GZA
GeoEnvironmental
of New York

*Engineers and
Scientists*

December 23, 2008
GZA File: 21.0056419.00

Mr. Gregory P. Sutton, P.E.
New York State Department of Environmental Conversation
Region 9, Division of Environmental Remediation
270 Michigan Avenue
Buffalo, New York 14203-2999
E-mail to gpsutton@gw.dec.state.ny.us

Re: Niagara County Refuse Disposal District (NCRDD)
NYSDEC Site Number 932024
Landfill #1 Evaluation

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Buffalo, New York
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Dear Mr. Sutton:

GZA GeoEnvironmental of New York (GZA), at the request of Niagara County Refuse Disposal District (NCRDD) and its behalf, prepared this letter which presents the findings from our most recent work done at the NCRDD Landfill #1, located in Lockport, New York (Site). This work included a file review from our Freedom of Information requests to the New York State Department of Environmental Conservation (NYSDEC) and sampling and analysis of waste/fill material, landfill gas, and groundwater from select areas associated with the Landfill #1 Site. This work was done in an effort to better assess for the presence and location of hazardous wastes at the Site and their potential for exposure and migration from the landfill limits.

FILE REVIEW

NCRDD File Review

GZA reviewed available files pertaining to historic activities at the Site that were available at the Site office. Our review identified that the landfill began receiving wastes in 1969. In 1981, NCRDD entered into an order on consent to address existing leachate and groundwater issues in order to be compliant with NYSDEC Part 360 regulations for solid waste facilities. Environmental concerns identified included the migration of flammable landfill gasses and hazardous groundwater contamination due to lack of a leachate collection system.

Included for our review was a table summarizing various account names and their yearly waste disposal quantities in pounds from the years 1972 through 1986. This table was divided into various types of received waste including; household, institutional, commercial, business-industrial, construction and demolition (C&D) and waste water treatment plant (WWTP) wastes. The accounts of particular interest include FMC Corporation, VanDeMark Chemical and Harrison Radiator-GMC as these companies have reportedly generated various hazardous wastes at their respective facilities and have

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historically disposed of various wastes at the Site. The listed amounts of wastes disposed of at the Site are as follows.

- FMC Corporation – 11,77,560 lbs of business–industrial wastes
- VanDeMark Chemical – 165,110 lbs of business–industrial wastes
- Harrison Radiator-GMC-199,461,490 lbs of business–industrial wastes
- Harrison Radiator –GMC (Dep't 341) – 45,168,080 lbs of WWTP wastes

A table titled "Industrial Waste Characterization Reported to Have Been Disposed of At The Site" (prepared by Camp Dresser Mckee Inc. for a 1983 Remedial Action Plan report), listed various wastes received at the Site including plating tank sludge, phenolic resin, steel drums, brine sludges, scrap resins, oil and grease drippings, and paper bags (with metal dusts) among others.

GZA also reviewed minutes taken from Niagara County Solid Waste Disposal District meetings held between 1969 and 1976. Various entries in the early to mid 1970s discussed concerns of the excessive liquid nature of the Harrison Radiator facilities WWTP sludge waste disposed at the Site. Additionally, meeting minutes from January 20, 1971 identified that contractors who were on-Site digging holes for the pole barn (now the existing maintenance shop outside of existing landfill limits) were having difficulty due to five foot thick waste materials encountered at depths.

Former NCRDD Employee Interview

GZA contacted Mr. Ron Claire, a former NCRDD employee, to inquire about historic waste acceptance and placement activities at the Site. Mr. Claire indicated that sludge from the Harrison Radiator –GMC facility was typically brought to the Site and placed in the northern portion of the Landfill. Because this waste was typically received in the early 1970s, he indicated that the waste would likely be in the deeper portions of the existing landfill. Additionally, Mr. Claire indicated that wastes received from the FMC Corp. facility typically included filter bags and waste product bags that may have contained residual pesticide powders. This waste was generally placed at various locations throughout the landfill. He could not indicate a specific location of these wastes. Mr. Claire also confirmed that waste had been placed in areas outside of the current limits of the landfill, specifically underneath and around the existing maintenance shop along the western side of the landfill. Mr. Claire indicated the thickness of the waste material located outside the existing limits of the landfill varied with location, ranging from 1 foot to more than 10 feet.

NYSDEC FOI Requests

GZA submitted a Freedom of Information request letter to the NYSDEC offices in both Albany and Buffalo, New York to review available files for industrial facilities located in Niagara County that have historically disposed wastes at the Site. Our file review request included those specific to the FMC Corporation in Middleport, VanDeMark Chemical Company of Lockport, and the Harrison Radiator – GMC facility in Lockport. A July 1,

2008 NYSDEC response letter indicated files for the requested facilities were available in various departments including Environmental Remediation, Hazardous Materials, Environmental Enforcement and Legal. GZA reviewed available files and pertinent information identified with respect to each of the three facilities and their waste activities at the Site are summarized below.



VanDeMark Chemical– Available files reviewed generally pertained to the hazardous materials/waste generated at the Middleport manufacturing facility and disposed of at their designated landfill. Typical hazardous wastes associated with the Site include various volatile organics compounds (VOCs) and select inorganic chemicals. The documents reviewed were inconclusive with respect to historical disposal activities of wastes at the NCRDD Site.

FMC Corporation- Available files reviewed indicated that the FMC facility primarily manufactured pesticides for agricultural purposes. A review of a New York State Hazardous Waste Survey (HWS), completed in October 10, 1976, identified several industrial wastes that were generated or expected to be generated by the facility including solid pesticides, raw material bags with pesticide residues, caustic wastes and miscellaneous solvents and various sludges. However, the HWS form was noted with a hand written comment that reads "All wastes FMC hauls to Niagara Co. LF not included here".

Additionally, an attached page from an unidentified document indicated "…plant would continue to sent, to the Lockport landfill, approximately 1,000 cu. yd/year of waste containers that originally contained registered products from our suppliers or products transferred from one plant department to another. Due to the high cost of these materials, FMC has and will continue to use diligent effort to insure that the residual contamination of the waste containers will be in trace amounts". The various wastes associated with specific listed registered products (i.e., pesticide products) were quantified as approximate cubic yards of paper waste per year. These documents are included in Appendix A.

Harrison Radiator-GMC- Files reviewed for this Site identified various hazardous wastes generated and disposed of from the facility. However, it appears that only sludge wastes from the WWTP were disposed of at the Site. This waste was typically identified as a listed hazardous waste for zinc (i.e., hazardous classification F019). The reviewed files did not specifically confirm or indicate that these wastes were disposed of at the Site. This could be attributed to the fact that NRCDD files indicate sludge wastes were disposed of at the Site in the 1970s and early 1980s and the dates of the available NYSDEC files reviewed were typically dated from the early 1980s to the 1990s.

EXPLORATION AND SAMPLING PLAN

As part of our evaluation of the Site, GZA completed on-Site explorations and collected samples of various media including waste/solids, groundwater and landfill gas/subslab air samples at select locations of the Site. Theses explorations (see Figure 1 – Sample Location Plan) were intended to identify the presence of waste debris located outside of the Landfill #1 limits, the toxicity of historic wastes located inside and outside the landfill limits and to evaluate for potential contamination being emitted from the landfill via landfill gas and/or groundwater. The nature and extent of contamination identified and the degree to which contamination poses a threat to human health and the environment were assessed in general accordance with our "Revised Work Plan for Landfill #1 Evaluation" dated August 21, 2008 that was submitted to the NYSDEC. Soil/solid waste material sample test results were compared to both the NYSDEC TAGM 4046 Recommended Soil Cleanup Objectives (RSCOs) and the NYSDEC 6 NYCRR Part 375 Environmental Remediation Programs Restricted Use Soil Cleanup Objectives (SCOs) for Protection of Groundwater values.

As part of this evaluation, NCRDD utilized a track mounted excavator to complete test pits at select locations outside of the Landfill #1 limits to identify the presence of historic waste. Additionally, test pits were completed at a few locations within the landfill limits in an effort to collect and sample historic waste materials for hazardous waste determination. GZA also collected one sample of soil gas beneath the existing mechanics shop (located west of the landfill), screened and sampled landfill gas from existing passive vents, and collected a water sample from the sump adjacent to the west. GZA intended on sampling liquids from leachate breakouts within the landfill; however, none were identified at the time of our explorations. GZA also coordinated with Frontier Technical Associates, who have been retained by NCRDD to perform quarterly groundwater monitoring, to collect additional groundwater samples from adjacent groundwater monitoring wells located in a downgradient location from the landfill. The following is a discussion pertaining to the specific work done for each sample type.

Test Pit Excavations of Waste Material

Test pit excavations were done at the Site on Wednesday August 27, 2008, September 3, 2008 and November 10, 2008 and were done in general accordance with our work plan. A GZA field representative observed and documented test pit excavation and sampling activities at each completed test pit. Excavations were completed by NCRDD personnel to depths generally ranging up to 15 feet below ground surface (bgs). The excavated top, clean cap soils were placed off to the side of the excavation for reuse during backfilling. The excavated waste material was placed on plastic sheeting adjacent to the excavation. Upon completion of the test pit excavations, NCRDD personnel backfilled and compacted the excavation with waste material in approximate 1 to 2 foot lifts and the clean cover soils were placed and compacted on top of the waste material. Photographs of each test pit excavation and associated wastes are included in Appendix B.

As part of our exploration observations, GZA monitored the excavation work areas and waste materials with an organic vapor meter (hNu PI-101) and a landfill gas meter which measured CO_2, O_2, H_2S and methane. Select waste/solid samples were collected and placed in sealable plastic baggies for headspace screening with the OVM and the readings (if detected) were recorded. Samples identified by the OVM screening as impacted with VOCs or those with metallic-like residue were placed in clean laboratory jars for laboratory testing in accordance with our work plan.

The following observations and activities were made for the respective test pit excavations (see Figure 2 Sample Location Plan)

TP-1- This test pit was completed in the area south of the existing maintenance shop to identify the presence and thickness of residential and industrial waste material located outside of the limits of Landfill #1. Approximately 4 to 5 feet of clean soils were observed over various waste materials (including a newspaper dated October 2, 1970). NCRDD completed excavation though approximately 9 feet of waste before terminating the test pit as bedrock was not encountered. OVM screening did not measure any VOCs in the waste material. A representative sample of waste material was collected for metal, PCBs and pesticide analysis, corrosivity and toxicity characteristic leachate potential (TCLP) for metals and pesticide analysis. The test results (see Table 1) indicated pesticides were not detected and the sample was not identified as a toxic or corrosive hazardous waste. Several metals were detected at concentrations exceeding respective RSCOs but only copper was identified exceeding its SCO. The PCB parameter Arochlor 1242 was also detected; although, at a concentration below the RSCO and SCOs for subsurface soils.

TP-2 - This test pit was completed in the area north of the existing maintenance shop to identify the presence and thickness of residential and industrial waste material located outside of the limits of Landfill #1. Approximately 2 feet of clean soils were observed over an approximate 1.5 thick layer of waste materials, beneath which was apparent clean silty-clay soils. NCRDD completed the excavation to an approximate depth of 7 feet below ground surface (bgs). OVM screening did not measure any VOCs in the waste material. Due to the thin layer of waste observed and no detections with the OVM, no samples were collected for laboratory analysis. NCRDD personnel indicated the ground surface in this area is generally wet. However, at the time of our excavation, the ground surface was dry. Excessive wetness may be associated with leachate breakout or day-lighting of accumulated liquid generated on top/within existing wastes located south of this area (towards the maintenance shop area). The ground elevation of the TP-2 area appeared to be lower than that of areas to the south.

TP-3 - This test pit was completed within the northwestern limits of Landfill # 1 to assess historical sludge disposed from the Harrison Radiator facility. Approximately 4 feet of clean cover soil was observed over various residential and industrial waste materials including a grayish, massive, fine grained material assumed to be historic sludge waste. NCRDD completed the excavation though approximately 10 feet of waste before terminating the test pit and exposing about 3 feet of the potential sludge waste. OVM screening did not measure VOCs in the waste material. Samples from the potential sludge waste were collected for metals, PCBs and pesticide analysis, corrosivity and TCLP metals and pesticides analysis. The test results identified the sample as toxic hazardous waste for lead, but not a corrosive hazardous. Pesticides (both total and TCLP) were not detected in the sample. Several metals were detected at concentrations exceeding respective RSCOs. In particular, zinc was identified at a concentration of 3 orders of magnitude greater than its respective RSCO and one order of magnitude greater than its SCO. This waste material may be similar to the historical listed hazardous waste classification of F019. The PCB parameter, Arochlor 1242, was detected at a concentration below its respective RSCO and SCO for subsurface soils.

TP-4 - This test pit was completed between the western limit of Landfill # 1 and the existing maintenance shop to assess the presence of residential and industrial wastes outside of the landfill limits. Approximately 7 feet of apparent clean soils were observed over various waste materials (including a newspaper dated January 2, 1971). A crushed steel drum with very strong solvent like odors was excavated from this test pit. OVM readings in the area of the drum ranged between 300 and 400 ppm. NCRDD completed the excavation to a depth of about 15 feet bgs where apparent bedrock was encountered. Due to the solvent-like odors and OVM readings, samples of waste material were collected for VOCs and TCLP VOCs analysis. The analytical results indicate the sample was not a toxic hazardous waste although petroleum compounds (i.e., methylene chloride, toluene, ethyl benzene, and xylenes) were detected at concentrations ranging from 2,200 to 140,000 parts per billion (ppb) or one to two orders of magnitude greater than their respective RSCOs and SCOs.

TP-5 - This test pit was completed in the area west of the existing maintenance shop to determine the presence and thickness of residential and industrial waste material located outside of the limits of Landfill #1. The first excavation area was located about 15 feet west of the western most side of the structure and was completed to an approximate depth of 15 feet bgs into a brown silt and clay soil. No waste was encountered in this initial excavation. NCRDD relocated the excavation to an area about 5 feet west of the existing building. This portion of the excavation identified about 3 feet of clean silt and clay soil over an approximate 1.5 foot thick lens of historic waste material. This waste lens was observed to terminate at a distance of about 10 feet west of the existing building. OVM screening did not measure VOCs in the waste material. Samples of waste material were collected for metals, PCBs and pesticide analysis, corrosivity and TCLP for

metals and pesticides. The analytical results indicated the sample was not a toxic or corrosive hazardous waste and pesticides were not detected. Zinc was the only metal identified at a concentration exceeding its respective RSCOs but not it's SCO. PCBs and pesticides were not detected above method detection limits in the sample.



TP-6 - This test pit was completed within the southeastern limits of Landfill #1 to assess representative historic residential and industrial wastes of the landfill. Approximately 5 feet of clean cover soil was observed over an approximate 3 foot thick layer of C&D type waste which was located over typical historic municipal waste (including a newspaper dated March 1982). NCRDD completed the excavation though approximately 13 feet of waste before terminating the test pit. OVM screening did not measure VOCs in the waste material. A representative sample of waste material was collected for RCRA 8 metals, PCBs and pesticide analysis, and TCLP metals and pesticides. The sample was not identified as a toxic hazardous waste. Neither PCBs nor pesticides were detected above method detection limits in the sample. Of the eight metals tested for, chromium was identified at concentration exceeding its RSCO and lead was identified as exceeding its SCO by an order of magnitude.

TP-7 - This test pit was completed within the eastern limits of Landfill #1 to assess representative historic residential and industrial wastes of the landfill. Additionally, a review of a 1999 land survey of the NCRDD Site indicated this portion of the existing landfill is located within an approximate 1.48 acre parcel identified as "Easement D to Niagara County Refuse Disposal District, Liber 21719, Page 318, Third Parcel B". Observations of the completed test pit included an approximate 5 foot thick layer of clean cover soil over 1 to 1.5 foot thick layer of C&D type waste over typical historic municipal waste (including a newspaper dated 1977). Phenolic waste resin was observed mixed within the other typical waste material. NCRDD completed the excavation at about 16 feet bgs and bedrock was not encountered. OVM screening did not measure VOCs in the waste material. A representative sample of waste material was collected for SVOCs, RCRA 8 metals, PCBs and pesticide analysis and TCLP metals and pesticides. The sample was not identified as a toxic hazardous waste. Neither PCBs nor pesticides were not detected above method detection limits within the sample. Of the eight metals tested, only chromium was identified at concentration exceeding its respective RSCO; however, did not exceed its SCO. Phenol was the only SVOC detected and was identified at a concentration three orders of magnitude greater than its respective RSCO and two orders of magnitude greater than its SCO.

TP-8 - This test pit was completed between the western limit of Landfill # 1 and the existing maintenance shop to assess the presence of wastes outside of the landfill limits. Approximately 2 feet of apparent clean soil was observed over various residential and industrial wastes. A crushed steel drum with possible welding waste residue was excavated from this test pit along with a smaller metal drum containing a tarry/oily material. NCRDD completed the excavation to a

depth of about 15 feet bgs where apparent bedrock was encountered. Samples of waste materials in both observed drums were collected for laboratory testing including VOC, SVOC, metals and ignitability analysis. The analytical results indicate the samples were not ignitable hazardous waste. Various metals, VOCs and SVOC concentrations were identified at levels exceeding their respective SCO and RSCO standards.

Other waste material observations made in this excavation include a crushed plastic lined cardboard drum with a corrosive label and several former chemical manufacturers' product shipping bags. The bags were identified with the following labeling.

- "Zineb" 85% dust based fungicide manufactured by FMC. Contents include zinc ethylene bisdithiocarbamate (zinc as metallic 20.2%)
- "Domestic Sulphate of Ammonia", manufactured by Donner-Hanna Co.

TP-9 - This test pit was completed between the western limit of Landfill # 1 and the existing maintenance shop to assess the presence of residential and industrial wastes outside of the landfill limits. Approximately 3 to 4 feet of apparent clean soils were observed over various waste materials. Excavated soil with very strong solvent like odors was excavated from this test pit. OVM readings from a soil/solid material sample collected from the excavation ranged between 900 and 1,000 ppm. NCRDD completed the excavation to a depth of about 15 feet bgs where apparent bedrock was encountered. Due to the solvent like odors and OVM readings, samples of waste material were collected for VOCs and ignitability analysis. The analytical results indicate the sample was not a toxic hazardous waste for ignitability, although petroleum compounds (i.e., toluene, ethyl benzene, and xylenes) were detected at concentrations ranging from 26,000 to 120,000 ppb (similar to the sample collected from TP-4) or one to two orders of magnitude greater than their respective RSCOs and SCOs.

Subsurface Soil and Landfill Gas sampling

One subslab soil gas sample was collected beneath the concrete floor slab of the existing maintenance building located adjacent to Landfill #1 on the west. The Subslab soil vapor sample was collected in general accordance with the October 2006 New York State Department of Health (NYSDOH) final "Guidance for Evaluating Soil Vapor Intrusion in New York State". However, due to the anticipated interference associated with petroleum products and solvents used within the maintenance shop and because both bay doors are open during the work day, an indoor air sample was not collected. The air sample was collected from underneath the floor slab through an approximate 3/8-inch diameter hole drilled in a competent portion of the concrete floor away from cracks, drains and building foundations. Clean, dedicated tubing was placed into the hole and sealed at the floor surface with modeling clay to limit atmospheric air from entering the sample canister. Prior to sampling, the air within the dedicated tubing was removed by an air pump for a minimum duration of 30 seconds to ensure representative sub-slab air was sampled. A

one-liter sampling canister was attached to the tubing with an airtight seal for sample collection. The sample was taken over an approximate 8-hour duration and the sample was submitted for laboratory analysis of VOCs via TO-15 and methane.

The results of this subslab soil gas sample identified several detections of petroleum and chlorinated compounds and are summarized in Table 3. Toluene was the compound with the highest concentration detected.

GZA also screened the existing landfill #1 passive gas vents (see Figure 1 - Sample Location Plan) using a landfill gas meter to measure methane, CO_2, O_2, and other gasses (assumed H_2S). Based on the screening measurements observed for the passive gas vents, GZA collected three landfill gas samples from specific vents for analysis. The samples were collected by lowering dedicated tubing down the gas vent to be sampled. A portable air pump was connected to the tubing to remove air for about one to two minutes to ensure representative landfill gas sample collection and then filled a laboratory provided tedlar bag to be submitted for select VOCs (via TO-17) and methane. These samples were collected to determine the quality of gas being emitted from the landfill.

The results of the passive gas vent samples are summarized in Table 3. Methane was identified to range from 24 % to 61% in the three samples. Additionally, select VOCs were detected in two of the three samples including benzene, toluene, ethlybenzene and xylene (BTEX). No other VOCs were detected.

Groundwater and Sump Water Sampling

GZA collected a water sample from the Landfill sump (located west of Landfill #1) specifically for pesticide analysis as the sump water is tested for other constituents as part of the NCRDD quarterly landfill monitoring. The sample was collected by GZA by dipping a laboratory provided sample jar directly into the sump water. The analytical results for this sample did not identify pesticide compounds at concentrations above method detection limits.

Frontier Technical Services (FTS) provided GZA the analytical test results from three samples collected during their recent groundwater sampling event done in September 2008. Specifically, FTS provided the analytical results from two groundwater samples collected from monitoring wells GZ-20S and GZ-13 and one leachate sample collected from the Landfilll #1 primary leachate collection tank. The groundwater samples did not detect VOCs, SVOCs, pesticides and PCBs at concentrations above method detection limits. Several metals were detected in the water samples, although below concentrations considered to be hazardous. The leachate sample was identified with specific VOCs (i.e., benzene, ethylbenzene, and xylenes) that exceeded the Class GA groundwater Criteria. Two pesticide compounds, dimthoate and disulfoton, were also detected. Only disulfoton was identified as exceeding its Class GA groundwater Criteria. Several metals were detected in the leachate sample; although, at concentrations not considered to be hazardous.

CONCLUSION

Based on our review of regulatory agency files, observations made from several test pit excavations and the analytical test results data, it is our opinion that a risk to human health and the environment exists due to waste materials associated with the NCRDD Landfill #1; both within the landfill and at exterior locations. Historic industrial wastes identified as hazardous wastes for pesticides and metals were reportedly disposed of in Landfill #1 between the late 1960s and the mid 1970s. Various waste samples were identified with high concentrations of VOCs, SVOCs, metals (including hazardous levels of lead from historic sludge) as well as pesticides and PCBs at lower concentrations. Due to the fact that Landfill #1 is an unlined landfill, it is our opinion and conclusion that contamination from these wastes could migrate from the Site within groundwater through the overburden or deeper bedrock fractures and could impact various off-Site receptors. Additionally, contaminated materials were identified outside the limits of the Landfill; these materials could be uncovered by authorized or unauthorized on-Site activities and would pose a risk to human health and/or the environment.

We hope this letter satisfies your current needs. Please feel free to contact the undersigned with any questions of comments you may have.

Sincerely,

GZA GeoEnvironmental of New York

Daniel Troy, P.E.
Project Manager

Ernest R. Hanna P.E.
Principal

Attachments: Figure 1 – Sample Location Plan
Table 1- Test Pit Soil Sample Analytical Results
Table 2- Test Pit Soil Sample TCLP Analytical Results
Table 3- Soil Gas & Passive Gas Vent Sample Analytical Results
Table 4 – Groundwater and Leachate Sample Analytical Results
Appendix A – FOIL Documents
Appendix B – Test Pit Photographs
Appendix C – Analytical Testing Reports

FIGURES

EXISTING LANDFILL #2

APPROXIMATE LIMITS OF LANDFILL 1

"A" SUBSLAB-1

TP-1

TP-4

TP-5

TP-9

TP-8

GROUNDWATER SAMPLE FROM SUMP

TP-2

GZ-12

"V"

"U"

"W"

"T"

"GV-1"

"J"

TP-6

"K"

"O"

"S"

"L"

"M"

"H"

"N"

"P"

"R"

"Q"

"B"

TP-3

"G"

TP-7

"E"

"F"

"C"

"D"

GZ-20S

APPROXIMATE LOCATION OF GAS FLARE

EXISTING C & D LANDFILL

GZ-13

LEGEND:

"B" APPROXIMATE LOCATION OF EXISTING GAS VENT

TP-3 APPROXIMATE LOCATION OF TEST PIT

APPROXIMATE LOCATION OF SUB-SLAB SOIL GAS SAMPLE

APPROXIMATE LOCATION OF EXISTING GROUNDWATER MONITORING WELL

NOTES:

1. BASE MAP ADAPTED FROM A BIRSEYE AERIAL PHOTOGRAPH DOWNLOADED FROM http://maps.live.com, A TOPOGRAPHIC PLAN PREPARED BY AEROCON PHOTOGRAMETRIC SURVEYORS, INC. DATED AUGUST 2, 1990 AND FIELD OBSERVATIONS.

2. THE SIZE AND LOCATION OF EXISTING SITE FEATURES SHOULD BE CONSIDERED APPROXIMATE.

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DRAWN BY: MDK

DATE: DECEMBER 2008

GZA GeoEnvironmental of New York

APPROXIMATE SCALE IN FEET

0 50 100 200

NIAGARA COUNTY
REFUSE AND DISPOSAL DISTRICT
LOCKPORT, NEW YORK

LANDFILL No. 1 EVALUATION

SAMPLING PLAN

PROJECT No.
21.0056419.00

FIGURE No.
1

TABLES

Table 1
Test Pit Soil Sample Analytical Results
NCRDD Landfill #1
Lockport, New York

Parameter	NYSDEC TAGM 4046 RSCO	Part 375 Restricted Use SCO - Protection of Groundwater	TP-1	TP-3	TP-4	TP-5	TP-6	TP-7	TP-8	TP-9
Volatile Organic Compounds - EPA Method 8260 TCL (ug/kg)										
2-Butanone	300	120	NT	NT		NT	NT	NT	**1,200**	
Methylene Chloride	100	50	NT	NT	**2,200**	NT	NT	NT		
Toluene	1,500	700	NT	NT	**60,000**	NT	NT	NT	**1,100**	**26,000**
Ethylbenzene	5,500	1,000	NT	NT	**40,000**	NT	NT	NT	**560**	**31,000**
m,p-xylene	1,200	1,600	NT	NT	**140,000**	NT	NT	NT	**2,500**	**120,000**
o-Xylene	1,200	1,600	NT	NT	**47,000**	NT	NT	NT	780	**44,000**
Semi-Volatile Organic Compounds - EPA Method 8270 Base Neutrals (ug/kg)										
Phenol	30 or MDL	330	NT	NT	NT	NT	NT	**27,000**	**1,200**	
bis(2-ethylhexyl) phthalate	50,000	NV	NT	NT	NT	NT	NT		4,300	
METALS (mg/kg)										
Aluminum	SB	NV	5,580	7,600	NT	70.4	NT	NT	NT	NT
Arsenic	7.5	NV	1.59	1.37	NT	0.319				NT
Barium	300	820	49.6	60.5	NT	2.0	59.5	46.9	79.6	NT
Beryllium	0.16	47	0.39	0.39	NT		NT	NT	NT	NT
Cadmium	1	7.5	0.966	1.65	NT		0.78		0.74	NT
Calcium	SB	NV	53,700	25,000	NT	2230	NT	NT	NT	NT
Chromium	10	NS	29.1	654	NT	2.85	25.0	22.8	984.0	NT
Cobalt	30	NV	6.62	6.76	NT		NT	NT	NT	NT
Copper	25	1,720	**1,830**	786	NT	15.8	NT	NT	NT	NT
Iron	2,000	NV	20,100	11,800	NT	1970	NT	NT	NT	NT
Lead	SB****	450	182	**1790**	NT	19.4	**1,120**	51.7	**481**	NT
Magnesium	SB	NV	19,500	6,300	NT	403	NT	NT	NT	NT
Manganese	SB	2,000	793	332	NT	34.4	NT	NT	NT	NT
Nickel	13	130	47.9	99.4	NT		NT	NT	NT	NT
Potassium	SB	NV	1430	864	NT		NT	NT	NT	NT
Selenium	2	4			NT	0.452				NT
Sodium	SB	NV	409	253	NT	63.0	NT	NT	NT	NT
Thallium	SB	NV	0.676	1.05	NT	5.02	NT	NT	NT	NT
Vanadium	150	NV	7.97	5.77	NT		NT	NT	NT	NT
Zinc	20	2,480	866	**10,600**	NT	23.4	NT	NT	NT	NT
Mercury	0.1	0.73	0.087	0.021	NT		0.051			NT
Pesticides via SW 8081 (ug/kg)										
					NT				NT	NT
Polychlorinated Biphenyls via SW8082 (ug/kg)										
Arochlor 1242	10000 (subsurface)	3,200	2,200	350	NT				NT	NT
Arochlor 1254	10000 (subsurface)	3,200		160	NT				NT	NT

Notes:
1. Compounds detected in one or more samples are presented on this table. Refer to Appendix C for list of all compounds included in analysis.
2. Analytical testing completed by Adirondack Environmental Services, Inc.
3. Recommended soil cleanup objectives (RSCOs) based on the NYSDEC TAGM 4046 Determination of Soil Cleanup Levels dated January 1994.
4. ug/kg = part per billion and mg/kg = parts per million.
5. Blank indicates compound was not detected.
6. NT = not tested, SB = Site Background, NS = Not Specified
7. Shading indicates value exceeds the NYSDEC TAGM 4046 Recommended Soil Cleanup Objective (RSCO),bolded value indicates exceedance of Part 375 Restricted Use Soil Cleanup Objectsives (RSO) for Protection of Groundwater
8. **** Background levels for lead vary widely. Average levels in undeveloped, rural areas may range from 4-61 ppm.
9. Sample Locations shown on Figure 1

Table 2
Test Pit Soil Sample TCLP Analytical Results
NCRDD Landfill #1
Lockport, New York

Parameter	Toxicity Characteristic Waste Criteria	TP-1	TP-3	TP-4	TP-5	TP-6	TP-7	TP-8	TP-9
Volatile Organic Compounds (via EPA Method 8260 TCL in ug/L)									
		NT	NT		NT	NT	NT	NT	NT
Semi-Volatile Organic Compounds (via EPA Method 8270 in ug/L)									
		NT	NT	NT	NT	NT		NT	NT
Inorganics (EPA Method 6010A/7470A in mg/L)									
Barium	100	0.52	0.65	NT	0.53	0.78	0.79	NT	NT
Cadmium	1		0.08	NT				NT	NT
Chromium	5		0.33	NT				NT	NT
Lead	5	0.35	**40.5**	NT	0.36			NT	NT
Pesticides (via EPA Method 8081 in ug/kg)									
				NT				NT	NT
Ignitability via SW1030 (ug/kg)									
Ignitability		NT	NT	NT	NT	NT	NT	Not Ignitable	Not Ignitable
Corrosivity (via SW9040B)									
Corrosivity		NC	NC	NT	NC	NT	NT	NT	NT

Notes:
1. Compounds detected in one or more samples are presented on this table. Refer to Appendix C for list of all compounds included in analysis.
2. Analytical testing completed by Adirondack Environmental Services.
3. TCLP - Toxicity Characteristic Leaching Potential. Toxicity Characteristic waste criteria from Table 1 of EPA 40 CFR Ch.I (7-1-01 Edition)
4. ug/L = part per billion and mg/L = parts per million.
5. Blank indicates compound was not detected.
6. NT = not tested, NC = Not Corrosive
7. Shading indicates value exceeds the Toxicity Characteristic Waste Criteria.
8. Sample Locations shown on Figure 1

Table 3
Soil and Passive Gas Vent Sample Analytical Results
NCRDD Landfill #1
Lockport, New York

Parameter	Maint. Shop Subslab Sample	Gas Vent T	Gas Vent B	Gas Vent M
Methane EPA-8015 Gases (percentage)				
Methane	NT	49	24	61
Volatile Organic Compounds - via TO-15 (mg/m3)				
1,1,1-Trichloroethane	0.55	NT	NT	NT
1,1-Dichoroethene	0.4	NT	NT	NT
1,2,4-Trimethylbenzene	11	NT	NT	NT
1,3,5-Trimethylbenzene	5.4	NT	NT	NT
1,4-Dichlorobenzene	2.5	NT	NT	NT
1,4-Dioxane	4.6	NT	NT	NT
4-ethyltoluene	6.1	NT	NT	NT
Acetone	50	NT	NT	NT
Benzene	3.8	NT	NT	NT
Carbon Disulfide	13	NT	NT	NT
Chlorobenzene	3	NT	NT	NT
Chloroform	0.99	NT	NT	NT
cis-1,2-Dichloroethene	0.6	NT	NT	NT
Cyclohexane	2.6	NT	NT	NT
Ethyl Acetate	3.3	NT	NT	NT
Ethylbenzene	8.4	NT	NT	NT
Freon 11	1.8	NT	NT	NT
Freon 12	2.7	NT	NT	NT
Heptane	9.6	NT	NT	NT
Hexane	5.4	NT	NT	NT
m,p-xylene	22	NT	NT	NT
Methyl Butyl Ketone	7.5	NT	NT	NT
Methyl Isobutyl Ketone	7.5	NT	NT	NT
Methylene Chloride	1.8	NT	NT	NT
o-xylene	8.9	NT	NT	NT
styrene	3.5	NT	NT	NT
Tetrachloroethylene	1.7	NT	NT	NT
Toluene	130	NT	NT	NT
Trichloroethene	7.3	NT	NT	NT
Volatile Organic Compounds - via TO-17 (mg/m3)				
Benzene	NT	0.30		
Carbon Disulfide	NT	0.35	0.22	
Toluene	NT		2.75	
Ethylbenzene	NT	2.90	0.74	
m,p-xylene	NT	0.84	0.46	
o-Xylene	NT	0.15		

Notes:
1. Compounds detected in one or more samples are presented on this table. Refer to Appendix C for list of all compounds included in analysis
2. TO-15 Analytical testing for Maintenance Subslab sample completed by Centek Laboratory. Remaining analysis completed by Adirondack Environmental Services
3. mg/m3 = microgram per cubic meter
4. Blank indicates compound was not detected.
5. NT = paremeter not tested
6. Sample Locations shown on Figure 1
7. Samples tested for VOCs via TO-17 were collected in tedlar bags. Sample tested for VOCs via TO-15 was collected in 1-liter canister for an approximate 8-hour duration

Table 4
Groundwater and Leachate Sample Analytical Testing Results Summary
NCRDD Landfill #1
Lockport, New York

Parameter	NYSDEC Class GA Criteria	LF-1 Leachate	GZ-20S	GZ-13
Volatile Organic Compounds - EPA Method 8260 TCL (ug/L)				
Benzene	1	**34**		
Ethylbenzene	5	**26**		
m,p-xylene	5	**73**		
o-Xylene	5	**22**		
Semi-Volatile Organic Compounds - EPA Method 8270 Base Neutrals (ug/L)				
bis(2-ethylhexyl) phthalate	5		**17**	**52**
METALS (mg/L)				
Aluminum	NV	0.734	0.253	
Barium	1	**1.85**		0.011
Boron	1	**7.58**	**2.76**	0.605
Calcium	NV	181	339	194
Chromium	0.05	0.025	0.008	0.005
Copper	0.2	0.011	0.008	
Iron	0.3	**32**	**0.584**	0.134
Lead	0.025	0.013		
Magnesium	35	**255**	**92.4**	**57.5**
Manganese	0.3	**0.486**	0.085	0.029
Nickel	0.1	0.059		
Potassium	NV	104	46.9	18.4
Sodium	NV		633	190
Thallium	0.005	**287**		
Vanadium	NA	0.057		
Zinc	2	0.267	0.012	
Organochlorine Pesticides via SW 8081 (ug/kg)				
Organo-Phosphorus Pesticides via SW 8141 (ug/L)				
Dimethoate	NV	3.4		
Disulfoton	ND	**4.2**		
Herbicides via SW 8081 (ug/L)				
Polychlorinated Biphenyls via SW8082 (ug/L)				
Arochlor 1242				
Arochlor 1254				

Notes:
1. Compounds detected in one or more samples are presented on this table. Refer to Lab Report for list of all compounds included in analysis.
2. Analytical testing completed by Adirondak Environmental Services, Inc.
3. NYSDEC Class GA Groundwater Criteria as promulgated in 6 NYCRR 703; Table 1 in Technical and Operational Guidance Series (1.1.1): Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, dated October 1993; revised June 1998; errata dated January 1999; addendum dated April 2000.
4. ug/L = part per billion, mg/L = part per million, NV = No Value, ND = No Detections
5. Blank cell indicates compound was not detected.
6. Bolded value indicates concentration exceeds the respective NYSDEC Groundwater Class GA Criteria

ATTACHMENT A

FOIL DOCUMENTS

Written Mailing 6/18/86 by JED
Initial Contact 7/15/86 by JED
Appointment Made 6/25/86 by JED
Site or Phone Visit 11/6/86 by JED
Follow-up / / by
Form Completed 6/10/86 by JED
Comments:

Company Code 2 5 7 7 5 2 9 0 2 2

Company Name FMC Corporation
Address Agricultural Chemicals Division
100 Niagara St. Middleport, NY 14105
County Niagara Phone (716) - 735-3761
SIC Codes 1. 2879 3.
2. 2819 4.

New York State Hazardous Waste Survey ✓ CONFIDENTIAL
Department of Environmental Conservation
Division of Solid Waste Management
50 Wolf Road, Albany, N.Y. 12233 Telephone: (518) 457-6605

I. General Information

1. Company Name FMC Corporation - Agricultural Chemicals Division

Mailing Address 100 Niagara St. Middleport, N.Y. 14105
Street City State Zip

Plant Location ☑ Same as above

Street City State Zip

2. If Subsidiary, Name of Parent Company FMC Corporation

3. Individual Responsible for Plant Operations William C. Cole
Name

Plant Manager (716) - 735-3761
Title Phone

4. Individual Providing Information Doug Whysong
Name

Pollution Engineer (716) - 735-3761
Title Phone

5. Department of Environmental Conservation Interviewer John E. Iannotti

6. Standard Industrial Classification (SIC) Codes for Principal Products

Group Name	SIC Code (4 Digit)	☑ Production / / Value Added
a. Agricultural Chemicals	2879	100%
b. Ind Inorg Chem, n.e.c.	2819	
c.		
d.		

7. Processes Used at Plant
a. Various chemical processes
b. including chemical reacting,
c. crystallization, evaporation,
d. mixing, blending, and
e. packaging

8. Products
a. Furadan, forbam, zineb
b. polyram Niacide
c. zinc ammonium carbamate
d.
e.

Company Code [ ]

9. Raw materials and other chemicals used in manufacturing processes.
   a. 7-hydroxy (2,3-Di Hydroxy 2,2-dimethyl-7-benzofuranal
   b. methyl isocyanate
   c. sodium hydroxide
   d. methylene chloride
   e. carbon disulfide, ammonia
   g. ethylene diamine, H_2SO_4, H_2O_2
   h. zinc sulfate, ferric sulfate
   i. manganese sulfate, liquid nitrogen
   j. dimethyl amine

10. a. On Site Waste Water Treatment /✓/ Yes / / No

    b. On Site Waste Water Treatment by July 1977 /✓/ Yes / / No

    c. On Site Waste Water Treatment by July 1983 /✓/ Yes / / No

    d. Industrial Sewer Discharge /✓/ Yes / / No Name of Sewage Treatment Plant Middleport Municipal Treatment Plant

    e. SPDES No. _____ NPDES No. NY 0000345

11. a. Air Pollution Control Devices /✓/ Yes / / No Types _____

    b. To Be Built / / Yes / / No by / /

    c. Air 100 Emission Point Registration Numbers 292201 0182

12. a. Number of manufacturing employees 100 b. Manufacturing Floor Space — sq.ft.

13. Attach a plat or sketch of the facility showing the location of on-site process waste storage (if available).

14. Attach flow diagrams of chemical processes including waste flow outputs (if available).

15. In-house waste treatment capabilities: carbon unit for furodan wash water, surface water

16. Is there a currently used or abandoned landfill, dump or lagoon on plant property? /✓/ Yes / / No

17. Industrial wastes produced or expected to be produced by plant. ★★
    1) solid pesticides
    2) raw mtl bags w/ pesticide residuals
    3) caustic waste
    4) misc. solvents
    5) R & D liquid pesticides
    6) wastewater treatment plant sludge
    7) ammonium sulfate solution w/ pesticide residues
    8) sodium sulfate solution w/ pesticide residues
    9) sump sludge

18. Comments: * Dry material — Folpet, Dichlone, omite, Lindane, Malathion, Sevin, Rotenone, Furodan (see Industrial Chem Survey)

★★ all wastes FMC hauls to Niagara Co. Lf. not included here!

FMC

Company Code

IV. Land Disposal Questionnaire (for ~~currently used or abandoned~~ landfills, dumps, or lagoons)

1. a. Are there detailed design and operational plans for the site? / /Yes /X/No

b. Attach sketch of land disposal area showing location and distance to surface water, soil classification, direction of groundwater flow, location of monitoring wells, and other pertinent information.

2. a. Does disposal site have a liner? / /Yes /X/No

b. Type of liner _____

c. Thickness _____

3. a. Leachate collection? / /Yes /X/No (but surface waters collected & treated)

b. Leachate treatment? / /Yes /X/No

c. Type of treatment _____

4. a. Shortest depth to groundwater _____ ft.

b. Classes of soils underlying site (correlate with sketch) red clay

5. a. Groundwater monitoring wells? / /Yes /X/No

b. Number of wells _____ c. Well down gradient? / /Yes /X/No

6. Non-industrial wastes disposed of at site? / /Yes /X/No

7. Are different waste(s) disposed in specially segregated areas of the site? / /Yes /X/No

8. Is there security at disposal area (i.e, fences, signs)? /X/Yes / /No

9. Are there contingency plans and equipment to handle possible emergency situations at the facility? / /Yes / /No Attach if available.

10. Industrial wastes disposed of at site:

Waste Stream Number	Waste	Volume/Year (please specify tons, gallons, cubic yards)
	off-grade material	
	paper, trash, packaging	
	organics from manufacture	
	of arsenic acid	
	arsenic	500,000 lb total

used from 1970 - 1974

Also a lagoon containing 1% w/ pesticides to be drained during 1977

7MC

Company Code

II. Waste Characterization and Management Practice

(Use separate form for each waste stream)

1. Waste Stream No. 1 (from Form I, Number 17)

2. Description of process producing waste dithiocarbamate & furadan production

3. Brief characterization of waste solid pesticides (dithio carbamates & furadan)

4. Time period for which data are representative _____ to _____

5. a. Annual waste production 89 /X/tons/yr. /_/gal./yr.

b. Daily waste production _____ /_/tons/day /_/gal./day

c. Frequency of waste production: /_/seasonal /_/occasional /_/continual

/_/other (specify) _____

6. Waste Composition

a. Average percent solids ____ % b. pH range __ to __

c. Physical state: /_/liquid, /_/slurry, /_/sludge, /_/solid,

/_/other (specify) _____

d. Component	Average Concentration	/_/wet weight /_/dry weight	
1. furadan (carbo-furan)		/_/wt.%	/_/ppm
2. dithiocarbamates (e.g.		/_/wt.%	/_/ppm
3. ferbam, ziram, polyram etc.)		/_/wt.%	/_/ppm
4.		/_/wt.%	/_/ppm
5.		/_/wt.%	/_/ppm
6.		/_/wt.%	/_/ppm
7.		/_/wt.%	/_/ppm
8.		/_/wt.%	/_/ppm
9.		/_/wt.%	/_/ppm
10.		/_/wt.%	/_/ppm

Company Code: | | | | | | | | | | |

e. Analysis of composition is / /theoretical / /laboratory /✓/estimate
(attach copy of laboratory analysis if available)

f. Projected /✓/increase, / /decrease in volume from base year: ____ % by July 1977;
____ % by July 1983.

g. Hazardous properties of waste: / /flammable /✓/toxic / /reactive / /explosive
/ /corrosive / /other (specify) _____

7. On Site Storage

a. Method: /✓/drum, / /roll-off container, / /tank, / /lagoon, / /other(specify) _____

b. Typical length of time waste stored ____ / /days, /✓/weeks, / /months

c. Typical volume of waste stored _____ /✓/tons, / /gallons

d. Is storage site diked? / /Yes / /No

e. Surface drainage collection /✓/Yes / /No

8. Transportation

a. Waste hauled off site by / /you /✓/others

b. Name of waste hauler Chem-Trol

Address _____
Street City
( )
State Zip Code Phone

9. Treatment and Disposal

a. Treatment or disposal: / /on site /✓/off site

b. Waste is / /reclaimed / /treated /✓/land disposed / /incinerated
/ /other (specify) _____

c. Off site facility receiving waste

Name of Facility Chem-Trol

Facility Operator _____

Facility Location _____
Street City
( )
State Zip Code Phone

FMC — Company Code

II. Waste Characterization and Management Practice
(Use separate form for each waste stream)

1. Waste Stream No. 2 (from Form I, Number 17)

2. Description of process producing waste raw mtl bags & baghouse filters from intermediate products

3. Brief characterization of waste raw mtl bags w/ residues of pesticides & baghouse filters w/ pesticide residues

4. Time period for which data are representative 1-1-75 to 12-31-75

5. a. Annual waste production 13.5 /✓/ tons/yr. / / gal./yr.

b. Daily waste production ____ / / tons/day / / gal./day

c. Frequency of waste production: / / seasonal / / occasional /✓/ continual

/ / other (specify) ____

6. Waste Composition

a. Average percent solids ____ % b. pH range __ to __

c. Physical state: / / liquid, / / slurry, / / sludge, /✓/ solid,

/ / other (specify) ____

d. Component	Average Concentration	/ / wet weight / / dry weight	
1. See various raw		/ / wt.%	/ / ppm
2. mtls & product		/ / wt.%	/ / ppm
3.		/ / wt.%	/ / ppm
4.		/ / wt.%	/ / ppm
5.		/ / wt.%	/ / ppm
6.		/ / wt.%	/ / ppm
7.		/ / wt.%	/ / ppm
8.		/ / wt.%	/ / ppm
9.		/ / wt.%	/ / ppm
10.		/ / wt.%	/ / ppm

Company Code

e. Analysis of composition is [ ] theoretical [ ] laboratory [✓] estimate
(attach copy of laboratory analysis if available)

f. Projected [✓] increase, [ ] decrease in volume from base year: ___ % by July 1977; ___ % by July 1983.

g. Hazardous properties of waste: [ ] flammable [✓] toxic [ ] reactive [ ] explosive [ ] corrosive [ ] other (specify) _____

7. On Site Storage

a. Method: [✓] drum, [ ] roll-off container, [ ] tank, [ ] lagoon, [ ] other (specify) _____

b. Typical length of time waste stored _____ [ ] days, [✓] weeks, [ ] months

c. Typical volume of waste stored _____ [✓] tons, [ ] gallons

d. Is storage site diked? [ ] Yes [ ] No

e. Surface drainage collection [✓] Yes [ ] No

8. Transportation

a. Waste hauled off site by [ ] you [✓] others

b. Name of waste hauler Chem-Trol

Address _____
Street City
( )
State Zip Code Phone

9. Treatment and Disposal

a. Treatment or disposal: [ ] on site [✓] off site

b. Waste is [ ] reclaimed [ ] treated [✓] land disposed [ ] incinerated
[ ] other (specify) _____

c. Off site facility receiving waste

Name of Facility Chem-Trol

Facility Operator _____

Facility Location _____
Street City
( )
State Zip Code Phone

F.W.I.C.

Company Code

II. Waste Characterization and Management Practice

(Use separate form for each waste stream)

1. Waste Stream No. 3 (from Form I, Number 17)

2. Description of process producing waste di-thio carbamate process

3. Brief characterization of waste caustic waste

4. Time period for which data are representative 1-1-75 to 12-31-75

5. a. Annual waste production 6360 [ ] tons/yr. [✓] gal./yr.

b. Daily waste production — [ ] tons/day [ ] gal./day

c. Frequency of waste production: [ ] seasonal [ ] occasional [✓] continual

[ ] other (specify)

6. Waste Composition

a. Average percent solids ____ % b. pH range __ to __

c. Physical state: [✓] liquid, [ ] slurry, [ ] sludge, [ ] solid,

[ ] other (specify)

d. Component	Average Concentration	[ ] wet weight [ ] dry weight	
1. NaOH		[ ] wt.%	[ ] ppm
2.		[ ] wt.%	[ ] ppm
3.		[ ] wt.%	[ ] ppm
4.		[ ] wt.%	[ ] ppm
5.		[ ] wt.%	[ ] ppm
6.		[ ] wt.%	[ ] ppm
7.		[ ] wt.%	[ ] ppm
8.		[ ] wt.%	[ ] ppm
9.		[ ] wt.%	[ ] ppm
10.		[ ] wt.%	[ ] ppm

Company Code

e. Analysis of composition is /_/theoretical /_/laboratory /_/estimate
(attach copy of laboratory analysis if available)

f. Projected /✓/increase, /_/decrease in volume from base year: ____ % by July 1977;
____ % by July 1983.

g. Hazardous properties of waste: /_/flammable /✓/toxic /_/reactive /_/explosive
/✓/corrosive /_/other (specify) _____

7. On Site Storage

a. Method: /✓/drum, /_/roll-off container, /_/tank, /_/lagoon, /_/other(specify) _____

b. Typical length of time waste stored ____ /_/days, /✓/weeks, /_/months

c. Typical volume of waste stored ____ /_/tons, /✓/gallons

d. Is storage site diked? /_/Yes /_/No

e. Surface drainage collection /✓/Yes /_/No

8. Transportation

a. Waste hauled off site by /_/you /✓/others

b. Name of waste hauler Chem-Trol

Address _____
Street City
( )
State Zip Code Phone

9. Treatment and Disposal

a. Treatment or disposal: /_/on site /✓/off site

b. Waste is /_/reclaimed /✓/treated /_/land disposed /_/incinerated
/_/other (specify) _____

c. Off site facility receiving waste

Name of Facility Chem-Trol

Facility Operator _____

Facility Location _____
Street City
( )
State Zip Code Phone

Company Code

II. Waste Characterization and Management Practice

(Use separate form for each waste stream)

1. Waste Stream No. 4 (from Form I, Number 17)

2. Description of process producing waste pyra wave department ("Black Flag" etc.)

3. Brief characterization of waste Methylene chloride, acetone Kerosene w/ traces pesticides

4. Time period for which data are representative 1-1-75 to 12-31-75

5. a. Annual waste production 7740 / / tons/yr. / / gal./yr.

b. Daily waste production _____ / / tons/day / / gal./day

c. Frequency of waste production: / / seasonal / / occasional / / continual

/ / other (specify) _____

6. Waste Composition

a. Average percent solids ____ % b. pH range __ to __

c. Physical state: / / liquid, / / slurry, / / sludge, / / solid,

/ / other (specify) _____

d. Component	Average Concentration	/ / wet weight / / dry weight	
1. MeCl2		/ / wt.%	/ / ppm
2. acetone		/ / wt.%	/ / ppm
3. Kerosene		/ / wt.%	/ / ppm
4. pesticide traces		/ / wt.%	/ / ppm
5.		/ / wt.%	/ / ppm
6.		/ / wt.%	/ / ppm
7.		/ / wt.%	/ / ppm
8.		/ / wt.%	/ / ppm
9.		/ / wt.%	/ / ppm
10.		/ / wt.%	/ / ppm

Company Code

e. Analysis of composition is / /theoretical / /laboratory /✓/estimate
(attach copy of laboratory analysis if available)

f. Projected /✓/increase, / /decrease in volume from base year: ____% by July 1977;
____% by July 1983.

g. Hazardous properties of waste: /✓/flammable /✓/toxic / /reactive / /explosive
/ /corrosive / /other (specify) ____

7. On Site Storage

a. Method: /✓/drum, / /roll-off container, / /tank, / /lagoon, / /other(specify) ____

b. Typical length of time waste stored ____ / /days, /✓/weeks, / /months

c. Typical volume of waste stored ____ / /tons, /✓/gallons

d. Is storage site diked? / /Yes / /No

e. Surface drainage collection /✓/Yes / /No

8. Transportation

a. Waste hauled off site by / /you /✓/others

b. Name of waste hauler Chem-Trol

Address ____
Street City
____
State Zip Code ( ) Phone

9. Treatment and Disposal

a. Treatment or disposal: / /on site /✓/off site

b. Waste is / /reclaimed / /treated / /land disposed / /incinerated
/ /other (specify) ____

c. Off site facility receiving waste

Name of Facility Chem-Trol

Facility Operator ____

Facility Location ____
Street City
____
State Zip Code ( ) Phone

Company Code

II. Waste Characterization and Management Practice

(Use separate form for each waste stream)

1. Waste Stream No. 5 (from Form I, Number 17)

2. Description of process producing waste Research & Development & liquid pesticides

3. Brief characterization of waste misc R&D Chemicals solid & liquid

4. Time period for which data are representative 1-1-75 to 12-31-75

5. a. Annual waste production 2545 /_/tons/yr. /✓/gal./yr.

b. Daily waste production ____ /_/tons/day /_/gal./day

c. Frequency of waste production: /_/seasonal /✓/occasional /_/continual /_/other (specify) ____

6. Waste Composition

a. Average percent solids ____% b. pH range __ to __

c. Physical state: /✓/liquid, /_/slurry, /_/sludge, /✓/solid, /_/other (specify) ____

d. Component	Average Concentration	/_/wet weight /_/dry weight
1. misc R&D chemicals		/_/wt.% /_/ppm
2. some pesticides		/_/wt.% /_/ppm
3.		/_/wt.% /_/ppm
4.		/_/wt.% /_/ppm
5.		/_/wt.% /_/ppm
6.		/_/wt.% /_/ppm
7.		/_/wt.% /_/ppm
8.		/_/wt.% /_/ppm
9.		/_/wt.% /_/ppm
10.		/_/wt.% /_/ppm

Company Code

e. Analysis of composition is / /theoretical / /laboratory /✓/estimate
(attach copy of laboratory analysis if available)

f. Projected /✓/increase, / /decrease in volume from base year: _____% by July 1977;
_____% by July 1983.

g. Hazardous properties of waste: /✓/flammable /✓/toxic / /reactive / /explosive
/ /corrosive / /other (specify) _____

7. On Site Storage

a. Method: /✓/drum, / /roll-off container, / /tank, / /lagoon, / /other(specify) _____

b. Typical length of time waste stored_____ / /days, /✓/weeks, / /months,

c. Typical volume of waste stored_____ / /tons, /✓/gallons

d. Is storage site diked? / /Yes / /No

e. Surface drainage collection /✓/Yes / /No

8. Transportation

a. Waste hauled off site by / /you /✓/others

b. Name of waste hauler Chem-Tol

Address _____
Street City
_____
State Zip Code ( ) Phone

9. Treatment and Disposal

a. Treatment or disposal: / /on site /✓/off site

b. Waste is / /reclaimed / /treated / /land disposed / /incinerated
/ /other (specify) _____

c. Off site facility receiving waste

Name of Facility Chem-Tol

Facility Operator _____

Facility Location _____
Street City
_____
State Zip Code ( ) Phone

FMC Company Code

II. Waste Characterization and Management Practice
(Use separate form for each waste stream)

1. Waste Stream No. 6 (from Form I, Number 17)

2. Description of process producing waste Carbon unit (wastewater treatment plant) to treat Furadan wash waters, pond drainage & surface H2O runoff

3. Brief characterization of waste Sludge consisting of ferric arsenite, ferric hydroxide & precoat

4. Time period for which data are representative 1-1-77 to 12-31-77

5. a. Annual waste production 30,000 / /tons/yr. /X/gal./yr.

b. Daily waste production — / /tons/day / /gal./day

c. Frequency of waste production: / /seasonal /X/occasional / /continual / /other (specify)

6. Waste Composition

a. Average percent solids 30 % b. pH range 7 to 8

c. Physical state: / /liquid, / /slurry, /X/sludge, / /solid, / /other (specify)

d. Component	Average Concentration	/X/wet weight / /dry weight
1. H2O	70	/X/wt.% / /ppm
2. ferric arsenite	2	/X/wt.% / /ppm
3. ferric hydroxide	4	/X/wt.% / /ppm
4. precoat	5	/X/wt.% / /ppm
5. misc solids	20	/X/wt.% / /ppm
6.		/ /wt.% / /ppm
7.		/ /wt.% / /ppm
8.		/ /wt.% / /ppm
9.		/ /wt.% / /ppm
10.		/ /wt.% / /ppm

Company Code

e. Analysis of composition is / /theoretical / /laboratory /✓/estimate
(attach copy of laboratory analysis if available)

f. Projected /✓/increase, / /decrease in volume from base year: ____% by July 1977;
____% by July 1983.

g. Hazardous properties of waste: / /flammable /✓/toxic / /reactive / /explosive
/ /corrosive / /other (specify) _____

7. On Site Storage

a. Method: /✓/drum, / /roll-off container, / /tank, / /lagoon, / /other(specify) _____

b. Typical length of time waste stored 4 / /days, /✓/weeks, / /months

c. Typical volume of waste stored 2500 / /tons, /✓/gallons

d. Is storage site diked? / /Yes / /No

e. Surface drainage collection /✓/Yes / /No

8. Transportation

a. Waste hauled off site by / /you /✓/others

b. Name of waste hauler Chem-Tol

Address _____
Street City
( )
State Zip Code Phone

9. Treatment and Disposal

a. Treatment or disposal: / /on site /✓/off site

b. Waste is / /reclaimed / /treated /✓/land disposed / /incinerated
/ /other (specify) _____

c. Off site facility receiving waste

Name of Facility Chem-Tol

Facility Operator _____

Facility Location _____
Street City
( )
State Zip Code Phone

FMC — Company Code

II. Waste Characterization and Management Practice

(Use separate form for each waste stream)

1. Waste Stream No. 7 (from Form I, Number 17)

2. Description of process producing waste dithiocarbamate production

3. Brief characterization of waste ammonium sulfate w/ 4% fungicide (dithiocarbamate) residues & H_2O

4. Time period for which data are representative 1977 to

5. a. Annual waste production 3,500,000 /_/tons/yr. /✓/gal./yr. *

b. Daily waste production _____ /_/tons/day /✓/gal./day

c. Frequency of waste production: /_/seasonal /_/occasional /✓/continual

/_/other (specify) _____

6. Waste Composition

a. Average percent solids ____% b. pH range __ to __

c. Physical state: /✓/liquid, /_/slurry, /_/sludge, /_/solid,

/_/other (specify) _____

d. Component	Average Concentration	/_/wet weight /_/dry weight
1. ammonium sulfate		/_/wt.% /_/ppm
2. dithiocarbamates		/_/wt.% /_/ppm
3. H_2O		/_/wt.% /_/ppm
4.		/_/wt.% /_/ppm
5.		/_/wt.% /_/ppm
6.		/_/wt.% /_/ppm
7.		/_/wt.% /_/ppm
8.		/_/wt.% /_/ppm
9.		/_/wt.% /_/ppm
10.		/_/wt.% /_/ppm

* This waste stream obtained from FMC hauler application

Company Code

e. Analysis of composition is / /theoretical / /laboratory /✓/estimate
(attach copy of laboratory analysis if available)

f. Projected / /increase, / /decrease in volume from base year: ____% by July 1977;
____% by July 1983.

g. Hazardous properties of waste: / /flammable /✓/toxic / /reactive / /explosive
/ /corrosive / /other (specify) _____

7. On Site Storage

a. Method: / /drum, / /roll-off container, /✓/tank, / /lagoon, / /other(specify) _____

b. Typical length of time waste stored ____ / /days, / /weeks, / /months

c. Typical volume of waste stored ____ / /tons, /✓/gallons

d. Is storage site diked? / /Yes / /No

e. Surface drainage collection /✓/Yes / /No

8. Transportation

a. Waste hauled off site by /✓/you / /others

b. Name of waste hauler FMC

Address _____
Street City
( )
State Zip Code Phone

9. Treatment and Disposal

a. Treatment or disposal: / /on site /✓/off site

b. Waste is / /reclaimed / /treated / /land disposed / /incinerated
/ /other (specify) _____

c. Off site facility receiving waste

Name of Facility Newco or Chem-Trol or Frontier

Facility Operator _____

Facility Location _____
Street City
( )
State Zip Code Phone

FMC

Company Code

II. Waste Characterization and Management Practice

(Use separate form for each waste stream)

1. Waste Stream No. 8 (from Form I, Number 17)

2. Description of process producing waste dithiocarbamate production

3. Brief characterization of waste Sodium Sulfate with dithiocarbamate residues + H_2O

4. Time period for which data are representative 1977 to

5. a. Annual waste production 3,500,000 / / tons/yr. /X/ gal./yr. *

b. Daily waste production / / tons/day / / gal./day

c. Frequency of waste production: / / seasonal / / occasional /X/ continual

/ / other (specify)

6. Waste Composition

a. Average percent solids ____ % b. pH range __ to __

c. Physical state: /X/ liquid, / / slurry, / / sludge, / / solid,

/ / other (specify)

d. Component	Average Concentration	/ / wet weight / / dry weight	
1. Sodium Sulfate		/ / wt.%	/ / ppm
2. dithiocarbamates		/ / wt.%	/ / ppm
3. H_2O		/ / wt.%	/ / ppm
4.		/ / wt.%	/ / ppm
5.		/ / wt.%	/ / ppm
6.		/ / wt.%	/ / ppm
7.		/ / wt.%	/ / ppm
8.		/ / wt.%	/ / ppm
9.		/ / wt.%	/ / ppm
10.		/ / wt.%	/ / ppm

* This waste stream from FMC hauler registration

Company Code

e. Analysis of composition is /_/theoretical /_/laboratory /✓/estimate
(attach copy of laboratory analysis if available)

f. Projected /_/increase, /_/decrease in volume from base year: _____% by July 1977;
_____% by July 1983.

g. Hazardous properties of waste: /_/flammable /✓/toxic /_/reactive /_/explosive
/_/corrosive /_/other (specify) _____

7. On Site Storage

a. Method: /_/drum, /_/roll-off container, /✓/tank, /_/lagoon, /_/other (specify) _____

b. Typical length of time waste stored _____ /_/days, /_/weeks, /_/months

c. Typical volume of waste stored _____ /_/tons, /✓/gallons

d. Is storage site diked? /_/Yes /_/No

e. Surface drainage collection /✓/Yes /_/No

8. Transportation

a. Waste hauled off site by /✓/you /_/others

b. Name of waste hauler FMC

Address _____
Street City
( )
State Zip Code Phone

9. Treatment and Disposal

a. Treatment or disposal: /_/on site /✓/off site

b. Waste is /_/reclaimed /_/treated /_/land disposed /_/incinerated
/_/other (specify) _____

c. Off site facility receiving waste

Name of Facility Newco or Chem-Trol or Frontier

Facility Operator _____

Facility Location _____
Street City
( )
State Zip Code Phone

FMC

Company Code

II. Waste Characterization and Management Practice

(Use separate form for each waste stream)

1. Waste Stream No. 9 (from Form I, Number 17)

2. Description of process producing waste Sump & pond sludge from dithiocarbamate production

3. Brief characterization of waste Sludge containing dithiocarbamates & metal salts

4. Time period for which data are representative 1-1-75 to 12-31-75

5. a. Annual waste production 8000 / /tons/yr. /X/gal./yr.

b. Daily waste production _____ / /tons/day / /gal./day

c. Frequency of waste production: / /seasonal /X/occasional / /continual

/ /other (specify) _____

6. Waste Composition

a. Average percent solids ____% b. pH range __ to __

c. Physical state: / /liquid, / /slurry, /X/sludge, / /solid,

/ /other (specify) _____

d. Component	Average Concentration	/ /wet weight / /dry weight	
1. Various dithiocarbamates		/ /wt.%	/ /ppm
2. (see chemical list)		/ /wt.%	/ /ppm
3. metal salts —		/ /wt.%	/ /ppm
4. Mn, Zn, Fe		/ /wt.%	/ /ppm
5.		/ /wt.%	/ /ppm
6.		/ /wt.%	/ /ppm
7.		/ /wt.%	/ /ppm
8.		/ /wt.%	/ /ppm
9.		/ /wt.%	/ /ppm
10.		/ /wt.%	/ /ppm

Company Code: | | | | | | | | | |

e. Analysis of composition is / /theoretical / /laboratory /✓/estimate
(attach copy of laboratory analysis if available)

f. Projected /✓/increase, / /decrease in volume from base year: ____% by July 1977;
____% by July 1983.

g. Hazardous properties of waste: / /flammable /✓/toxic / /reactive / /explosive
/ /corrosive / /other (specify) _____

7. On Site Storage

a. Method: /✓/drum, / /roll-off container, / /tank, / /lagoon, / /other (specify) _____

b. Typical length of time waste stored ____ / /days, / /weeks, /✓/months

c. Typical volume of waste stored _____ / /tons, /✓/gallons

d. Is storage site diked? / /Yes / /No

e. Surface drainage collection /✓/Yes / /No

8. Transportation

a. Waste hauled off site by / /you /✓/others

b. Name of waste hauler Chem-Trol

Address _____
Street City
State Zip Code ( ) Phone

9. Treatment and Disposal

a. Treatment or disposal: / /on site /✓/off site

b. Waste is / /reclaimed / /treated /✓/and disposed / /incinerated
/ /other (specify) _____

c. Off site facility receiving waste

Name of Facility Chem-Trol

Facility Operator _____

Facility Location _____
Street City
State Zip Code ( ) Phone

EMISSION SOURCE REFERENCE NUMBER	PROCESS OR OPERATION PRODUCING EMISSION	PHYSICAL CHARACTERISTICS OF EMISSION POINT				
		DISCH TEMP °F	I.D. OF OUTLET	HEIGHT ABOVE GROUND	DIST TO NEAREST RECEPTOR	GROUND ELEVATION
21-1 00211	Dust Mixing and Packaging Fairfield	Ambient	14 In.	34 Ft.	700 Ft.	530
23-3 00233	Drum Dryer	180	31 In. x 16 In. (Rect.)	55 Ft.	987 Ft.	535
23-4 00234	Drum Dryer	180	32 In. x 16 In. (Rect.)	55 Ft.	966 Ft.	535
23-5 00235	Drum Dryer	180	31 In. x 16 In. (Rect.)	55 Ft.	966 Ft.	535
23-6 00236	Drum Dryer	180	31 In. x 16 In. (Rect.)	55 Ft.	942 Ft.	535
23-7 00237	Drum Dryer	180	31 In. x 16 In. (Rect.)	55 Ft.	930 Ft.	535
23-8 00238	Spray Dryer Exhaust	180	24 In.	41 Ft.	975 Ft.	532
23-9 00239	Miscellaneous Dust Hoods (Dust Mixing)	Ambient	14 In.	46 Ft.	882 Ft.	532
23-10 02310	Misc. Dust Hoods (Imp Mill Area)	Ambient	18 In.	46 Ft.	876 Ft.	532
23-13 02313	Drum Dryer Product Discharge Points	Ambient	12 In.	30 Ft.	954 Ft.	535
23A-2 023A2	Misc. Dust Hoods (Imp Mill Dust Mixing)	Ambient	12 In.	35 Ft.	879 Ft.	532
33-2 00332	Misc. Dust Hoods (Raymond Mill Area)	Ambient	12 In.	30 Ft.	624 Ft.	529

EMISSION SOURCE REFERENCE NUMBER	PROCESS OR OPERATION PRODUCING EMISSION	PHYSICAL CHARACTERISTICS OF EMISSION POINT				
		DISCH TEMP °F	I.D. OF OUTLET	HEIGHT ABOVE GROUND	DIST. TO NEAREST RECEPTOR	GROUND ELEVATION
27-1 00271	Raymond Mill Purge	Ambient	12 In.	25 Ft.	621 Ft.	529
32-1 00321	Carbamates Mixing	Ambient	14 In.	19 Ft. 3 In.	1197 Ft.	539
33-1 00331	Dept. 33 Ventilation System (Raymond Mill)	Ambient	18 In.	25.5 Ft.	604 Ft.	527
54-2 00542	Misc. Dust Hoods (Kidwell Area)	Ambient	10 In. x 12 In. (Rect.)	40 Ft.	780 Ft.	531
54-3 00543	Misc. Packaging (Kidwell Area)	Ambient	18 In.	42 Ft.	762 Ft.	531
54-4 00544	Kidwell Air Mill Exhaust	Ambient	14 In.	40 Ft.	770 Ft.	531
65-3 00653	Misc. Rebagging (East Warehouse)	Ambient	10 In.	20 Ft.	1257 Ft.	532
65-5 00655	Incinerator Combustall Model 200	1400	24 In.	21 Ft.	835 Ft.	532
65A-1 065A1	Misc. Dust Hoods Sturtevant Air Milling	Ambient	18 In.	37 Ft.	870 Ft.	532
65A-2 065A2	Sturtevant Air Milling	Ambient	9 In.	30 Ft.	870 Ft.	532
70-1 00701	Furadan Production Standby	550	48 In.	40 Ft.	920 Ft.	537
70-2 00702	Furadan Production	300	66 In.	82 Ft.	1000 Ft.	540.5

EMISSION SOURCE REFERENCE NUMBER	PROCESS OR OPERATION PRODUCING EMISSION	PHYSICAL CHARACTERISTICS OF EMISSION POINT				
		DISCHARGE TEMP °F	I.D. OF OUTLET	HEIGHT ABOVE GROUND	DIST. TO NEAREST RECEPTOR	GROUND ELEVATION
70-3 00203	Clay Transfer System	Ambient	17"	38'	900'	536.4
100R-4	Herbicide Lab Hood	Ambient	8"	31' 11"	330'	537
100R-5	Residue Lab Hood RM 117	Ambient	8"	30' 4"	370'	537
114-1 01141	Dithiocarbamate Scrubber	130	15"	47'	630'	533

Waste to ChemTrol - 1975 data

1) sludge → rum, chemicals, Amer Sugar → 50700 gal
2) liquid → 25450 gal → Rail
3) solids → filter → 178,000 lb
4) bags → 27,000 lb
5) caustic → Natl → 6,360 gal → Natl
6) solvents → 7,740 gal → Kerosene, NaOH, Acetone

Sludge (pretreated) from surface waste treatment
= 300,000 lb/yr → Lagoon storage
→ ChemTrol hauled

waste streams

1) various solid wastes such as off grade mtl, clay, cleanouts of product line, (solid pesticides) 178,000 lb/yr

2) bag as a raw mtl holder & intermediate product + bag line filter all contaminated with pesticides 27,000 lb/yr

3) caustic waste from dethio carbamate processes 6360 gal

4) Solvents → 7740 gal

5) wash water + sludge → to rail

6) rum & sand sludge - same clean outs etc.

7) Rail liquid 2545 gal

Waste a) packaging
b) particle
c) solvents - Kerosene - tank cars

1) wastes → solids → chemTrol
off-grade unfit → unreactables - various
clay, cleanouts of product-line
bags - as raw mtl
bag house filter / intermediate product

Spent cartridges - Camp, Tale
Niagara Co. Lit. in Lockport

2) liquids → concentrate for celite, limestone, gypsum sulfate, sodium sulfate, sulfuric acid
on site lagoons → sludge dredged up → dried & evaporated, repeated

4) sludge → ferric arsenate, ferrous organics, ammoniates, heavy metals precipitate out arsenic 300,000 lb/yr

5) R&D wastes → put in clay lined containers liquid & solid form chemTrol

3) solvents → to chemTrol
Kerosene or methylene chloride
"pyranone dept" Blank flag
intermediate → put in drums & handled as

1) fungicides - most business
2) dithiocarbamate fungicides - see (2)
3) formulate - "seven" & etc
wastes - clay to drum mtl line
+ dust collector waste (chemTrol)

process

1) w.water → to chemTrol 5090 gal/yr
2) sludge - cleanout of sump, arsenic facilities

not used any more (1974)
onsite burial - 1970 from mfr, arsenic acid
sludge w arsenic → to surface water treatment
off-grade mtl + paper, trash, packaging
500,000 lb arsenic
organics - same
no monitoring wells
no design
red clay soil
surface water collected & treated

sludge - 300,000 lb/yr
70% H2O
ferric arsenate - 20%
ferric hydroxide - 4%
precoat - 3%
30% solids 7-8 pH

(1) 2 tanks → Thickener → Centrifuge → Cake
Treated → To Dechlorinator → Clarified H2O
Cyclic sulfur product
Chlorinated

(2) Surface H2O Collection → 2 pumps H2O with Chlorine
& Filter in
300 ton 16/gr sludge → Direct storage → Clarifier
Use H2SO4 Ferric sulfate Chlorine Caustic Soda Aeration

To: Friedman Nov. 21, 1974
From: W.C. Cole – FMC

to Niagara Co. L&F.
Non-toxic
Just Lime & Steel containers

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
ALBANY, NEW YORK 12233

INDUSTRIAL CHEMICAL SURVEY

APR 14 1977

DIVISION OF PURE WATERS
BUREAU OF INDUSTRIAL PROGRAMS

PART I

PLEASE COMPLETE AND RETURN TO THE ABOVE ADDRESS, ATTENTION: INDUSTRIAL CHEMICAL SURVEY.

COMPANY NAME		SIC CODE (if known)	OFFICE USE ONLY
FMC CORPORATION Agricultural Chemical Division		2879 ~~281~~	29 66401
COMPANY MAILING ADDRESS: 100 Niagara Street	CITY: Middleport	STATE: New York	ZIP CODE: 14105
PLANT NAME (if different)	CONTACT NAME: William C. Cole, Jr.	TELEPHONE Area: 716/735-3761	
PLANT ADDRESS (If different) Street	CITY	STATE	ZIP CODE

PRINCIPAL BUSINESS OF PLANT: Formulation and Manufacture of Agricultural Chemicals

NOTE: (If parent company, give name and addresses of all divisions, subsidiaries, etc. located in New York State. A separate questionnaire is to be completed and submitted for each.)

PART II
Discharge Information

WATER

1. Does your plant discharge liquid wastes to a municipally owned sanitary sewer system? [X] Yes [ ] No
   Name of System: Middleport Sanitary Treatment Facility
2. Is your facility permitted to discharge liquid wastes under a State (SPDES) or Federal (NPDES) permit? [X] Yes [ ] No
   Permit Number: 0 0 0 0 3 4 5
3. Do you discharge liquid wastes in any other manner? [ ] Yes [X] No
   Explain:

If any of the above are "Yes":

a. Do you discharge process or chemical wastes – (i.e. water used in manufacturing including direct contact cooling water and scrubber water)? [X] Yes [ ] No
b. Do you discharge non-contact cooling water? [ ] Yes [X] No
c. Do you discharge collected storm drainage only? [ ] Yes [X] No
d. Do you discharge sanitary wastes only? [ ] Yes [X] No

AIR

1. Does your facility have sources of possible emissions to the atmosphere? [X] Yes [ ] No
2. Enter Location and Facility Code as shown on your Air Pollution Control Application for Permits and Certification (If applicable): 2 9 2 2 0 1 0 1 8 2

LIQUID WASTES

1. List Name and Address of Firm (Including yourself) removing wastes other than office and cafeteria refuse.

Name	Address	City	State	Zip Code
FMC CORPORATION Agricultural Chemical Div.	100 Niagara St.	Middleport	NY	14105
CHEM-TROL	P.O. Box 200	Model City	NY	14107

2. List Location(s) of Landfill(s) ~~where~~ used by your facility.

		Active	Inactive
1	CHEM-TROL - Model City, NY	[X]	[ ]
2		[ ]	[ ]

PESTICIDES

1. Does this facility:
   Manufacture Pesticides or Pesticide Product Ingredients? [X] Yes [ ] No
   Produce Pesticides or Pesticide Product Ingredients? [X] Yes [ ] No
   Formulate Pesticides? [X] Yes [ ] No
   Repackage Pesticides? [X] Yes [ ] No
2. EPA Establishment Number: 0 0 2 7 9 – N Y – 0 1

66401

SUBSTANCES OF CONCERN
(Refer to attached TABLE I)

Complete all information for those substances your facility has used, produced, stored, distributed or otherwise disposed of since January 1, 1971. Do not include chemicals used only in analytical laboratory work. Enter the name and code from Table I. If facility uses a substance in any of the Classes A – F which is not specified in the list, enter it as code class plus 99, e.g. B99 with name, usage, etc.

NAME OF SUBSTANCE	CODE	AVERAGE ANNUAL USAGE	AMOUNT NOW ON HAND	(✓) GAL.	(✓) LB.	PURPOSE OF USE (State whether produced, reacted, blended, packaged, distributed, no longer used, etc.)
Methlenechloride	A02	220,000#	40,000#		✓	Blended
111-Trichlaroethane	A07	25,000#	8,000#		✓	Blended
Xylene	D03	5,000#	1,300#		✓	No longer using in producti
Han	D99	15,000#	1,800#		✓	Blended
Sioxon	C99	60,000G	0	✓		No longer Producing since 197
Sevin	C11	350,000#	270,000#		✓	Blended
Lindane	C26	20,000#	0		✓	No longer Producing
Dithio Carbamates-Total	C17	8,200,000#	1,645,000		✓	Total for all Carbamates-
Ferbam	C17	850,000#	620,000#		✓	Produced below
Niacide	C17	100,000#	50,000#		✓	Produced
Thiram	C17	100,000#	55,000#		✓	Buy Tech. & formulate 65%WI
Zinc Ammonium Carb.	C17	2,200,000#	130,000#		✓	Produced Intermediate for
Ambam Oxidation Product	C17	420,000#	33,000#		✓	Prod. Intermediate for Pol
Zineb	C17	1,200,000#	372,000#		✓	Produced
Polyram	C17	3,200,000#	385,000#		✓	Produced
Malathion	C07	90,000#	30,000#		✓	Blended
Thiodan	C04	450,000#	392,000#		✓	Blended
Dichlone	C24	100,000#	63,000#		✓	Blended since
Lead Arsenate	C99	500,000#	0		✓	No longer Producing, 1973
Elgetol	C99	20,000G	0	✓		No longer Producing
Methyl Violet 2B Dye	F24	1,000#	0		✓	Distributed
Folpet	C23	100,000#	16,000#		✓	Blended
Sodium Salt of Naphthalene Acetic Acid	C99	7,000#	3,500#		✓	Blended
Pyrenones	C99	1,350,000#	550,000#		✓	Blended
Diazinon	C13	6,000#	1,100#		✓	Blended
Tandex	C20	250,000#	4,700#		✓	No Longer Producing
Rotenone	C25	2,000#	300#		✓	Blended
Carbofuran	C21	21,000,000	1,101,730		✓	Produced as 100%
Omite 30W	C99	200,000#	1,150#		✓	Blended
Copper Oxychloride	C99	60,000#	0		✓	Blended

ou use chemicals of unknown composition, list trade name or other identification, name of supplier and complete information.

NAME OF SUBSTANCE	AVERAGE ANNUAL USAGE	AMOUNT NOW ON HAND	(✓) GAL.	(✓) LB.	SUPPLIER	PURPOSE OF USE (State whether produced, reacted, blended, packaged, distributed, no longer used, etc.)
Dursban	5,000#	3300#		✓	Dow Chemical	Blended
Vapona Tech	300#	0		✓	Shell Chemical Co.	Blended

I hereby affirm under penalty of perjury that information provided on this form is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

SIGNATURE (Owner, Partner, Officer) William C. Cole, Jr. DATE 3/1/77

NAME (Printed or Typed) William C. Cole, Jr. TITLE PLANT MANAGER

SUBSTANCES OF CONCERN
(Refer to attached TABLE I)

66401

Complete all information for those substances your facility has used, produced, stored, distributed or otherwise disposed of since January 1, 1971. Do not include chemicals used only in analytical laboratory work. Enter the name and code from Table I. If facility uses a substance in any of the Classes A – F which is not specified in the list, enter it as code class plus 99, e.g. B99 with name, usage, etc.

NAME OF SUBSTANCE	CODE	AVERAGE ANNUAL USAGE	AMOUNT NOW ON HAND	(✓) GAL.	(✓) LBS.	PURPOSE OF USE (State whether produced, reacted, blended, packaged, distributed, no longer used, etc.)
Methoxychlor	C08	2,000#	0		✓	No longer being used
Pentac	G22	500#	0		✓	Distributed
Methyl Isocyanate	G11	6,200,000	390,000#		✓	Reacted
2-3 dihydro-2,2-dimethyl-7-hydroxy benzo furan	F99	6,000,000	455,000#		✓	Reacted
Benzyl Alcohol	F99	6,000	2,000		✓	Blended
Isopar	D99	700,000	140,000			Blended

ou use chemicals of unknown composition, list trade name or other identification, name of supplier and complete information.

NAME OF SUBSTANCE	AVERAGE ANNUAL USAGE	AMOUNT NOW ON HAND	(✓) GAL.	(✓) LBS.	SUPPLIER	PURPOSE OF USE (State whether produced, reacted, blended, packaged, distributed, no longer used, etc.)

I hereby affirm under penalty of perjury that information provided on this form is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

GNATURE (~~XXXXXXXXXXXXXXXX~~) William C. Cole, Jr. DATE 3/1/77

ME (Printed or Typed) William C. Cole, Jr. TITLE Plant Manager

4. The plant will continue to send, to the Lockport landfill, approximately 1000 cu. yd/year of waste containers that originally contained registered products from our suppliers or products transferred from one plant department to another. Due to the high costs of these materials, FMC has and will continue to use diligent effort to insure that the residual contamination of the waste containers will be in trace amounts. None of these items appear on the NYSDEC restricted list.

   The material will be transported primarily in a compacted form by using a Truxmore Packer.

The composition of the items to be found in proposed item 4 above are as follows:

	Registered Product	Approximate Cu. yd of paper waste per year
1.	Polyram	500
2.	Carbaryl (Sevin)	100
3.	Omite	100
4.	Dichlone	50
5.	Folpet	50
6.	Malathion	50
7.	Tandex	50
8.	Thiram	50
9.	Ferbam	Less than 10
10.	Pyrethrins	Less than 10
11.	Thiodax Powder	Less than 10
12.	Rotenone	Less than 10
13.	Zineb	Less than 10
14.	Streptomycin Sulfate	Less than 10
15.	Ziram	Less than 10
16.	Manganese Niacide	Less than 10

FMC feels that due to the limited solubilities of these products, high LD_{50}, soil breakdown properties and the fact that the small amounts of these pesticides are inside the spent containers, that there will be no adverse affect on the leachate characteristics of the landfill.

The following background information has been compiled for all the above items that generate more than 10 cu. yd of paper waste per year.

1. Polyram - a selective dithiocarbamate, LD_{50} in rats is 6200 mg/kg., insoluble in water, degrades in soil.

2. Sevin - a carbamate contact insecticide, LD_{50} in rats is 500 mg/kg., slightly soluble in water (40 ppm), not persistant in the soil, half life is 7 to 10 days, degradable by biological organisms.

Company Code

9. Chemicals used in manufacturing or produced as products:

a. 7-hydroxy-Tuaclan product
b. (2,3 - Di Hydroxy 2,2- dimethyl-7-benzofuranol (liquid)
c. Methyl Isocyanate → liquid
d. NaOH
e. MnCl2
f. Cuba D.S.O.S.
h. ethylene diamine
i. dimethyl amine
j. H2O2, Zinc Sulfate (Rem. Mn sulfate & solids from liquid nitrogen)

10. a. On Site Waste Water Treatment /X/Yes / /No

b. On Site Waste Water Treatment by July 1977 /X/Yes / /No

c. On Site Waste Water Treatment by July 1983 /X/Yes / /No

d. Industrial Sewer Discharge /X/Yes / /No Name of Sewage Treatment Plant Middleport Municipal Treatment Plant

e. SPDES No. _____ NPDES No. NY0000345

11. a. Air Pollution Control Devices /X/Yes / /No Types baghouse filter - incinerator (carbon paper towels, dithiocarbamate → cyclone & wet scrubber dust collector chem precipitation step (all included under solids))

b. To Be Built /X/Yes / /No by / /

c. Air 100 Emission Point Registration Numbers some recycled - post mix fiber drums

12. a. Number of manufacturing employees 100 b. Manufacturing Floor Space — sq.ft.

13. Attach a plat or sketch of the facility showing the location of on-site process waste storage (if available). In various bldg — caustic waste from dithiocarbamate H2S removal

14. Attach flow diagrams of chemical processes including waste flow outputs (if available).

15. In-house waste treatment capabilities: carbon unit for Fungadan and onsite 4/1/77 dithiocarbamate & 7/1/77 → sandfilter. Current pond sludge from → contains ~10% thiocarbamate 60,000 ft3 — will be removed + mobilized to Emelle, Mississippi (800 mi) incineration ~2.5¢/#)

16. Is there a currently used or abandoned landfill, dump or lagoon on plant property? / /Yes / /No will stay - must be remediated

17. Industrial wastes produced or expected to be produced by plant.
1) spent carbon unit to Calgon for regeneration
2)
3)
4)
5)
6)
7)
8)

18. Comments: Dry mill - deck mills + clay + wetting agents
Telone, Dichlone, Omite, Lindane, Malathion, "Sevin" Rotenone, Thiodan

made the mfr. { Fungadan carbamate, Polyram, Ferbam, Zineb } Diacide

Initial Mailing 10/18/76 by JEI
Initial Contact 11/10/76 by JEI
Appointment Made 11/10/76 by JEI
Site or Phone Visit 11/17/76 by JEI
Follow-up / / by
Form Completed 11/17/76 by JEI
Comments:

Company Code 2819520397

Company Name Van De Mark Chemical Co., Inc.
Address 1 North Transit Road, Lockport, N.Y. 14094
County Niagara Phone (716) - 433 - 6764
SIC Codes 1. 2819 3. 4. 2.

New York State Hazardous Waste Survey
Department of Environmental Conservation
Division of Solid Waste Management
50 Wolf Road, Albany, N.Y. 12233 Telephone: (518) 457-6605

I. General Information

1. Company Name Van De Mark Chemical Company, Inc.
Mailing Address 1 North Transit Road, Lockport, N.Y. 14094
Street City State Zip

Plant Location ☑ Same as above
Street City State Zip

2. If Subsidiary, Name of Parent Company

3. Individual Responsible for Plant Operations Allan W. Van De Mark
Name
President (716) - 433 - 6764
Title Phone

4. Individual Providing Information Allan B. VanDe Mark
Name
Vice-President Same
Title Phone

5. Department of Environmental Conservation Interviewer John E. Iannotti

6. Standard Industrial Classification (SIC) Codes for Principal Products

Group Name	SIC Code (4 Digit)	Approximate % of ☑ Production / / Value Added
a. Industrial Inorganic	2819	100%
b. Chemicals, N.E.C.		
c.		
d.		

7. Processes Used at Plant
a. Chemical reaction
b. Distillation stripping
c.
d.
e.

8. Products
a. Silicon tetrachloride
b. Carbonyl chloride (phosgene)
c. Specialty organic derivatives
d.
e.

47-15-4(12/76)

Company Code [ ][ ][ ][ ][ ][ ][ ][ ][ ][ ]

9. Raw materials and other chemicals used in manufacturing processes.

a. SiCl4 Process
b. silicon carbide
c. chlorine
d.
e. phosgene process - phosgene derivatives
f. phosgene process
g. carbon monoxide
h. chlorine
i.
j.

10. a. On Site Waste Water Treatment [V] Yes [ ] No

b. On Site Waste Water Treatment by July 1977 [V] Yes [ ] No

c. On Site Waste Water Treatment by July 1983 [V] Yes [ ] No

d. Industrial Sewer Discharge [V] Yes [ ] No Name of Sewage Treatment Plant Lockport Waste Water Treatment Plant

e. SPDES No. _____ NPDES No. NY 0001295

11. a. Air Pollution Control Devices [V] Yes [ ] No Types packed scrubbing towers
a.) for phosgene & specialty chemicals - the scrubbers neutralize the Halogases
b.) for silicon tetrachloride - absorb & recycle spent SiCl4 & recover chlorine gas

b. To Be Built [ ] Yes [V] No by / /

c. Air 100 Emission Point Registration Numbers 0005-2; 0005-3; 0005-1

12. a. Number of manufacturing employees 22 b. Manufacturing Floor Space 17,500± sq.ft.

13. Attach a plat or sketch of the facility showing the location of on-site process waste storage (if available). see attached copies

14. Attach flow diagrams of chemical processes including waste flow outputs (if available).

15. In-house waste treatment capabilities: a limestone box is used for pH adjustment of process wastewater.

16. Is there a currently used or abandoned landfill, dump or lagoon on plant property? [V] Yes [ ] No

17. Industrial wastes produced or expected to be produced by plant.
1) silicon tetrachloride sludge
2) spent silicon carbide
3) spent silicon tetrachloride
4) chlorine
5) waste limestone
6)
7)
8)

18. Comments: _____

47-15-4(12/76)

Company Code [ ][ ][ ][ ][ ][ ][ ][ ]

II. Waste Characterization and Management Practice

(Use separate form for each waste stream)

1. Waste Stream No. 1 (from Form I, Number 17)

2. Description of process producing waste see attached flow sheet process description for manufacture of silicon tetrachloride

3. Brief characterization of waste silicon tetrachloride sludge containing impurities

4. Time period for which data are representative current to _____

5. a. Annual waste production 131 [✓] tons/yr. [ ] gal./yr.

   b. Daily waste production 0.5 [✓] tons/day [ ] gal./day

   c. Frequency of waste production: [ ] seasonal [ ] occasional [✓] continual

   [ ] other (specify) _____

6. Waste Composition

   a. Average percent solids ____ % b. pH range __ to __

   c. Physical state: [ ] liquid, [ ] slurry, [✓] sludge, [ ] solid,

   [ ] other (specify) _____

d. Component	Average Concentration	[ ] wet weight [ ] dry weight
1. _____	_____	[ ] wt.% [ ] ppm
2. _____	_____	[ ] wt.% [ ] ppm
3. _____	_____	[ ] wt.% [ ] ppm
4. _____	_____	[ ] wt.% [ ] ppm
5. _____	_____	[ ] wt.% [ ] ppm
6. _____	_____	[ ] wt.% [ ] ppm
7. _____	_____	[ ] wt.% [ ] ppm
8. _____	_____	[ ] wt.% [ ] ppm
9. _____	_____	[ ] wt.% [ ] ppm
10. _____	_____	[ ] wt.% [ ] ppm

Company Code [| | | | | | | | | |]

e. Analysis of composition is [ ] theoretical [ ] laboratory [ ] estimate
(attach copy of laboratory analysis if available)

f. Projected [ ] increase, [ ] decrease in volume from base year: ____% by July 1977;

____% by July 1983.

g. Hazardous properties of waste: [ ] flammable [ ] toxic [ ] reactive [ ] explosive

[ ] corrosive [ ] other (specify) _____

7. On Site Storage

a. Method: [✓] drum, [ ] roll-off container, [ ] tank, [ ] lagoon, [ ] other(specify) _____

b. Typical length of time waste stored _____ [ ] days, [ ] weeks, [ ] months

c. Typical volume of waste stored _____ [ ] tons, [ ] gallons

d. Is storage site diked? [ ] Yes [ ] No

e. Surface drainage collection [ ] Yes [ ] No

8. Transportation

a. Waste hauled off site by [ ] you [ ] others

b. Name of waste hauler _____

Address. _____
Street City

( )
State Zip Code Phone

9. Treatment and Disposal

a. Treatment or disposal: [✓] on site [ ] off site

b. Waste is [ ] reclaimed [ ] treated [✓] land disposed [ ] incinerated

[ ] other (specify) _____

c. Off site facility receiving waste

Name of Facility _____

Facility Operator _____

Facility Location _____
Street City

( )
State Zip Code Phone

Company Code [ ][ ][ ][ ][ ][ ][ ][ ][ ][ ]

II. Waste Characterization and Management Practice

(Use separate form for each waste stream)

1. Waste Stream No. 2 (from Form I, Number 17)

2. Description of process producing waste see attach: flow sheet
Process description for manufacture of silicon tetrachloride.

3. Brief characterization of waste spent silicon carbide waste

4. Time period for which data are representative current to _____

5. a. Annual waste production 360 [✓] tons/yr. [ ] gal./yr.

b. Daily waste production 1.5 [✓] tons/day [ ] gal./day

c. Frequency of waste production: [ ] seasonal [ ] occasional [✓] continual

[ ] other (specify) _____

6. Waste Composition

a. Average percent solids ____ % b. pH range __ to __

c. Physical state: [ ] liquid, [ ] slurry, [ ] sludge, [✓] solid,

[✓] other (specify) Powder

d. Component	Average Concentration	[ ] wet weight [ ] dry weight	
1.		[ ] wt.%	[ ] ppm
2.		[ ] wt.%	[ ] ppm
3.		[ ] wt.%	[ ] ppm
4.		[ ] wt.%	[ ] ppm
5.		[ ] wt.%	[ ] ppm
6.		[ ] wt.%	[ ] ppm
7.		[ ] wt.%	[ ] ppm
8.		[ ] wt.%	[ ] ppm
9.		[ ] wt.%	[ ] ppm
10.		[ ] wt.%	[ ] ppm

Company Code [| | | | | | | | | |]

e. Analysis of composition is [ ] theoretical [ ] laboratory [ ] estimate
(attach copy of laboratory analysis if available)

f. Projected [ ] increase, [ ] decrease in volume from base year: ____ % by July 1977;

____ % by July 1983.

g. Hazardous properties of waste: [ ] flammable [ ] toxic [ ] reactive [ ] explosive
[ ] corrosive [✓] other (specify) None

7. On Site Storage

a. Method: [ ] drum, [ ] roll-off container, [ ] tank, [ ] lagoon, [✓] other (specify) in ground

b. Typical length of time waste stored 1 [ ] days, [ ] weeks, [✓] months

c. Typical volume of waste stored 30 [✓] tons, [ ] gallons

d. Is storage site diked? [ ] Yes [✓] No

e. Surface drainage collection [ ] Yes [✓] No

8. Transportation

a. Waste hauled off site by [✓] you [ ] others

b. Name of waste hauler Van De Mark Chemical Co, Inc.

Address. 1 Transit Road Lockport,
Street City
N.Y. 14094 (716) 433-6764
State Zip Code Phone

9. Treatment and Disposal

a. Treatment or disposal: [ ] on site [✓] off site

b. Waste is [ ] reclaimed [ ] treated [ ] land disposed [ ] incinerated
[✓] other (specify) sold as a by-product to various steel companies

c. Off site facility receiving waste

Name of Facility _____

Facility Operator _____

Facility Location _____
Street City
( )
State Zip Code Phone

Company Code ☐☐☐☐☐☐☐☐☐☐

II. Waste Characterization and Management Practice

(Use separate form for each waste stream)

1. Waste Stream No. 3 (from Form I, Number 17)

2. Description of process producing waste See attached flow sheet process description for manufacture of silicon tetrachloride.

3. Brief characterization of waste spent silicon tetrachloride with Si is absorbed & recovered as silicon tetrachloride

4. Time period for which data are representative current to _____

5. a. Annual waste production 5 ☑ tons/yr. ☐ gal./yr.

   b. Daily waste production 40 ☑ ~~tons~~ 165/day ☐ gal./day

   c. Frequency of waste production: ☐ seasonal ☐ occasional ☑ continual

   ☐ other (specify) _____

6. Waste Composition

   a. Average percent solids ____ % b. pH range __ to __

   c. Physical state: ☐ liquid, ☐ slurry, ☐ sludge, ☐ solid,

   ☐ other (specify) _____

d. Component	Average Concentration	☐ wet weight ☐ dry weight
1. _____	_____	☐ wt.% ☐ ppm
2. _____	_____	☐ wt.% ☐ ppm
3. _____	_____	☐ wt.% ☐ ppm
4. _____	_____	☐ wt.% ☐ ppm
5. _____	_____	☐ wt.% ☐ ppm
6. _____	_____	☐ wt.% ☐ ppm
7. _____	_____	☐ wt.% ☐ ppm
8. _____	_____	☐ wt.% ☐ ppm
9. _____	_____	☐ wt.% ☐ ppm
10. _____	_____	☐ wt.% ☐ ppm

Company Code [| | | | | | | | | |]

e. Analysis of composition is [ ] theoretical [ ] laboratory [ ] estimate
(attach copy of laboratory analysis if available)

f. Projected [ ] increase, [ ] decrease in volume from base year: _____% by July 1977;

_____% by July 1983.

g. Hazardous properties of waste: [ ] flammable [ ] toxic [ ] reactive [ ] explosive
[ ] corrosive [✓] other (specify) None

7. On Site Storage

a. Method: [ ] drum, [ ] roll-off container, [ ] tank, [ ] lagoon, [ ] other (specify) _____

b. Typical length of time waste stored _____ [ ] days, [ ] weeks, [ ] months

c. Typical volume of waste stored _____ [ ] tons, [ ] gallons

d. Is storage site diked? [ ] Yes [ ] No

e. Surface drainage collection [ ] Yes [ ] No

8. Transportation

a. Waste hauled off site by [ ] you [ ] others

b. Name of waste hauler _____

Address. _____
Street City

( )
State Zip Code Phone

9. Treatment and Disposal

a. Treatment or disposal: [✓] on site [ ] off site

b. Waste is [✓] reclaimed [ ] treated [ ] land disposed [ ] incinerated

[ ] other (specify) _____

c. Off site facility receiving waste

Name of Facility _____

Facility Operator _____

Facility Location _____
Street City

( )
State Zip Code Phone

Company Code ☐☐☐☐☐☐☐☐☐☐

II. Waste Characterization and Management Practice

(Use separate form for each waste stream)

1. Waste Stream No. 4 (from Form I, Number 17)

2. Description of process producing waste see attached flow sheet / process description for manufacture of silicon tetrachloride

3. Brief characterization of waste scrubbing towers recover chlorine as a gas

4. Time period for which data are representative current to _____

5. a. Annual waste production 375 ☑ tons/yr. ☐ gal./yr.

   b. Daily waste production 1.5 ☑ tons/day ☐ gal./day

   c. Frequency of waste production: ☐ seasonal ☐ occasional ☑ continual

   ☐ other (specify) _____

6. Waste Composition

   a. Average percent solids ____ % b. pH range __ to __

   c. Physical state: ☐ liquid, ☐ slurry, ☐ sludge, ☐ solid,

   ☑ other (specify) gas

d. Component	Average Concentration	☐ wet weight ☐ dry weight	
1. _____	_____	☐ wt.%	☐ ppm
2. _____	_____	☐ wt.%	☐ ppm
3. _____	_____	☐ wt.%	☐ ppm
4. _____	_____	☐ wt.%	☐ ppm
5. _____	_____	☐ wt.%	☐ ppm
6. _____	_____	☐ wt.%	☐ ppm
7. _____	_____	☐ wt.%	☐ ppm
8. _____	_____	☐ wt.%	☐ ppm
9. _____	_____	☐ wt.%	☐ ppm
10. _____	_____	☐ wt.%	☐ ppm

Company Code [ ][ ][ ][ ][ ][ ][ ][ ][ ][ ]

e. Analysis of composition is [ ] theoretical [ ] laboratory [ ] estimate
(attach copy of laboratory analysis if available)

f. Projected [ ] increase, [ ] decrease in volume from base year: ____% by July 1977;

____% by July 1983.

g. Hazardous properties of waste: [ ] flammable [✓] toxic [ ] reactive [ ] explosive

[ ] corrosive [ ] other (specify) _____

7. On Site Storage

a. Method: [ ] drum, [ ] roll-off container, [ ] tank, [ ] lagoon, [ ] other (specify) _____

b. Typical length of time waste stored _____ [ ] days, [ ] weeks, [ ] months

c. Typical volume of waste stored _____ [ ] tons, [ ] gallons

d. Is storage site diked? [ ] Yes [ ] No

e. Surface drainage collection [ ] Yes [ ] No

8. Transportation

a. Waste hauled off site by [ ] you [ ] others

b. Name of waste hauler _____

Address. _____
Street City

_____ ( )
State Zip Code Phone

9. Treatment and Disposal

a. Treatment or disposal: [✓] on site [ ] off site

b. Waste is [✓] reclaimed [ ] treated [ ] land disposed [ ] incinerated

[ ] other (specify) _____

c. Off site facility receiving waste

Name of Facility _____

Facility Operator _____

Facility Location _____
Street City

_____ ( )
State Zip Code Phone

Company Code ☐☐☐☐☐☐☐☐☐☐

II. Waste Characterization and Management Practice
(Use separate form for each waste stream)

1. Waste Stream No. 5 (from Form I, Number 17)

2. Description of process producing waste a limestone mix is used for pH adjustment of process wastewater

3. Brief characterization of waste waste limestone + water

4. Time period for which data are representative current to _____

5. a. Annual waste production 1.2 ☑ tons/yr. ☐ gal./yr.

b. Daily waste production _____ ☐ tons/day ☐ gal./day

c. Frequency of waste production: ☐ seasonal ☑ occasional ☐ continual

☐ other (specify) _____

6. Waste Composition

a. Average percent solids ____ % b. pH range __ to __

c. Physical state: ☐ liquid, ☐ slurry, ☐ sludge, ☑ solid,

☐ other (specify) _____

d. Component	Average Concentration	☐ wet weight ☐ dry weight	
1. _____	_____	☐ wt.%	☐ ppm
2. _____	_____	☐ wt.%	☐ ppm
3. _____	_____	☐ wt.%	☐ ppm
4. _____	_____	☐ wt.%	☐ ppm
5. _____	_____	☐ wt.%	☐ ppm
6. _____	_____	☐ wt.%	☐ ppm
7. _____	_____	☐ wt.%	☐ ppm
8. _____	_____	☐ wt.%	☐ ppm
9. _____	_____	☐ wt.%	☐ ppm
10. _____	_____	☐ wt.%	☐ ppm

Company Code [ ][ ][ ][ ][ ][ ][ ][ ][ ][ ]

e. Analysis of composition is [ ] theoretical [ ] laboratory [ ] estimate
(attach copy of laboratory analysis if available)

f. Projected [ ] increase, [ ] decrease in volume from base year: ____ % by July 1977;

____ % by July 1983.

g. Hazardous properties of waste: [ ] flammable [ ] toxic [ ] reactive [ ] explosive

[ ] corrosive [✓] other (specify) None

7. On Site Storage

a. Method: [ ] drum, [ ] roll-off container, [ ] tank, [ ] lagoon, [ ] other (specify) _____

b. Typical length of time waste stored ____ [ ] days, [ ] weeks, [ ] months

c. Typical volume of waste stored _____ [ ] tons, [ ] gallons

d. Is storage site diked? [ ] Yes [ ] No

e. Surface drainage collection [ ] Yes [ ] No

8. Transportation

a. Waste hauled off site by [ ] you [ ] others

b. Name of waste hauler _____

Address. _____
Street City

( )
State Zip Code Phone

9. Treatment and Disposal

a. Treatment or disposal: [ ] on site [✓] off site

b. Waste is [ ] reclaimed [ ] treated [ ] land disposed [ ] incinerated

[✓] other (specify) used as a driveway filler.

c. Off site facility receiving waste

Name of Facility _____

Facility Operator _____

Facility Location _____
Street City

( )
State Zip Code Phone

Company Code |_|_|_|_|_|_|_|_|

III. Land Disposal Questionnaire (for currently used or abandoned landfills, dumps, or lagoons)

1. a. Are there detailed design and operational plans for the site? / /Yes /X/No

   b. Attach sketch of land disposal area showing location and distance to surface water, soil classification, direction of groundwater flow, location of monitoring wells, and other pertinent information.

2. a. Does disposal site have a liner? / /Yes /X/No

   b. Type of liner _____

   c. Thickness _____

3. a. Leachate collection? / /Yes /X/No

   b. Leachate treatment? / /Yes /X/No

   c. Type of treatment _____

4. a. Shortest depth to groundwater _____ ft.

   b. Classes of soils underlying site (correlate with sketch) clay, [illegible]
   calcite & dolomite

5. a. Groundwater monitoring wells? / /Yes /X/No

   b. Number of wells _____ c. Well down gradient? / /Yes /X/No

6. Non-industrial wastes disposed of at site? / /Yes /X/No

7. Are different waste(s) disposed in specially segregated areas of the site? / /Yes /X/No

8. Is there security at disposal area (i.e. fences, signs)? / /Yes / /No

9. Are there contingency plans and equipment to handle possible emergency situations at the facility? / /Yes / /No Attach if available.

10. Industrial wastes disposed of at site:

Waste Stream Number	Waste	Volume/Year (please specify tons, gallons, cubic yards)
1	silicon tetrachloride sludge	131 tons/yr.

#13

REFERENCE NOTES

A - S.E. CORNER R.R.M. & ROBY STREETS TO CENTER & NORTH STREETS

B - NORTH PROPERTY LINE OF FLINTKOTE CORPORATION

C - PROPERTY OCCUPIED BY FERREE PLASTICS INC

D - EXTENSION OF CENTERLINE OF BEVERLY AVENUE

E - WEST & SOUTH PROPERTY LINES OF LOCKPORT TOWN & COUNTRY CLUB

F - N. LINE OF WASHINGTON HUNT SCHOOL & W. LINE OF CITY HOSPITAL PROPERTIES

G - OF SACRED CATHOLIC HIGH SCHOOL ATHLETIC FIELD

H - NIAGARA COUNTY PROPERTIES

J - R ZONE - SAMUEL LICATA PROPERTY

K - [illegible] PROPERTY

L - CENTER OF RAILROAD TRACKS

M - EXTENDED N. LINE OF CHESTNUT STREET

N - LOCKPORT MALL PROPERTY

P - [illegible] AREA PROPERTY

R - PARALLEL TO PROSPECT STREET & 100' WEST

S - R - ZONE - 44 x 49 - SCHIAVITTI PROPERTY

T - EAST LINE ST. PATRICK'S CHURCH PROPERTY

U - EXTENDED N. TO EAST LINE OF Mr. COLLINS STREET

Scale 1" = 800'

Van De Mark Chemical
Landfill Area 9/24/73

Vanchlor Co.

VDM Chemical

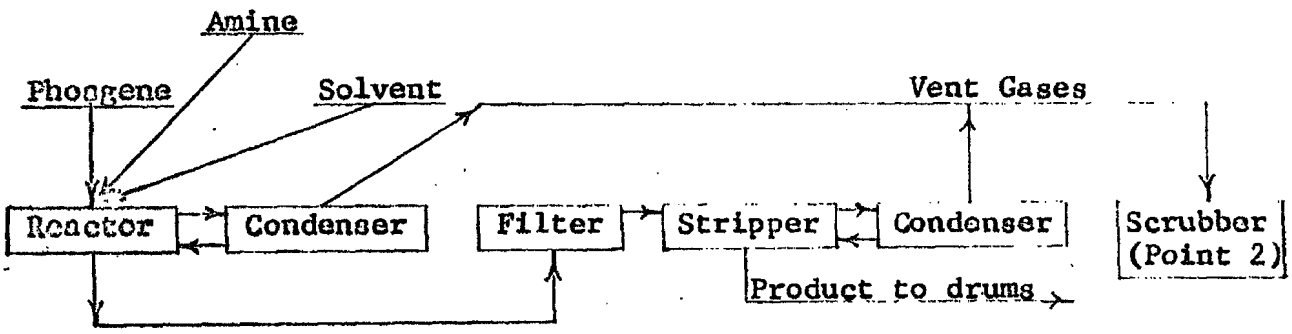
ST. PATRICKS CEMETERY

#14

Van De Mark Chemical Co., Inc.

1 N. TRANSIT ROAD • LOCKPORT, NEW YORK 14094 • 716 - 433-6764

ISOCYANATE FLOW SHEET



PROCESS EXPLANATION
(Description of Isocyanate Process)

An amine and a solvent is added is added to a reactor where phosgene gas is passed through the heated solution.

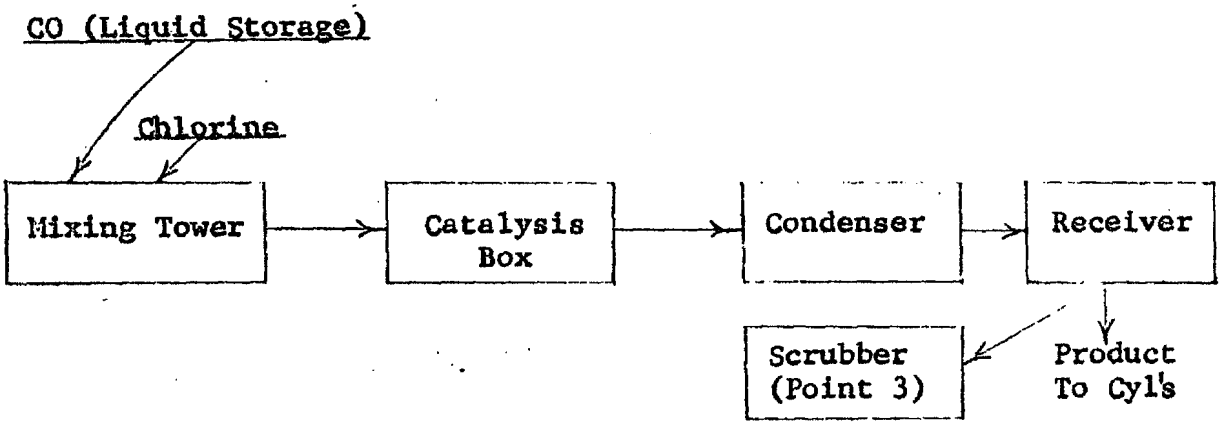
Solvent, hydrochloric acid, and unreacted phosgene from the reaction passes through a refrigerated condenser where the phosgene and solvent are condensed and returned to the reactor. The by product hydrochloric acid gas then passes on to the caustic scrubber. (Point 2)

After the reaction is completed, the crude product is then filtered into a stripper where dissolved hydrochloric acid gases are boiled off before drumming the product. The hydrochloric acid gases taken from the product are then reacted out in the caustic scrubber. (Point 2)

Van De Mark Chemical Co., Inc.

1 N. Transit Road • Lockport, New York 14094 • 716 - 433-6764

PHOSGENE FLOW SHEET



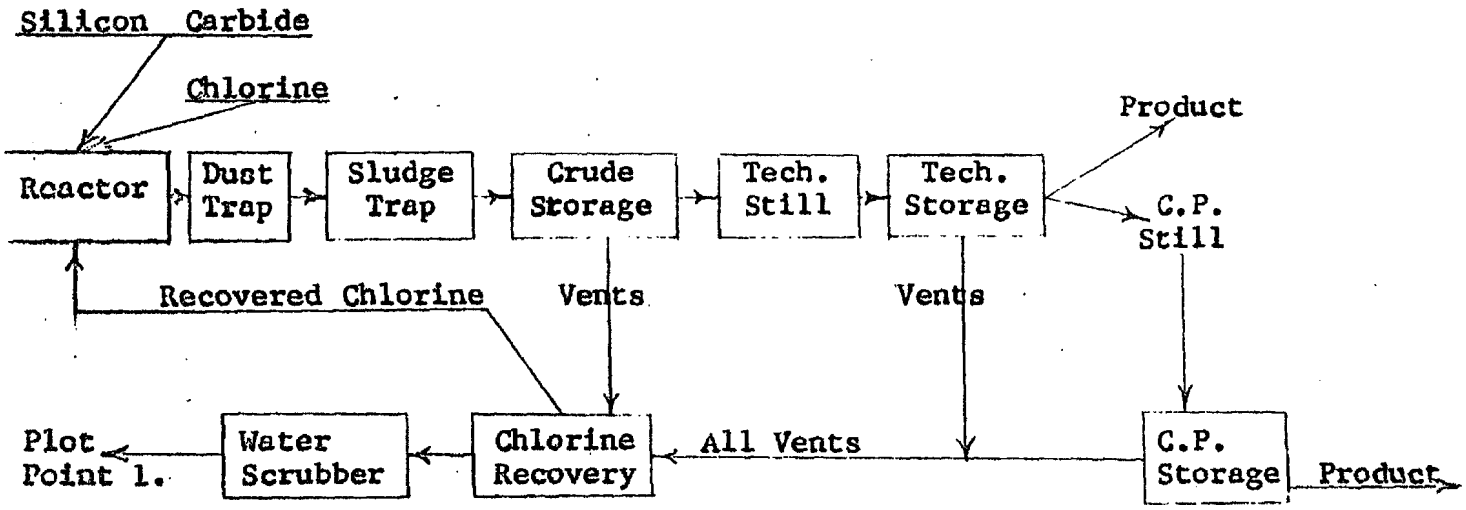
PROCESS EXPLANATION
(Description of ~~Isocyanate~~ PHOSGENE Process)

The purchased carbon monoxide gas is stored in a steel tank. From the tank, the gas is mixed with chlorine before passing through the catalysis box where the phosgene gas is produced. The phosgene gas is then liquified in a refrigerated condenser before being transferred into shipping cylinders. The uncondensable gases are then passed through a packed scrubber where they are removed. (Point 3).

Van De Mark Chemical Co., Inc.

1 N. Transit Road • Lockport, New York 14094 • 716 - 433-6764

SILICON TETRACHLORIDE FLOW SHEET



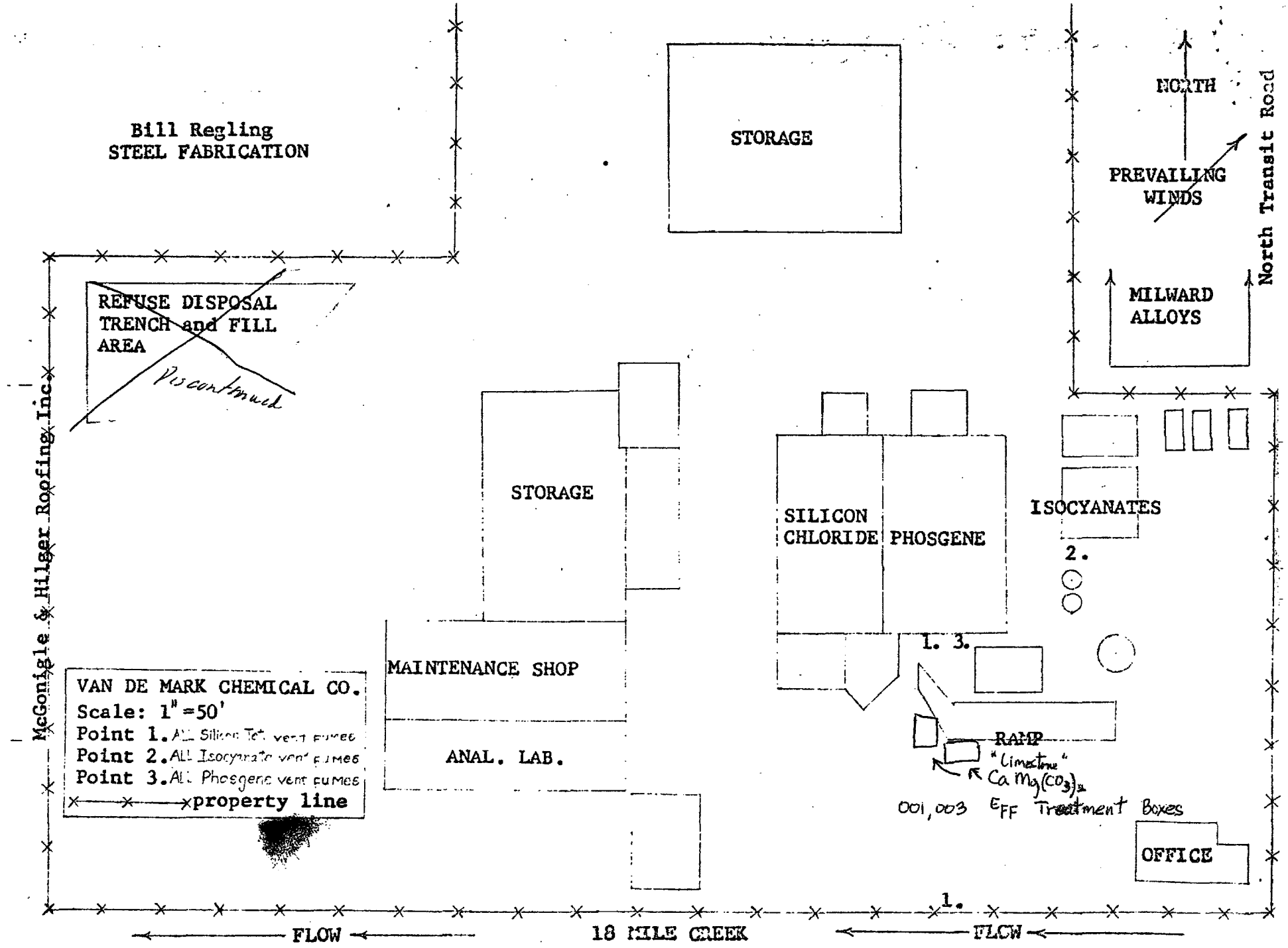
PROCESS EXPLANATION

(Description of ~~Aluminum Chloride~~ Silicon Tetrachloride Process)

To a hot bed of silicon carbide, a controlled flow of chlorine gas is added. The Silicon Chloride gas produced then passes through a dusttrap on its way to a sludge trap and water cooled condensers. The crude Silicon Tetrachloride is then allowed to overflow from the sludge trap to a crude storage tank from which it is then pumped to the technical grade still. Any uncondensed Silicon Tetrachloride is then cooled by amonia refrigeration and the distillate from the technical still is sold as product or pumped to the C.P. Still for further distillation.

The uncondensed gases from the reactors and stills is fed into a chlorine recovery system where most of the condensable gases are recovered in a refrigerated Silicon Tetrachloride absorption tower. When the Silicon Tetrachloride in the tower becomes saturated with chlorine, the Silicon Tetrachloride is then stripped of chlorine by means of still. The chlorine from the stripping still is then re-cycled to the reactors.

Any gases which escape from the absorption tower and the and the chlorine re-cycle process passes through a water scrubber equipped with a water seal to contain the gases. (Plot Point 1.)


Bill Regling
STEEL FABRICATION
STORAGE
NORTH
PREVAILING WINDS
North Transit Road
MILWARD ALLOYS
REFUSE DISPOSAL TRENCH and FILL AREA
Discontinued
McGonigle & Hilger Roofing Inc.
STORAGE
SILICON CHLORIDE
PHOSGENE
ISOCYANATES
2.
1. 3.
MAINTENANCE SHOP
ANAL. LAB.
RAMP
"Limestone"
$CaMg(CO_3)_2$
001, 003 EFF Treatment Boxes
OFFICE
VAN DE MARK CHEMICAL CO.
Scale: 1" =50'
Point 1. All Silicon Tet. vent fumes
Point 2. All Isocyanate vent fumes
Point 3. All Phosgene vent fumes
property line
1.
FLOW
18 MILE CREEK
FLOW

Van De Mark Chemical Co., Inc.

1 N. Transit Road • Lockport, New York 14094 • 716 - 433-6764

PLOT PLAN SUPPLEMENT

A. North Orientation - shown on plot plan
B. Plant property lines - shown on plot plan
C. Direction of prevailing winds - (WSW) shown on plot plan
D. Land use of surrounding property - as shown on plot plan and as follows:
   1. West - Mc Gonigle & Hilger Roofing Inc. (Industrial)
   2. North - Norton Labs Inc. (Industrial)
   3. Northwest - Bill Regling Steel Fabrication (Industrial)
   4. East - North Transit Road
   5. South - 18 Mile Creek

* E. Emission Sources - as shown on plot plan and as follows:
   1. Point 1. - All Silicon Chloride vent fumes
   2. Point 2. - All Isocyanate fumes
   3. Point 3. - All Phosgene vent fumes

F. Location of refuse disposal area -shown on plot plan
G. Elevation at ground level of emission points: 454'
H. Straight line distance from the points where air contaminants are discharged into the atmosphere to:
   1. The boundaries of the installation
      a. Given on plot plan (scale 1" = 60')
   2. The nearest building off plant property:
      a. Point 1. - 138' Northeast to Milward Alloy Co., Inc.
      b. Point 2. - 88' Northeast to Milward Alloy Co., Inc.
      c. Point 3. - 128' Northeast to Milward Alloy Co., Inc.
   3. The nature and use of off plant property:
      a. West - Mc Gonigle & Hilger Roofing Inc. (Storage area)
      b. North - Norton Labs Inc. (Industrial Manufacturing)
      c. Northwest - Bill Regling Steel Fabrication (Industrial fabrication shop)
      d. Northeast - Milward Alloys Inc. (metal alloy manufacturing)
      e. East - North Transit Road (public road)
      f. South - 18 Mile Creek

Miscellaneous: Location of refuse disposal trench and fill area: as shown on plot plan on Northwest side of property. Refuse is taken to site by towmotor or highlift and is disposed by trench and fill operation. Refuse consists of [redacted]saleable scrap; such as [redacted] metals. The waste from the Silicon

PLOT PLAN SUPPLEMENT

Tetrachloride operation is accumulated and sold in truckload quantities. The isocyanate and phosgene processes do not have by product wastes or residues.

☼ Existing emission points, no proposed emission points.

Notes: Silicon tetrafluoride
Carbonyl chloride (Phosgene)
(Vande Mark)

Vaughn's
alcohol, ether

① Si Cly
② phosgene
③ specialty chemicals (phosgene derivatives)

waste: Aluminum [illegible]
slag, concentrator
Comp → Aluminum + Alum
+ sold as [illegible]

Si Cly - 2 waste products

45,000 lb/mo.

(1.) spent silicon carbide waste
sold to steel companies
used on ground → haul themselves to companies
60,000 lb/month - powder form
Si Cly process - continual

[illegible] skimmed off
put in drums + sold
continual

state log backwards permit

2.) silicon tetrachloride sludge traps
Si Cly process making (will be stopped) no outside haulers.
impurities
on site burial but will stop
from SiO_2 + NaCl → Calcium + Cl
HCl neutralizer
262,000 lb/yr total
about 15 yrs.

dug a hole → has a bottom
of soil stabilizer
1/2 acre / caustic + lime
clay, sand + lime
drums + [illegible]
phosgenation → [illegible]

No distillation unit from specialty chemicals
shipped as impure product → incineration

(3) mixed ash wastes to w.w. treatment - 20 gal/yr.

note: all w.w. effluent is acceptable to Pre Water Dept.
on site incineration w/permit to burn paper, cardboard
residue stays in hopper (or to municipal waste [illegible]

RCRA files (Nia. County) — 9

RCRA INSPECTION FORM

OCT 1 3 '82
NEW YORK, N.Y. 10007

Report Prepared for:

Generator ☒

Transporter ☒

HWM (TSD) facility ☒

Copy of report sent to the facility ☐

Facility Information

Name: GMC, Harrison Radiator Division

Address: 200 Upper Mountain Road
West Lockport, NY 14094

EPA ID#: NYDO 0212685 2

Date of Inspection: 9/24/82

Participating Personnel

State or EPA Personnel: Jonathan Josephs – EPA
A. Donald McKenzie – DEC

Facility Personnel: L.E. Chamberlin, Superintendent - Environmental
George Tabraham – Supervisor - Wastewater Treatmen
Mark Rathke – Hazardous Waste Specialist
Roy Knapp – Wastewater Treatment Specialist

Report Prepared by Name: Jonathan Josephs

Agency: EPA

Telephone #: (212) 264-0546

Approved for the Director by: [signature]

Facility Description and Operations -

The existing hazardous waste processes at the facility are —

1) container storage of still bottoms from solvent recovery (F001/F002) for less than 90 days.

2) pile storage of wastewater treatment plant sludge (F019)

A landfill is proposed for the facility. The landfill would receive the following wastes —

1) the sludge currently stored in piles

2) the wastewater treatment sludge generated in the future

3) wastes from other GMC facilities located in N.Y. State from Rochester to the west

The GMC, Harrison Radiator Wastewater Treatment plant (NYT370010209) is listed as a separate facility from this facility which includes the manufacturing plant, sludge piles and proposed landfill site. Therefore, sludge shipments from the treatment plant to the storage piles are manifested.

PLANT

-B-

Describe the activities that result in the generation of hazardous waste.

Manufacture of automobile radiators and air conditioners.
Solvent degreasing
Chromium Conversion Coating of Aluminum

Identify the hazardous waste located on site, and estimate the approximate quantities of each. (Identify Waste Codes)

(1) Wastewater treatment plant sludge resulting from "electroplating" (actually conversion coating) operations
- waste code F019 (also EP toxic) - ≈ 70,000 cubic feet

(2) Still bottoms from the recovery of the spent solvents trichloroethylene and perchloroethylene
- waste codes F001 and/or F002 ≈ 60 drums (55 gallons each)

Is there reason to believe that the facility has hazardous waste on-site?

a. If yes, what leads you to believe it is hazardous waste? Check appropriate boxes:

☒ Company admits that its waste is hazardous during the inspection.

☒ Company admitted the waste is hazardous in its RCRA notification and/or Part A Permit Application.

☒ The waste material is listed in the regulations as a hazardous waste from a nonspecific source (§261.31)

☐ The waste material is listed in the regulations as a hazardous waste from a specific source (§261.32)

☐ The material or product is listed in the regulations as a discarded commercial chemical product (§261.33)

☒ Testing has shown characteristics of ignitability, corrosivity, reactivity or extraction procedure toxicity, or has revealed hazardous constituents (please attach analysis report) – wastewater treatment sludge

☒ Company is unsure but there is reason to believe that waste materials are hazardous. (Explain)

– Runoff from sludge piles might be EP toxic since the sludge is EP toxic.

GENERATOR INSPECTION CHECKLIST

40 CFR 262 Subpart A-General	YES	NO	N/A
262.11 - Hazardous waste determination — See attachment			
1) Did the generator test its waste to determine whether it is hazardous?	X	X	—
Is the waste hazardous?	X	X	?
2) Is the generator determining that its waste exhibits a hazardous waste characteristic(s) based on its knowledge of the material(s) or processes used?	X	—	—
40 CFR 262 Subpart B-The Manifest			
Has hazardous waste been shipped off-site since November 19, 1980?	X	—	—
If yes, approximately how many shipments, off-site, have been made and describe the approximate size of an average shipment made on a monthly basis. If facility is a small quantity generator, please explain. Perhaps 100 shipments. Around 80 drums each. Some non-hazardous wastes (e.g. waste oil, paint sludges) are also manifested.			
262.21 Does each manifest (or representative sample) have the following information? Please circle the missing elements.			
— a manifest document number?	X	—	—
— the generators name, mailing address, telephone number and EPA I.D. Number?	X	—	—
— the transporters name and EPA I.D. Number?	X	—	—
— the name, address and EPA ID Number of the designated facility?	X	—	—
— a description of the wastes (DOT)?	X	—	—
— the total quantity of each hazardous waste by units of weight or volume, and the type and number of containers as loaded into or onto the transport vehicle?	X	—	—
— a certification that the materials are properly classified, described, package, marked and labeled, and are in proper condition for transportation under regulations of the DOT and EPA?	X	—	—
(obtain a copy of the incomplete manifests)			
This facility also maintains records for three other Harrison Radiator facilities: the wastewater treatment facility and two generator installations located in Lockport and Buffalo.			
40 CFR 262 - Subpart D - Recordkeeping and Reporting			
262.40 Has the generator maintained facility records since Nov. 19, 1980? (manifest, exception report and waste analysis)	X	—	—
262.42 Has the generator received signed copies (from the TSD facility) of all the manifests for waste shipped off-site more than 35 days ago?	X	—	—
If not, have Exception Reports been submitted to EPA covering any of these shipments made more than 45 days ago?	—	—	X

	YES	NO	N/A

40 CFR 262 - Subpart C - Pretransportation Requirements

262.30-33 Before transporting or offering hazardous waste for transportation off-site does the generator:

Hazardous waste not offerred for inspection. Not ascertained.

1) Package the waste in accordance with applicable DOT regulations (i.e., 49 CFR Parts 173, 178 & 179) ___ ___ ___

2) Label each package according to DOT (i.e., 49 CFR 172) ___ ___ ___

3) Mark each package according to DOT (i.e., 49 CFR 172) ___ ___ ___

4) Mark each container of 110 gallons or less with the words "Hazardous Waste - Federal Law Prohibits Improper Disposal. If found, contact the nearest police or public safety authority or the U.S. EPA," and include the generators name, address and manifest document number. (i.e., 49 CFR 172.304) ___ ___ ___

262.34 Accumulation Time

1) How is waste accumulated on-site?

- [X] Containers
- [ ] Tanks
- [?] Surface impoundments (complete SWMF checklist)
- [X] Piles (complete SWMF checklist)

2) Is waste accumulated for more than 90 days? X ___ ___

However, containerized waste is not accumulated for more than 90 days.

If yes, complete SWMF checklist

3) Is each container clearly dated with each period of accumulation so as to be visible for inspection? X ___ ___

4) Is each container or tank marked or labeled with the words "hazardous waste" or in compliance with the DOT labeling requirements? ___ X ___

Labeling is not done until just prior to shipment so that the labels are not washed off by rain.

STOP HERE IF THE HAZARDOUS WASTE MGT FACILITY (TSD) CHECKLIST IS FILLED OUT

262.34 - SHORT TERM ACCUMULATION STANDARDS

(For generators who accumulate waste in tanks or containers for 90 days or less)

	YES	NO	N/A
40 CFR 265 - Subpart I Containers			
265.170 - What type of containers are used for storage. Describe the size, type and quantity and nature of waste (e.g., 12 fifty-five gallon drums of waste acetone). 55 gallon drums Approximately 60 drums of hazardous waste (still bottoms)			
265.171 - Do the containers appear to be in good condition, not in danger of leaking?	X		
If not, please describe the type, condition and number of leaking or corroded containers. Be detailed and specific.			
265.172 - Are hazardous waste stored in containers made of compatible materials?	X		
If not, please explain.			
265.173(a) - Are all containers closed except those in use?	X		
265.173(b) - Do containers appear to be properly opened, handled or stored in a manner which will minimize the risk of the container rupturing or leaking?	X		
265.174 - Is the storage area inspected at least weekly?	X		
265.176 - Are containers holding ignitable and reactive waste located at least 50 feet (15 meters) away from the facility's property line?			X
265.177 - Are incompatible wastes stored separate from each other?			X

Drums are stored on pallets over concrete.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

RCRA TRANSPORTER INSPECTION CHECKLIST

Transporter Name: GMC, Harrison Radiator EPA I.D.: NYDO 021266852

Transporter Address: 200 Upper Mountain Road Driver: ———
West Lockport

		Yes	No	
1.	Does the transporter have an EPA I.D. number?	(X)	( )	
2.	Is the transporter carrying hazardous waste?	( )	( )	NA
3.	Does the transporter have a manifest?	( )	( )	NA
4.	Does the manifest show the following information:			
	a. Name, address, I.D. of generator	(X)	( )	
	b. Name, address, I.D. of transporter	(X)	( )	
	c. Name, address, I.D. of designated facility	(X)	( )	
	d. Name of alternative facility	(X)	( )	
	e. DOT waste description	(X)	( )	
	f. Quantity of waste—volume, weight, number of containers	(X)	( )	
	g. Signed certification statement	(X)	( )	
5.	Does the manifest information confirm vehicle load?	( )	( )	NA
6.	Is the vehicle placarded for hazardous waste?	( )	( )	NA

7. General comments:

Transportation of hazardous waste not observed. Answers based on review of manifests in office.

Inspected by: J. Jacobs
Date: 9/24/82

HAZARDOUS WASTE MANAGEMENT FACILITY CHECK LIST
(Facilities Subject to 40 CFR 265 Standards)

40 CFR Part 265 Subpart B General Facility Standards	YES	NO	N/A	See attachment for further explanation
265.13-General Waste Analysis				
1) Is there a detailed chemical and physical anaylsis of a representative sample of the waste or each waste? (At a minimum this analysis must contain all the information necessary for proper management of the waste)		X		Lack of analytical data for sludge pile runoff
2) Does the character of the waste handled at the facility change from day to day, week to week, etc., thus requiring frequent testing? You may check only one				
Waste characteristics vary				little variability expected
All waste are basically the same				
Company treats all waste as hazardous				
3) Is there a written waste analysis plan at the facility?		X		
Does it contain the following:				
a) Parameters for each waste to be analyzed and the rationale for the selection of these parameters.				
b) Test methods used to test these parameters.				
c) Sampling methods to obtain a representative sample of the waste to be analyzed.				
d) Frequency of repeated analysis to ensure accurate and current information.				
4) Does hazardous waste come to this facility from an outside source? e.g. another generator.	X			
5) If waste comes from an outside source, are there procedures in the plan to insure that waste received conforms to the accompanying manifest?				Unnecessary at present

Composition of GMC, Harrison wastewater treatment sludge is well documented and the two facilities are managed by the same management. Procedures will be developed for any new off-site sources.

265.14-Security			
1) Is there: a) a 24-hour surveillance system? or,			
b) a suitable barrier which completely surrounds the active portion of this facility?	X		
2) Are there "Danger-Unauthorized Personnel Keep Out" signs posted at each entrance to the facility?		X	
If no, explain what measures are taken for security.			
265.15 - General Inspections Requirements			
1) Does the facility have a written inspection schedule?	X		
2) Does the schedule identify the types of problems to be looked for and the frequency of inspections?	X		
3) Does the owner/operator record inspections in a log?	X		
4) Is there evidence that problems reported in the inspection log have been remedied?		X	
If no, please explain.			

265.16 - Personnel Training	YES	NO	N/A
1) Have facility personnel successfully completed a program of classroom instruction or on-the-job training within 6 months of having been employed?	≷	—	—
If yes, have facility personnel taken part in an annual review of training?	≷	—	—
2) Is there written documentation of the following:			
—job title for each position at the facility related to hazardous waste management and the name of the employee filling each job?	not ascertained		
—type and amount of training to be given to personnel in jobs related to hazardous waste management?	≷	—	—
—actual training or experience received by personnel?	≷	—	—
3) Are training records kept on all employees for at least 3 years?	≷	—	—

The only formalized training program is for management of containerized hazardous waste. A training program and training records regarding sludge handling is lacking.

265.17-General Requirements for Ignitable, Reactive or Incompatible Wastes	None		
1) Are there ignitable, reactive or incompatible wastes on site?	—	—	≷
If yes, what are the approximate types and quantities and location of the waste.			
2) Have precautions been taken to prevent accidental ignition or reaction of ignitable or reactive waste?	—	—	—
If no, please explain.			
3) In your opinion, are proper precautions taken so that these wastes do not:			
— generate extreme heat or pressure, fire or explosion, or violent reaction?	—	—	—
— produce uncontrolled toxic mist, fumes, dusts or gases in sufficient quantities to pose a risk of fire or explosions?	—	—	—
— damage the structural integrity of the device or facility containing the waste?	—	—	—
— threaten human health or the environment?	—	—	—

40 CFR 265 - Subpart C - Preparedness and Prevention	YES	NO	N/A
265.32 Does the facility comply with preparedness and prevention requirements including maintaining:			
— an internal communications or alarm system?	X		
— a telephone or other device to summon emergency assistance from local authorities?	X		
— portable fire equipment?	X		
— water at adequate volume and pressure to supply water hose streams, foam producing equipment, etc.	X		
265.33 Is equipment tested and maintained?	X		
265.34 Is there immediate access to communications or alarm systems during handling of hazardous waste? Two way radios used in waste pile areas.	X		
265.35 Adequate aisle space?	X		
If no, please explain storage pattern.			
In your opinion, do the types of waste on-site require all of the above procedures, or are some not needed: Explain.	X		

40 CFR 265 - Subpart D - Contingency Plan and Emergency Procedures			
Does the facility have a written contingency plan for emergency procedures designed to deal with fires, explosions or any unplanned release of hazardous waste?	X		
1) Does the plan describe arrangements made with the local authorities? However, arrangements have been made with the fire department.	not ascertained		
2) Has the contingency plan been submitted to the local authorities?	X		
3) Does the plan list names, addresses and phone numbers of Emergency Coordinators?		X	
4) Does the plan have a list of what emergency equipment is available?	X		
5) Is there a provision for evacuating facility personnel?		X	
6) Was there an emergency coordinator present or on call at the time of the inspection?			X

Facility has amended its SPCC Plan to deal with hazardous waste.

40 CFR 265 Subpart E-Manifest System, Recordkeeping and Reporting			
265.71 - Use of the Manifest			
1) Has the facility received hazardous waste from an off-site source since November 19, 1980?	X		
If no, skip to 265.73 - Operating Record			
2) If yes, does it appear that the facility has a copy of a manifest for each hazardous waste load received?	X		
If not, please explain.			

	YES	NO	N/A
3) How many post-November 19 manifests does the facility have? (Estimate if the number is large) Perhaps 300 shipments from the wastewater treatment plant			
4) Does each manifest have the following information? (circle missing information)			
— a manifest document number?	X		
— the generators name, mailing address, telephone number and EPA I.D. #?	X		
— the transporters name and EPA I.D. Number?	X		
— the TSD name, address, telephone number & EPA I.D. Number?	X		
— a description of the waste (DOT)?	X		
— the total quantity of each hazardous waste by units of weight or volume, and the type and number of containers as loaded into or onto the transport vehicle?	X		
— a certification that the materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation under regulations of the DOT and EPA?	X		
(Obtain a copy of the incomplete manifests)			

265.72 – Manifest Discrepancies

	YES	NO	N/A
Have there been significant discrepancies between the quantity and type of waste received and the waste identified on the manifest?		X	
Describe unreconciled descrepancies.			

265.73 – Operating Record

	YES	NO	N/A	
1) Does the facility keep an operating record?	X			
2) Does the record contain the following information:				
a) Description and quantity of waste on-site and the method(s) and date(s) of its Treatments, Storage & Disposal?	X			– in the form of the manifests
b) The location and quantity of each hazardous waste at each location?	X			– waste inventory performed 6/82
c) Records and results of waste analysis and trial tests performed and identified in the waste analysis plan?	X			
d) Summary reports and details of all incidents that require implementing the contingency plan.				
e) Records and results of inspections for the past 3 years or November 19, 1980 which ever is less?	X			
f) Monitoring, testing or analytical data where required for:				
Groundwater, Land Treatment, Incinerators, and Thermal Treatment?			X	

There is groundwater monitoring data. However, it does not appear to be required.

265.76 – Unmanifested Waste Report

	YES	NO	N/A
Has the facility accepted hazardous waste from off-site sources without a manifest?		X	
If yes, has the facility submitted an unmanifested waste report?			X

	YES	NO	N/A
40 CFR 265 Subpart F - Groundwater Monitoring			
(Applies only to surface impoundments, landfills and/or land treatment facilities.)			
Is a groundwater monitoring plan available at the facility? See attachments	—	—	—
If yes, please fill out the appropriate Groundwater Monitoring Questionaire and attach to this report.			
40 CFR 265 Subpart G - Closure and Post-Closure			
265.111 Closure Performance Standard			
Have any portions of the facility been closed since November 19, 1980?	—	X	—
If yes, please explain			
265.112 - Closure Plan			
Does the facility have a written closure plan? (Applies to all types of TSD facilities)	X	—	—
If yes, does the written plan include:			
1. A description of how and when the facility will be partially (if applicable) and ultimately closed?	X	—	—
2. An estimate of the maximum inventory of wastes in storage or treatment at any time during the life of the facility? 75,000 cu. yd. of sludge	X	—	—
3. A description of the steps necessary to decontaminate facility equipment during closure?	X	—	—
4. A schedule for final closure including the anticipated date when waste will no longer be received and when final closure will be completed? 6 to 9 months to complete closure. It is uncertain when closure will commence.	X	—	—
5. Does the owner/operator have a written estimate of of the cost of closing the facility?	—	—	—
If yes, what is it? ($) 7,000,000 — based on the worst case (i.e. off-site disposal)			
265.118 - Post Closure Plan			
Does the facility have a written post-closure plan? (Applies only to disposal facilities)	—	—	X
If yes, Does the Plan:			
1. Identify the activities which will be carried on after closure and the frequency of these activities?	—	—	—
2. Include a description of planned groundwater monitoring activities and their frequency during post-closure?	—	—	—
3. Include a description of planned maintenance activities and frequency to insure integrity of final cover during post-closure?	—	—	—
4. Include the name, address and phone number of a person or office to contact during post-closure?	—	—	—
5. Does the owner/operator have a written estimate of the cost of post-closure for the facility?	—	—	—
If yes, what is it? ($)			

Closure plan based on excavating all sludge and contaminated soil and disposal at an approved hazardous waste landfill.

A post closure plan will be proposed for the planned landfill. The existing waste management operations do not require a post closure plan.

Please circle all appropriate activities and answer questions on indicated pages for all activities circled.

Storage	Treatment	Disposal
Container - pg 6	Tank - pg 7	Landfill - pg 11
Tank, above ground-pg 7	Surface Impoundment-pg 8	Land Treatment - pg 10
Tank, below ground-pg 7	Incineration - pg 12	Surface Impoundments - pg 8
Surface Impoundments-pg 8	Thermal Treatment- pg 12	Other_____
Waste Piles - pg 9	Land Treatment - pg 10	
Other_____	Chemical, Physical and Biological Treatment - pg 13	
	Other_____	

YES NO N/A

40 CFR 265 - Subpart I - Containers — See generator checklist (Storage less than 90 days)

1) - What type of containers are used for storage. Describe the size, type, quantity and nature of waste (e.g. 12 fifty-five gallon drums of waste acetone)

2) - Is there a containment system for spills, leaks and precipitation? — — —

If yes, describe.

265.171 - Do the containers appear to be in good condition, not in danger of leaking? — — —

If not, please describe the type, condition and number of leaking or corroded containers. Be detailed and specific.

265.172 - Are hazardous waste stored in containers made of compatible materials? — — —

If not, please explain.

265.173(a) - Are all containers closed except those in use? — — —

265.173(b) - Do containers appear to be properly opened, handled or stored in a manner which will minimize the risk of the container rupturing or leaking? — — —

265.174 - Is the storage area inspected at least weekly? — — —

265.176 - Are containers holding ignitable and reactive waste located at least 50 feet (15 meters) away from the facility's property line? — — —

265.177 - Are incompatible wastes stored separate from each other? — — —

If no, explain

40 CFR 265 Subpart J - Tanks — None	YES	NO	N/A
265.190 1) What are the approximate number and size of tanks containing hazardous waste?			
2) Identify the waste treated/stored in each tank.			
265.192 - General Operating Requirements			
1) Are the tanks maintained so that there is no evidence of past, present, or risk of future leaks?			
If no, please explain.			
2) Are there leaking tanks?			
3) Are all hazardous wastes or treatment reagents being placed in tanks compatible with the tank material so that there is no danger of ruptures, corrosion, leaks or other failures?			
4) Do uncovered tanks have at least 2 feet of freeboard or an adequate containment structure?			
5) If waste is continuously fed into a tank, is the tank equipped with a means to stop the inflow from the tank? e.g. bypass system to a standby tank			
265.194 - Inspections			
1) Is the tank(s) inspected each operating day for a) discharge control equipment b) monitoring equipment c) level of waste in tank			
2) Are the tanks and surrounding areas (e.g., dike) inspected weekly for leaks, corrosion or other failures?			
3) Are there underground tanks?			
If yes, how many and can they be entered for inspection?			
265.198 - Are ignitable or reactive wastes stored in a manner which protects them from a source of ignition or reaction?			
If no, please explain.			
265.199 - Does it appear that incompatible wastes are being stored separate from each other?			

40 CFR 265 Subpart K - Surface Impoundments — None	YES	NO	N/A
Describe the design and operating features of the surface impoundment to prevent ground water contamination (e.g., liner leachate collection system).			
265.220 - Give the approximate size of surface impoundments (gallons or cubic feet). Please specify the types of wastes stored and treated.			
265.222 - Is there at least 2 feet of freeboard in the impoundment?	___	___	___
265.223 - Do all earthen dikes have a protective cover to preserve their structural integrity?	___	___	___
If yes, please specify the type of covering.			
265.226 - 1) Is the free board level inspected daily?	___	___	___
2) Are the dikes surrounding the surface impoundment inspected for leaks, deterioration or failures inspected weekly?	___	___	___
265.229 - 1) Are any ignitable or reactive wastes placed in the impoundment?	___	___	___
2) If yes, is the waste treated immediately after placement in the impoundment to render the waste non-active and/or non-ignitable?	___	___	___
3) If no, to (2) explain.			
265.230 - Are incompatible wastes placed in the impoundment?	___	___	___
If yes, explain.			

	YES	NO	N/A

40 CFR 265 Subpart L - Waste Piles

265.250 - How many waste piles are on-site and approximately how large are they? (Please indicate size and height and types of wastes in piles.) 5 pile "areas"

68,000 cu. yd. of wastewater treatment sludge (F019)

265.251 - Is the waste pile protected from wind erosion? X

a) Does it appear to need such protection? X

b) Explain what type of protection does exist.

See attachment

265.253 Containment

1) Is leachate run-off from the waste piles a hazardous waste? If no, skip down to 265.256. It hasn't been tested. Uncertain

2) Is the pile placed on an impermeable base? X

3) Is run-on diverted away from the pile? X

4) Is the leachate and run-off collected and treated? X - Some of it is. However, there is no underground leachate collection system

If no to any of the above questions above then:

5) Is the pile protected from precipitation and run-on? X

6) Are wastes containing free liquids placed in the pile? X

Sludge has been dewatered by a vacuum filter to ≥25% solids.

265.256 - 1) Are ignitable or reactive wastes placed on the pile? If no, skip to §265.257 X

2) Is the ignitable or reactive waste added to existing pile resulting in it no longer meeting the definition of ignitable and reactive? If no, explain. X

3) Is the waste protected from any materials or condition that may cause it to ignite or react? If no, explain. X

265.257 - Does it appear that a pile of incompatible wastes is being stored separate from other wastes or materials, or protected from them by means of a dike, berm, wall or other device? If no, explain. X

Attachments

Hazardous waste determination

— A determination has not been made as to whether leachate from the waste piles is a hazardous waste. This information is relevant to —

1) Whether an impermiable base for the piles is required under § 265.253(a)

2) Whether the runoff collection ditches and ponds are hazardous waste impoundments

Groundwater Monitoring

— Groundwater monitoring around the waste piles has been ongoing for several years. Samples from 9 wells are collected monthly with the analytic results submitted to the DEC Buffalo office. Analyses are done for pH, Cadmium, Chromium, Copper, Lead, Zinc, Oil & Grease, Flouride and Hexavalent Chromium. Groundwater contamination did not appear significant based on a cursory review of the data.

Waste Piles

— The wastewater treatment sludge has been accumulated in piles since the mid 1970's.

There are 5 separate pile areas designated "A" through "E." Only area "A" is currently used for storage of new sludge. The piles are bermed to prevent run-on and drained to collect runoff in ditches or ponds. There are some measures to control wind erosion —

① Most of the pile in area "A" is covered with dirt and seeded with grass, although there is some uncovered sludge.

② The piles in area "E" are covered with plastic, although the plastic is badly torn.

③ The "piles" in area "C" don't rise above the ground level since they are contained in pits. This provides some wind protection

④ The piles in area B and the pile in area D are not protected.

According to the facility representatives, wind erosion is only a problem in dry summer weather. During the inspection, the piles were damp and no wind dispersal of waste was apparent.

The amount of water collected in the pile

drainage system is observed during pile inspections. Pile maintenance includes pumping the collected water into tank trucks. It is discharged from the tank trucks into sewers which feed the GMC, Harrison Radiator Wastewater Treatment Facility (NYT370010209).

ATTACHMENT B

TEST PIT EXCAVATION PHOTOGRAPHS

NCRDD Landfill #1 Evaluation Photographs

NCRDD LF #1
Lockport, New York File No. 21.0056419.00


TP-1 Excavation


TP-1 showing thick layer of waste


TP-2 Excavation


TP-2 with thin layer of waste


TP-3 with possible exposed possible sludge waste



Grey, possible historic sludge waste from TP-3

NCRDD Landfill #1 Evaluation Photographs

NCRDD LF #1
Lockport, New York File No. 21.0056419.00


TP-4 Excavation


Former 55-gallon drum from TP-4


Minimal waste exposed from TP-5


TP-6 located inside landfill #1


TP-7 located inside Landfill #1 and Easement “D”


Exposed waste from TP-7

NCRDD Landfill #1 Evaluation Photographs

NCRDD LF #1
Lockport, New York File No. 21.0056419.00



TP-8 Excavation between maintenance shop and LF#1



Metal drum with possible welding waste residue in TP-8



TP-9 Excavation between maintenance shop and LF#1



Metal drum with tar-like material in TP-8



FMC fungicide product bags in TP-8



Various chemical product bags in TP-8

ATTACHMENT C

ANALYTICAL TESTING REPORTS

Adirondack Environmental Services, Inc.®
Experience is the solution
314 North Pearl Street ♦ Albany, New York 12207
(800) 848-4983 ♦ (518) 434-4546 ♦ Fax (518) 434-0891

September 12, 2008

Richard Pope
Niagara County
175 Hawley Street
Lockport, NY 14094

TEL: (716) 438-9984
FAX: (716) 434-6568

Work Order No: 080829033
PO#: NIACO-0000049960

RE: NCRDD Investigation

Dear Richard Pope:

Adirondack Environmental Services, Inc received 5 samples on 8/29/2008 for the analyses presented in the following report.

There were no problems with the analyses and all associated QC met EPA or laboratory specifications, except if noted.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Tara Daniels
Laboratory Manager

ELAP#: 10709
AIHA#: 100307

CC:
Attachment-TO15 Report

Qualifiers:	ND - Not Detected at the Reporting Limit	S - Spike Recovery outside accepted recovery limits
	J - Analyte detected below quanititation limits	R - RPD outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	T - Tentitively Identified Compound-Estimated Conc.
	X - Value exceeds Maximum Contaminant Level	E - Value above quantitation range

Adirondack Environmental Services, Inc

Date: *12-Sep-08*

CLIENT: Niagara County
Work Order: 080829033
Reference: NCRDD Investigation /
PO#: NIACO-0000049960

Client Sample ID: NCRDD LF#1 TP-1
Collection Date: 8/27/2008
Lab Sample ID: 080829033-001
Matrix: SOLID

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ORGANOCHLORINE PESTICIDES SW8081A (Prep: SW3545 - 9/3/2008)						Analyst: **KF**
4,4'-DDD	< 16	16		µg/Kg	5	9/4/2008 6:15:50 AM
4,4'-DDE	< 16	16		µg/Kg	5	9/4/2008 6:15:50 AM
4,4'-DDT	< 16	16		µg/Kg	5	9/4/2008 6:15:50 AM
Aldrin	< 8.5	8.5		µg/Kg	5	9/4/2008 6:15:50 AM
alpha-BHC	< 8.5	8.5		µg/Kg	5	9/4/2008 6:15:50 AM
alpha-Chlordane	< 8.5	8.5		µg/Kg	5	9/4/2008 6:15:50 AM
beta-BHC	< 8.5	8.5		µg/Kg	5	9/4/2008 6:15:50 AM
Chlordane	< 850	850		µg/Kg	5	9/4/2008 6:15:50 AM
delta-BHC	< 8.5	8.5		µg/Kg	5	9/4/2008 6:15:50 AM
Dieldrin	< 16	16		µg/Kg	5	9/4/2008 6:15:50 AM
Endosulfan I	< 8.5	8.5		µg/Kg	5	9/4/2008 6:15:50 AM
Endosulfan II	< 16	16		µg/Kg	5	9/4/2008 6:15:50 AM
Endosulfan sulfate	< 16	16		µg/Kg	5	9/4/2008 6:15:50 AM
Endrin	< 16	16		µg/Kg	5	9/4/2008 6:15:50 AM
Endrin aldehyde	< 16	16		µg/Kg	5	9/4/2008 6:15:50 AM
Endrin ketone	< 16	16		µg/Kg	5	9/4/2008 6:15:50 AM
gamma-BHC	< 8.5	8.5		µg/Kg	5	9/4/2008 6:15:50 AM
gamma-Chlordane	< 8.5	8.5		µg/Kg	5	9/4/2008 6:15:50 AM
Heptachlor	< 8.5	8.5		µg/Kg	5	9/4/2008 6:15:50 AM
Heptachlor epoxide	< 8.5	8.5		µg/Kg	5	9/4/2008 6:15:50 AM
Methoxychlor	< 85	85		µg/Kg	5	9/4/2008 6:15:50 AM
Toxaphene	< 850	850		µg/Kg	5	9/4/2008 6:15:50 AM
POLYCHLORINATED BIPHENYLS SW8082 (Prep: SW3545 - 9/3/2008)						Analyst: **KF**
Aroclor 1016	< 160	160		µg/Kg	5	9/5/2008 12:22:22 PM
Aroclor 1221	< 160	160		µg/Kg	5	9/5/2008 12:22:22 PM
Aroclor 1232	< 160	160		µg/Kg	5	9/5/2008 12:22:22 PM
Aroclor 1242	2200	160		µg/Kg	5	9/5/2008 12:22:22 PM
Aroclor 1248	< 160	160		µg/Kg	5	9/5/2008 12:22:22 PM
Aroclor 1254	< 160	160		µg/Kg	5	9/5/2008 12:22:22 PM
Aroclor 1260	< 160	160		µg/Kg	5	9/5/2008 12:22:22 PM
Aroclor 1262	< 160	160		µg/Kg	5	9/5/2008 12:22:22 PM
Aroclor 1268	< 160	160		µg/Kg	5	9/5/2008 12:22:22 PM
PESTICIDES, TCLP LEACHED SW1311/8081A (Prep: E608 - 9/3/2008)						Analyst: **KF**
Chlordane-TCLP	< 0.005	0.005		mg/L	1	9/4/2008 6:15:50 AM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
X - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
T - Tentitively Identified Compound-Estimated Conc.
E - Value above quantitation range

Adirondack Environmental Services, Inc

Date: *12-Sep-08*

CLIENT: Niagara County
Work Order: 080829033
Reference: NCRDD Investigation /
PO#: NIACO-0000049960

Client Sample ID: NCRDD LF#1 TP-1
Collection Date: 8/27/2008
Lab Sample ID: 080829033-001
Matrix: SOLID

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
PESTICIDES, TCLP LEACHED SW1311/8081A (**Prep: E608 - 9/3/2008**)						Analyst: **KF**
Endrin-TCLP	< 0.005	0.005		mg/L	1	9/4/2008 6:15:50 AM
gamma-BHC(Lindane)-TCLP	< 0.005	0.005		mg/L	1	9/4/2008 6:15:50 AM
Heptachlor epoxide-TCLP	< 0.005	0.005		mg/L	1	9/4/2008 6:15:50 AM
Heptachlor-TCLP	< 0.005	0.005		mg/L	1	9/4/2008 6:15:50 AM
Methoxychlor-TCLP	< 0.050	0.050		mg/L	1	9/4/2008 6:15:50 AM
Toxaphene-TCLP	< 0.050	0.050		mg/L	1	9/4/2008 6:15:50 AM
ICP METALS SW6010B (**Prep: SW3050B - 9/2/2008**)						Analyst: **KH**
Aluminum	5580	5.00		µg/g	1	9/9/2008 3:40:00 PM
Antimony	< 3.00	3.00		µg/g	1	9/9/2008 3:40:00 PM
Arsenic	1.59	0.250		µg/g	1	9/9/2008 3:40:00 PM
Barium	49.6	0.500		µg/g	1	9/9/2008 3:40:00 PM
Beryllium	0.390	0.250		µg/g	1	9/9/2008 3:40:00 PM
Cadmium	0.966	0.250		µg/g	1	9/9/2008 3:40:00 PM
Calcium	53700	250		µg/g	10	9/9/2008 3:51:00 PM
Chromium	29.1	0.250		µg/g	1	9/9/2008 3:40:00 PM
Cobalt	6.62	2.50		µg/g	1	9/9/2008 3:40:00 PM
Copper	1830	0.250		µg/g	1	9/9/2008 3:40:00 PM
Iron	20100	25.0		µg/g	10	9/9/2008 3:51:00 PM
Lead	182	0.250		µg/g	1	9/9/2008 3:40:00 PM
Magnesium	19500	25.0		µg/g	1	9/9/2008 3:40:00 PM
Manganese	793	5.00		µg/g	10	9/9/2008 3:51:00 PM
Nickel	47.9	2.50		µg/g	1	9/9/2008 3:40:00 PM
Potassium	1430	25.0		µg/g	1	9/9/2008 3:40:00 PM
Selenium	< 0.250	0.250		µg/g	1	9/9/2008 3:40:00 PM
Silver	< 1.00	1.00		µg/g	1	9/9/2008 3:40:00 PM
Sodium	409	25.0		µg/g	1	9/9/2008 3:40:00 PM
Thallium	0.676	0.500		µg/g	1	9/9/2008 3:40:00 PM
Vanadium	7.97	2.50		µg/g	1	9/9/2008 3:40:00 PM
Zinc	866	0.500		µg/g	1	9/9/2008 3:40:00 PM
MERCURY SW7471A (**Prep: SW7471A - 9/2/2008**)						Analyst: **KH**
Mercury	0.087	0.020		µg/g	1	9/3/2008
TCLP MERCURY SW1311/7470A (**Prep: SW7470A - 9/3/2008**)						Analyst: **KH**

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T - Tentitively Identified Compound-Estimated Conc.
E - Value above quantitation range

Adirondack Environmental Services, Inc

Date: *12-Sep-08*

CLIENT: Niagara County
Work Order: 080829033
Reference: NCRDD Investigation /
PO#: NIACO-0000049960

Client Sample ID: NCRDD LF#1 TP-1
Collection Date: 8/27/2008
Lab Sample ID: 080829033-001
Matrix: SOLID

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
TCLP MERCURY SW1311/7470A (**Prep: SW7470A - 9/3/2008**)						Analyst: **KH**
Mercury-TCLP	< 0.020	0.020		mg/L	1	9/3/2008
TCLP METALS - ICP SW1311/6010A (**Prep: SW1311 - 9/2/2008**)						Analyst: **SM**
Arsenic-TCLP	< 0.05	0.05		mg/L	1	9/10/2008 1:29:00 PM
Barium-TCLP	0.52	0.10		mg/L	1	9/10/2008 1:29:00 PM
Cadmium-TCLP	< 0.05	0.05		mg/L	1	9/10/2008 1:29:00 PM
Chromium-TCLP	< 0.05	0.05		mg/L	1	9/10/2008 1:29:00 PM
Lead-TCLP	0.35	0.05		mg/L	1	9/10/2008 1:29:00 PM
Selenium-TCLP	< 0.05	0.05		mg/L	1	9/10/2008 1:29:00 PM
Silver-TCLP	< 0.10	0.10		mg/L	1	9/10/2008 1:29:00 PM
CORROSIVITY SW9040B						Analyst: **CJ**
Corrosivity	Non Corrosive	0			1	9/10/2008 4:15:00 PM

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T - Tentitively Identified Compound-Estimated Conc.
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CLIENT: Niagara County
Work Order: 080829033
Reference: NCRDD Investigation /
PO#: NIACO-0000049960

Client Sample ID: NCRDD LF#1 TP-3
Collection Date: 8/27/2008
Lab Sample ID: 080829033-002
Matrix: SOLID

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ORGANOCHLORINE PESTICIDES SW8081A (**Prep: SW3545 - 9/3/2008**)						Analyst: **KF**
4,4´-DDD	< 6.6	6.6		µg/Kg	2	9/5/2008 5:21:53 PM
4,4´-DDE	< 6.6	6.6		µg/Kg	2	9/5/2008 5:21:53 PM
4,4´-DDT	< 6.6	6.6		µg/Kg	2	9/5/2008 5:21:53 PM
Aldrin	< 3.4	3.4		µg/Kg	2	9/5/2008 5:21:53 PM
alpha-BHC	< 3.4	3.4		µg/Kg	2	9/5/2008 5:21:53 PM
alpha-Chlordane	< 3.4	3.4		µg/Kg	2	9/5/2008 5:21:53 PM
beta-BHC	< 3.4	3.4		µg/Kg	2	9/5/2008 5:21:53 PM
Chlordane	< 340	340		µg/Kg	2	9/5/2008 5:21:53 PM
delta-BHC	< 3.4	3.4		µg/Kg	2	9/5/2008 5:21:53 PM
Dieldrin	< 6.6	6.6		µg/Kg	2	9/5/2008 5:21:53 PM
Endosulfan I	< 3.4	3.4		µg/Kg	2	9/5/2008 5:21:53 PM
Endosulfan II	< 6.6	6.6		µg/Kg	2	9/5/2008 5:21:53 PM
Endosulfan sulfate	< 6.6	6.6		µg/Kg	2	9/5/2008 5:21:53 PM
Endrin	< 6.6	6.6		µg/Kg	2	9/5/2008 5:21:53 PM
Endrin aldehyde	< 6.6	6.6	S	µg/Kg	2	9/5/2008 5:21:53 PM
Endrin ketone	< 6.6	6.6		µg/Kg	2	9/5/2008 5:21:53 PM
gamma-BHC	< 3.4	3.4		µg/Kg	2	9/5/2008 5:21:53 PM
gamma-Chlordane	< 3.4	3.4		µg/Kg	2	9/5/2008 5:21:53 PM
Heptachlor	< 3.4	3.4		µg/Kg	2	9/5/2008 5:21:53 PM
Heptachlor epoxide	< 3.4	3.4		µg/Kg	2	9/5/2008 5:21:53 PM
Methoxychlor	< 34	34		µg/Kg	2	9/5/2008 5:21:53 PM
Toxaphene	< 340	340		µg/Kg	2	9/5/2008 5:21:53 PM
POLYCHLORINATED BIPHENYLS SW8082 (**Prep: SW3545 - 9/3/2008**)						Analyst: **KF**
Aroclor 1016	< 33	33		µg/Kg	1	9/5/2008 10:57:13 AM
Aroclor 1221	< 33	33		µg/Kg	1	9/5/2008 10:57:13 AM
Aroclor 1232	< 33	33		µg/Kg	1	9/5/2008 10:57:13 AM
Aroclor 1242	350	33		µg/Kg	1	9/5/2008 10:57:13 AM
Aroclor 1248	< 33	33		µg/Kg	1	9/5/2008 10:57:13 AM
Aroclor 1254	160	33		µg/Kg	1	9/5/2008 10:57:13 AM
Aroclor 1260	< 33	33		µg/Kg	1	9/5/2008 10:57:13 AM
Aroclor 1262	< 33	33		µg/Kg	1	9/5/2008 10:57:13 AM
Aroclor 1268	< 33	33		µg/Kg	1	9/5/2008 10:57:13 AM
PESTICIDES, TCLP LEACHED SW1311/8081A (**Prep: E608 - 9/3/2008**)						Analyst: **KF**
Chlordane-TCLP	< 0.005	0.005		mg/L	1	9/4/2008 6:43:20 AM

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E - Value above quantitation range

Adirondack Environmental Services, Inc

Date: *12-Sep-08*

CLIENT: Niagara County
Work Order: 080829033
Reference: NCRDD Investigation /
PO#: NIACO-0000049960

Client Sample ID: NCRDD LF#1 TP-3
Collection Date: 8/27/2008
Lab Sample ID: 080829033-002
Matrix: SOLID

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
PESTICIDES, TCLP LEACHED SW1311/8081A (**Prep: E608 - 9/3/2008**)						Analyst: **KF**
Endrin-TCLP	< 0.005	0.005		mg/L	1	9/4/2008 6:43:20 AM
gamma-BHC(Lindane)-TCLP	< 0.005	0.005		mg/L	1	9/4/2008 6:43:20 AM
Heptachlor epoxide-TCLP	< 0.005	0.005		mg/L	1	9/4/2008 6:43:20 AM
Heptachlor-TCLP	< 0.005	0.005		mg/L	1	9/4/2008 6:43:20 AM
Methoxychlor-TCLP	< 0.050	0.050		mg/L	1	9/4/2008 6:43:20 AM
Toxaphene-TCLP	< 0.050	0.050		mg/L	1	9/4/2008 6:43:20 AM
ICP METALS SW6010B (**Prep: SW3050B - 9/2/2008**)						Analyst: **KH**
Aluminum	7600	5.00		µg/g	1	9/9/2008 3:56:00 PM
Antimony	< 3.00	3.00		µg/g	1	9/9/2008 3:56:00 PM
Arsenic	1.37	0.250		µg/g	1	9/9/2008 3:56:00 PM
Barium	60.5	0.500		µg/g	1	9/9/2008 3:56:00 PM
Beryllium	0.390	0.250		µg/g	1	9/9/2008 3:56:00 PM
Cadmium	1.65	0.250		µg/g	1	9/9/2008 3:56:00 PM
Calcium	25000	250		µg/g	10	9/9/2008 4:02:00 PM
Chromium	654	0.250		µg/g	1	9/9/2008 3:56:00 PM
Cobalt	6.76	2.50		µg/g	1	9/9/2008 3:56:00 PM
Copper	786	0.250		µg/g	1	9/9/2008 3:56:00 PM
Iron	11800	25.0		µg/g	10	9/9/2008 4:02:00 PM
Lead	1790	0.250		µg/g	1	9/9/2008 3:56:00 PM
Magnesium	6300	25.0		µg/g	1	9/9/2008 3:56:00 PM
Manganese	332	0.500		µg/g	1	9/9/2008 3:56:00 PM
Nickel	99.4	2.50		µg/g	1	9/9/2008 3:56:00 PM
Potassium	864	25.0		µg/g	1	9/9/2008 3:56:00 PM
Selenium	< 0.250	0.250		µg/g	1	9/9/2008 3:56:00 PM
Silver	< 1.00	1.00		µg/g	1	9/9/2008 3:56:00 PM
Sodium	253	25.0		µg/g	1	9/9/2008 3:56:00 PM
Thallium	1.05	0.500		µg/g	1	9/9/2008 3:56:00 PM
Vanadium	5.77	2.50		µg/g	1	9/9/2008 3:56:00 PM
Zinc	10600	5.00		µg/g	10	9/9/2008 4:02:00 PM
MERCURY SW7471A (**Prep: SW7471A - 9/2/2008**)						Analyst: **KH**
Mercury	0.021	0.020		µg/g	1	9/3/2008
TCLP MERCURY SW1311/7470A (**Prep: SW7470A - 9/3/2008**)						Analyst: **KH**

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E - Value above quantitation range

Adirondack Environmental Services, Inc

Date: *12-Sep-08*

CLIENT: Niagara County
Work Order: 080829033
Reference: NCRDD Investigation /
PO#: NIACO-0000049960

Client Sample ID: NCRDD LF#1 TP-3
Collection Date: 8/27/2008
Lab Sample ID: 080829033-002
Matrix: SOLID

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
TCLP MERCURY SW1311/7470A						Analyst: **KH**
(Prep: SW7470A - 9/3/2008)						
Mercury-TCLP	< 0.020	0.020		mg/L	1	9/3/2008
TCLP METALS - ICP SW1311/6010A						Analyst: **SM**
(Prep: SW1311 - 9/2/2008)						
Arsenic-TCLP	< 0.05	0.05		mg/L	1	9/10/2008 1:37:00 PM
Barium-TCLP	0.65	0.10		mg/L	1	9/10/2008 1:37:00 PM
Cadmium-TCLP	0.08	0.05		mg/L	1	9/10/2008 1:37:00 PM
Chromium-TCLP	0.33	0.05		mg/L	1	9/10/2008 1:37:00 PM
Lead-TCLP	40.5	0.05	X	mg/L	1	9/10/2008 1:37:00 PM
Selenium-TCLP	< 0.05	0.05		mg/L	1	9/10/2008 1:37:00 PM
Silver-TCLP	< 0.10	0.10		mg/L	1	9/10/2008 1:37:00 PM
CORROSIVITY SW9040B						Analyst: **CJ**
Corrosivity	Non Corrosive	0			1	9/10/2008 4:15:00 PM

Qualifiers:

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B - Analyte detected in the associated Method Blank
X - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
T - Tentitively Identified Compound-Estimated Conc.
E - Value above quantitation range

Adirondack Environmental Services, Inc

Date: *12-Sep-08*

CLIENT: Niagara County
Work Order: 080829033
Reference: NCRDD Investigation /
PO#: NIACO-0000049960

Client Sample ID: NCRDD LF#1 TP-4
Collection Date: 8/27/2008
Lab Sample ID: 080829033-003
Matrix: SOLID

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANICS SW8260B						Analyst: **ML**
Chloromethane	< 4000	4000		µg/Kg	400	9/10/2008 7:52:00 PM
Bromomethane	< 4000	4000		µg/Kg	400	9/10/2008 7:52:00 PM
Vinyl chloride	< 4000	4000		µg/Kg	400	9/10/2008 7:52:00 PM
Chloroethane	< 4000	4000		µg/Kg	400	9/10/2008 7:52:00 PM
Methylene chloride	2200	2000		µg/Kg	400	9/10/2008 7:52:00 PM
Acetone	< 4000	4000		µg/Kg	400	9/10/2008 7:52:00 PM
Carbon disulfide	< 2000	2000		µg/Kg	400	9/10/2008 7:52:00 PM
1,1-Dichloroethene	< 2000	2000		µg/Kg	400	9/10/2008 7:52:00 PM
1,1-Dichloroethane	< 2000	2000		µg/Kg	400	9/10/2008 7:52:00 PM
trans-1,2-Dichloroethene	< 2000	2000		µg/Kg	400	9/10/2008 7:52:00 PM
cis-1,2-Dichloroethene	< 2000	2000		µg/Kg	400	9/10/2008 7:52:00 PM
Chloroform	< 2000	2000		µg/Kg	400	9/10/2008 7:52:00 PM
1,2-Dichloroethane	< 2000	2000		µg/Kg	400	9/10/2008 7:52:00 PM
2-Butanone	< 4000	4000		µg/Kg	400	9/10/2008 7:52:00 PM
1,1,1-Trichloroethane	< 2000	2000		µg/Kg	400	9/10/2008 7:52:00 PM
Carbon tetrachloride	< 2000	2000		µg/Kg	400	9/10/2008 7:52:00 PM
Bromodichloromethane	< 2000	2000		µg/Kg	400	9/10/2008 7:52:00 PM
1,2-Dichloropropane	< 2000	2000		µg/Kg	400	9/10/2008 7:52:00 PM
cis-1,3-Dichloropropene	< 2000	2000		µg/Kg	400	9/10/2008 7:52:00 PM
Trichloroethene	< 2000	2000		µg/Kg	400	9/10/2008 7:52:00 PM
Dibromochloromethane	< 2000	2000		µg/Kg	400	9/10/2008 7:52:00 PM
1,1,2-Trichloroethane	< 2000	2000		µg/Kg	400	9/10/2008 7:52:00 PM
Benzene	< 2000	2000		µg/Kg	400	9/10/2008 7:52:00 PM
trans-1,3-Dichloropropene	< 2000	2000		µg/Kg	400	9/10/2008 7:52:00 PM
Bromoform	< 2000	2000		µg/Kg	400	9/10/2008 7:52:00 PM
4-Methyl-2-pentanone	< 4000	4000		µg/Kg	400	9/10/2008 7:52:00 PM
2-Hexanone	< 4000	4000		µg/Kg	400	9/10/2008 7:52:00 PM
Tetrachloroethene	< 2000	2000		µg/Kg	400	9/10/2008 7:52:00 PM
1,1,2,2-Tetrachloroethane	< 2000	2000		µg/Kg	400	9/10/2008 7:52:00 PM
Toluene	60000	2000		µg/Kg	400	9/10/2008 7:52:00 PM
Chlorobenzene	< 2000	2000		µg/Kg	400	9/10/2008 7:52:00 PM
Ethylbenzene	40000	2000		µg/Kg	400	9/10/2008 7:52:00 PM
Styrene	< 2000	2000		µg/Kg	400	9/10/2008 7:52:00 PM
m,p-Xylene	140000	2000		µg/Kg	400	9/10/2008 7:52:00 PM
o-Xylene	47000	2000		µg/Kg	400	9/10/2008 7:52:00 PM
Methyl tert-butyl ether	< 2000	2000		µg/Kg	400	9/10/2008 7:52:00 PM
Dichlorodifluoromethane	< 2000	2000		µg/Kg	400	9/10/2008 7:52:00 PM
Methyl Acetate	< 2000	2000		µg/Kg	400	9/10/2008 7:52:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
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B - Analyte detected in the associated Method Blank
X - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
T - Tentitively Identified Compound-Estimated Conc.
E - Value above quantitation range

Adirondack Environmental Services, Inc

Date: *12-Sep-08*

CLIENT: Niagara County
Work Order: 080829033
Reference: NCRDD Investigation /
PO#: NIACO-0000049960

Client Sample ID: NCRDD LF#1 TP-4
Collection Date: 8/27/2008
Lab Sample ID: 080829033-003
Matrix: SOLID

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANICS SW8260B						Analyst: **ML**
1,1,2-Trichloro-1,2,2-trifluoroethane	< 2000	2000		µg/Kg	400	9/10/2008 7:52:00 PM
Trichlorofluoromethane	< 2000	2000		µg/Kg	400	9/10/2008 7:52:00 PM
Cyclohexane	< 4000	4000		µg/Kg	400	9/10/2008 7:52:00 PM
Methyl Cyclohexane	< 2000	2000		µg/Kg	400	9/10/2008 7:52:00 PM
1,2-Dibromoethane	< 2000	2000		µg/Kg	400	9/10/2008 7:52:00 PM
1,3-Dichlorobenzene	< 2000	2000		µg/Kg	400	9/10/2008 7:52:00 PM
Isopropylbenzene	< 2000	2000		µg/Kg	400	9/10/2008 7:52:00 PM
1,4-Dichlorobenzene	< 2000	2000		µg/Kg	400	9/10/2008 7:52:00 PM
1,2-Dichlorobenzene	< 2000	2000		µg/Kg	400	9/10/2008 7:52:00 PM
1,2-Dibromo-3-chloropropane	< 2000	2000		µg/Kg	400	9/10/2008 7:52:00 PM
1,2,4-Trichlorobenzene	< 2000	2000		µg/Kg	400	9/10/2008 7:52:00 PM
TCLP VOLATILES SW1311/8260						Analyst: **ML**
1,1-Dichloroethene-TCLP	< 5	5		µg/L	1	9/10/2008 12:22:00 PM
1,2-Dichloroethane-TCLP	< 5	5		µg/L	1	9/10/2008 12:22:00 PM
1,4-Dichlorobenzene-TCLP	< 5	5		µg/L	1	9/10/2008 12:22:00 PM
2-Butanone-TCLP	< 10	10		µg/L	1	9/10/2008 12:22:00 PM
Benzene-TCLP	< 5	5		µg/L	1	9/10/2008 12:22:00 PM
Carbon tetrachloride-TCLP	< 5	5		µg/L	1	9/10/2008 12:22:00 PM
Chlorobenzene-TCLP	< 5	5		µg/L	1	9/10/2008 12:22:00 PM
Chloroform-TCLP	< 5	5		µg/L	1	9/10/2008 12:22:00 PM
Tetrachloroethene-TCLP	< 5	5		µg/L	1	9/10/2008 12:22:00 PM
Trichloroethene-TCLP	< 5	5		µg/L	1	9/10/2008 12:22:00 PM
Vinyl chloride-TCLP	< 10	10		µg/L	1	9/10/2008 12:22:00 PM

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S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
T - Tentitively Identified Compound-Estimated Conc.
E - Value above quantitation range

CLIENT: Niagara County
Work Order: 080829033
Reference: NCRDD Investigation /
PO#: NIACO-0000049960

Client Sample ID: NCRDD LF#1 TP-5
Collection Date: 8/27/2008
Lab Sample ID: 080829033-004
Matrix: SOLID

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ORGANOCHLORINE PESTICIDES SW8081A (Prep: SW3545 - 9/3/2008)						Analyst: **KF**
4,4'-DDD	< 3.3	3.3		µg/Kg	1	9/5/2008 5:49:19 PM
4,4'-DDE	< 3.3	3.3		µg/Kg	1	9/5/2008 5:49:19 PM
4,4'-DDT	< 3.3	3.3		µg/Kg	1	9/5/2008 5:49:19 PM
Aldrin	< 1.7	1.7		µg/Kg	1	9/5/2008 5:49:19 PM
alpha-BHC	< 1.7	1.7		µg/Kg	1	9/5/2008 5:49:19 PM
alpha-Chlordane	< 1.7	1.7		µg/Kg	1	9/5/2008 5:49:19 PM
beta-BHC	< 1.7	1.7		µg/Kg	1	9/5/2008 5:49:19 PM
Chlordane	< 170	170		µg/Kg	1	9/5/2008 5:49:19 PM
delta-BHC	< 1.7	1.7		µg/Kg	1	9/5/2008 5:49:19 PM
Dieldrin	< 3.3	3.3		µg/Kg	1	9/5/2008 5:49:19 PM
Endosulfan I	< 1.7	1.7		µg/Kg	1	9/5/2008 5:49:19 PM
Endosulfan II	< 3.3	3.3		µg/Kg	1	9/5/2008 5:49:19 PM
Endosulfan sulfate	< 3.3	3.3		µg/Kg	1	9/5/2008 5:49:19 PM
Endrin	< 3.3	3.3		µg/Kg	1	9/5/2008 5:49:19 PM
Endrin aldehyde	< 3.3	3.3	S	µg/Kg	1	9/5/2008 5:49:19 PM
Endrin ketone	< 3.3	3.3		µg/Kg	1	9/5/2008 5:49:19 PM
gamma-BHC	< 1.7	1.7		µg/Kg	1	9/5/2008 5:49:19 PM
gamma-Chlordane	< 1.7	1.7		µg/Kg	1	9/5/2008 5:49:19 PM
Heptachlor	< 1.7	1.7		µg/Kg	1	9/5/2008 5:49:19 PM
Heptachlor epoxide	< 1.7	1.7		µg/Kg	1	9/5/2008 5:49:19 PM
Methoxychlor	< 17	17		µg/Kg	1	9/5/2008 5:49:19 PM
Toxaphene	< 170	170		µg/Kg	1	9/5/2008 5:49:19 PM
PESTICIDES, TCLP LEACHED SW1311/8081A (Prep: E608 - 9/3/2008)						Analyst: **KF**
Chlordane-TCLP	< 0.005	0.005		mg/L	1	9/4/2008 7:10:47 AM
Endrin-TCLP	< 0.005	0.005		mg/L	1	9/4/2008 7:10:47 AM
gamma-BHC(Lindane)-TCLP	< 0.005	0.005		mg/L	1	9/4/2008 7:10:47 AM
Heptachlor epoxide-TCLP	< 0.005	0.005		mg/L	1	9/4/2008 7:10:47 AM
Heptachlor-TCLP	< 0.005	0.005		mg/L	1	9/4/2008 7:10:47 AM
Methoxychlor-TCLP	< 0.050	0.050		mg/L	1	9/4/2008 7:10:47 AM
Toxaphene-TCLP	< 0.050	0.050		mg/L	1	9/4/2008 7:10:47 AM
ICP METALS SW6010B (Prep: SW3050B - 9/2/2008)						Analyst: **KH**
Aluminum	70.4	5.00		µg/g	1	9/10/2008 3:32:00 PM
Antimony	< 3.00	3.00		µg/g	1	9/10/2008 3:32:00 PM
Arsenic	0.319	0.250		µg/g	1	9/10/2008 3:32:00 PM

Qualifiers:

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X - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
T - Tentitively Identified Compound-Estimated Conc.
E - Value above quantitation range

Adirondack Environmental Services, Inc

Date: *12-Sep-08*

CLIENT: Niagara County
Work Order: 080829033
Reference: NCRDD Investigation /
PO#: NIACO-0000049960

Client Sample ID: NCRDD LF#1 TP-5
Collection Date: 8/27/2008
Lab Sample ID: 080829033-004
Matrix: SOLID

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS SW6010B (**Prep: SW3050B - 9/2/2008**)						Analyst: **KH**
Barium	2.01	0.500		µg/g	1	9/10/2008 3:32:00 PM
Beryllium	< 0.250	0.250		µg/g	1	9/10/2008 3:32:00 PM
Cadmium	< 0.250	0.250		µg/g	1	9/10/2008 3:32:00 PM
Calcium	2230	25.0		µg/g	1	9/10/2008 3:32:00 PM
Chromium	2.85	0.250		µg/g	1	9/10/2008 3:32:00 PM
Cobalt	< 2.50	2.50		µg/g	1	9/10/2008 3:32:00 PM
Copper	15.8	0.250		µg/g	1	9/10/2008 3:32:00 PM
Iron	1970	2.50		µg/g	1	9/10/2008 3:32:00 PM
Lead	19.4	0.250		µg/g	1	9/10/2008 3:32:00 PM
Magnesium	403	25.0		µg/g	1	9/10/2008 3:32:00 PM
Manganese	34.4	0.500		µg/g	1	9/10/2008 3:32:00 PM
Nickel	< 2.50	2.50		µg/g	1	9/10/2008 3:32:00 PM
Potassium	< 25.0	25.0		µg/g	1	9/10/2008 3:32:00 PM
Selenium	0.452	0.250		µg/g	1	9/10/2008 3:32:00 PM
Silver	< 1.00	1.00		µg/g	1	9/10/2008 3:32:00 PM
Sodium	63.0	25.0		µg/g	1	9/10/2008 3:32:00 PM
Thallium	5.02	0.500		µg/g	1	9/10/2008 3:32:00 PM
Vanadium	< 2.50	2.50		µg/g	1	9/10/2008 3:32:00 PM
Zinc	23.4	0.500		µg/g	1	9/10/2008 3:32:00 PM
MERCURY SW7471A (**Prep: SW7471A - 9/2/2008**)						Analyst: **KH**
Mercury	< 0.020	0.020		µg/g	1	9/3/2008
TCLP MERCURY SW1311/7470A (**Prep: SW7470A - 9/3/2008**)						Analyst: **KH**
Mercury-TCLP	< 0.020	0.020		mg/L	1	9/3/2008
TCLP METALS - ICP SW1311/6010A (**Prep: SW1311 - 9/2/2008**)						Analyst: **SM**
Arsenic-TCLP	< 0.05	0.05		mg/L	1	9/10/2008 1:42:00 PM
Barium-TCLP	0.53	0.10		mg/L	1	9/10/2008 1:42:00 PM
Cadmium-TCLP	< 0.05	0.05		mg/L	1	9/10/2008 1:42:00 PM
Chromium-TCLP	< 0.05	0.05		mg/L	1	9/10/2008 1:42:00 PM
Lead-TCLP	0.36	0.05		mg/L	1	9/10/2008 1:42:00 PM
Selenium-TCLP	< 0.05	0.05		mg/L	1	9/10/2008 1:42:00 PM
Silver-TCLP	< 0.10	0.10		mg/L	1	9/10/2008 1:42:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
X - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
T - Tentitively Identified Compound-Estimated Conc.
E - Value above quantitation range

Adirondack Environmental Services, Inc

Date: *12-Sep-08*

CLIENT: Niagara County
Work Order: 080829033
Reference: NCRDD Investigation /
PO#: NIACO-0000049960

Client Sample ID: NCRDD LF#1 TP-5
Collection Date: 8/27/2008
Lab Sample ID: 080829033-004
Matrix: SOLID

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
CORROSIVITY SW9040B						Analyst: **CJ**
Corrosivity	Non Corrosive	0			1	9/10/2008 4:15:00 PM

Qualifiers:

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B - Analyte detected in the associated Method Blank
X - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
T - Tentitively Identified Compound-Estimated Conc.
E - Value above quantitation range

Adirondack Environmental Services, Inc

Date: *12-Sep-08*

CLIENT: Niagara County
Work Order: 080829033
Reference: NCRDD Investigation /
PO#: NIACO-0000049960

Client Sample ID: Sump
Collection Date: 8/27/2008
Lab Sample ID: 080829033-005
Matrix: AIR

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ORGANOCHLORINE PESTICIDES SW8081A (**Prep: E608 - 9/2/2008**)						Analyst: **KF**
4,4´-DDD	< 0.104	0.104		µg/L	1	9/2/2008 8:27:43 PM
4,4´-DDE	< 0.104	0.104		µg/L	1	9/2/2008 8:27:43 PM
4,4´-DDT	< 0.104	0.104		µg/L	1	9/2/2008 8:27:43 PM
Aldrin	< 0.052	0.052		µg/L	1	9/2/2008 8:27:43 PM
alpha-BHC	< 0.052	0.052		µg/L	1	9/2/2008 8:27:43 PM
alpha-Chlordane	< 0.052	0.052		µg/L	1	9/2/2008 8:27:43 PM
beta-BHC	< 0.052	0.052		µg/L	1	9/2/2008 8:27:43 PM
delta-BHC	< 0.052	0.052		µg/L	1	9/2/2008 8:27:43 PM
Dieldrin	< 0.104	0.104		µg/L	1	9/2/2008 8:27:43 PM
Endosulfan I	< 0.052	0.052		µg/L	1	9/2/2008 8:27:43 PM
Endosulfan II	< 0.104	0.104		µg/L	1	9/2/2008 8:27:43 PM
Endosulfan sulfate	< 0.104	0.104		µg/L	1	9/2/2008 8:27:43 PM
Endrin	< 0.104	0.104		µg/L	1	9/2/2008 8:27:43 PM
Endrin aldehyde	< 0.104	0.104		µg/L	1	9/2/2008 8:27:43 PM
Endrin ketone	< 0.104	0.104		µg/L	1	9/2/2008 8:27:43 PM
gamma-BHC	< 0.052	0.052		µg/L	1	9/2/2008 8:27:43 PM
gamma-Chlordane	< 0.052	0.052		µg/L	1	9/2/2008 8:27:43 PM
Heptachlor	< 0.052	0.052		µg/L	1	9/2/2008 8:27:43 PM
Heptachlor epoxide	< 0.052	0.052		µg/L	1	9/2/2008 8:27:43 PM
Methoxychlor	< 0.052	0.052		µg/L	1	9/2/2008 8:27:43 PM
Toxaphene	< 0.521	0.521		µg/L	1	9/2/2008 8:27:43 PM

Qualifiers:

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B - Analyte detected in the associated Method Blank
X - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
T - Tentitively Identified Compound-Estimated Conc.
E - Value above quantitation range

Adirondack Environmental Services, Inc.
314 North Pearl Street
Albany, New York 12207
518-434-4546/434-0891 FAX

CHAIN OF CUSTODY RECORD

Experience is the solution

A full service analytical research laboratory offering solutions to environmental concerns

Client Name: NCRDD c/o GZA GEOENVIRONMENTAL	Address: 535 WASHINGTON ST BUFFALO, NY 14203		
Send Report To: D. TROY	Project Name (Location) NCRDD LF #1	Samplers: (Names) DANIEL TROY	
Client Phone No: 716-844-7034	Client Fax No: 716-685-3629	PO Number:	Samplers: (Signature)

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.	Sample Type: Matrix	Comp	Grab	Number of Cont's	Analysis Required
001	NCRDD LF #1 TP-1	8/27/08	A/P	S	X		1	TCLP METAL TAL METAL TCLP PEST corrosivity TCL PESTICIDE
002	NCRDD LF #1 TP-3	8/27/08	A/P	S	X		1	TCLP metal TAL metal TCLP PEST corrosivity TCL PESTICIDE
003	NCRDD LF #1 TP-4	8/27/08	A/P	S	X		1	TCLP VOC TCL VOC
004	NCRDD LF #1 TP-5	8/27/08	A/P	S	X		1	TCLP metal TAL METAL TCLP PEST TCL PESTICIDE corrosivity
005	SUMP	8/27/08	A/P	W	X		1	TCL PEST
			A/P					
			A/P					
			A/P					
			A/P					
			A/P					
			A/P					

AES Work Order #: 080829033

CC Report To / Special Instructions/Remarks: Fedex

Turnaround Time Request:
☐ 1 Day ☐ 3 Day ☒ Normal
☐ 2 Day ☐ 5 Day

Relinquished by: (Signature)	Received by: (Signature)	Date/Time 8/27/08 800
Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Received for Laboratory by: Scott Basal	Date/Time 8-29-08 11:52 AM

Temperature	Properly Preserved	Received Within Holding Times
Ambient or (Chilled) 1°C	(Y) N	(Y) N
Notes:	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

Adirondack Environmental Services, Inc.
Experience is the solution
314 North Pearl Street • Albany, New York 12207 • (518) 434-4546 • Fax (518) 434-0891

TERMS, CONDITIONS & LIMITATIONS

All service rendered by the **Adirondack Environmental Services, Inc.** are undertaken and all rates are based upon the following terms:

(a) Neither **Adirondack Environmental Services, Inc.,** nor any of its employees, agents or sub-contractors shall be liable for any loss or damage arising out of **Adirondack Environmental Services, Inc.'s** performance or nonperformance, whether by way of negligence or breach of contract, or otherwise, in any amount greater than twice the amount billed to the customer for the work leading to the claim of the customer. Said remedy shall be the sole and exclusive remedy against **Adirondack Environmental Services, Inc.** arising out of its work.

(b) All claims made must be in writing within forty-five (45) days after delivery of the **Adirondack Environmental Services, Inc.** report regarding said work or such claim shall be deemed or irrevocably waived.

(c) **Adirondack Environmental Services, Inc.** reports are submitted in writing and are for our customers only. Our customers are considered to be only those entities being billed for our services. Acquisition of an **Adirondack Environmental Services, Inc.** report by other than our customer does not constitute a representation of **Adirondack Environmental Services, Inc.** as to the accuracy of the contents thereof.

(d) In no event shall **Adirondack Environmental Services, Inc.,** its employees, agents or sub-contractors be responsible for consequential or special damages of any kind or in any amount.

(e) No deviation from the terms set forth herein shall bind **Adirondack Environmental Services, Inc.** unless in writing and signed by a Director of **Adirondack Environmental Services, Inc.**

(f) Results pertain only to items analyzed. Information supplied by client is assumed to be correct. This information may be used on reports and in calculations and **Adirondack Environmental Services, Inc.** is not responsible for the accuracy of this information.

(g) Payments by credit card are subject to a 3% additional charge.

Adirondack Environmental Services, Inc.®
Experience is the solution
314 North Pearl Street ♦ Albany, New York 12207
(800) 848-4983 ♦ (518) 434-4546 ♦ Fax (518) 434-0891

September 17, 2008

Richard Pope
Niagara County
175 Hawley Street
Lockport, NY 14094

TEL: (716) 438-9984
FAX: (716) 434-6568

Work Order No: 080904052
PO#: NIACO-0000049960

RE: NCRDD Landfill #1
Evaluation

Dear Richard Pope:

Adirondack Environmental Services, Inc received 2 samples on 9/4/2008 for the analyses presented in the following report.

There were no problems with the analyses and all associated QC met EPA or laboratory specifications, except if noted.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Christopher Hess
QA Manager

ELAP#: 10709
AIHA#: 100307

Qualifiers:	ND - Not Detected at the Reporting Limit	S - Spike Recovery outside accepted recovery limits
	J - Analyte detected below quanititation limits	R - RPD outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	T - Tentitively Identified Compound-Estimated Conc.
	X - Value exceeds Maximum Contaminant Level	E - Value above quantitation range

Adirondack Environmental Services, Inc

Date: *17-Sep-08*

CLIENT: Niagara County
Work Order: 080904052
Reference: NCRDD Landfill #1 / Evaluation
PO#: NIACO-0000049960

Client Sample ID: NCRDD LF#1 TP-6
Collection Date: 9/3/2008
Lab Sample ID: 080904052-001
Matrix: SOLID

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ORGANOCHLORINE PESTICIDES SW8081A (Prep: SW3545 - 9/4/2008)						Analyst: **KF**
4,4´-DDD	< 3.3	3.3		µg/Kg	1	9/5/2008 6:44:15 PM
4,4´-DDE	< 3.3	3.3		µg/Kg	1	9/5/2008 6:44:15 PM
4,4´-DDT	< 3.3	3.3		µg/Kg	1	9/5/2008 6:44:15 PM
Aldrin	< 1.7	1.7		µg/Kg	1	9/5/2008 6:44:15 PM
alpha-BHC	< 1.7	1.7		µg/Kg	1	9/5/2008 6:44:15 PM
alpha-Chlordane	< 1.7	1.7		µg/Kg	1	9/5/2008 6:44:15 PM
beta-BHC	< 1.7	1.7		µg/Kg	1	9/5/2008 6:44:15 PM
Chlordane	< 170	170		µg/Kg	1	9/5/2008 6:44:15 PM
delta-BHC	< 1.7	1.7		µg/Kg	1	9/5/2008 6:44:15 PM
Dieldrin	< 3.3	3.3		µg/Kg	1	9/5/2008 6:44:15 PM
Endosulfan I	< 1.7	1.7		µg/Kg	1	9/5/2008 6:44:15 PM
Endosulfan II	< 3.3	3.3		µg/Kg	1	9/5/2008 6:44:15 PM
Endosulfan sulfate	< 3.3	3.3		µg/Kg	1	9/5/2008 6:44:15 PM
Endrin	< 3.3	3.3		µg/Kg	1	9/5/2008 6:44:15 PM
Endrin aldehyde	< 3.3	3.3		µg/Kg	1	9/5/2008 6:44:15 PM
Endrin ketone	< 3.3	3.3		µg/Kg	1	9/5/2008 6:44:15 PM
gamma-BHC	< 1.7	1.7		µg/Kg	1	9/5/2008 6:44:15 PM
gamma-Chlordane	< 1.7	1.7		µg/Kg	1	9/5/2008 6:44:15 PM
Heptachlor	< 1.7	1.7		µg/Kg	1	9/5/2008 6:44:15 PM
Heptachlor epoxide	< 1.7	1.7		µg/Kg	1	9/5/2008 6:44:15 PM
Methoxychlor	< 17	17		µg/Kg	1	9/5/2008 6:44:15 PM
Toxaphene	< 170	170		µg/Kg	1	9/5/2008 6:44:15 PM
PESTICIDES, TCLP LEACHED SW1311/8081A (Prep: E608 - 9/4/2008)						Analyst: **KF**
Chlordane-TCLP	< 0.005	0.005		mg/L	1	9/5/2008 6:44:15 PM
Endrin-TCLP	< 0.005	0.005		mg/L	1	9/5/2008 6:44:15 PM
gamma-BHC(Lindane)-TCLP	< 0.005	0.005		mg/L	1	9/5/2008 6:44:15 PM
Heptachlor epoxide-TCLP	< 0.005	0.005		mg/L	1	9/5/2008 6:44:15 PM
Heptachlor-TCLP	< 0.005	0.005		mg/L	1	9/5/2008 6:44:15 PM
Methoxychlor-TCLP	< 0.050	0.050		mg/L	1	9/5/2008 6:44:15 PM
Toxaphene-TCLP	< 0.050	0.050		mg/L	1	9/5/2008 6:44:15 PM
ICP METALS SW6010B (Prep: SW3050B - 9/5/2008)						Analyst: **WB**
Arsenic	< 0.250	0.250		µg/g	1	9/16/2008 12:22:00 PM
Barium	59.5	0.500		µg/g	1	9/16/2008 12:22:00 PM
Cadmium	0.780	0.250		µg/g	1	9/16/2008 12:22:00 PM

Qualifiers:

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S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
T - Tentitively Identified Compound-Estimated Conc
E - Value above quantitation range

Adirondack Environmental Services, Inc

Date: *17-Sep-08*

CLIENT: Niagara County
Work Order: 080904052
Reference: NCRDD Landfill #1 / Evaluation
PO#: NIACO-0000049960

Client Sample ID: NCRDD LF#1 TP-6
Collection Date: 9/3/2008
Lab Sample ID: 080904052-001
Matrix: SOLID

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS SW6010B (**Prep: SW3050B - 9/5/2008**)						Analyst: **WB**
Chromium	25.0	0.250		µg/g	1	9/16/2008 12:22:00 PM
Lead	1120	0.250		µg/g	1	9/16/2008 12:22:00 PM
Selenium	< 0.250	0.250		µg/g	1	9/16/2008 12:22:00 PM
Silver	< 1.00	1.00		µg/g	1	9/16/2008 12:22:00 PM
MERCURY SW7471A (**Prep: SW7471A - 9/5/2008**)						Analyst: **SM**
Mercury	0.051	0.020		µg/g	1	9/8/2008
TCLP MERCURY SW1311/7470A (**Prep: SW7470A - 9/8/2008**)						Analyst: **SM**
Mercury-TCLP	< 0.020	0.020		mg/L	1	9/8/2008
TCLP METALS - ICP SW1311/6010A (**Prep: SW1311 - 9/5/2008**)						Analyst: **SM**
Arsenic-TCLP	< 0.05	0.05		mg/L	1	9/10/2008 3:36:00 PM
Barium-TCLP	0.78	0.10		mg/L	1	9/10/2008 3:36:00 PM
Cadmium-TCLP	< 0.05	0.05		mg/L	1	9/10/2008 3:36:00 PM
Chromium-TCLP	< 0.05	0.05		mg/L	1	9/10/2008 3:36:00 PM
Lead-TCLP	< 0.05	0.05		mg/L	1	9/10/2008 3:36:00 PM
Selenium-TCLP	< 0.05	0.05		mg/L	1	9/10/2008 3:36:00 PM
Silver-TCLP	< 0.10	0.10		mg/L	1	9/10/2008 3:36:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
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X - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
T - Tentitively Identified Compound-Estimated Conc
E - Value above quantitation range

Adirondack Environmental Services, Inc

Date: *17-Sep-08*

CLIENT: Niagara County
Work Order: 080904052
Reference: NCRDD Landfill #1 / Evaluation
PO#: NIACO-0000049960

Client Sample ID: NCRDD LF#1 TP-7
Collection Date: 9/3/2008
Lab Sample ID: 080904052-002
Matrix: SOLID

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ORGANOCHLORINE PESTICIDES SW8081A (Prep: SW3545 - 9/4/2008)						Analyst: **KF**
4,4'-DDD	< 3.3	3.3		µg/Kg	1	9/5/2008 7:11:45 PM
4,4'-DDE	< 3.3	3.3		µg/Kg	1	9/5/2008 7:11:45 PM
4,4'-DDT	< 3.3	3.3		µg/Kg	1	9/5/2008 7:11:45 PM
Aldrin	< 1.7	1.7		µg/Kg	1	9/5/2008 7:11:45 PM
alpha-BHC	< 1.7	1.7		µg/Kg	1	9/5/2008 7:11:45 PM
alpha-Chlordane	< 1.7	1.7		µg/Kg	1	9/5/2008 7:11:45 PM
beta-BHC	< 1.7	1.7		µg/Kg	1	9/5/2008 7:11:45 PM
Chlordane	< 170	170		µg/Kg	1	9/5/2008 7:11:45 PM
delta-BHC	< 1.7	1.7		µg/Kg	1	9/5/2008 7:11:45 PM
Dieldrin	< 3.3	3.3		µg/Kg	1	9/5/2008 7:11:45 PM
Endosulfan I	< 1.7	1.7		µg/Kg	1	9/5/2008 7:11:45 PM
Endosulfan II	< 3.3	3.3		µg/Kg	1	9/5/2008 7:11:45 PM
Endosulfan sulfate	< 3.3	3.3		µg/Kg	1	9/5/2008 7:11:45 PM
Endrin	< 3.3	3.3		µg/Kg	1	9/5/2008 7:11:45 PM
Endrin aldehyde	< 3.3	3.3		µg/Kg	1	9/5/2008 7:11:45 PM
Endrin ketone	< 3.3	3.3		µg/Kg	1	9/5/2008 7:11:45 PM
gamma-BHC	< 1.7	1.7		µg/Kg	1	9/5/2008 7:11:45 PM
gamma-Chlordane	< 1.7	1.7		µg/Kg	1	9/5/2008 7:11:45 PM
Heptachlor	< 1.7	1.7		µg/Kg	1	9/5/2008 7:11:45 PM
Heptachlor epoxide	< 1.7	1.7		µg/Kg	1	9/5/2008 7:11:45 PM
Methoxychlor	< 17	17		µg/Kg	1	9/5/2008 7:11:45 PM
Toxaphene	< 170	170		µg/Kg	1	9/5/2008 7:11:45 PM
PESTICIDES, TCLP LEACHED SW1311/8081A (Prep: E608 - 9/4/2008)						Analyst: **KF**
Chlordane-TCLP	< 0.005	0.005		mg/L	1	9/5/2008 7:11:45 PM
Endrin-TCLP	< 0.005	0.005		mg/L	1	9/5/2008 7:11:45 PM
gamma-BHC(Lindane)-TCLP	< 0.005	0.005		mg/L	1	9/5/2008 7:11:45 PM
Heptachlor epoxide-TCLP	< 0.005	0.005		mg/L	1	9/5/2008 7:11:45 PM
Heptachlor-TCLP	< 0.005	0.005		mg/L	1	9/5/2008 7:11:45 PM
Methoxychlor-TCLP	< 0.050	0.050		mg/L	1	9/5/2008 7:11:45 PM
Toxaphene-TCLP	< 0.050	0.050		mg/L	1	9/5/2008 7:11:45 PM
ICP METALS SW6010B (Prep: SW3050B - 9/5/2008)						Analyst: **WB**
Arsenic	< 0.250	0.250		µg/g	1	9/16/2008 12:27:00 PM
Barium	46.9	0.500		µg/g	1	9/16/2008 12:27:00 PM
Cadmium	< 0.250	0.250		µg/g	1	9/16/2008 12:27:00 PM

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T - Tentitively Identified Compound-Estimated Conc.
E - Value above quantitation range

Adirondack Environmental Services, Inc

Date: *17-Sep-08*

CLIENT: Niagara County
Work Order: 080904052
Reference: NCRDD Landfill #1 / Evaluation
PO#: NIACO-0000049960

Client Sample ID: NCRDD LF#1 TP-7
Collection Date: 9/3/2008
Lab Sample ID: 080904052-002
Matrix: SOLID

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS SW6010B (**Prep: SW3050B - 9/5/2008**)						Analyst: **WB**
Chromium	22.8	0.250		µg/g	1	9/16/2008 12:27:00 PM
Lead	51.7	0.250		µg/g	1	9/16/2008 12:27:00 PM
Selenium	< 0.250	0.250		µg/g	1	9/16/2008 12:27:00 PM
Silver	< 1.00	1.00		µg/g	1	9/16/2008 12:27:00 PM
MERCURY SW7471A (**Prep: SW7471A - 9/5/2008**)						Analyst: **SM**
Mercury	< 0.020	0.020		µg/g	1	9/8/2008
TCLP MERCURY SW1311/7470A (**Prep: SW7470A - 9/8/2008**)						Analyst: **SM**
Mercury-TCLP	< 0.020	0.020		mg/L	1	9/8/2008
TCLP METALS - ICP SW1311/6010A (**Prep: SW1311 - 9/5/2008**)						Analyst: **SM**
Arsenic-TCLP	< 0.05	0.05		mg/L	1	9/10/2008 3:40:00 PM
Barium-TCLP	0.79	0.10		mg/L	1	9/10/2008 3:40:00 PM
Cadmium-TCLP	< 0.05	0.05		mg/L	1	9/10/2008 3:40:00 PM
Chromium-TCLP	< 0.05	0.05		mg/L	1	9/10/2008 3:40:00 PM
Lead-TCLP	< 0.05	0.05		mg/L	1	9/10/2008 3:40:00 PM
Selenium-TCLP	< 0.05	0.05		mg/L	1	9/10/2008 3:40:00 PM
Silver-TCLP	< 0.10	0.10		mg/L	1	9/10/2008 3:40:00 PM
SEMI VOLATILE ORGANICS SW8270C (**Prep: SW3545 - 9/8/2008**)						Analyst: **MT**
Phenol	27000	3300		µg/Kg	10	9/12/2008 12:32:00 PM
Bis(2-chloroethyl)ether	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM
2-Chlorophenol	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM
1,3-Dichlorobenzene	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM
1,4-Dichlorobenzene	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM
1,2-Dichlorobenzene	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM
2-Methylphenol	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM
Bis(2-chloroisopropyl)ether	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM
4-Methylphenol	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM
N-Nitrosodi-n-propylamine	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM
Hexachloroethane	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM
Nitrobenzene	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM
Isophorone	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM

Qualifiers:

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T - Tentitively Identified Compound-Estimated Conc.
E - Value above quantitation range

Adirondack Environmental Services, Inc

Date: *17-Sep-08*

CLIENT: Niagara County
Work Order: 080904052
Reference: NCRDD Landfill #1 / Evaluation
PO#: NIACO-0000049960

Client Sample ID: NCRDD LF#1 TP-7
Collection Date: 9/3/2008
Lab Sample ID: 080904052-002
Matrix: SOLID

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
SEMI VOLATILE ORGANICS SW8270C (**Prep: SW3545 - 9/8/2008**)						Analyst: **MT**
2-Nitrophenol	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM
2,4-Dimethylphenol	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM
Bis(2-chloroethoxy)methane	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM
2,4-Dichlorophenol	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM
1,2,4-Trichlorobenzene	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM
Naphthalene	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM
4-Chloroaniline	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM
Hexachlorobutadiene	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM
4-Chloro-3-methylphenol	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM
2-Methylnaphthalene	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM
Hexachlorocyclopentadiene	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM
2,4,6-Trichlorophenol	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM
2,4,5-Trichlorophenol	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM
2-Chloronaphthalene	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM
2-Nitroaniline	< 17000	17000		µg/Kg	10	9/12/2008 12:32:00 PM
Dimethyl phthalate	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM
Acenaphthylene	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM
2,6-Dinitrotoluene	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM
3-Nitroaniline	< 17000	17000		µg/Kg	10	9/12/2008 12:32:00 PM
Acenaphthene	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM
2,4-Dinitrophenol	< 17000	17000		µg/Kg	10	9/12/2008 12:32:00 PM
4-Nitrophenol	< 17000	17000		µg/Kg	10	9/12/2008 12:32:00 PM
Dibenzofuran	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM
2,4-Dinitrotoluene	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM
Diethyl phthalate	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM
4-Chlorophenyl phenyl ether	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM
Fluorene	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM
4-Nitroaniline	< 17000	17000		µg/Kg	10	9/12/2008 12:32:00 PM
4,6-Dinitro-2-methylphenol	< 17000	17000		µg/Kg	10	9/12/2008 12:32:00 PM
N-Nitrosodiphenylamine	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM
4-Bromophenyl phenyl ether	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM
Hexachlorobenzene	< 17000	17000		µg/Kg	10	9/12/2008 12:32:00 PM
Pentachlorophenol	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM
Phenanthrene	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM
Anthracene	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM
Carbazole	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM
Di-n-butyl phthalate	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM
Fluoranthene	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM

Qualifiers:

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X - Value exceeds Maximum Contaminant Level
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R - RPD outside accepted recovery limits
T - Tentitively Identified Compound-Estimated Conc.
E - Value above quantitation range

CLIENT: Niagara County
Work Order: 080904052
Reference: NCRDD Landfill #1 / Evaluation
PO#: NIACO-0000049960

Client Sample ID: NCRDD LF#1 TP-7
Collection Date: 9/3/2008
Lab Sample ID: 080904052-002
Matrix: SOLID

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
SEMI VOLATILE ORGANICS SW8270C (Prep: SW3545 - 9/8/2008)						Analyst: **MT**
Pyrene	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM
Butyl benzyl phthalate	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM
3,3´-Dichlorobenzidine	< 6600	6600		µg/Kg	10	9/12/2008 12:32:00 PM
Benz(a)anthracene	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM
Chrysene	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM
Bis(2-ethylhexyl)phthalate	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM
Di-n-octyl phthalate	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM
Benzo(b)fluoranthene	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM
Benzo(k)fluoranthene	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM
Benzo(a)pyrene	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM
Indeno(1,2,3-cd)pyrene	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM
Dibenz(a,h)anthracene	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM
Benzo(g,h,i)perylene	< 3300	3300		µg/Kg	10	9/12/2008 12:32:00 PM
TCLP-SEMIVOLATILES SW1311/8270C (Prep: SW3545 - 9/8/2008)						Analyst: **MT**
1,4-Dichlorobenzene -TCLP	< 100	100		µg/L	1	9/11/2008 5:20:00 PM
2,4,5-Trichlorophenol-TCLP	< 100	100		µg/L	1	9/11/2008 5:20:00 PM
2,4,6-Trichlorophenol-TCLP	< 100	100		µg/L	1	9/11/2008 5:20:00 PM
2,4-Dinitrotoluene-TCLP	< 100	100		µg/L	1	9/11/2008 5:20:00 PM
Cresols, Total-TCLP	< 100	100		µg/L	1	9/11/2008 5:20:00 PM
Hexachlorobenzene-TCLP	< 100	100		µg/L	1	9/11/2008 5:20:00 PM
Hexachlorobutadiene-TCLP	< 100	100		µg/L	1	9/11/2008 5:20:00 PM
Hexachloroethane-TCLP	< 100	100		µg/L	1	9/11/2008 5:20:00 PM
Nitrobenzene-TCLP	< 100	100		µg/L	1	9/11/2008 5:20:00 PM
Pentachlorophenol-TCLP	< 500	500		µg/L	1	9/11/2008 5:20:00 PM
Pyridine-TCLP	< 100	100		µg/L	1	9/11/2008 5:20:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
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X - Value exceeds Maximum Contaminant Level
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E - Value above quantitation range

Adirondack Environmental Services, Inc.
314 North Pearl Street
Albany, New York 12207
518-434-4546/434-0891 FAX

Experience is the solution

CHAIN OF CUSTODY RECORD

AES Work Order # 0809040S2

A full service analytical research laboratory offering solutions to environmental concerns

Client Name:	Address:
NCRDD c/o GZA GEOENVIRONMENTAL	535 WASHINGTON ST. 11th FLOOR Buffalo NY 14203
Send Report To:	**Project Name (Location)**	**Samplers: (Names)**
DANIEL TROY	NCRDD LF#1 EVALUATION	DANIEL TROY
Client Phone No:	**Client Fax No:**	**PO Number:**	**Samplers: (Signature)**
716-844-7034	716-685-3629	AS PER K. WAGER	

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type: Matrix	Comp	Grab	Number of Cont's	Analysis Required
001	NCRDD LF#1 TP-6	9/3/08	930	A P	S	X		3	RCRA 8 metal/TCLP metal Pesticide /TCLP PESTICIDE
				A P					
002	NCRDD LF#1 TP-7	9/3/08	1030	A P	S	X		3	RCRA 8 METAL/TCLP metal Pesticide /TCLP Pesticide SVOC /TCLP SVOC
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					

Shipment Arrived Via: FedEx (UPS) Client AES Other:_____

Turnaround Time Request: 1 Day 3 Day (X) Normal 2 Day 5 Day

CC Report To / Special Instructions/Remarks:

TP-7 jar labeled for SVOC/TCLP SVOC to have that analysis.

All other sample jars are composite samples.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
	UPS	1730 / 9/3/08
Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Received for Laboratory by:	Date/Time
	Adelia Maleszka	9/4/08 11:13AM

Temperature	Properly Preserved	Received Within Holding Times
Ambient or (Chilled)	(Y) N	(Y) N
Notes: 3°C	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

Adirondack Environmental Services, Inc.
314 North Pearl Street
Albany, New York 12207
518-434-4546/434-0891 FAX

CHAIN OF CUSTODY RECORD

AES Work Order #:

Experience is the solution

A full service analytical research laboratory offering solutions to environmental concerns

Client Name:	Address:		
NCRDD c/o GZA GEOENVIRONMENTAL	535 WASHINGTON ST. 11th FLOOR Buffalo NY 14203		
Send Report To:	**Project Name (Location)**	**Samplers: (Names)**	
DANIEL TROY	NCRDD LF#1 EVALUATION	DANIEL TROY	
Client Phone No:	**Client Fax No:**	**PO Number:**	**Samplers: (Signature)**
716-844-7034	716-685-3629	AS PER K. WAGER	D. Troy

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type: Matrix	Comp	Grab	Number of Cont's	Analysis Required
	NCRDD LF#1 TP-6	9/3/08	930	A P	S	X		3	RCRA 8 metal/TCLP metal Pesticide/TCLP pesticide
	NCRDD LF#1 TP-7	9/3/08	1030	A P	S	X		3	RCRA 8 metal/TCLP metal Pesticide/TCLP pesticide SVOC/TCLP SVOC
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					

Shipment Arrived Via: FedEx (UPS) Client AES Other:

Turnaround Time Request: 1 Day, 2 Day, 3 Day, 5 Day, (X) Normal

CC Report To / Special Instructions/Remarks:

TP-7 jar labeled for SVOC/TCLP SVOC to have that analysis.

All other sample jars are composite samples.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
D. Troy	UPS	1730 / 9/3/08
Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Received for Laboratory by:	Date/Time

Temperature	Properly Preserved	Received Within Holding Times
Ambient or Chilled	Y N	Y N
Notes:	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

Adirondack Environmental Services, Inc.
Experience is the solution
314 North Pearl Street • Albany, New York 12207 • (518) 434-4546 • Fax (518) 434-0891

TERMS, CONDITIONS & LIMITATIONS

All service rendered by the **Adirondack Environmental Services, Inc.** are undertaken and all rates are based upon the following terms:

(a) Neither **Adirondack Environmental Services, Inc.,** nor any of its employees, agents or sub-contractors shall be liable for any loss or damage arising out of **Adirondack Environmental Services, Inc.'s** performance or nonperformance, whether by way of negligence or breach of contract, or otherwise, in any amount greater than twice the amount billed to the customer for the work leading to the claim of the customer. Said remedy shall be the sole and exclusive remedy against **Adirondack Environmental Services, Inc.** arising out of its work.

(b) All claims made must be in writing within forty-five (45) days after delivery of the **Adirondack Environmental Services, Inc.** report regarding said work or such claim shall be deemed or irrevocably waived.

(c) **Adirondack Environmental Services, Inc.** reports are submitted in writing and are for our customers only. Our customers are considered to be only those entities being billed for our services. Acquisition of an **Adirondack Environmental Services, Inc.** report by other than our customer does not constitute a representation of **Adirondack Environmental Services, Inc.** as to the accuracy of the contents thereof.

(d) In no event shall **Adirondack Environmental Services, Inc.,** its employees, agents or sub-contractors be responsible for consequential or special damages of any kind or in any amount.

(e) No deviation from the terms set forth herein shall bind **Adirondack Environmental Services, Inc.** unless in writing and signed by a Director of **Adirondack Environmental Services, Inc.**

(f) Results pertain only to items analyzed. Information supplied by client is assumed to be correct. This information may be used on reports and in calculations and **Adirondack Environmental Services, Inc.** is not responsible for the accuracy of this information.

(g) Payments by credit card are subject to a 3% additional charge.

Adirondack Environmental Services, Inc.®
Experience is the solution
314 North Pearl Street ♦ Albany, New York 12207
(800) 848-4983 ♦ (518) 434-4546 ♦ Fax (518) 434-0891

November 25, 2008

Richard Pope
Niagara County
175 Hawley Street
Lockport, NY 14094

TEL: (716) 438-9984
FAX: (716) 434-6568

Work Order No: 081111014
PO#: NIACO-0000049960

RE: NCRDD Investigation
Lockport NY

Dear Richard Pope:

Adirondack Environmental Services, Inc received 2 samples on 11/11/2008 for the analyses presented in the following report.

There were no problems with the analyses and all associated QC met EPA or laboratory specifications, except if noted.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Tara Daniels
Laboratory Manager

ELAP#: 10709
AIHA#: 100307

Qualifiers:	ND - Not Detected at the Reporting Limit	S - Spike Recovery outside accepted recovery limits
	J - Analyte detected below quanititation limits	R - RPD outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	T - Tentitively Identified Compound-Estimated Conc.
	X - Value exceeds Maximum Contaminant Level	E - Value above quantitation range

Adirondack Environmental Services, Inc

Date: *25-Nov-08*

CLIENT: Niagara County
Work Order: 081111014
Reference: NCRDD Investigation / Lockport NY
PO#: NIACO-0000049960

Client Sample ID: TP-8
Collection Date: 11/10/2008
Lab Sample ID: 081111014-001
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS SW6010B (**Prep: SW3050B - 11/11/2008**)						Analyst: **KH**
Arsenic	< 0.250	0.250		µg/g	1	11/18/2008 2:34:00 PM
Barium	79.6	0.500		µg/g	1	11/18/2008 2:34:00 PM
Cadmium	0.740	0.250		µg/g	1	11/18/2008 2:34:00 PM
Chromium	984	2.50		µg/g	10	11/18/2008 2:53:00 PM
Lead	481	0.250		µg/g	1	11/18/2008 2:34:00 PM
Selenium	< 0.250	0.250		µg/g	1	11/18/2008 2:34:00 PM
Silver	6.68	1.00		µg/g	1	11/18/2008 2:34:00 PM
MERCURY SW7471A (**Prep: SW7471A - 11/11/2008**)						Analyst: **SM**
Mercury	< 0.020	0.020		µg/g	1	11/11/2008
SEMI VOLATILE ORGANICS SW8270C (**Prep: SW3545 - 11/12/2008**)						Analyst: **MT**
Phenol	1200	990		µg/Kg	1	11/14/2008 3:13:00 AM
Bis(2-chloroethyl)ether	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM
2-Chlorophenol	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM
1,3-Dichlorobenzene	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM
1,4-Dichlorobenzene	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM
1,2-Dichlorobenzene	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM
2-Methylphenol	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM
Bis(2-chloroisopropyl)ether	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM
4-Methylphenol	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM
N-Nitrosodi-n-propylamine	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM
Hexachloroethane	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM
Nitrobenzene	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM
Isophorone	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM
2-Nitrophenol	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM
2,4-Dimethylphenol	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM
Bis(2-chloroethoxy)methane	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM
2,4-Dichlorophenol	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM
1,2,4-Trichlorobenzene	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM
Naphthalene	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM
4-Chloroaniline	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM
Hexachlorobutadiene	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM
4-Chloro-3-methylphenol	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM
2-Methylnaphthalene	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM
Hexachlorocyclopentadiene	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
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X - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
T - Tentitively Identified Compound-Estimated Conc.
E - Value above quantitation range

Adirondack Environmental Services, Inc

Date: *25-Nov-08*

CLIENT: Niagara County
Work Order: 081111014
Reference: NCRDD Investigation / Lockport NY
PO#: NIACO-0000049960

Client Sample ID: TP-8
Collection Date: 11/10/2008
Lab Sample ID: 081111014-001
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
SEMI VOLATILE ORGANICS SW8270C (Prep: SW3545 - 11/12/2008)						Analyst: **MT**
2,4,6-Trichlorophenol	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM
2,4,5-Trichlorophenol	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM
2-Chloronaphthalene	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM
2-Nitroaniline	< 5000	5000		µg/Kg	1	11/14/2008 3:13:00 AM
Dimethyl phthalate	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM
Acenaphthylene	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM
2,6-Dinitrotoluene	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM
3-Nitroaniline	< 5000	5000		µg/Kg	1	11/14/2008 3:13:00 AM
Acenaphthene	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM
2,4-Dinitrophenol	< 5000	5000		µg/Kg	1	11/14/2008 3:13:00 AM
4-Nitrophenol	< 5000	5000		µg/Kg	1	11/14/2008 3:13:00 AM
Dibenzofuran	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM
2,4-Dinitrotoluene	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM
Diethyl phthalate	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM
4-Chlorophenyl phenyl ether	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM
Fluorene	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM
4-Nitroaniline	< 5000	5000		µg/Kg	1	11/14/2008 3:13:00 AM
4,6-Dinitro-2-methylphenol	< 5000	5000		µg/Kg	1	11/14/2008 3:13:00 AM
N-Nitrosodiphenylamine	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM
4-Bromophenyl phenyl ether	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM
Hexachlorobenzene	< 5000	5000		µg/Kg	1	11/14/2008 3:13:00 AM
Pentachlorophenol	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM
Phenanthrene	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM
Anthracene	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM
Carbazole	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM
Di-n-butyl phthalate	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM
Fluoranthene	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM
Pyrene	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM
Butyl benzyl phthalate	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM
3,3´-Dichlorobenzidine	< 2000	2000		µg/Kg	1	11/14/2008 3:13:00 AM
Benz(a)anthracene	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM
Chrysene	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM
Bis(2-ethylhexyl)phthalate	4300	990		µg/Kg	1	11/14/2008 3:13:00 AM
Di-n-octyl phthalate	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM
Benzo(b)fluoranthene	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM
Benzo(k)fluoranthene	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM
Benzo(a)pyrene	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM
Indeno(1,2,3-cd)pyrene	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM

Qualifiers:

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X - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
T - Tentitively Identified Compound-Estimated Conc.
E - Value above quantitation range

Adirondack Environmental Services, Inc

Date: *25-Nov-08*

CLIENT: Niagara County
Work Order: 081111014
Reference: NCRDD Investigation / Lockport NY
PO#: NIACO-0000049960

Client Sample ID: TP-8
Collection Date: 11/10/2008
Lab Sample ID: 081111014-001
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
SEMI VOLATILE ORGANICS SW8270C (Prep: SW3545 - 11/12/2008)						Analyst: **MT**
Dibenz(a,h)anthracene	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM
Benzo(g,h,i)perylene	< 990	990		µg/Kg	1	11/14/2008 3:13:00 AM
VOLATILE ORGANICS SW8260B						Analyst: **ML**
Chloromethane	< 200	200		µg/Kg	20	11/21/2008 12:08:00 PM
Bromomethane	< 200	200		µg/Kg	20	11/21/2008 12:08:00 PM
Vinyl chloride	< 200	200		µg/Kg	20	11/21/2008 12:08:00 PM
Chloroethane	< 200	200		µg/Kg	20	11/21/2008 12:08:00 PM
Methylene chloride	< 100	100		µg/Kg	20	11/21/2008 12:08:00 PM
Acetone	< 200	200		µg/Kg	20	11/21/2008 12:08:00 PM
Carbon disulfide	< 100	100		µg/Kg	20	11/21/2008 12:08:00 PM
1,1-Dichloroethene	< 100	100		µg/Kg	20	11/21/2008 12:08:00 PM
1,1-Dichloroethane	< 100	100		µg/Kg	20	11/21/2008 12:08:00 PM
trans-1,2-Dichloroethene	< 100	100		µg/Kg	20	11/21/2008 12:08:00 PM
cis-1,2-Dichloroethene	< 100	100		µg/Kg	20	11/21/2008 12:08:00 PM
Chloroform	< 100	100		µg/Kg	20	11/21/2008 12:08:00 PM
1,2-Dichloroethane	< 100	100		µg/Kg	20	11/21/2008 12:08:00 PM
2-Butanone	1200	200		µg/Kg	20	11/21/2008 12:08:00 PM
1,1,1-Trichloroethane	< 100	100		µg/Kg	20	11/21/2008 12:08:00 PM
Carbon tetrachloride	< 100	100		µg/Kg	20	11/21/2008 12:08:00 PM
Bromodichloromethane	< 100	100		µg/Kg	20	11/21/2008 12:08:00 PM
1,2-Dichloropropane	< 100	100		µg/Kg	20	11/21/2008 12:08:00 PM
cis-1,3-Dichloropropene	< 100	100		µg/Kg	20	11/21/2008 12:08:00 PM
Trichloroethene	< 100	100		µg/Kg	20	11/21/2008 12:08:00 PM
Dibromochloromethane	< 100	100		µg/Kg	20	11/21/2008 12:08:00 PM
1,1,2-Trichloroethane	< 100	100		µg/Kg	20	11/21/2008 12:08:00 PM
Benzene	< 100	100		µg/Kg	20	11/21/2008 12:08:00 PM
trans-1,3-Dichloropropene	< 100	100		µg/Kg	20	11/21/2008 12:08:00 PM
Bromoform	< 100	100		µg/Kg	20	11/21/2008 12:08:00 PM
4-Methyl-2-pentanone	< 200	200		µg/Kg	20	11/21/2008 12:08:00 PM
2-Hexanone	< 200	200		µg/Kg	20	11/21/2008 12:08:00 PM
Tetrachloroethene	< 100	100		µg/Kg	20	11/21/2008 12:08:00 PM
1,1,2,2-Tetrachloroethane	< 100	100		µg/Kg	20	11/21/2008 12:08:00 PM
Toluene	1100	100		µg/Kg	20	11/21/2008 12:08:00 PM
Chlorobenzene	< 100	100		µg/Kg	20	11/21/2008 12:08:00 PM
Ethylbenzene	560	100		µg/Kg	20	11/21/2008 12:08:00 PM
Styrene	< 100	100		µg/Kg	20	11/21/2008 12:08:00 PM

Qualifiers:

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X - Value exceeds Maximum Contaminant Level
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R - RPD outside accepted recovery limits
T - Tentitively Identified Compound-Estimated Conc.
E - Value above quantitation range

Adirondack Environmental Services, Inc

Date: *25-Nov-08*

CLIENT: Niagara County
Work Order: 081111014
Reference: NCRDD Investigation / Lockport NY
PO#: NIACO-0000049960

Client Sample ID: TP-8
Collection Date: 11/10/2008
Lab Sample ID: 081111014-001
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANICS SW8260B						Analyst: **ML**
m,p-Xylene	2500	100		µg/Kg	20	11/21/2008 12:08:00 PM
o-Xylene	780	100	S	µg/Kg	20	11/21/2008 12:08:00 PM
Methyl tert-butyl ether	< 100	100		µg/Kg	20	11/21/2008 12:08:00 PM
Dichlorodifluoromethane	< 100	100		µg/Kg	20	11/21/2008 12:08:00 PM
Methyl Acetate	< 100	100		µg/Kg	20	11/21/2008 12:08:00 PM
1,1,2-Trichloro-1,2,2-trifluoroethane	< 100	100		µg/Kg	20	11/21/2008 12:08:00 PM
Trichlorofluoromethane	< 100	100		µg/Kg	20	11/21/2008 12:08:00 PM
Cyclohexane	< 200	200		µg/Kg	20	11/21/2008 12:08:00 PM
Methyl Cyclohexane	< 100	100		µg/Kg	20	11/21/2008 12:08:00 PM
1,2-Dibromoethane	< 100	100		µg/Kg	20	11/21/2008 12:08:00 PM
1,3-Dichlorobenzene	< 100	100		µg/Kg	20	11/21/2008 12:08:00 PM
Isopropylbenzene	< 100	100		µg/Kg	20	11/21/2008 12:08:00 PM
1,4-Dichlorobenzene	< 100	100		µg/Kg	20	11/21/2008 12:08:00 PM
1,2-Dichlorobenzene	< 100	100		µg/Kg	20	11/21/2008 12:08:00 PM
1,2-Dibromo-3-chloropropane	< 100	100		µg/Kg	20	11/21/2008 12:08:00 PM
1,2,4-Trichlorobenzene	< 100	100		µg/Kg	20	11/21/2008 12:08:00 PM
IGNITABILITY SW1030						Analyst: **PL**
Ignitability	Not Ignitable	0			1	11/25/2008

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
X - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
T - Tentitively Identified Compound-Estimated Conc.
E - Value above quantitation range

Adirondack Environmental Services, Inc

Date: *25-Nov-08*

CLIENT: Niagara County
Work Order: 081111014
Reference: NCRDD Investigation / Lockport NY
PO#: NIACO-0000049960

Client Sample ID: TP-9
Collection Date: 11/10/2008
Lab Sample ID: 081111014-002
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANICS SW8260B						Analyst: **ML**
Chloromethane	< 5000	5000		µg/Kg	500	11/21/2008 12:30:00 PM
Bromomethane	< 5000	5000		µg/Kg	500	11/21/2008 12:30:00 PM
Vinyl chloride	< 5000	5000		µg/Kg	500	11/21/2008 12:30:00 PM
Chloroethane	< 5000	5000		µg/Kg	500	11/21/2008 12:30:00 PM
Methylene chloride	< 2500	2500		µg/Kg	500	11/21/2008 12:30:00 PM
Acetone	< 5000	5000		µg/Kg	500	11/21/2008 12:30:00 PM
Carbon disulfide	< 2500	2500		µg/Kg	500	11/21/2008 12:30:00 PM
1,1-Dichloroethene	< 2500	2500		µg/Kg	500	11/21/2008 12:30:00 PM
1,1-Dichloroethane	< 2500	2500		µg/Kg	500	11/21/2008 12:30:00 PM
trans-1,2-Dichloroethene	< 2500	2500		µg/Kg	500	11/21/2008 12:30:00 PM
cis-1,2-Dichloroethene	< 2500	2500		µg/Kg	500	11/21/2008 12:30:00 PM
Chloroform	< 2500	2500		µg/Kg	500	11/21/2008 12:30:00 PM
1,2-Dichloroethane	< 2500	2500		µg/Kg	500	11/21/2008 12:30:00 PM
2-Butanone	< 5000	5000		µg/Kg	500	11/21/2008 12:30:00 PM
1,1,1-Trichloroethane	< 2500	2500		µg/Kg	500	11/21/2008 12:30:00 PM
Carbon tetrachloride	< 2500	2500		µg/Kg	500	11/21/2008 12:30:00 PM
Bromodichloromethane	< 2500	2500		µg/Kg	500	11/21/2008 12:30:00 PM
1,2-Dichloropropane	< 2500	2500		µg/Kg	500	11/21/2008 12:30:00 PM
cis-1,3-Dichloropropene	< 2500	2500		µg/Kg	500	11/21/2008 12:30:00 PM
Trichloroethene	< 2500	2500		µg/Kg	500	11/21/2008 12:30:00 PM
Dibromochloromethane	< 2500	2500		µg/Kg	500	11/21/2008 12:30:00 PM
1,1,2-Trichloroethane	< 2500	2500		µg/Kg	500	11/21/2008 12:30:00 PM
Benzene	< 2500	2500		µg/Kg	500	11/21/2008 12:30:00 PM
trans-1,3-Dichloropropene	< 2500	2500		µg/Kg	500	11/21/2008 12:30:00 PM
Bromoform	< 2500	2500		µg/Kg	500	11/21/2008 12:30:00 PM
4-Methyl-2-pentanone	< 5000	5000		µg/Kg	500	11/21/2008 12:30:00 PM
2-Hexanone	< 5000	5000		µg/Kg	500	11/21/2008 12:30:00 PM
Tetrachloroethene	< 2500	2500		µg/Kg	500	11/21/2008 12:30:00 PM
1,1,2,2-Tetrachloroethane	< 2500	2500		µg/Kg	500	11/21/2008 12:30:00 PM
Toluene	26000	2500		µg/Kg	500	11/21/2008 12:30:00 PM
Chlorobenzene	< 2500	2500		µg/Kg	500	11/21/2008 12:30:00 PM
Ethylbenzene	31000	2500		µg/Kg	500	11/21/2008 12:30:00 PM
Styrene	< 2500	2500		µg/Kg	500	11/21/2008 12:30:00 PM
m,p-Xylene	120000	2500		µg/Kg	500	11/21/2008 12:30:00 PM
o-Xylene	44000	2500	S	µg/Kg	500	11/21/2008 12:30:00 PM
Methyl tert-butyl ether	< 2500	2500		µg/Kg	500	11/21/2008 12:30:00 PM
Dichlorodifluoromethane	< 2500	2500		µg/Kg	500	11/21/2008 12:30:00 PM
Methyl Acetate	< 2500	2500		µg/Kg	500	11/21/2008 12:30:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
X - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
T - Tentitively Identified Compound-Estimated Conc.
E - Value above quantitation range

Adirondack Environmental Services, Inc

Date: *25-Nov-08*

CLIENT: Niagara County
Work Order: 081111014
Reference: NCRDD Investigation / Lockport NY
PO#: NIACO-0000049960

Client Sample ID: TP-9
Collection Date: 11/10/2008
Lab Sample ID: 081111014-002
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANICS SW8260B						Analyst: **ML**
1,1,2-Trichloro-1,2,2-trifluoroethane	< 2500	2500		µg/Kg	500	11/21/2008 12:30:00 PM
Trichlorofluoromethane	< 2500	2500		µg/Kg	500	11/21/2008 12:30:00 PM
Cyclohexane	< 5000	5000		µg/Kg	500	11/21/2008 12:30:00 PM
Methyl Cyclohexane	< 2500	2500		µg/Kg	500	11/21/2008 12:30:00 PM
1,2-Dibromoethane	< 2500	2500		µg/Kg	500	11/21/2008 12:30:00 PM
1,3-Dichlorobenzene	< 2500	2500		µg/Kg	500	11/21/2008 12:30:00 PM
Isopropylbenzene	< 2500	2500		µg/Kg	500	11/21/2008 12:30:00 PM
1,4-Dichlorobenzene	< 2500	2500		µg/Kg	500	11/21/2008 12:30:00 PM
1,2-Dichlorobenzene	< 2500	2500		µg/Kg	500	11/21/2008 12:30:00 PM
1,2-Dibromo-3-chloropropane	< 2500	2500		µg/Kg	500	11/21/2008 12:30:00 PM
1,2,4-Trichlorobenzene	< 2500	2500		µg/Kg	500	11/21/2008 12:30:00 PM
IGNITABILITY SW1030						Analyst: **PL**
Ignitability	Not Ignitable	0			1	11/25/2008

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
X - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
T - Tentitively Identified Compound-Estimated Conc.
E - Value above quantitation range

Adirondack Environmental Services, Inc.
314 North Pearl Street
Albany, New York 12207
518-434-4546/434-0891 FAX

CHAIN OF CUSTODY RECORD

Experience is the solution

A full service analytical research laboratory offering solutions to environmental concerns

Client Name:	Address:	
NCROD c/o GZA	535 Washington St. Buffalo NY 14203	
Send Report To:	**Project Name (Location)**	**Samplers: (Names)**
daniel.troy@gza.com	NCROD LF#1 Lockport NY	DANIEL TROY
Client Phone No:	**Client Fax No:**	**PO Number:**
716-844-7034	716-685-3629	NCROD P.O issued

Samplers: (Signature) Daniel Troy

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.	Sample Type: Matrix	Comp	Grab	Number of Cont's	Analysis Required
001	TP-8	11/10/08	1200 P	S		X	1	8260 VOC / 8270 SVOC / ignitability
	TP-8	11/10/08	1200 P	S		X	2	RCRA 8 metals
002	TP-9	11/10/08	1230 P	S		X	1	8260 VOC + ignitability

AES Work Order #: 08111014

CC Report To / Special Instructions/Remarks:
* Spoke to Daniel, he wants to run the full list on 8260 and 8270. A. Maksut 11/11/08

Turnaround Time Request:
☐ 1 Day ☐ 3 Day (X) Normal
☐ 2 Day ☐ 5 Day

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Daniel Troy	Fed Ex	11/10/08 1730
Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Received for Laboratory by:	Date/Time
	Addin Maksuti	11/11/08 9:48AM

Temperature	Properly Preserved	Received Within Holding Times
Ambient or (Chilled)	(Y) N	(Y) N
Notes: 2°c	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

Adirondack Environmental Services, Inc.
Experience is the solution
314 North Pearl Street • Albany, New York 12207 • (518) 434-4546 • Fax (518) 434-0891

TERMS, CONDITIONS & LIMITATIONS

All service rendered by the **Adirondack Environmental Services, Inc.** are undertaken and all rates are based upon the following terms:

(a) Neither **Adirondack Environmental Services, Inc.,** nor any of its employees, agents or sub-contractors shall be liable for any loss or damage arising out of **Adirondack Environmental Services, Inc.'s** performance or nonperformance, whether by way of negligence or breach of contract, or otherwise, in any amount greater than twice the amount billed to the customer for the work leading to the claim of the customer. Said remedy shall be the sole and exclusive remedy against **Adirondack Environmental Services, Inc.** arising out of its work.

(b) All claims made must be in writing within forty-five (45) days after delivery of the **Adirondack Environmental Services, Inc.** report regarding said work or such claim shall be deemed or irrevocably waived.

(c) **Adirondack Environmental Services, Inc.** reports are submitted in writing and are for our customers only. Our customers are considered to be only those entities being billed for our services. Acquisition of an **Adirondack Environmental Services, Inc.** report by other than our customer does not constitute a representation of **Adirondack Environmental Services, Inc.** as to the accuracy of the contents thereof.

(d) In no event shall **Adirondack Environmental Services, Inc.,** its employees, agents or sub-contractors be responsible for consequential or special damages of any kind or in any amount.

(e) No deviation from the terms set forth herein shall bind **Adirondack Environmental Services, Inc.** unless in writing and signed by a Director of **Adirondack Environmental Services, Inc.**

(f) Results pertain only to items analyzed. Information supplied by client is assumed to be correct. This information may be used on reports and in calculations and **Adirondack Environmental Services, Inc.** is not responsible for the accuracy of this information.

(g) Payments by credit card are subject to a 3% additional charge.

CENTEK LABORATORIES, LLC

143 Midler Park Drive * Syracuse, NY 13206

Phone (315) 431-9730 * Fax (315) 431-9731 * Emergency 24/7 (315) 416-2751

NELAC Certificate No. 11830

www CentekLabs.com

Friday, August 29, 2008

Ms. Tara Daniels
Adirondack Environmental Services, Inc
314 N Pearl St
Albany, NY 12207

TEL: 518-434-4546
FAX 518-434-0891

RE: Soil Gas Samples

Dear Ms. Tara Daniels: Order No.: C0808030

Centek Laboratories, LLC received 1 sample(s) on 8/28/2008 for the analyses presented in the following report.

Analytical results relate to samples as received at laboratory. We do our best to make our reporting format clear and understandable and hope you are thoroughly satisfied with our services.

Centek Laboratories is distinctively qualified to meet your needs for precise and timely volatile organic compound analysis. We perform all analyses according to EPA, NIOSH or OSHA-approved analytical methods. Centek Laboratories is dedicated to providing quality analyses and exceptional customer service.

Please contact your client service representative, Michael Palmer at (315) 431-9730, if you would like any additional information regarding this report.

Thank you for using Centek Laboratories. This report can not be reproduced except in its entirety, without prior written authorization.

Sincerely,

Michael Palmer
Director of Client Services

SEP 2 2 2008

Centek Laboratories, LLC **Date:** *09-Sep-08*

CLIENT: Adirondack Environmental Services, Inc
Project: Soil Gas Samples
Lab Order: C0808030

CASE NARRATIVE

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objective except as indicated in the corrective action report(s). All samples were received and analyzed within the EPA recommended holding times. Test results are not Method Blank (MB) corrected for contamination. Samples were analyzed using the methods outlined in the following references:

Compendium of Methods for the Determination of Toxic Organic Compounds, Compendium Method TO-15, January 1999.

TO: CENTEK LABS

Adirondack Environmental Services, Inc.
314 North Pearl Street
Albany, New York 12207
518-434-4546/434-0891 FAX

CHAIN OF CUSTODY RECORD

Experience is the solution

A full service analytical research laboratory offering solutions to environmental concerns

Client Name:	Address:	Samplers: (Names)
Adirondack Env	314 N. Pearl St Albany NY 12207	DANIEL TROY
Send Report To:	**Project Name (Location)**	
TARA DANIELS	NCRDD investigation	
Client Phone No:	**Client Fax No:**	**PO Number:**
518-434-4546	518-434-0891	**Samplers: (Signature)**

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type Matrix	Comp	Grab	Number of Cont's	Analysis Required
	Maint. Shop Sub Slab	8/27/08	8:30	A	Air		X	1	TO 15
	Canister 240			P					Air Samples
	Regulator 455			A/P					~~TO 15~~
				A/P					
				A/P					
				A/P					
				A/P					
				A/P					
				A/P					
				A/P					
				A/P					
				A/P					
				A/P					
				A/P					
				A/P					

AES Work Order #:

CC Report To / Special Instructions/Remarks:

Turnaround Time Request:
☐ 1 Day ☐ 3 Day ☒ Normal
☐ 2 Day ☐ 5 Day

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
GZA	Fed Ex	1745 8/27/08
Relinquished by: (Signature)	**Received by: (Signature)**	**Date/Time**
Relinquished by: (Signature)	**Received for Laboratory by:**	**Date/Time**
	M. Pal	9/28/08

Temperature	Properly Preserved	Received Within Holding Times
Ambient or Chilled	Y N	Y N
Notes: N/A	Notes: N/A	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

Adirondack Environmental Services, Inc.

Centek Laboratories, LLC

Date: *29-Aug-08*

CLIENT:	Adirondack Environmental Services, Inc	**Client Sample ID:**	Maint. Shop Subslab
Lab Order:	C0808030	**Tag Number:**	240, 455
Project:	Soil Gas Samples	**Collection Date:**	8/27/2008
Lab ID:	C0808030-001A	**Matrix:**	AIR

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		**FLD**				Analyst:
Vacuum Reading "Hg	-11			"Hg		8/27/2008
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	0.10	0.15	J	ppbV	1	8/28/2008 9:01:00 PM
1,1,2,2-Tetrachloroethane	ND	0.15		ppbV	1	8/28/2008 9:01:00 PM
1,1,2-Trichloroethane	ND	0.15		ppbV	1	8/28/2008 9:01:00 PM
1,1-Dichloroethane	ND	0.15		ppbV	1	8/28/2008 9:01:00 PM
1,1-Dichloroethene	0.10	0.15	J	ppbV	1	8/28/2008 9:01:00 PM
1,2,4-Trichlorobenzene	ND	0.15		ppbV	1	8/28/2008 9:01:00 PM
1,2,4-Trimethylbenzene	2.2	1.5		ppbV	10	8/28/2008 8:20:00 PM
1,2-Dibromoethane	ND	0.15		ppbV	1	8/28/2008 9:01:00 PM
1,2-Dichlorobenzene	ND	0.15		ppbV	1	8/28/2008 9:01:00 PM
1,2-Dichloroethane	ND	0.15		ppbV	1	8/28/2008 9:01:00 PM
1,2-Dichloropropane	ND	0.15		ppbV	1	8/28/2008 9:01:00 PM
1,3,5-Trimethylbenzene	1.1	0.15		ppbV	1	8/28/2008 9:01:00 PM
1,3-butadiene	ND	0.15		ppbV	1	8/28/2008 9:01:00 PM
1,3-Dichlorobenzene	ND	0.15		ppbV	1	8/28/2008 9:01:00 PM
1,4-Dichlorobenzene	0.41	0.15		ppbV	1	8/28/2008 9:01:00 PM
1,4-Dioxane	1.3	0.30		ppbV	1	8/28/2008 9:01:00 PM
2,2,4-trimethylpentane	ND	0.15		ppbV	1	8/28/2008 9:01:00 PM
4-ethyltoluene	1.2	0.15		ppbV	1	8/28/2008 9:01:00 PM
Acetone	21	3.0		ppbV	10	8/28/2008 8:20:00 PM
Allyl chloride	ND	0.15		ppbV	1	8/28/2008 9:01:00 PM
Benzene	1.2	0.15		ppbV	1	8/28/2008 9:01:00 PM
Benzyl chloride	ND	0.15		ppbV	1	8/28/2008 9:01:00 PM
Bromodichloromethane	ND	0.15		ppbV	1	8/28/2008 9:01:00 PM
Bromoform	ND	0.15		ppbV	1	8/28/2008 9:01:00 PM
Bromomethane	ND	0.15		ppbV	1	8/28/2008 9:01:00 PM
Carbon disulfide	4.1	1.5		ppbV	10	8/28/2008 8:20:00 PM
Carbon tetrachloride	ND	0.15		ppbV	1	8/28/2008 9:01:00 PM
Chlorobenzene	0.65	0.15		ppbV	1	8/28/2008 9:01:00 PM
Chloroethane	ND	0.15		ppbV	1	8/28/2008 9:01:00 PM
Chloroform	0.20	0.15		ppbV	1	8/28/2008 9:01:00 PM
Chloromethane	ND	0.15		ppbV	1	8/28/2008 9:01:00 PM
cis-1,2-Dichloroethene	0.15	0.15		ppbV	1	8/28/2008 9:01:00 PM
cis-1,3-Dichloropropene	ND	0.15		ppbV	1	8/28/2008 9:01:00 PM
Cyclohexane	0.75	0.15		ppbV	1	8/28/2008 9:01:00 PM
Dibromochloromethane	ND	0.15		ppbV	1	8/28/2008 9:01:00 PM
Ethyl acetate	0.89	0.25		ppbV	1	8/28/2008 9:01:00 PM
Ethylbenzene	1.9	1.5		ppbV	10	8/28/2008 8:20:00 PM

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected at or below quantitation limits
- JN Non-routine analyte. Quantitation estimated
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Centek Laboratories, LLC

Date: *29-Aug-08*

CLIENT:	Adirondack Environmental Services, Inc	**Client Sample ID:**	Maint. Shop Subslab
Lab Order:	C0808030	**Tag Number:**	240, 455
Project:	Soil Gas Samples	**Collection Date:**	8/27/2008
Lab ID:	C0808030-001A	**Matrix:**	AIR

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst. **RJP**
Freon 11	0.31	0.15		ppbV	1	8/28/2008 9:01:00 PM
Freon 113	ND	0.15		ppbV	1	8/28/2008 9:01:00 PM
Freon 114	ND	0.15		ppbV	1	8/28/2008 9:01:00 PM
Freon 12	0.54	0.15		ppbV	1	8/28/2008 9:01:00 PM
Heptane	2.3	1.5		ppbV	10	8/28/2008 8:20:00 PM
Hexachloro-1,3-butadiene	ND	0.15		ppbV	1	8/28/2008 9:01:00 PM
Hexane	1.5	0.15		ppbV	1	8/28/2008 9:01:00 PM
Isopropyl alcohol	ND	0.15		ppbV	1	8/28/2008 9:01:00 PM
m&p-Xylene	5.0	3.0		ppbV	10	8/28/2008 8:20:00 PM
Methyl Butyl Ketone	ND	0.30		ppbV	1	8/28/2008 9:01:00 PM
Methyl Ethyl Ketone	2.5	3.0	J	ppbV	10	8/28/2008 8:20:00 PM
Methyl Isobutyl Ketone	1.8	3.0	J	ppbV	10	8/28/2008 8:20:00 PM
Methyl tert-butyl ether	ND	0.15		ppbV	1	8/28/2008 9:01:00 PM
Methylene chloride	0.50	0.15		ppbV	1	8/28/2008 9:01:00 PM
o-Xylene	2.0	0.15		ppbV	1	8/28/2008 9:01:00 PM
Propylene	ND	0.15		ppbV	1	8/28/2008 9:01:00 PM
Styrene	0.81	0.15		ppbV	1	8/28/2008 9:01:00 PM
Tetrachloroethylene	0.25	0.15		ppbV	1	8/28/2008 9:01:00 PM
Tetrahydrofuran	ND	0.15		ppbV	1	8/28/2008 9:01:00 PM
Toluene	35	6.0		ppbV	40	8/28/2008 9:34:00 PM
trans-1,2-Dichloroethene	ND	0.15		ppbV	1	8/28/2008 9:01:00 PM
trans-1,3-Dichloropropene	ND	0.15		ppbV	1	8/28/2008 9:01:00 PM
Trichloroethene	1.3	0.15		ppbV	1	8/28/2008 9:01:00 PM
Vinyl acetate	ND	0.15		ppbV	1	8/28/2008 9:01:00 PM
Vinyl Bromide	ND	0.15		ppbV	1	8/28/2008 9:01:00 PM
Vinyl chloride	ND	0.15		ppbV	1	8/28/2008 9:01:00 PM
Surr: Bromofluorobenzene	116	70-130		%REC	1	8/28/2008 9:01:00 PM

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected at or below quantitation limits
- JN Non-routine analyte Quantitation estimated
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Centek Laboratories, LLC

Date: *29-Aug-08*

CLIENT:	Adirondack Environmental Services, Inc	**Client Sample ID:**	Maint. Shop Subslab
Lab Order:	C0808030	**Tag Number:**	240, 455
Project:	Soil Gas Samples	**Collection Date:**	8/27/2008
Lab ID:	C0808030-001A	**Matrix:**	AIR

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	0.55	0.83	J	ug/m3	1	8/28/2008 9:01:00 PM
1,1,2,2-Tetrachloroethane	ND	1.0		ug/m3	1	8/28/2008 9:01:00 PM
1,1,2-Trichloroethane	ND	0.83		ug/m3	1	8/28/2008 9:01:00 PM
1,1-Dichloroethane	ND	0.62		ug/m3	1	8/28/2008 9:01:00 PM
1,1-Dichloroethene	0.40	0.60	J	ug/m3	1	8/28/2008 9:01:00 PM
1,2,4-Trichlorobenzene	ND	1.1		ug/m3	1	8/28/2008 9:01:00 PM
1,2,4-Trimethylbenzene	11	7.5		ug/m3	10	8/28/2008 8:20:00 PM
1,2-Dibromoethane	ND	1.2		ug/m3	1	8/28/2008 9:01:00 PM
1,2-Dichlorobenzene	ND	0.92		ug/m3	1	8/28/2008 9:01:00 PM
1,2-Dichloroethane	ND	0.62		ug/m3	1	8/28/2008 9:01:00 PM
1,2-Dichloropropane	ND	0.70		ug/m3	1	8/28/2008 9:01:00 PM
1,3,5-Trimethylbenzene	5.4	0.75		ug/m3	1	8/28/2008 9:01:00 PM
1,3-butadiene	ND	0.34		ug/m3	1	8/28/2008 9:01:00 PM
1,3-Dichlorobenzene	ND	0.92		ug/m3	1	8/28/2008 9:01:00 PM
1,4-Dichlorobenzene	2.5	0.92		ug/m3	1	8/28/2008 9:01:00 PM
1,4-Dioxane	4.6	1.1		ug/m3	1	8/28/2008 9:01:00 PM
2,2,4-trimethylpentane	ND	0.71		ug/m3	1	8/28/2008 9:01:00 PM
4-ethyltoluene	6.1	0.75		ug/m3	1	8/28/2008 9:01:00 PM
Acetone	50	7.2		ug/m3	10	8/28/2008 8:20:00 PM
Allyl chloride	ND	0.48		ug/m3	1	8/28/2008 9:01:00 PM
Benzene	3.8	0.49		ug/m3	1	8/28/2008 9:01:00 PM
Benzyl chloride	ND	0.88		ug/m3	1	8/28/2008 9:01:00 PM
Bromodichloromethane	ND	1.0		ug/m3	1	8/28/2008 9:01:00 PM
Bromoform	ND	1.6		ug/m3	1	8/28/2008 9:01:00 PM
Bromomethane	ND	0.59		ug/m3	1	8/28/2008 9:01:00 PM
Carbon disulfide	13	4.7		ug/m3	10	8/28/2008 8:20:00 PM
Carbon tetrachloride	ND	0.96		ug/m3	1	8/28/2008 9:01:00 PM
Chlorobenzene	3.0	0.70		ug/m3	1	8/28/2008 9:01:00 PM
Chloroethane	ND	0.40		ug/m3	1	8/28/2008 9:01:00 PM
Chloroform	0.99	0.74		ug/m3	1	8/28/2008 9:01:00 PM
Chloromethane	ND	0.31		ug/m3	1	8/28/2008 9:01:00 PM
cis-1,2-Dichloroethene	0.60	0.60		ug/m3	1	8/28/2008 9:01:00 PM
cis-1,3-Dichloropropene	ND	0.69		ug/m3	1	8/28/2008 9:01:00 PM
Cyclohexane	2.6	0.52		ug/m3	1	8/28/2008 9:01:00 PM
Dibromochloromethane	ND	1.3		ug/m3	1	8/28/2008 9:01:00 PM
Ethyl acetate	3.3	0.92		ug/m3	1	8/28/2008 9:01:00 PM
Ethylbenzene	8.4	6.6		ug/m3	10	8/28/2008 8:20:00 PM
Freon 11	1.8	0.86		ug/m3	1	8/28/2008 9:01:00 PM
Freon 113	ND	1.2		ug/m3	1	8/28/2008 9:01:00 PM
Freon 114	ND	1.1		ug/m3	1	8/28/2008 9:01:00 PM

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected at or below quantitation limits
- JN Non-routine analyte. Quantitation estimated
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Centek Laboratories, LLC

Date: *29-Aug-08*

CLIENT:	Adirondack Environmental Services, Inc	**Client Sample ID:**	Maint. Shop Subslab
Lab Order:	C0808030	**Tag Number:**	240, 455
Project:	Soil Gas Samples	**Collection Date:**	8/27/2008
Lab ID:	C0808030-001A	**Matrix:**	AIR

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
Freon 12	2.7	0.75		ug/m3	1	8/28/2008 9:01:00 PM
Heptane	9.6	6.2		ug/m3	10	8/28/2008 8:20:00 PM
Hexachloro-1,3-butadiene	ND	1.6		ug/m3	1	8/28/2008 9:01:00 PM
Hexane	5.4	0.54		ug/m3	1	8/28/2008 9:01:00 PM
Isopropyl alcohol	ND	0.37		ug/m3	1	8/28/2008 9:01:00 PM
m&p-Xylene	22	13		ug/m3	10	8/28/2008 8:20:00 PM
Methyl Butyl Ketone	ND	1.2		ug/m3	1	8/28/2008 9:01:00 PM
Methyl Ethyl Ketone	7.5	9.0	J	ug/m3	10	8/28/2008 8:20:00 PM
Methyl Isobutyl Ketone	7.5	12	J	ug/m3	10	8/28/2008 8:20:00 PM
Methyl tert-butyl ether	ND	0.55		ug/m3	1	8/28/2008 9:01:00 PM
Methylene chloride	1.8	0.53		ug/m3	1	8/28/2008 9:01:00 PM
o-Xylene	8.9	0.66		ug/m3	1	8/28/2008 9:01:00 PM
Propylene	ND	0.26		ug/m3	1	8/28/2008 9:01:00 PM
Styrene	3.5	0.65		ug/m3	1	8/28/2008 9:01:00 PM
Tetrachloroethylene	1.7	1.0		ug/m3	1	8/28/2008 9:01:00 PM
Tetrahydrofuran	ND	0.45		ug/m3	1	8/28/2008 9:01:00 PM
Toluene	130	23		ug/m3	40	8/28/2008 9:34:00 PM
trans-1,2-Dichloroethene	ND	0.60		ug/m3	1	8/28/2008 9:01:00 PM
trans-1,3-Dichloropropene	ND	0.69		ug/m3	1	8/28/2008 9:01:00 PM
Trichloroethene	7.3	0.82		ug/m3	1	8/28/2008 9:01:00 PM
Vinyl acetate	ND	0.54		ug/m3	1	8/28/2008 9:01:00 PM
Vinyl Bromide	ND	0.67		ug/m3	1	8/28/2008 9:01:00 PM
Vinyl chloride	ND	0.39		ug/m3	1	8/28/2008 9:01:00 PM

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected at or below quantitation limits
- JN Non-routine analyte Quantitation estimated
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Adirondack Environmental Services, Inc.®
Experience is the solution
314 North Pearl Street ♦ Albany, New York 12207
(800) 848-4983 ♦ (518) 434-4546 ♦ Fax (518) 434-0891

September 10, 2008

Richard Pope
Niagara County
175 Hawley Street
Lockport, NY 14094

TEL: (716) 438-9984
FAX: (716) 434-6568

Work Order No: 080828049

RE: NCRDD LF#1 Evaluation

Dear Richard Pope:

Adirondack Environmental Services, Inc received 3 samples on 8/28/2008 for the analyses presented in the following report.

There were no problems with the analyses and all associated QC met EPA or laboratory specifications, except if noted.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Tara Daniels
Laboratory Manager

ELAP#: 10709
AIHA#: 100307

Qualifiers:	ND - Not Detected at the Reporting Limit	S - Spike Recovery outside accepted recovery limits
	J - Analyte detected below quanititation limits	R - RPD outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	T - Tentitively Identified Compound-Estimated Conc
	X - Value exceeds Maximum Contaminant Level	E - Value above quantitation range

Adirondack Environmental Services, Inc

Date: *10-Sep-08*

CLIENT: Niagara County
Work Order: 080828049
Reference: NCRDD LF#1 Evaluation /
PO#:

Client Sample ID: Gas Vent "T"
Collection Date: 8/27/2008
Lab Sample ID: 080828049-001
Matrix: AIR

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
GASES BY GC EPA-8015GASES						Analyst: **TN**
Methane	49	1		%	1	8/28/2008
VOLATILE ORGANICS TO17						Analyst: **ML**
1,1,1-Trichloroethane	<0.15	0.10		mg/m3	1	9/9/2008 11:54:00 AM
1,1,2,2-Tetrachloroethane	<0.15	0.10		mg/m3	1	9/9/2008 11:54:00 AM
1,1,2-Trichloroethane	<0.15	0.10		mg/m3	1	9/9/2008 11:54:00 AM
1,1-Dichloroethane	<0.15	0.10		mg/m3	1	9/9/2008 11:54:00 AM
1,1-Dichloroethene	<0.15	0.10		mg/m3	1	9/9/2008 11:54:00 AM
1,2,4-Trichlorobenzene	<0.15	0.10		mg/m3	1	9/9/2008 11:54:00 AM
1,2-Dibromo-3-chloropropane	<0.15	0.10		mg/m3	1	9/9/2008 11:54:00 AM
1,2-Dibromoethane	<0.15	0.10		mg/m3	1	9/9/2008 11:54:00 AM
1,2-Dichlorobenzene	<0.15	0.10		mg/m3	1	9/9/2008 11:54:00 AM
1,2-Dichloroethane	<0.15	0.10		mg/m3	1	9/9/2008 11:54:00 AM
1,2-Dichloropropane	<0.15	0.10		mg/m3	1	9/9/2008 11:54:00 AM
1,3-Dichlorobenzene	<0.15	0.10		mg/m3	1	9/9/2008 11:54:00 AM
1,4-Dichlorobenzene	<0.15	0.10		mg/m3	1	9/9/2008 11:54:00 AM
2-Butanone	<0.15	0.10		mg/m3	1	9/9/2008 11:54:00 AM
2-Hexanone	<0.15	0.10		mg/m3	1	9/9/2008 11:54:00 AM
4-Methyl-2-Pentanone	<0.15	0.10		mg/m3	1	9/9/2008 11:54:00 AM
Benzene	0.30	0.10		mg/m3	1	9/9/2008 11:54:00 AM
Bromochloromethane	<0.15	0.10		mg/m3	1	9/9/2008 11:54:00 AM
Bromodichloromethane	<0.15	0.10		mg/m3	1	9/9/2008 11:54:00 AM
Bromoform	<0.15	0.10		mg/m3	1	9/9/2008 11:54:00 AM
Bromomethane	<0.15	0.10		mg/m3	1	9/9/2008 11:54:00 AM
Carbon Disulfide	0.35	0.10		mg/m3	1	9/9/2008 11:54:00 AM
Carbon Tetrachloride	<0.15	0.10		mg/m3	1	9/9/2008 11:54:00 AM
Chlorobenzene	<0.15	0.10		mg/m3	1	9/9/2008 11:54:00 AM
Chloroethane	<0.15	0.10		mg/m3	1	9/9/2008 11:54:00 AM
Chloroform	<0.15	0.10		mg/m3	1	9/9/2008 11:54:00 AM
Chloromethane	<0.15	0.10		mg/m3	1	9/9/2008 11:54:00 AM
cis-1,2-Dichloroethene	<0.15	0.10		mg/m3	1	9/9/2008 11:54:00 AM
cis-1,3-Dichloropropene	<0.15	0.10		mg/m3	1	9/9/2008 11:54:00 AM
Dibromochloromethane	<0.15	0.10		mg/m3	1	9/9/2008 11:54:00 AM
Dichlorodifluoromethane	<0.15	0.10		mg/m3	1	9/9/2008 11:54:00 AM
Ethylbenzene	2.90	0.10		mg/m3	1	9/9/2008 11:54:00 AM
Isopropylbenzene	<0.15	0.10		mg/m3	1	9/9/2008 11:54:00 AM
m,p-Xylene	0.84	0.10		mg/m3	1	9/9/2008 11:54:00 AM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
X - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
T - Tentitively Identified Compound-Estimated Conc
E - Value above quantitation range

Adirondack Environmental Services, Inc

Date: *10-Sep-08*

CLIENT:	Niagara County	**Client Sample ID:**	Gas Vent "T"
Work Order:	080828049	**Collection Date:**	8/27/2008
Reference:	NCRDD LF#1 Evaluation /	**Lab Sample ID:**	080828049-001
PO#:		**Matrix:**	AIR

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANICS TO17						Analyst: **ML**
Methyl tert-butyl ether	<0.15	0.10		mg/m3	1	9/9/2008 11:54:00 AM
o-Xylene	0.15	0.10		mg/m3	1	9/9/2008 11:54:00 AM
Styrene	<0.15	0.10		mg/m3	1	9/9/2008 11:54:00 AM
Tetrachloroethene	<0.15	0.10		mg/m3	1	9/9/2008 11:54:00 AM
Toluene	<0.15	0.10		mg/m3	1	9/9/2008 11:54:00 AM
trans-1,2-Dichloroethene	<0.15	0.10		mg/m3	1	9/9/2008 11:54:00 AM
trans-1,3-Dichloropropene	<0.15	0.10		mg/m3	1	9/9/2008 11:54:00 AM
Trichloroethene	<0.15	0.10		mg/m3	1	9/9/2008 11:54:00 AM
Trichlorofluoromethane	<0.15	0.10		mg/m3	1	9/9/2008 11:54:00 AM
Vinyl Chloride	<0.15	0.10		mg/m3	1	9/9/2008 11:54:00 AM

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quanititation limits
- B - Analyte detected in the associated Method Blank
- X - Value exceeds Maximum Contaminant Level
- S - Spike Recovery outside accepted recovery limits
- R - RPD outside accepted recovery limits
- T - Tentitively Identified Compound-Estimated Conc.
- E - Value above quantitation range

Adirondack Environmental Services, Inc

Date: *10-Sep-08*

CLIENT: Niagara County
Work Order: 080828049
Reference: NCRDD LF#1 Evaluation /
PO#:

Client Sample ID: Gas Vent "B"
Collection Date: 8/27/2008
Lab Sample ID: 080828049-002
Matrix: AIR

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
GASES BY GC EPA-8015GASES						Analyst: **TN**
Methane	24	1		%	1	8/28/2008
VOLATILE ORGANICS TO17						Analyst: **ML**
1,1,1-Trichloroethane	<0.14	0.10		mg/m3	1	9/9/2008 12:33:00 PM
1,1,2,2-Tetrachloroethane	<0.14	0.10		mg/m3	1	9/9/2008 12:33:00 PM
1,1,2-Trichloroethane	<0.14	0.10		mg/m3	1	9/9/2008 12:33:00 PM
1,1-Dichloroethane	<0.14	0.10		mg/m3	1	9/9/2008 12:33:00 PM
1,1-Dichloroethene	<0.14	0.10		mg/m3	1	9/9/2008 12:33:00 PM
1,2,4-Trichlorobenzene	<0.14	0.10		mg/m3	1	9/9/2008 12:33:00 PM
1,2-Dibromo-3-chloropropane	<0.14	0.10		mg/m3	1	9/9/2008 12:33:00 PM
1,2-Dibromoethane	<0.14	0.10		mg/m3	1	9/9/2008 12:33:00 PM
1,2-Dichlorobenzene	<0.14	0.10		mg/m3	1	9/9/2008 12:33:00 PM
1,2-Dichloroethane	<0.14	0.10		mg/m3	1	9/9/2008 12:33:00 PM
1,2-Dichloropropane	<0.14	0.10		mg/m3	1	9/9/2008 12:33:00 PM
1,3-Dichlorobenzene	<0.14	0.10		mg/m3	1	9/9/2008 12:33:00 PM
1,4-Dichlorobenzene	<0.14	0.10		mg/m3	1	9/9/2008 12:33:00 PM
2-Butanone	<0.14	0.10		mg/m3	1	9/9/2008 12:33:00 PM
2-Hexanone	<0.14	0.10		mg/m3	1	9/9/2008 12:33:00 PM
4-Methyl-2-Pentanone	<0.14	0.10		mg/m3	1	9/9/2008 12:33:00 PM
Benzene	<0.14	0.10		mg/m3	1	9/9/2008 12:33:00 PM
Bromochloromethane	<0.14	0.10		mg/m3	1	9/9/2008 12:33:00 PM
Bromodichloromethane	<0.14	0.10		mg/m3	1	9/9/2008 12:33:00 PM
Bromoform	<0.14	0.10		mg/m3	1	9/9/2008 12:33:00 PM
Bromomethane	<0.14	0.10		mg/m3	1	9/9/2008 12:33:00 PM
Carbon Disulfide	0.22	0.10		mg/m3	1	9/9/2008 12:33:00 PM
Carbon Tetrachloride	<0.14	0.10		mg/m3	1	9/9/2008 12:33:00 PM
Chlorobenzene	<0.14	0.10		mg/m3	1	9/9/2008 12:33:00 PM
Chloroethane	<0.14	0.10		mg/m3	1	9/9/2008 12:33:00 PM
Chloroform	<0.14	0.10		mg/m3	1	9/9/2008 12:33:00 PM
Chloromethane	<0.14	0.10		mg/m3	1	9/9/2008 12:33:00 PM
cis-1,2-Dichloroethene	<0.14	0.10		mg/m3	1	9/9/2008 12:33:00 PM
cis-1,3-Dichloropropene	<0.14	0.10		mg/m3	1	9/9/2008 12:33:00 PM
Dibromochloromethane	<0.14	0.10		mg/m3	1	9/9/2008 12:33:00 PM
Dichlorodifluoromethane	<0.14	0.10		mg/m3	1	9/9/2008 12:33:00 PM
Ethylbenzene	0.74	0.10		mg/m3	1	9/9/2008 12:33:00 PM
Isopropylbenzene	<0.14	0.10		mg/m3	1	9/9/2008 12:33:00 PM
m,p-Xylene	0.46	0.10		mg/m3	1	9/9/2008 12:33:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
X - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
T - Tentitively Identified Compound-Estimated Conc.
E - Value above quantitation range

Adirondack Environmental Services, Inc

Date: *10-Sep-08*

CLIENT: Niagara County
Work Order: 080828049
Reference: NCRDD LF#1 Evaluation /
PO#:

Client Sample ID: Gas Vent "B"
Collection Date: 8/27/2008
Lab Sample ID: 080828049-002
Matrix: AIR

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANICS TO17						Analyst: **ML**
Methyl tert-butyl ether	<0.14	0.10		mg/m3	1	9/9/2008 12:33:00 PM
o-Xylene	<0.14	0.10		mg/m3	1	9/9/2008 12:33:00 PM
Styrene	<0.14	0.10		mg/m3	1	9/9/2008 12:33:00 PM
Tetrachloroethene	<0.14	0.10		mg/m3	1	9/9/2008 12:33:00 PM
Toluene	2.75	0.10		mg/m3	1	9/9/2008 12:33:00 PM
trans-1,2-Dichloroethene	<0.14	0.10		mg/m3	1	9/9/2008 12:33:00 PM
trans-1,3-Dichloropropene	<0.14	0.10		mg/m3	1	9/9/2008 12:33:00 PM
Trichloroethene	<0.14	0.10		mg/m3	1	9/9/2008 12:33:00 PM
Trichlorofluoromethane	<0.14	0.10		mg/m3	1	9/9/2008 12:33:00 PM
Vinyl Chloride	<0.14	0.10		mg/m3	1	9/9/2008 12:33:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
X - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
T - Tentitively Identified Compound-Estimated Conc
E - Value above quantitation range

Adirondack Environmental Services, Inc

Date: *10-Sep-08*

CLIENT: Niagara County
Work Order: 080828049
Reference: NCRDD LF#1 Evaluation /
PO#:

Client Sample ID: Gas Vent "M"
Collection Date: 8/27/2008
Lab Sample ID: 080828049-003
Matrix: AIR

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
GASES BY GC EPA-8015GASES						Analyst: **TN**
Methane	61	1		%	1	8/28/2008
VOLATILE ORGANICS TO17						Analyst: **ML**
1,1,1-Trichloroethane	<0.14	0.10		mg/m3	1	9/9/2008 1:17:00 PM
1,1,2,2-Tetrachloroethane	<0.14	0.10		mg/m3	1	9/9/2008 1:17:00 PM
1,1,2-Trichloroethane	<0.14	0.10		mg/m3	1	9/9/2008 1:17:00 PM
1,1-Dichloroethane	<0.14	0.10		mg/m3	1	9/9/2008 1:17:00 PM
1,1-Dichloroethene	<0.14	0.10		mg/m3	1	9/9/2008 1:17:00 PM
1,2,4-Trichlorobenzene	<0.14	0.10		mg/m3	1	9/9/2008 1:17:00 PM
1,2-Dibromo-3-chloropropane	<0.14	0.10		mg/m3	1	9/9/2008 1:17:00 PM
1,2-Dibromoethane	<0.14	0.10		mg/m3	1	9/9/2008 1:17:00 PM
1,2-Dichlorobenzene	<0.14	0.10		mg/m3	1	9/9/2008 1:17:00 PM
1,2-Dichloroethane	<0.14	0.10		mg/m3	1	9/9/2008 1:17:00 PM
1,2-Dichloropropane	<0.14	0.10		mg/m3	1	9/9/2008 1:17:00 PM
1,3-Dichlorobenzene	<0.14	0.10		mg/m3	1	9/9/2008 1:17:00 PM
1,4-Dichlorobenzene	<0.14	0.10		mg/m3	1	9/9/2008 1:17:00 PM
2-Butanone	<0.14	0.10		mg/m3	1	9/9/2008 1:17:00 PM
2-Hexanone	<0.14	0.10		mg/m3	1	9/9/2008 1:17:00 PM
4-Methyl-2-Pentanone	<0.14	0.10		mg/m3	1	9/9/2008 1:17:00 PM
Benzene	<0.14	0.10		mg/m3	1	9/9/2008 1:17:00 PM
Bromochloromethane	<0.14	0.10		mg/m3	1	9/9/2008 1:17:00 PM
Bromodichloromethane	<0.14	0.10		mg/m3	1	9/9/2008 1:17:00 PM
Bromoform	<0.14	0.10		mg/m3	1	9/9/2008 1:17:00 PM
Bromomethane	<0.14	0.10		mg/m3	1	9/9/2008 1:17:00 PM
Carbon Disulfide	<0.14	0.10		mg/m3	1	9/9/2008 1:17:00 PM
Carbon Tetrachloride	<0.14	0.10		mg/m3	1	9/9/2008 1:17:00 PM
Chlorobenzene	<0.14	0.10		mg/m3	1	9/9/2008 1:17:00 PM
Chloroethane	<0.14	0.10		mg/m3	1	9/9/2008 1:17:00 PM
Chloroform	<0.14	0.10		mg/m3	1	9/9/2008 1:17:00 PM
Chloromethane	<0.14	0.10		mg/m3	1	9/9/2008 1:17:00 PM
cis-1,2-Dichloroethene	<0.14	0.10		mg/m3	1	9/9/2008 1:17:00 PM
cis-1,3-Dichloropropene	<0.14	0.10		mg/m3	1	9/9/2008 1:17:00 PM
Dibromochloromethane	<0.14	0.10		mg/m3	1	9/9/2008 1:17:00 PM
Dichlorodifluoromethane	<0.14	0.10		mg/m3	1	9/9/2008 1:17:00 PM
Ethylbenzene	<0.14	0.10		mg/m3	1	9/9/2008 1:17:00 PM
Isopropylbenzene	<0.14	0.10		mg/m3	1	9/9/2008 1:17:00 PM
m,p-Xylene	<0.14	0.10		mg/m3	1	9/9/2008 1:17:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
X - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
T - Tentitively Identified Compound-Estimated Conc.
E - Value above quantitation range

Adirondack Environmental Services, Inc

Date: *10-Sep-08*

CLIENT:	Niagara County	**Client Sample ID:**	Gas Vent "M"
Work Order:	080828049	**Collection Date:**	8/27/2008
Reference:	NCRDD LF#1 Evaluation /	**Lab Sample ID:**	080828049-003
PO#:		**Matrix:**	AIR

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANICS TO17						Analyst: **ML**
Methyl tert-butyl ether	<0.14	0.10		mg/m3	1	9/9/2008 1:17:00 PM
o-Xylene	<0.14	0.10		mg/m3	1	9/9/2008 1:17:00 PM
Styrene	<0.14	0.10		mg/m3	1	9/9/2008 1:17:00 PM
Tetrachloroethene	<0.14	0.10		mg/m3	1	9/9/2008 1:17:00 PM
Toluene	<0.14	0.10		mg/m3	1	9/9/2008 1:17:00 PM
trans-1,2-Dichloroethene	<0.14	0.10		mg/m3	1	9/9/2008 1:17:00 PM
trans-1,3-Dichloropropene	<0.14	0.10		mg/m3	1	9/9/2008 1:17:00 PM
Trichloroethene	<0.14	0.10		mg/m3	1	9/9/2008 1:17:00 PM
Trichlorofluoromethane	<0.14	0.10		mg/m3	1	9/9/2008 1:17:00 PM
Vinyl Chloride	<0.14	0.10		mg/m3	1	9/9/2008 1:17:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quanititation limits

B - Analyte detected in the associated Method Blank

X - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

T - Tentitively Identified Compound-Estimated Conc.

E - Value above quantitation range

Adirondack Environmental Services, Inc.
314 North Pearl Street
Albany, New York 12207
518-434-4546/434-0891 FAX

080828049

REQUEST FOR INDUSTRIAL HYGIENE ANALYSIS

CLIENT NAME	PROJECT NAME (Location)	SAMPLERS' (Names)
NCRDD c/o GZA	NCRDD LF#1 Evaluation	Daniel Troy 716-844-7034
ADDRESS	**PO NUMBER**	**SAMPLERS' (Signatures)**
535 Washington St. Buffalo NY 14203	NCRDD	

AES SAMPLE NUMBER	SAMPLE IDENTIFICATION	DATE SAMPLED	TIME A = A.M. P = P.M.		MEDIA TYPE/ MATRIX	NO. OF CONT'S	TOTAL SAMPLING TIME (MIN.)	AIR SAMPLE VOLUME (LITERS)	ANALYSIS REQUESTED
001	GAS Vent "T"	8/27/08	1500	(A) P	Air	1	—	tedlar	VOC + methane
002	Gas Vent "B"	8/27/08	1530	(A) P	Air	1	—	tedlar	VOC + methane
003	GAS Vent "M"	8/27/08	1550	(A) P	Air	1	—	tedlar	VOC + methane
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					

SEND REPORT TO	SEND INVOICE TO
DANIEL TROY / GZA	NCRDD
535 Washington St. Buffalo NY 14203	Lockport NY
daniel.troy@gza.com	

Samples received in good condition: ✓ Y ___ N
Samples collected on proper media: ✓ Y ___ N
Comments: Arrived by Fedex

TURN-AROUND TIME – PLEASE CHECK ALL THAT APPLY

(X) STANDARD SERVICE

☐ *RUSH SERVICE — Results requested by: _____

☐ FAX RESULTS TO: _____ FAX# (___) ___-

☐ PHONE RESULTS TO: _____ PH # (___) ___-

* Turn-around time varies by substance. For most substances, standard turn-around time is ten (10) working days. Please inquire for capacity of rush analysis.

LABORATORY APPROVAL	DATE	TIME	RECEIVED FOR LABORATORY BY	DATE	TIME
			Kathy Basal	8-28-08	2:53 PM

CHAIN OF CUSTODY

RELINQUISHED BY (Signature)	RECEIVED BY (Signature)	DATE	TIME
Daniel Troy	FedEx	8/27/08	1750
RELINQUISHED BY (Signature)	**RECEIVED BY (Signature)**	**DATE**	**TIME**

WHITE — Lab Copy YELLOW — Sampler Copy PINK — Generator Copy

The Laboratory reserves the right to return hazardous samples to the client or may levy an appropriate fee per container for disposal.

Adirondack Environmental Services, Inc.
Experience is the solution
314 North Pearl Street • Albany, New York 12207 • (518) 434-4546 • Fax (518) 434-0891

TERMS, CONDITIONS & LIMITATIONS

All service rendered by the **Adirondack Environmental Services, Inc.** are undertaken and all rates are based upon the following terms:

(a) Neither **Adirondack Environmental Services, Inc.,** nor any of its employees, agents or sub-contractors shall be liable for any loss or damage arising out of **Adirondack Environmental Services, Inc.'s** performance or nonperformance, whether by way of negligence or breach of contract, or otherwise, in any amount greater than twice the amount billed to the customer for the work leading to the claim of the customer. Said remedy shall be the sole and exclusive remedy against **Adirondack Environmental Services, Inc.** arising out of its work.

(b) All claims made must be in writing within forty-five (45) days after delivery of the **Adirondack Environmental Services, Inc.** report regarding said work or such claim shall be deemed or irrevocably waived.

(c) **Adirondack Environmental Services, Inc.** reports are submitted in writing and are for our customers only. Our customers are considered to be only those entities being billed for our services. Acquisition of an **Adirondack Environmental Services, Inc.** report by other than our customer does not constitute a representation of **Adirondack Environmental Services, Inc.** as to the accuracy of the contents thereof.

(d) In no event shall **Adirondack Environmental Services, Inc.,** its employees, agents or sub-contractors be responsible for consequential or special damages of any kind or in any amount.

(e) No deviation from the terms set forth herein shall bind **Adirondack Environmental Services, Inc.** unless in writing and signed by a Director of **Adirondack Environmental Services, Inc.**

(f) Results pertain only to items analyzed. Information supplied by client is assumed to be correct. This information may be used on reports and in calculations and **Adirondack Environmental Services, Inc.** is not responsible for the accuracy of this information.

(g) Payments by credit card are subject to a 3% additional charge.