/25/96

**Disposal Facility**

Disposer of Waste (must be filled in by the disposer)

Company Name: High Acres Landfill

Site Location: 425 Perinton Parkway Fairport, NY 14450

Waste subject to this manifest was delivered by the above hauler to this disposal facility and accepted on:

Disposal Date: 11/26/96 Total Tons: \_\_\_\_\_ Other (Specify): \_\_\_\_\_  
Signature of authorized agent and title: \_\_\_\_\_

White & Canary - Landfill

Pink - Hauler

Golden Rod - Generator

HIGH ACRES LANDFILL WASTE MANAGEMENT

# 184111

425 PERINTON PARKWAY

DATE: 11/26/96

FAIRPORT, NY 14450

TIME: 08:42

8268  
CUSTOMER: ~~1717~~ *Seneca* LAKEVIEW LANDFILL

WEIGH MASTER: KIM VILLARD

TRUCK: Z15

WASTE: COX CONT. SOIL (TAXE

ORIGIN: 189 TONAWANDA (NI)

PROFILE: 257413

2251 MILITARY ROAD ASSOC. INC CONTA

GROSS: 70300 LBS

CELL: 1

TARE: 31060 LBS

TO THE BEST OF MY  
KNOWLEDGE THIS TRUCK  
CONTAINS NO HAZARDOUS  
OR UNACCEPTABLE WASTE

NET: 39240 LBS = 19.62 TONS

OUT-OF-STATE SOLID WASTE TRANSPORTER DECLARATION: I certify under penalty of perjury that the information provided is true and correct to the best of my knowledge and belief.

0001717 REMARKS:

SIGN

*Deny Ky*

High Acres Landfill  
425 Perinton Parkway  
Fairport, NY 14450  
(716)223-6132

Manifest 2288

Western Expansion Site Permit No. NYS DEC 8-2644-00048/00021-0  
High Acres Site Permit No. NYSDEC 8-2644-00048/00003

**NON-HAZARDOUS SPECIAL WASTE MANIFEST**

NH-2

**Generator Section**

Generator of Waste (must be filled in by producer) 2251 MILITARY RD. ASSOC, INC  
EPA. ID. NO. \_\_\_\_\_

Company Address:

(Print or Type) 13550 BLOOMINGDALE RD, ALCRA, N.Y. 14001  
(No.) (Street) (City) (State) (Zip)

Pick-up Address: 2250 MILITARY RD TONAWANDA, N.Y. 14150  
(No.) (Street) (City) (State) (Zip)

Telephone Number: 716/542-5888

Waste Stream Identification: NON HAZARDOUS TOP OF CR CONTAMINATED SOIL

This manifest represents a non-hazardous waste as per E.P.A. and N.Y.S. D.E.C. regulations

Est Tons: 20 Other (Specify): \_\_\_\_\_

Special Handling instructions, if any: \_\_\_\_\_ None TARP LOAD

This is to certify that the above named materials are properly classified, described, packages, marked and labeled and are in proper condition for transportation according to applicable state and federal law. The wastes were consigned to the transporter named. I certify that the foregoing is true and correct to the best of my knowledge.

Date: 11/25/96

Signature: [Signature]  
(Name and Title)

**Transportation Section**

Hauler of Waste (must be filled in by hauler) ZOLADE CONSTRUCTION CO. INC  
ADDRESS: 13989 BROADWAY, ALCRA, N.Y.

Pick-up Date: 11/25/96 Truck No. 15 Vehicle Lic. No. PR7555

The above described waste was picked up and hauled by me to the disposal facility named below and was accepted. I certify that the foregoing is true and correct to the best of my knowledge.

Signature of authorized agent and title [Signature] Date: 11/25/96

**Disposal Facility**

Disposer of Waste (must be filled in by the disposer)

Company Name: High Acres Landfill

Site Location: 425 Perinton Parkway Fairport, NY 14450

Waste subject to this manifest was delivered by the above hauler to this disposal facility and accepted on:

Disposal Date: 11/26/96 Total Tons: \_\_\_\_\_ Other (Specify): \_\_\_\_\_

Signature of authorized agent and title: [Signature]

White & Canary - Landfill

Pink - Hauler

Golden Rod - Generator

HIGH ACRES LANDFILL - WASTE MANAGEMENT  
425 PERINTON PARKWAY  
FAIRPORT, NY 14450  
(716) 223-6132

# 184110  
DATE: 11/26/96  
TIME: 08:33

8268  
CUSTOMER: ~~LAKEVIEW LANDFILL~~

WEIGH MASTER: KIM VILLARD

TRUCK: 711

WASTE: COX CONT. SOIL(TAXE

ORIGIN: 189 TONAWANDA(NI)

PROFILE: 357413  
2251 MILITARY ROAD ASSOC. INC CONTA

GROSS: 68620 LBS

CELL: 1

TARE: 23660 LBS

NET: 44960 LBS = 22.48 TONS

TO THE BEST OF MY  
KNOWLEDGE THIS TRUCK  
CONTAINS NO HAZARDOUS  
OR UNACCEPTABLE WASTE

OUT-OF-STATE SOLID WASTE TRANSPORTER DECLARATION: I certify under penalty of perjury that the information provided is true and correct to the best of my knowledge and belief.

0001717 REMARKS:

SIGN



High Acres Landfill  
425 Perinton Parkway  
Fairport, NY 14450  
(716)223-6132

Manifest

2037

Western Expansion Site Permit No. NYS DEC 8-2644-00048/00021-0  
High Acres Site Permit No. NYSDEC 8-2644-00048/00003

**NON-HAZARDOUS SPECIAL WASTE MANIFEST**

11-9

**Generator Section**

Generator of Waste (must be filled in by producer) 2251 MILITARY RD ASSOCIATES  
EPA. ID. NO. \_\_\_\_\_

Company Address: 13550 BLOOMINGDALE RD, ALBANY, N.Y. 14001  
(Print or Type) ~~2251 MILITARY RD~~  
(No.) (Street) (City) (State) (Zip)

Pick-up Address: 2251 MILITARY RD, TONAWANDA, NY 14150  
(No.) (Street) (City) (State) (Zip)

Telephone Number: 716/542-5886

Waste Stream Identification: NON HAZARDOUS Pb & Cr CONTAINING SOILS

This manifest represents a non-hazardous waste as per E.P.A. and N.Y.S. D.E.C. regulations  
Est. Tons: 1722 Other (Specify): \_\_\_\_\_

Special Handling instructions, if any: \_\_\_\_\_ None TARP LOAD

This is to certify that the above named materials are properly classified, described, packages, marked and labeled and are in proper condition for transportation according to applicable state and federal law. The wastes were consigned to the transporter named. I certify that the foregoing is true and correct to the best of my knowledge.

Date: 11/25/96

Signature: [Signature]  
(Name and Title)

**Transportation Section**

Hauler of Waste (must be filled in by hauler) ZOLA DZ CONST. CO. INC

ADDRESS: 13989 BROADWAY, ALBANY, NY 14004

Pick-up Date: 11/25/96 Truck No. 11 Vehicle Lic. No. HA 8677

The above described waste was picked up and hauled by me to the disposal facility named below and was accepted. I certify that the foregoing is true and correct to the best of my knowledge.

Signature of authorized agent and title: [Signature] Date: 11/25/96

**Disposal Facility**

Disposer of Waste (must be filled in by the disposer)

Company Name: High Acres Landfill

Site Location: 425 Perinton Parkway Fairport, NY 14450

Waste subject to this manifest was delivered by the above hauler to this disposal facility and accepted on:

Disposal Date: 11/26/96 Total Tons: \_\_\_\_\_ Other (Specify): \_\_\_\_\_  
Signature of authorized agent and title: [Signature]

White & Canary - Landfill

Pink - Hauler

Golden Rod - Generator

HIGH ACRES LANDELL - WASTE MANAGEMENT  
425 PERINTON PARKWAY  
FAIRPORT, NY 14450  
(716) 223-6132

# 184107  
DATE: 11/26/96  
TIME: 08:31

CUSTOMER: *8268* ~~LANEVIEW LANDELL~~

WEIGH MASTER: KIM VILLARD

TRUCK: Z32

WASTE: COX CONT. SOIL (TAXE

ORIGIN: 109 TONAWANDA (NI)

PROFILE: 357413

2251 MILITARY ROAD ASSOC. INC CONTA

GROSS: 72900 LBS

CELL: 3

TARE: 25640 LBS

NET: 47260 LBS = 23.63 TONS

TO THE BEST OF MY  
KNOWLEDGE THIS TRUCK  
CONTAINS NO HAZARDOUS  
OR UNACCEPTABLE WASTE

OUT-OF-STATE SOLID WASTE TRANSPORTER DECLARATION: I certify under penalty of perjury that the information provided is true and correct to the best of my knowledge and belief.

0001717 REMARKS:

STGN

*2.2*

High Acres Landfill  
425 Perinton Parkway  
Fairport, NY 14450  
(716)223-6132

Manifest N 2671  
Western Expansion Site Permit No. NYS DEC 8-2644-00048/00021-0  
High Acres Site Permit No. NYSDEC 8-2644-00048/00003

**NON-HAZARDOUS SPECIAL WASTE MANIFEST**

11-8

**Generator Section**

Generator of Waste (must be filled in by producer) 2251 MILITARY RD ASSOC. INC  
EPA. ID. NO. \_\_\_\_\_

Company Address:

(Print or Type) 13550 BLOOMINGDALE RD, ALDEN, N.Y. 14001  
(No.) (Street) (City) (State) (Zip)

Pick-up Address: 2251 MILITARY RD, TONAWANDA, N.Y. 14150  
(No.) (Street) (City) (State) (Zip)

Telephone Number: 716/542-5888

Waste Stream Identification: NON-HAZARDOUS PCB & LE CONTAINING SOIL

This manifest represents a non-hazardous waste as per E.P.A. and N.Y.S. D.E.C. regulations

Est Tons: 22 Other (Specify): \_\_\_\_\_

Special Handling instructions, if any: None TARP LOAD

This is to certify that the above named materials are properly classified, described, packages, marked and labeled and are in proper condition for transportation according to applicable state and federal law. The wastes were consigned to the transporter named. I certify that the foregoing is true and correct to the best of my knowledge.

Date: 11/25/96

Signature: [Signature] VICE PRESIDENT  
(Name and Title)

**Transportation Section**

Hauler of Waste (must be filled in by hauler) ZOLADE CONST. CO. INC

ADDRESS: 13909 BROADWAY, ALDEN, N.Y. 14009

Pick-up Date: 11/25/96 Truck No. 32 Vehicle Lic. No. PM 1567

The above described waste was picked up and hauled by me to the disposal facility named below and was accepted. I certify that the foregoing is true and correct to the best of my knowledge.

Signature of authorized agent and title [Signature] Date: 11/25/96

**Disposal Facility**

Disposer of Waste (must be filled in by the disposer)

Company Name: High Acres Landfill

Site Location: 425 Perinton Parkway Fairport, NY 14450

Waste subject to this manifest was delivered by the above hauler to this disposal facility and accepted on:

Disposal Date: 11/26/96 Total Tons: \_\_\_\_\_ Other (Specify): \_\_\_\_\_

Signature of authorized agent and title: [Signature]  
White & Canary - Landfill Pink - Hauler Golden Rod - Generator

HIGH ACRES LANDFILL WASTE MANAGEMENT  
425 PERINTON PARKWAY  
FAIRPORT, NY 14450  
(716) 223-6132

# 184105  
DATE: 11/26/96  
TIME: 08:30

8268  
CUSTOMER: ~~1747~~ LAKEVIEW LANDFILL

WEIGH MASTER: KIM VILLARD

TRUCK: Z36

WASTE: COX CONT. SOIL (TAXE

ORIGIN: 189 TONAWANDA (NI)

PROFILE: 357413

2251 MILITARY ROAD ASSOC. INC CONTA

GROSS: 70920 LBS

CELL: 3

TARE: 25740 LBS

NET: 45180 LBS = 22.59 TONS

TO THE BEST OF MY  
KNOWLEDGE THIS TRUCK  
CONTAINS NO HAZARDOUS  
OR UNACCEPTABLE WASTE

OUT-OF-STATE SOLID WASTE TRANSPORTER DECLARATION: I certify under penalty of perjury that the information provided is true and correct to the best of my knowledge and belief.

0001717 REMARKS:

SIGN

High Acres Landfill  
425 Perinton Parkway  
Fairport, NY 14450  
(716)223-6132

Manifest

2044

Western Expansion Site Permit No. NYS DEC 8-2644-00048/00021-0  
High Acres Site Permit No. NYSDEC 8-2644-00048/00003

**NON-HAZARDOUS SPECIAL WASTE MANIFEST**

**Generator Section**

Generator of Waste (must be filled in by producer) 2251 MILITARY RD, ASGAC, INC  
EPA. ID. NO. \_\_\_\_\_

Company Address:

(Print or Type) 13550 BLOOMINGDALE RD, ALDEN NY 14001  
(No.) (Street) (City) (State) (Zip)

Pick-up Address: 2251 MILITARY RD, TONAWANDA NY 14502  
(No.) (Street) (City) (State) (Zip)

Telephone Number: 716/42-5885

Waste Stream Identification: NONHAZARDOUS SOILS CONTAINING SOIL

This manifest represents a non-hazardous waste as per E.P.A. and N.Y.S. D.E.C. regulations  
Est Tons: 22 Other (Specify): \_\_\_\_\_

Special Handling instructions, if any: \_\_\_\_\_ None TRAP LOAD

This is to certify that the above named materials are properly classified, described, packages, marked and labeled and are in proper condition for transportation according to applicable state and federal law. The wastes were consigned to the transporter named. I certify that the foregoing is true and correct to the best of my knowledge.

Date: 11/25/96

Signature: [Signature]  
(Name and Title)

**Transportation Section**

Hauler of Waste (must be filled in by hauler) FEADZ CONST CO, INC

ADDRESS: 13939 BROADWAY ALDEN, NY 14001

Pick-up Date: 11/25/96 Truck No. 36 Vehicle Lic. No. PW1254

The above described waste was picked up and hauled by me to the disposal facility named below and was accepted. I certify that the foregoing is true and correct to the best of my knowledge.

Signature of authorized agent and title [Signature] Date: 11/25/96

**Disposal Facility**

Disposer of Waste (must be filled in by the disposer)

Company Name: High Acres Landfill

Site Location: 425 Perinton Parkway Fairport, NY 14450

Waste subject to this manifest was delivered by the above hauler to this disposal facility and accepted on:

Disposal Date: 11/26/96 Total Tons: \_\_\_\_\_ Other (Specify): \_\_\_\_\_

Signature of authorized agent and title: [Signature]

White & Canary - Landfill

Pink - Hauler

Golden Rod - Generator

HIGH ACRES LANDFILL - WASTE MANAGEMENT  
425 PERINTON PARKWAY

# 104106  
DATE: 11/26/96  
TIME: 08:20

FAIRPORT, NY 14450  
(716) 223-6132

CUSTOMER: *8268* *Ventura*  
~~1277~~ ~~LORETTA LANDFILL~~

WEIGH MASTER: KIM VILLARD

TRUCK: 228

WASTE: COX CONT. SOIL (TAXE

ORIGIN: 189 TONAWANDA (NI)

PROFILE: 357413

2251 MILITARY ROAD ASSOC. INC. CUNTA

GROSS: 68500 LBS

CELL: 3

TARE: 26500 LBS

NET: 42000 LBS

21.04 TONS

TO THE BEST OF MY  
KNOWLEDGE THIS TRUCK  
CONTAINS NO HAZARDOUS  
OR UNACCEPTABLE WASTE

OUT-OF-STATE SOLID WASTE TRANSPORTER DECLARATION: I certify under penalty of perjury that the information provided is true and correct to the best of my knowledge and belief.

00001717 REMARKS:

STON

*Mark*

High Acres Landfill  
425 Perinton Parkway  
Fairport, NY 14450  
(716)223-6132

Manifest NO. 1116

Western Expansion Site Permit No. NYS DEC 8-2644-00048/00021-0  
High Acres Site Permit No. NYSDEC 8-2644-00048/00003

**NON-HAZARDOUS SPECIAL WASTE MANIFEST**

**Generator Section**

Generator of Waste (must be filled in by producer) 2251 MILITARY RD ASSOC, INC.  
EPA. ID. NO. \_\_\_\_\_

Company Address:

(Print or Type) 13550 BLOOMINGDALE RD, ALBANY, NY 14401  
(No.) (Street) (City) (State) (Zip)

Pick-up Address: 2250 MILITARY RD TONAWANDA, NY 14150  
(No.) (Street) (City) (State) (Zip)

Telephone Number: 716/512-5888

Waste Stream Identification: NON HAZARDOUS Pb & Cr CONTAINING SOIL

This manifest represents a non-hazardous waste as per E.P.A. and N.Y.S. D.E.C. regulations

Est Tons: 22 Other (Specify): \_\_\_\_\_

Special Handling instructions, if any: None TARP LOAN

This is to certify that the above named materials are properly classified, described, packages, marked and labeled and are in proper condition for transportation according to applicable state and federal law. The wastes were consigned to the transporter named. I certify that the foregoing is true and correct to the best of my knowledge.

Date: 1/25/96

Signature: [Signature]  
(Name and Title)

**Transportation Section**

Hauler of Waste (must be filled in by hauler) Galaxy Const Co Inc.  
ADDRESS: 13989 Broadway, Albany, NY 14004

Pick-up Date: 11/25/96 Truck No. 28 Vehicle Lic. No. PR 8272

The above described waste was picked up and hauled by me to the disposal facility named below and was accepted. I certify that the foregoing is true and correct to the best of my knowledge.

Signature of authorized agent and title Mark Kauschinger, Owner Date: 11/25/96

**Disposal Facility**

Disposer of Waste (must be filled in by the disposer)

Company Name: High Acres Landfill

Site Location: 425 Perinton Parkway Fairport, NY 14450

Waste subject to this manifest was delivered by the above hauler to this disposal facility and accepted on:

Disposal Date: 1/26/96 Total Tons: \_\_\_\_\_ Other (Specify): \_\_\_\_\_

Signature of authorized agent and title: [Signature]

White & Canary - Landfill

Pink - Hauler

Golden Rod - Generator

***APPENDIX K***

***HAZARDOUS WASTE MANIFESTS***

PAGE 1 08:06:56 17 DEC 1996  
Profile Date.. Receipt..... State..... Manife NET WGT..... DISPOSAL D  
Number Received Number Manifest

CA8057	12/12/96	08146153601	NYB869936401	00001	38420.00	ON SITE
CA8057	12/12/96	08146155001	NYB869935501	00003	41180.00	ON SITE
CA8057	12/13/96	08146156001	NYB869937301	00005	43980.00	ON SITE
CA8057	12/13/96	08146156301	NYB869938201	00004	43560.00	ON SITE
CA8057	12/13/96	08146159801	NYB869939101	00006	50240.00	ON SITE
CA8057	12/16/96	08146169601	NYB869940901	00002	42440.00	ON SITE

\*\*\*

259820.00

\*\*\*

259820.00

6 Records Processed

DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
DIVISION OF SOLID & HAZARDOUS MATERIALS

## HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Form Approved, OMB No. 2050-0039 Expires 9-30-96

Please print or type. Do not Staple.

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA No.		Manifest Document No.		2. Page 1 of 1		Information in the shaded areas is not required by Federal Law.	
3. Generator's Name and Mailing Address 2001 MILITARY ROAD, ALBANY, NY 12212 1000 MILITARY RD ALBANY, NY 12212						A. State Manifest Document No. NY B 8699364			
4. Generator's Phone ( ) ( ) ( ) ( ) ( ) ( )						B. Generator's ID 3411			
5. Transporter 1 (Company Name) CWM Chemical Services INC.			6. US EPA ID Number 104 D0000688671			C. State Transporter's ID NY67279K		D. Transporter's Phone ( ) ( ) ( ) ( ) ( ) ( )	
7. Transporter 2 (Company Name)			8. US EPA ID Number			E. State Transporter's ID		F. Transporter's Phone ( ) ( ) ( ) ( ) ( ) ( )	
9. Designated Facility Name and Site Address CWM CHEMICAL SERVICES, INC. 1000 MILITARY RD. ALBANY, NY 12212						10. US EPA ID Number		G. State Facility's ID	
						H. Facility's Phone ( ) ( ) ( ) ( ) ( ) ( )			
11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)						12. Containers No. Type		13. Total Quantity	
a. HAZARDOUS WASTE, UNCLAS. SOLID, 9, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100						507		EPA STATE	
b.								EPA STATE	
c.								EPA STATE	
d.								EPA STATE	
J. Additional Descriptions for Materials listed Above						K. Handling Codes for Wastes Listed Above			
a						a		c	
b						b		d	
15. Special Handling Instructions and Additional Information EMERGENCY RESPONSE NUMBER: 340971-2									
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations. If I am a large quantity generator, I certify that I have program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR if I am a small generator, I have made a good faith effort to minimize my waste and select the best waste management method that is available to me and that I can afford.									
Printed/Typed Name KEVIN MCMAHON				Signature 		Mo. Day Year 11 12 1996			
17. Transporter 1 (Acknowledgement of Receipt of Materials)									
Printed/Typed Name Kevin McMahon				Signature 		Mo. Day Year 11 12 1996			
18. Transporter 2 (Acknowledgement or Receipt of Materials)									
Printed/Typed Name				Signature		Mo. Day Year			
19. Discrepancy Indication Space									
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.									
Printed/Typed Name				Signature		Mo. Day Year			

NY B 8699364

DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
DIVISION OF SOLID & HAZARDOUS MATERIALS

## HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Form Approved. OMB No. 2050-0039. Expires 9-30-96

Please print or type. Do not Staple.

UNITED STATES DEPARTMENT OF TRANSPORTATION HAZARDOUS WASTE MANIFEST		1. Generator's US EPA No.		Manifest Document No.		2. Page 1 of 1		Information in the shaded areas is not required by Federal Law.	
3. Generator's Name and Mailing Address FRANK VALUATION SERVICE, INC. 1500 KALEHEA BLVD. HONOLULU HI 96813-6000						A. State Manifest Document No. NY B 8699409			
4. Generator's Phone ( ) 714 384 1211						B. Generator's ID 55888			
5. Transporter 1 (Company Name) FRANK VALUATION SERVICE, INC.						C. State Transporter's ID 80360V			
7. Transporter 2 (Company Name)						D. Transporter's Phone ( ) 714 384 1211			
8. US EPA ID Number						E. State Transporter's ID			
9. Designated Facility Name and Site Address FRANK VALUATION SERVICE, INC. 1500 KALEHEA BLVD. HONOLULU HI 96813-6000						F. Transporter's Phone ( )			
10. US EPA ID Number						G. State Facility's ID			
11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)						H. Facility's Phone (714) 384-0231			
12. Containers						13. Total Quantity		14. Unit Wt/Vol	
a. HAZARDOUS WASTE, CORROSIVE, LIQ., N.O.S., 3, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 72									

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

**COPY 8-Generator-retained by generator**

NY B 8639403

DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
DIVISION OF SOLID & HAZARDOUS MATERIALS

## HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Form Approved, OMB No. 2050-0039, Expires 9-30-96

Please print or type. Do not Staple.

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA No.		Manifest Document No.		2. Page 1 of		Information in the shaded areas is not required by Federal Law.	
3. Generator's Name and Mailing Address HAWAIIAN AIR FORCE HAWAIIAN AIR FORCE HAWAIIAN AIR FORCE						A. State Manifest Document No. NY B 8699355			
4. Generator's Phone ( )						B. Generator's ID KATE			
5. Transporter 1 (Company Name)			6. US EPA ID Number			C. State Transporter's ID			
7. Transporter 2 (Company Name)			8. US EPA ID Number			D. Transporter's Phone ( )			
9. Designated Facility Name and Site Address HAWAIIAN AIR FORCE HAWAIIAN AIR FORCE HAWAIIAN AIR FORCE						E. State Transporter's ID			
10. US EPA ID Number						F. Transporter's Phone ( )			
11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)						12. Containers		13. Total Quantity	
a. HAZARDOUS WASTE, LIQ, N.O.D., HAZARDOUS, LIQ, N.O.D.						No. Type		14. Unit Wt/Vol	
b.								I. Waste No.	
c.								EPA	
d.								STATE	
J. Additional Descriptions for Materials listed Above						K. Handling Codes for Wastes Listed Above			
a						a			
b						b			
15. Special Handling Instructions and Additional Information									
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.									
If I am a large quantity generator, I certify that I have program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR if I am a small generator, I have made a good faith effort to minimize my waste and select the best waste management method that is available to me and that I can afford.									
Printed/Typed Name			Signature			Mo. Day Year			
17. Transporter 1 (Acknowledgement of Receipt of Materials)			Signature			Mo. Day Year			
18. Transporter 2 (Acknowledgement or Receipt of Materials)			Signature			Mo. Day Year			
19. Discrepancy Indication Space									
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.									
Printed/Typed Name			Signature			Mo. Day Year			

DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
DIVISION OF SOLID & HAZARDOUS MATERIALS**HAZARDOUS WASTE MANIFEST**

P.O. Box 12820, Albany, New York 12212

Form Approved, OMB No. 2050-0039, Expires 9-30-96

Please print or type. Do not Staple.

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA No.		Manifest Document No.		2. Page 1 of		Information in the shaded areas is not required by Federal Law.					
3. Generator's Name and Mailing Address 101 MILLER ROAD MILLER, NY 14101						A. State Manifest Document No. <b>NY B 8699382</b>							
4. Generator's Phone ( ) 716 341 2011						B. Generator's ID STATE							
5. Transporter 1 (Company Name) JAYCO						C. State Transporter's ID							
6. US EPA ID Number 162 014 141 414 141 414						D. Transporter's Phone ( ) 716 341 2011							
7. Transporter 2 (Company Name) JAYCO						E. State Transporter's ID							
8. US EPA ID Number						F. Transporter's Phone ( )							
9. Designated Facility Name and Site Address JAYCO, INC. 1500 BALDWIN BL. MILLER, NY 14101						G. State Facility's ID							
10. US EPA ID Number						H. Facility's Phone (716) 754-8231							
11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)						12. Containers		13. Total Quantity		14. Unit Wt/Vol		I. Waste No.	
a. HAZARDOUS WASTE, CORROSIVE, LIQ., N.O.S., H2902, 111, 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.8, 1.9, 2.0, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9, 3.0, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 4.0, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8, 4.9, 5.0, 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8, 5.9, 6.0, 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.7, 6.8, 6.9, 7.0, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7, 7.8, 7.9, 8.0, 8.1, 8.2, 8.3, 8.4, 8.5, 8.6, 8.7, 8.8, 8.9, 9.0, 9.1, 9.2, 9.3, 9.4, 9.5, 9.6, 9.7, 9.8, 9.9, 10.0, 10.1, 10.2, 10.3, 10.4, 10.5, 10.6, 10.7, 10.8, 10.9, 11.0, 11.1, 11.2, 11.3, 11.4, 11.5, 11.6, 11.7, 11.8, 11.9, 12.0, 12.1, 12.2, 12.3, 12.4, 12.5, 12.6, 12.7, 12.8, 12.9, 13.0, 13.1, 13.2, 13.3, 13.4, 13.5, 13.6, 13.7, 13.8, 13.9, 14.0, 14.1, 14.2, 14.3, 14.4, 14.5, 14.6, 14.7, 14.8, 14.9, 15.0, 15.1, 15.2, 15.3, 15.4, 15.5, 15.6, 15.7, 15.8, 15.9, 16.0, 16.1, 16.2, 16.3, 16.4, 16.5, 16.6, 16.7, 16.8, 16.9, 17.0, 17.1, 17.2, 17.3, 17.4, 17.5, 17.6, 17.7, 17.8, 17.9, 18.0, 18.1, 18.2, 18.3, 18.4, 18.5, 18.6, 18.7, 18.8, 18.9, 19.0, 19.1, 19.2, 19.3, 19.4, 19.5, 19.6, 19.7, 19.8, 19.9, 20.0, 20.1, 20.2, 20.3, 20.4, 20.5, 20.6, 20.7, 20.8, 20.9, 21.0, 21.1, 21.2, 21.3, 21.4, 21.5, 21.6, 21.7, 21.8, 21.9, 22.0, 22.1, 22.2, 22.3, 22.4, 22.5, 22.6, 22.7, 22.8, 22.9, 23.0, 23.1, 23.2, 23.3, 23.4, 23.5, 23.6, 23.7, 23.8, 23.9, 24.0, 24.1, 24.2, 24.3, 24.4, 24.5, 24.6, 24.7, 24.8, 24.9, 25.0, 25.1, 25.2, 25.3, 25.4, 25.5, 25.6, 25.7, 25.8, 25.9, 26.0, 26.1, 26.2, 26.3, 26.4, 26.5, 26.6, 26.7, 26.8, 26.9, 27.0, 27.1, 27.2, 27.3, 27.4, 27.5, 27.6, 27.7, 27.8, 27.9, 28.0, 28.1, 28.2, 28.3, 28.4, 28.5, 28.6, 28.7, 28.8, 28.9, 29.0, 29.1, 29.2, 29.3, 29.4, 29.5, 29.6, 29.7, 29.8, 29.9, 30.0, 30.1, 30.2, 30.3, 30.4, 30.5, 30.6, 30.7, 30.8, 30.9, 31.0, 31.1, 31.2, 31.3, 31.4, 31.5, 31.6, 31.7, 31.8, 31.9, 32.0, 32.1, 32.2, 32.3, 32.4, 32.5, 32.6, 32.7, 32.8, 32.9, 33.0, 33.1, 33.2, 33.3, 33.4, 33.5, 33.6, 33.7, 33.8, 33.9, 34.0, 34.1, 34.2, 34.3, 34.4, 34.5, 34.6, 34.7, 34.8, 34.9, 35.0, 35.1, 35.2, 35.3, 35.4, 35.5, 35.6, 35.7, 35.8, 35.9, 36.0, 36.1, 36.2, 36.3, 36.4, 36.5, 36.6, 36.7, 36.8, 36.9, 37.0, 37.1, 37.2, 37.3, 37.4, 37.5, 37.6, 37.7, 37.8, 37.9, 38.0, 38.1, 38.2, 38.3, 38.4, 38.5, 38.6, 38.7, 38.8, 38.9, 39.0, 39.1, 39.2, 39.3, 39.4, 39.5, 39.6, 39.7, 39.8, 39.9, 40.0, 40.1, 40.2, 40.3, 40.4, 40.5, 40.6, 40.7, 40.8, 40.9, 41.0, 41.1, 41.2, 41.3, 41.4, 41.5, 41.6, 41.7, 41.8, 41.9, 42.0, 42.1, 42.2, 42.3, 42.4, 42.5, 42.6, 42.7, 42.8, 42.9, 43.0, 43.1, 43.2, 43.3, 43.4, 43.5, 43.6, 43.7, 43.8, 43.9, 44.0, 44.1, 44.2, 44.3, 44.4, 44.5, 44.6, 44.7, 44.8, 44.9, 45.0, 45.1, 45.2, 45.3, 45.4, 45.5, 45.6, 45.7, 45.8, 45.9, 46.0, 46.1, 46.2, 46.3, 46.4, 46.5, 46.6, 46.7, 46.8, 46.9, 47.0, 47.1, 47.2, 47.3, 47.4, 47.5, 47.6, 47.7, 47.8, 47.9, 48.0, 48.1, 48.2, 48.3, 48.4, 48.5, 48.6, 48.7, 48.8, 48.9, 49.0, 49.1, 49.2, 49.3, 49.4, 49.5, 49.6, 49.7, 49.8, 49.9, 50.0, 50.1, 50.2, 50.3, 50.4, 50.5, 50.6, 50.7, 50.8, 50.9, 51.0, 51.1, 51.2, 51.3, 51.4, 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DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
DIVISION OF SOLID & HAZARDOUS MATERIALS

## HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Form Approved, OMB No. 2050-0039 Expires 9-30-96

Please print or type. Do not Staple.

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA No.		Manifest Document No.		2. Page 1 of		Information in the shaded areas is not required by Federal Law.	
3. Generator's Name and Mailing Address NY MILITARY STAFF ARMY NY MILITARY STAFF SUNNYSIDE NY 10101						A. State Manifest Document No. NY B 8599373			
4. Generator's Phone ( ) 718 754 7311						B. Generator's ID 7311			
5. Transporter 1 (Company Name) UNION CARBIDE				6. US EPA ID Number 141700147		C. State Transporter's ID 27256 NY			
7. Transporter 2 (Company Name)				8. US EPA ID Number		D. Transporter's Phone ( ) 754-2311			
9. Designated Facility Name and Site Address NY CHEMICAL SERVICES, INC. 1500 HALL ST. MIDLAND CITY NY 14643						E. State Transporter's ID			
10. US EPA ID Number						F. Transporter's Phone ( )			
11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)						12. Containers		13. Total Quantity	
a. 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