High Acres Landfill & Recycling Center 425 Perinton Parkway Fairport, New York 14450 716/223-6132



May 12, 1995

9501488

RECEIVED

Rob Crossen NYSDEC - Spills Management 270 Michigan Avenue Buffalo, New York, 14203-2999

512

MAY 1 6 1995 NYSDEC-REG. 9

PMC

Re: Remedial Investigations WMNY - Ganson Street Property

54ND\$515 ,

Dear Mr. Crossen:

Enclosed with this letter are copies of the Phase II and Phase III (Remedial Soil Investigation) reports that have been generated as part of an environmental assessment being perform at the Waste Management of New York, Inc. hauling division property on Ganson Street in Buffalo, N.Y.. Also included with the two reports is a copy of the work plan for the Phase III investigation. As I mentioned during our recent telephone conversation, the environmental assessment was performed as part of a purchase and sale agreement, where WMNY was selling the Ganson Street property to another party.

-As the result of the various phases of the environmental assessment, it has been noted that there are localized areas of impacted soil as the result of fueling spills and leakage from parked vehicles. The impacted areas are nothave ed in the attached Phase III report. When you review the Phase II report you will note that five shallow overburden monitoring wells been installed and that groundwater samples have been obtained and analyzed with no impacts observed. In addition several soil and sediment samples were obtained and the results of these samples prompted the Phase III investigation.

The Phase III investigation contains recommendations for soil removal and additional testing to document that the impacted soils have been removed. We would like to be able to initiate the soil removal and additional testing as soon as possible, since the hauling division will be required to vacate the property to the new owner by mid June 1995.

Your timely review of these reports is very much appreciated. Please feel free to contact me, should you have any questions or comments regarding this matter. Thank-you.

Sincerely,

John A. Minichiello

Environmental Engineering Manager

Environmental

A Division of Buffalo Environmental Consultants, Inc.
7815 Buffalo Avenue • Niagara Falls, New York 14304
Office: (716) 283-7645 Fax: (716) 283-2858

REMEDIAL ACTION PLAN SOIL INVESTIGATION REPORT

DOWNING CONTAINER 191 GANSON STREET, BUFFALO, NEW YORK

PROJECT #H1025

PREPARED FOR:

WASTE MANAGEMENT OF NEW YORK
425 PERINGTON PARKWAY
FAIRPORT, NEW YORK
14450

PREPARED BY

AFI ENVIRONMENTAL 7815 BUFFALO AVENUE NIAGARA FALLS, NEW YORK 14304

May 8, 1995

AFI

ENVIRONMENTAL

A Division of Buffalo Environmental Consultants, Inc.

7815 Buffalo Avenue • Niagara Falls, New York 14304 Office: (716) 283-7645 Fax: (716) 283-2858

May 8, 1995

Mr. John A. Minichiello 425 Perinton Parkway Fairport, NY 14450

RE: Remedial Soil Investigation Report

Downing Container Services - 191 Ganson St., Buffalo NY AFI Project # h1025.1

Dear Mr. Minichiello:

Please find enclosed three copies of the Ganson Street Remedial Action Soil Investigation Report for the Downing Container Services 191 Ganson Street, Buffalo, New York location. One Copy is within scope of the original budget, and two copies provided for the New York State DEC are out-of-scope of the original budget.

If you need a change order for the two extra reports please let us know. Should you have any questions, please don't hesitate to call me at (716) 283-7645.

Sincerely,

AFI ENVIRONMENTAL

William L. Heitzenrater

President

Mille The

Enclosure

h1025/letters/Minichiello

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FIGURE 1: SITE LOCATION MAP

FIGURE 2: SITE PLAN

FIGURE 3: SAMPLE LOCATIONS - PHASE II INVESTIGATION AFI

ENVIRONMENTAL

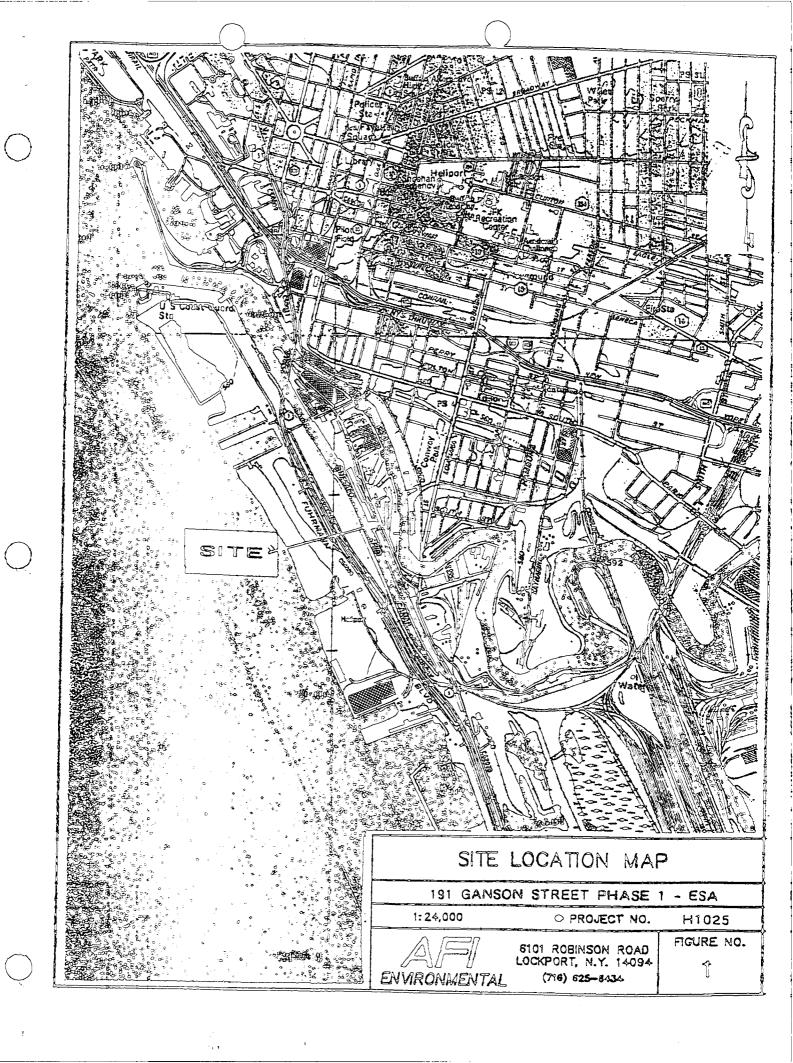
FIGURE 4: STUDY AREAS - REMEDIAL INVESTIGATION

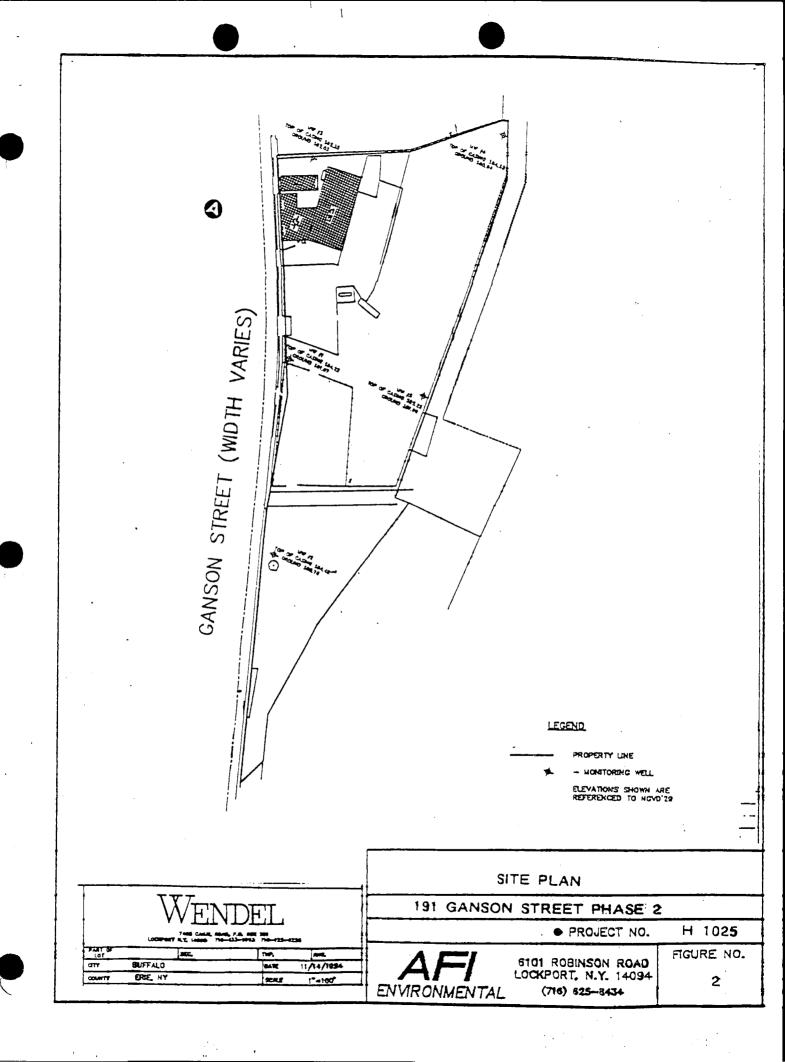
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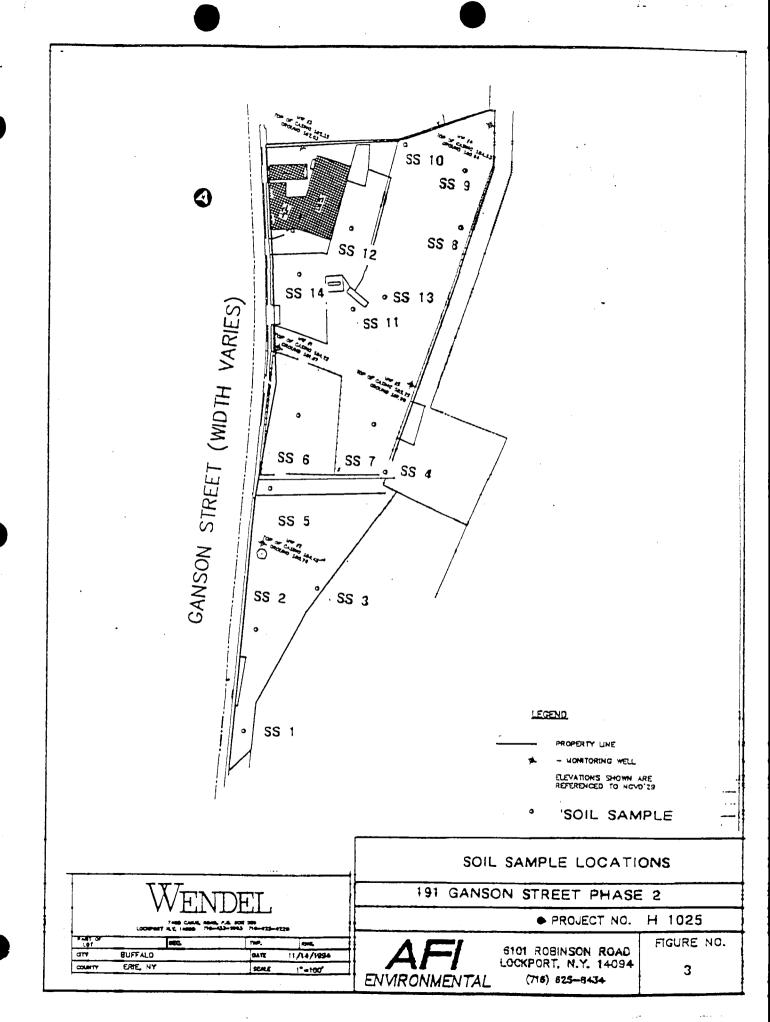
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1.0 INTRODUCTION

1.1 BACKGROUND

this Remedial Soil prepared Environmental has Investigation Report (RSIP) on behalf of Waste Management of New York, Inc. This RSIP is intended to address petroleum impacted soil and sediment encountered at the Downing Container Facility located at 191 Ganson Street, Buffalo, New York (Figure 1). facility is the storage yard and repair shop for Waste Management of New York's Downing Container Division's garbage pickup, roll-This RSIP was prepared to address off and rental operation. potential areas of environmental concern (AECs) identified in a Phase I Investigation conducted on October 1994 and a modified Phase II Investigation completed on December 1994. The ESA and subsequent Phase II Investigation resulted in the detection of low level organic, inorganic, and PCB constituents in soil and sediment samples collected at the Ganson Street site. The areas of the site in which constituents were indicated include the following (refer to Figure 3).

The chemical analysis of sediment samples collected from within the storm sewer staging areas and gas islands indicated the presence of semi-volatile organic compounds (SVOC), PCBs metals at concentrations which exceed NYSDEC guidance levels. Potential sources which may have individually or collectively resulted in the impact to sediment and soil samples include petroleum based fluids utilized for facility operations; runoff of liquids from the garbage trucks or roll off boxes and fluid leakage from parked trucks and automobiles. Potential pathways of releases from these sources to the storm water control system include; runoff received by the storm sewer from the exterior roll off and truck staging area or fueling islands; and runoff from the parking area captured by the storm sewer.

1.2 PURPOSE AND OBJECTIVES

Waste Management of New York, Inc. retained AFI Environmental to further investigate the areal extent and composition of impact constituents in an attempt, to identify the cost to mitigate existing soil/sediment contamination at their 191 Ganson Street Waste management facility.

This RSIP has been developed for the private use of Waste Management, but in accordance with NYSDEC guidance memorandum.

This report presents the results of previous investigations conducted at the project site; outlines the scope of the Remedial Investigative program, identified the equipment and procedures utilized, and discusses results of the current investigation. This information is presented to identify the extent of soil and sediment contamination and support AFI's recommendation for

remediation/disposal options.

1.3 SCOPE OF WORK

The Remedial Soil Investigation conducted at the Ganson Street facility was consistent with the site specific sampling plan approved by Waste Management. The purpose of the investigation was to characterize the aerial extent of chemical constituents identified in the soils, through establishment of a grid sampling system in each of the three (3) areas identified as: areas of potential concern (AECs); during the previously completed Environmental Phase I and Modified Phase II Investigations. The scope of work consisted of the following remedial objectives:

- o Identification Of Three (3) General Investigative Areas.
- <u>o</u> Establishment Of A Sampling Grid At Each Area.
- Selection And Implementation Of Soil Sample Collection Techniques.
- Sample Composite Homogenization Techniques.
- O Development Of A Site Specific And Health And Safety Plan.
- <u>Data Presentation And Fecommendation For Delineation Of</u>
 <u>The Area Of Eexcavation And Disposal.</u>

2.0 SITE DESCRIPTION

Figure 1 graphically depicts the property location on Ganson street south of the intersection with Michigan Avenue in the City of Buffalo, Erie County, New York, which is included on the Buffalo SE NY - 7.5 minute quadrangle of the United States Geological Survey (USGS). The site is approximately 4.78 acre in size and contains one office building, one repair/maintenance garage, one detached office trailer, and gravel driveways and parking areas. The site is generally flat with a very slight slope to the east towards the Buffalo River. As shown on Figure 1, the elevation of the property is approximately 580 feet above mean sea level. Site drainage is accomplished by means of uncontrolled overland flow from the stone driveway and parking area to the east, and a series of four catch basins located in the north central portion of the These catch basins discharge to the Buffalo Sewer Authority combined stormwater/sanitary sewer system.

The site is currently owned by Downing Container Service, Inc. Figure 2 illustrates the current site plan. The property is bounded by Ganson Street to the west, Integrated Waste Systems, Inc. to the north, Roy Track, Inc. to the east, and General Portland, Inc. to the south and east. All the surrounding

properties are industrial in nature.

Current zoning maps were not available for the site, however, based on the nature of the businesses in the area, it is presumed that the site and surrounding properties are zoned heavy industrial. The site is serviced by municipal water and a combined sanitary/storm sewer system. Other utilities included natural gas from National Fuel and Electric from Niagara Mohawk. The gas is routed to the main building through underground pipes from Ganson Street. Electric is delivered through overhead lines from Ganson Street.

According to the Soil Survey of Erie County, New York, the project site is characterized as having urban soils (Ud). This indicates that 80 percent or more of the soil surface is covered by asphalt, concrete, buildings, or other impervious structure. These areas are mostly nearly level to gently sloping.

Groundwater was encountered at the site in each of the monitoring wells. Static water levels measured in the monitoring wells ranged from 2.88 to 8.02 feet below ground surface. Regional groundwater flow direction, inferred from topographic maps, is generally towards the northwest and northeast to the discharge area represented by the Buffalo Ship Canal and the Buffalo River respectively. Local variations in groundwater flow, however, may occur in the site vicinity.

The Federal Emergency Management Association (FEMA) Flood Insurance rate Map (Panel No. 360230 0020) was consulted to determine the flooding potential of this site. It was determined that the site is not located within the one-hundred year of five hundred year flood plains of any waterway, with the exception of the extreme southern tip of the property (<10 percent), which slightly impinges on the five hundred year floodplain of the Buffalo River.

3.0 PREVIOUS STUDIES

3.1 PHASE I ENVIRONMENTAL ASSESSMENT

AFI Environmental performed a Phase I Environmental Assessment (ESA) of the project site in September, 1993. This ESA was conducted in accordance with the procedures outlined in American Society for Testing and Materials (ASTM) Practice E1527-93. As a result, the following items were disclosed:

o There is one RCRIS-TS (Treatment, Storage and Disposal) facility located within 1.0 mile radius of the site. This facility has numerous violations associated with ignitable wastes, heavy metals, and chlorinated solvents.

- o The waste hauling operation occupying the subject property was identified as a RCRIS-LG large quantity generator of the following waste types:
 - a solid waste that exhibits the characteristic of ignitability, but is not listed as a hazardous waste (D001).
- o Additionally, one other RCRIS-LG large quantity generator is located within 0.25 mile radius of the site. This site generates the following waste types:
 - a solid waste that exhibits the characteristic of ignitability, but is not listed as a hazardous waste (D001).
 - a solid waste that exhibits the characteristic of corrosivity, but is not listed as a hazardous waste (D002).
- One RCRIS-SG small quantity generator is located within 0.25 mile radius of the site. This site generates the following waste types:
 - spent non-halogenated solvents (F003, F005); and
 - a solid waste that exhibits the characteristic of ignitability, but is not listed as a hazardous waste (D001).
- o The site itself is a listed petroleum bulk storage facility. Additionally, two (2) petroleum bulk storage tank sites are located within a 0.25 mile radius of the subject property:
- o There are three (3) LST (Leaking Storage Tanks) sites located with 0.5 radius of the subject property.

3.2 PHASE I CONCLUSIONS

In accordance with the conclusions drawn in the Phase I ESA Report, the property owner (Waste Management of New York Inc.), in consultation with AFI Environmental, elected to implement a Phase II investigation to examine the subsurface and groundwater of the subject property. The purpose of the investigation was to determine the presence or absence of environmental impacts on the site.

3.3 MODIFIED PHASE II INVESTIGATION

The Phase II subsurface investigation was performed during the period of October 23 to November 2, 1994 with supplemental soil

sampling conducted on December 6, 1994. This investigation was conducted in accordance with the investigation plan developed by AFI Environmental. The final report was issued in December 1994.

3.3.1 MODIFIED PHASE II SOIL BORINGS

Ten (10) soil borings were installed manually using a three (3) inch bucket auger. Soil samples obtained from the bucket auger, from a depth of 0.5' to 1.0', were immediately placed in properly labeled sample containers sealed with tin foil and a screw on cap for screening as described in section 4.3.2. Each soil boring was abandoned following the completion of auguring/sampling activities by backfilling with auger cuttings from the respective borehole.

3.3.2 MODIFIED PHASE II SEDIMENT SAMPLES

Three (3) sediment samples were collected from each of the three onsite catch basins. The samples were collected using a shovel to remove some material from the bottom of the catch basin. Each sediment sample obtained from the catch basins were immediately placed in properly labeled sample containers sealed with tin foil and a screw on cap for screening. Excess material collected from the catch basins was returned to the bottom of the catch basins.

3.3.3 MODIFIED PHASE II SAMPLE COLLECTION/SCREENING AND ANALYSIS TECHNIQUES

sample collection/screening and analysis The implemented at the project site involved the collection of one (1) groundwater sample from each monitoring well; as well as the field screening of soil and sediment samples to enable the selection of two (2) soil samples from the ten (10) soil borings and one (1) sediment sample for chemical analysis. All sample collection and screening measures were performed in accordance with accepted protocols by an experienced AFI Environmental Geologist. samples were placed in appropriately labeled sample containers for transport under proper chain of custody record to Lozier Laboratories for chemical analysis.

3.3.4 MODIFIED PHASE II SOIL INVESTIGATION

Soil samples obtained from split-spoons were screened for total organic vapors (TOVs) utilizing an HNU PID after equilibrating at room temperature for one (1) hour. After removing the screw on cap, the foil seal of the sample container was pierced with the probe of the PID, and a measurement was recorded. PID measurements were zero for all split spoon samples collected during monitoring well installation and ranged from Oppm to 0.7 ppm for the ten (10) soil and three (3) sediment samples.

monitoring well installation and ranged from Oppm to 0.7 ppm for the ten (10) soil and three (3) sediment samples.

Two (2) samples of the ten (10) soil borings and one (1) sediment sample from the three (3) drainage inlets were selected for chemical analysis based upon the results of field screening. The three (3) soil/sediment samples with the highest measured TOV concentration were placed in a laboratory precleaned and properly labeled sample containers and placed on ice in a cooler for transport under proper chain of custody records to Lozier Laboratories. All soil samples underwent testing in accordance with EPA SW-3846 Method 8240 for VOCs, TCL SEMI-VOCs by method 8270, TCL Pesticides/PCBs by Method 8080, RCRA Metals by Method 6010/7000s, and Cyanide by Method 9012.

3.3.5 MODIFIED PHASE II SOIL RESULTS

Analytical results from the two (2) soil samples and one (1) sediment sample collected from the project site have indicated the presence of a number of volatile organic compounds (VOCs) and semi volatile organic compounds (SEMIVOCs) commonly associated with petroleum constituents, possible from fuel oil. Further, PCB-1260 was detected at all locations sampled and analyzed, with the highest concentration at location #9 (see figure #3).

Based upon the location from which soil samples containing significant concentrations of VOCs and SEMIVOCs were collected; one can assume that impacts to the soil near the former UST location (location #10 and the fueling/container staging area (location #11) has occurred as the results of minor spillage or leaks. This assumption is consistent with the field screening data.

3.3.6 MODIFIED PHASE II GROUNDWATER RESULTS

The chemical analysis of groundwater samples collected from the overburden monitoring wells installed on the site, did not indicate the presence of petroleum constituents in exceedance of NYSDEC guidance values. Based on a comparison with applicable guidance valued established by the NYSDEC STARS Memo #1 and NYSDEC TAGM dated January 24, 1994, it appears that none of the constituents encountered in the soil/sediments have entered the groundwater at any of the areas monitored. Further, it appears that constituents originating from areas off-site are not migrating on-site via the groundwater flow system and that the onsite constituents are not migrating offsite via the groundwater system.

3.4 MODIFIED PHASE II CONCLUSIONS/RECOMMENDATIONS

AFI Environmental collected a total of three (3) soil/sediment and five (5) groundwater samples from the project site for analysis pursuant to NYSDEC Petroleum-Contaminated Soil Guidance Policy. The resulting analytical data was assessed to determine if

petroleum impacted soil was present and to characterize groundwater quality. In general, impacted soil was encountered in varying degrees in the areas sampled. Due to the analytical testing method utilized to SCAN soils no determination was made as to whether contamination encountered exceeded NYSDEC guidance values. It was suggested that some of the particular constituents levels could exceed the NYSDEC STARS limits, but this is unknown because TCLP analysis was not performed. The area of the former UST (sample location #10) demonstrated higher levels for VOCs and SEMIVOCS, than the truck fueling/waste container staging area (sample However, the sludge/sediment sample (sample location #11). location #14) collected from the surface water runoff collection inlet was highest of all, especially for Acetone and Toluene (39,000 and 62,400 ppb respectfully). PCB-1260. A recommendation for TCLP analysis of the suspect area was made.

4.0 REMEDIAL INVESTIGATION

The Remedial Investigation conducted by AFI Environmental involved the collection and analysis of a series of (5) soil subsamples from three (3) distinct areas of concern; the area near the previously excavated UST (Area #1), the northeast roll off staging area (Area #2), and the area near the gas islands and storm sewer inlet (Area #3). These areas were identified during Modified Phase II Investigation as areas of environmental concern (AEC) and they are identified in figure #4. Each area of concern was divided into two (2) study areas and each study area was subjected to five (5) randomly selected subsamples. The subsampling and analysis program was developed to:

- o Evaluate chemical constituent concentrations with respect to regulatory levels using TCLP Extraction Protocol; and
- o Chemically profile potentially impacted soils and determine rough quantities requiring disposal at appropriately permitted facilities.

4.1 SAMPLING TECHNIQUES

Five (5) randomly selected soil subsamples were collected by an AFI Environmental field representative from each study area. Subsamples were collected at each location by scooping soil from the tailings of a hand auger at a depth of 6" to 18" using a precleaned stainless steel sampling spoon. The soil from each of the five (5) subsamples was placed in a precleaned stainless steel five (5) gallon bucket, and homogenized. A representative subsample was collected from the homogenized soil, in each study area, and placed in precleaned, sample bottle, labeled with the sample number, date and time of collection, sampler's initials, and the analysis requested and transported to Lozier Labs of Rochester under proper chain of custody.

4.1.1 Homogenized Composite Samples

Homogenized composite samples were assembled to characterize background soil quality and to chemically profile soils contained within the area showing previous evidence of contamination. Five (5) discrete subsamples were homogenized into one (1) sample for each study area.

4.1.2 STATISTICAL SAMPLING GRID

Each area of concern was divided into two (2) components or study areas. One component representing the "near-field" area, and a second component representing the "far-field" area. The "nearfield" component consisted of a 25' x 25' area of soil "near" the Modified Phase II Investigation sample locations. component or "far-field" area consisted of a larger 125' x 125' square area concentric to the "near-field" study area. Both study areas were divided using a standard grid pattern into 36 intersections. The 36 intersection of the "near-field" were created by 5' spacing while the 36 intersections of the "farfield" area were created by 25'spacing. Five (5) locations were randomly selected for soil subsampling inside each study area and one (1) homogenized composite sample was assembled and sent for analysis from each area. This resulted in a total of five (5) samples being sent to Lozier Labs for analysis. (No "near-field" subsample was collected from the storm sewer and gas island area due to the concrete pad and pavement encountered).

4.2 ANALYTICAL TESTING

All soil samples were immediately transported under proper chain of custody records to Lozier Laboratories, Rochester, New All samples underwent testing for the Characteristic Leaching Procedure (TCLP) STARS Volatiles 1311(8021), and semi-volatile organic compounds (SOCs) accordance with EPA SW-846 Method 1-311/8220. These analytical methods were selected based upon discussion with Waste Management of New York personnel and due to the types of contaminants identified during earlier investigations at the project site.

5.0 RESULTS

Appendix A includes the results for all analysis conducted on the homogenized composite samples for the three (3) Study Areas. Only one (1) sample (PT #3) from the "near-field" study area #2 (see figure #4) exceeded the New york state Dec Guidance values as presented by the NYSDEC S.T.A.R.S. Program Analtical Test. This exceedance was noted for the chemical Parameter of Napthalene at location #2 where the presented value equalled 18ppb (adjusting for the 5 to 1 dilution equates to 90ppb). All other tested parameter were listed as non-detects or below the detection levels as presented by Lozier Labs.

6.0 CONCLUSIONS

According to SPOTS No. 14 (May 15, 1991) "...if the field analysis does not indicate any contamination at the site, and laboratory analysis of a minimum amount of sampling of soil/water taken from around the tank and piping confirms no contamination at the sample locations, it is reasonable to assume that no contamination exists at the site.

(However) If this minimum sampling does show contamination, then the Department (DEC) must be notified of this contamination and additional laboratory analysis must be conducted."

Since, AFI has already conducted additional analysis and the results from all but one area showed no contamination (utilizing a five (5) to one (1) dilution); it is reasonable to assume that chemical constituents in the soils are limited to the original sampling areas, and the one study area where chemical constituents exceeded guidance values.

AFI RECOMMENDATION

Generally a Phase III Site Assessment; or Exposure Assessment is conducted, at this point, to predict possible migration pathways or routes; and to identify areas where chemical constituents released into the soil may impact public health or the environment.

Phase III procedures generally include mapping the distribution of contamination, and predicting the pathways for exposure. The factors considered during a Phase III study include the volume released (which we do not know, but we assume to be minimal); the absorption capacity of the soil (which is medium to high); the relative ability of the soils to allow water movement (which is low); rate and direction of groundwater movement (known to be slight); and all processes that dilute concentration and limit the area of the contaminated zones (see Phase I and Modified Phase II reports).

However, the lack of detectable levels of the chemical constituents in the onsite monitoring wells; taken in consideration with the lack of detection of chemical constituents in all but one of the suspect areas during the most recent extended sampling; would allow one to conclude that TCLP contamination was limited to the one area demonstrating exceedance of the guidance values and the limited areas near each of the original modified Phase II sampling locations.

As such, AFI recommends that all areas where original contamination was documented during the modified Phase II Investigation be excavated and removed in a $10^{\circ} \times 10^{\circ}$ area to a depth of 18° . The excavation should be closed with #2 crusher run and/or fill and compacted for immediate use.

Study Area #3 should be excavated to 18", or refusal, throughout entire 25' x 25' boundary and replaced with clean and packed #2 crusher run stone. In addition, any stained areas near the truck parking, or roll off staging area, and fueling islands should be removed and filled with clean #2 crusher run stone and packed. All concrete should be steamed washed and the storm sewer inlets should be thoroughly cleaned with a VAC-Truck and steam washed after sediment removal.

All excavated soils should be staged in plastic lined roll off containers and a representative soil sample collected for waste profiling procedures.

AFI further recommends that additional composite samples be taken from the side walls and bottom of each excavated areas as well as from 1' to 2' beneath the excavation and run for TCLP. This data should be evaluated to assure that all chemical constituents have been removed.

A total of four (4) additional samples would be collected one (1) from each study area and one (1) from the staged soils to document the clean up.

AFI recommends removal of all visually stained soils in each of the study areas to a depth of 18".

All removed and/or contaminated soils should be properly disposed of at a legally permitted facility.

AFI also recommends that a copy of the final closure report be submitted to the DEC as a token of good faith and request there comments once the final samples have been tested and the site is documented to be clean so that they have record of the cleanup.



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LOZIER LABORATORIES, INC.

909 CULVER ROAD ROCHESTER, NEW YORK 14609 TEL. (716) 654-6350 FAX (716) 654-6354

NEW YORK STATE APPROVED

ENVIRONMENTAL LABORATORY

CLIENT : AFI ENVIRONMENTAL

6101 ROBINSON RD LOCKPORT, NY 14094

REPORT DATE : 03/29/95

DATE REC'D. : 03/08/95 LABORATORY NO. : 95031539

ATTN : BILL HEITZENRATER

RE : GANSON ST. II

SAMPLE INFORMATION

SAMPLE DATE : 03/08/95 LOCATION

:SEE REFERENCE

SAMPLE TIME

: 9:30-11:20 AM

TYPE OF SAMPLE: SOILS

NUMBER OF SAMPLES : 5

SAMPLER

:LOZIER LABS

S.T.A.R.S. 8021 VOLATILES EXTRACTION

PARAMETER	PT 1	PT 2	PT 3	PT 4	P T 5	UNITS
METHYL T-BUTYL						
ETHER (MIBE)	<5.0	<5.0	<5.0	<5.0	<5.0	ug/l
BENZENE	<0.7	<0.7	<0.7	<0.7	<0.7	ug/l
EIHYLBENZENE	<1.0	<1.0	<1.0	<1.0	<1.0	ug/l
TOLUENE	<1.0	<1.0	<1.0	<1.0	<1.0	ug/l
M+P XYLENES	<2.0	<2.0	<2.0	<2.0	<2.0	ug/l
o xylene	<1.0	<1.0	<1.0	<1.0	<1.0	ug/1
TOTAL XYLENES	<3.0	<3.0	<3.0	<3.0	<3.0	ug/l
I SOPROPYLBENZENE	<1.0	<1.0	<1.0	<1.0	<1.0	ug/l
n-PROPYLBENZENE	<1.0	<1.0	<1.0	<1.0	<1.0	ug/l
p-ISOP RO PYL						3/
TOLUENE	<1.0	<1.0	<1.0	<1.0	<1.0	ug/l
1,2,4-TRIMETHYL						3/
BENZENE	<1.0	<1.0	<1.0	<1.0	<1.0	ug/1
1,3,5-TRIMETHYL						3,
BENZENE	<1.0	<1.0	<1.0	<1.0	<1.0	ug/1
n-BUTYLBENZENE	<1.0	<1.0	<1.0	<1.0	<1.0	ug/l
sec-BUTYLBENZENE	<1.0	<1.0	51.0	<1.0	<1.0	ug/l
naphtha l ene	<1.0	<1.0	718)	<1.0	<1.0	ug/l
SURROGATE RECOVERS						
a,a,a-TFT	69	84	78	76	76	3

ANALYSIS: EPA Method 8021 Volatiles (NYSDEC S.T.A.R.S. Program Analyte List) performed on TCLP (ZHE) extractions.

NYSDOH LAB ID # 10390 acq

LABORATORY DIRECTOR



NEW YORK STATE APPROVED ENVIRONMENTAL LABORATORY

AFI / LAB #95031539

PAGE 2 OF 2

POLYNUCLEAR AROMATIC HYDROCARBONS

PARAMETER	PT 1	PT 2	PT 3	PT 4	PT 5	METHOD BLANK	UNITS
NAPHTHALENE	<10	<10	<10	<10	<10	<10	ug/l
ACENAPHTHYLENE	<10	<10	<10	<10	<10	<10	ug/l
ACENAPHTHENE	<10	<10	<10	<10	<10	<10	ug/l
FLUOREN E	<10	<10	<10	<10	<10	<10	ug/l
PHENANTHRENE	<10	<10	<10	<10	<10	<10	ug/1
ANTHRACENE	<10	<10	<10	<10	<10	<10	ug/l
FLUORANTHENE	<10	<10	<10	<10	<10	<10	ug/l
PYRENE	<10	<10	<10	<10	<10	<10	ug/l
CHRYSENE	<10	<10	<10	<10	<10	<10	ug/l
BENZO(b)							
FLUORANTHENE	<10	<10	<10	<10	<10	<10	ug/l
BENZO(k)							
FLUCRANTHENE	<10	<10	<10	<10	<10	<10	ug/l
BENZO(a)PYRENE	<10	<10	<10	<10	<10	<10	ug/l
DIBENZO(a,h)							
ANTHRACENE	<10	<10	<10	<10	<10	<10	ug/1
INDENO(1,2,3-cd)							
PYRENE	<10	<10	<10	<10	<10	<10	ug/l
BENZO(g,h,i)							
PERYLEN E	<10	<10	<10	<10	<10	<10	ug/l
BENZO(a)							
ANTHRACENE	<10	<10	<10	<10	<10	<10	ug/l
SURROGATE RECOVER		70	•				
NITROBENZENE-d5	74	73	82	42	48	77	્રું
2-FLUOROBIPHENYL	81	78	84	45	49	86	Q.
TERPHENYL-dl4	88	85	97	42	43	95	ક્ર

ANALYSIS: EPA Method 8270 (PNA'S) performed on TCLP (ZHE) extractions on 03/15/95.

NYSDOH LAB ID # 10390

ALAN J / LAFFIN LABORÁTORY DIRECTOR

acq

ZIER LABORATORIES

CHAIN OF CUSTODY RECORD

ATTN! BILL HERZ MATER!

Client Name: AFT ENUIRONMENTAL

Mailing Address: 6001 Robinson Rd

LABORATORY NO:		ing a single of the single of		Lockland NY MORY
SAMPLE IDENTIFICATION DAYS	TIME LOCATION	SAMPLE TYPE	Project Name:	NUMBER ST. IE SON SAMP
10	20 PT1 Solution 30 PT3 FUMING THE SOLUTION TO		CONT.	OF /
RELINQUISHED 1 SIGN DATE TIME DATE TIME DETHOD OF SHIPMENT:	2 SIGN DATE TIME 2 SIGN DATE TIME	3 SIGN DÂTE TÎME 3 SIGN DÂTE TÎME RECEIVED FOR LAB	4 5	SIGN DATE TIME IGN ATE FIME