



March 4, 2013

Mr. James Jones, P.E.
Town of Tonawanda
Technical Support Department
2919 Delaware Avenue
Kenmore, NY 14217

Re: Summary of 5335 River Rd. Containment Pond Removal and Site Work

Dear Mr. Jones:

LiRo Engineers, Inc. (LiRo) was retained by the Town of Tonawanda to evaluate and develop a design for final restoration and grading of the Riverview Industrial Site located at 5335 River Road in Tonawanda, NY. A site location map is included as Figure 1. The total parcel size is 25 acres, but the work completed under this project was confined to the front 11-acre section that formerly housed petroleum storage tanks. For the purposes of this report, the term "Site" will refer to the 11-acre section only. The Site is bordered on the north by River Road and the Niagara River, the south by Rattlesnake Creek, to the east by an abandoned former steel recycling facility and to the west by Riverview Commerce Park. Property uses in the area are typically commercial and recreational.

LiRo was retained by the Town of Tonawanda to evaluate and develop a design for draining the Site ponds, final restoration and grading of the Riverview Industrial Site. Work conducted by LiRo related to the Site restoration included a predesign investigation of pond sediment and pond water, investigation of a fill area identified by the New York State Department of Environmental Conservation (NYSDEC), design for the removal/re-grading of the Site containment ponds, and oversight of the construction work. Under a previous Contract, LiRo had overseen the removal of the Site building, aboveground fueling apparatus, and the last remaining AST from the Site.

The New York State Department of Environmental Conservation (NYSDEC) completed subsurface investigations to determine the status of the Site with respect to the State listing of Inactive Hazardous Waste Sites. NYSDEC's investigation did not identify the presence of hazardous waste, but determined that significant petroleum contamination (spill #0902367) was present. NYSDEC completed additional investigation and remedial activities which included the removal of USTs, piping and contaminated soil. The results of the NYSDEC work were documented in a Report dated October 2010. NYSDEC issued a letter dated December 9, 2010 (see Attachment D) stating that the Site had been re-classified to class "N" indicating that no further action was required.

Site History

The Site is a former bulk oil storage facility which has remained vacant and underutilized since the early 1990's. Records indicate that the Site was utilized for oil storage since 1937 by various owners. The license to store petroleum through the New York State Department of Environmental Conservation (NYSDEC) Major Onshore Storage Facility (MOSF) program was revoked by the NYSDEC in November 1989. The Site contained a two-story 10,460 square foot vacant building, truck racks along River Road and one large 5,000,000-gallon oil aboveground storage tank (AST). The site was formerly used for oil storage and distribution from the 1930's until the site was abandoned in the 1990's. The site's remaining structures were demolished in 2009 including a 2-story former vehicle repair/office building, an empty 5,000,000-gallon above-ground petroleum storage tank, and fuel supply appurtenances used to support the former operations.



Historical records indicate that at one time, there were 11 aboveground storage tanks at the Site with an estimated combined storage capacity of 11,800,000 gallons. These ASTs were removed around 1994. Earthen dikes remained which were the containment structures for the former above ground storage tanks. The earthen dikes also served to create treatment ponds for water storage prior to passage by drainage pipe through an oil/water separator and ultimate discharge to Rattlesnake Creek.

Historically, a significant amount of belowground infrastructure also existed onsite. NYSDEC removed numerous USTs which are documented in the reports referenced above. In addition, a drainage system ran down the center of the Site and other underground piping systems were present.

Pre-Design Investigation

LiRo's predesign investigation work consisted of containment pond sediment and pond water sampling for petroleum-related compounds. LiRo collected core samples of pond sediment at 33 locations. Six sediment samples were sent to an NYSDOH certified laboratory and analyzed for petroleum-related compounds. The analytical results showed that there were no exceedances of NYSDEC Part 375 Commercial Use Soil Cleanup Objectives, however, several of the sediment samples showed petroleum nuisance odor characteristics. Summary tables with the results of the sediment sampling are provided in Attachment A.

Based on the findings of the pre-design investigation work, LiRo developed a containment pond restoration design that included dewatering of the ponds, on-site aeration of pond sediment to address the nuisance odor and re-grading of the entire site to eliminate the former containment berms and to facilitate site drainage. LiRo's design also included concrete pad removal; underground piping excavation, removal and backfilling; and a bid alternate for excavation of a fill area that NYSDEC had previously identified between the southern containment pond and Rattlesnake Creek. The Summary of Work Section from LiRo's design is provided in Attachment B with this letter and the scope of work to address any environmental concerns at the Site is summarized below:

Base Bid Work – Dewatering, Sediment Staging, and Site Re-grading - ***Completed.***

Alternate 1 – Underground Piping Removal – ***Completed as noted.***

Alternate 4 – Fill Area Excavation – ***Not Required.***

Containment Pond Removal and Site Work

Construction work for the containment pond removal was initiated in 2011 and completed in 2012 by Op-Tech Environmental, Inc. (Op-Tech) under the supervision of LiRo. In completion of the Site work, Op-Tech removed all known concrete structures to a depth of approximately two feet below final grade, dewatered the site ponds in accordance with the NYSDEC site-specific requirements, excavated and tilled pond sediments to mitigate nuisance odors, removed underground piping shown on historic drawings and discovered during the work, and re-graded the Site in accordance with the Site grading plan.

During the course of the work, a previously unknown UST was discovered and a new spill number (1109400) was opened for the Site. The UST was removed by Op-Tech under the supervision of NYSDEC and the spill number was subsequently closed as described in the NYSDEC spill report that is provided in Attachment D. NYSDEC stated via email (Attachment D), that no further Site testing was planned and that monitoring wells installed for the Site investigations could be removed.

Op-Tech also excavated 12 test pits under LiRo supervision in the fill area between the southern containment pond and Rattlesnake Creek. LiRo conducted PID screening during the test pit work and conducted analytical testing



(NYSDEC Part 375 parameters) for soil samples from two of the test pits. LiRo's test pit observations indicated that fill soil with petroleum odors and organic vapors (based on field photoionization detector measurements) were present in the fill area. The two samples that were collected for laboratory analysis indicated that there were no exceedances of Part 375 Commercial Use Soil Cleanup Objectives. Summary tables with the results of the sediment sampling are provided in Attachment C. Based on the analytical results, removal of the fill area was not required.

Summary of Current Conditions

At the time of this letter, NYSDEC has closed all petroleum spills at the site and all known USTs have been removed. In addition, any underground piping that could be located was removed and pond sediments were tilled and re-graded. Fill soils with petroleum odors and waste material (typically C&D debris) remain in the southern portion of the Site. Based on the long history of industrial use for petroleum storage and distribution, it is possible that undocumented underground structures (i.e., storage tanks, piping, etc.) containing residual petroleum or petroleum contamination related to the former use of the Site could be encountered if future excavation work is conducted.

Please feel free to contact LiRo at 716-882-5476 with any questions regarding the Site work or if you require further information.

Sincerely,
LiRo Engineers, Inc.

Prepared by:

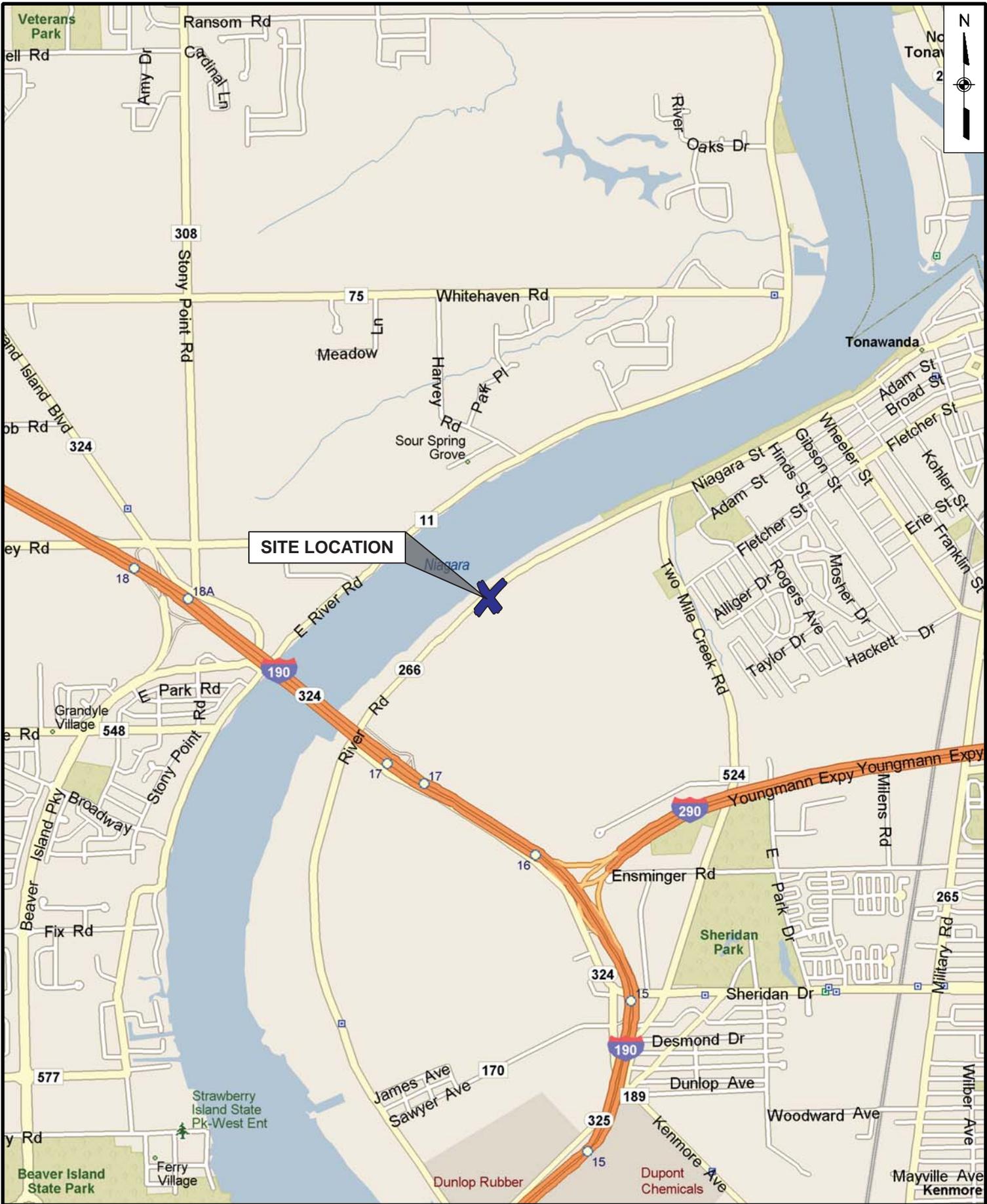
A handwritten signature in black ink that reads "Stephen Frank".

Stephen Frank
Project Scientist

Reviewed by:

A handwritten signature in black ink that reads "Robert Kreuzer".

Robert Kreuzer
Vice President



J:\11-09-0428 River Road Pond Removal\CAD\River Road Site Loc Map.ai



LiRo Engineers, Inc.
690 Delaware Ave.
Buffalo, New York

5335 RIVER ROAD SITE LOCATION MAP

FIGURE NO.

1



ATTACHMENT A – POND SEDIMENT LABORATORY RESULTS

Table 1
Sediment Sample Results Summary
5335 River Road Containment Ponds

Sample Location	NYSDEC Recommended Soil Cleanup Objective Per TAGM 4046	NYSDEC Soil Cleanup Levels Per CP-51 Tables 2 & 3	North Pond			South Pond								
			12	2 and 4	9 and 10	24	31 and 35	37 and 38						
Sample Designation			0' - 1' grab	composite	composite	0' - 1' grab	composite	composite						
Depth Interval(ft)														
Date Sampled														
Compound			Soil	Soil	Soil	Soil	Soil	Soil						
Units	Concentrations in ug/kg		Concentrations in ug/kg											
SVOCs														
2-Methylnaphthalene	36,400	36,400	660		ND		ND		ND		ND			
Dimethylphthalate	2,000	100,000	540	B	450	B	570	B	720	B	1,200	B	570	B
Fluorene	50,000	30,000	59	J	ND		ND		ND		ND		ND	
Phenanthrene	50,000	100,000	130	J	ND		ND		ND		ND		ND	
Total SVOCs	500,000	N/A	1,389		450		570		720		1,200		570	
Total TICs			7,290		1,300		2,130		5,970		3,870		2,750	
Total PCBs	1,000/10,000	1,000/10,000	NA		NA		ND		NA		ND		NA	
Miscellaneous Parameters	Units													
Petroleum Hydrocarbons	Concentrations in ug/kg		NA		8,035		NA		NA		89,714		NA	
Iron	Concentrations in mg/kg		NA		23,500		NA		NA		24,500		NA	
Total Organic Carbon	Concentrations in mg/kg		NA		2,900		NA		NA		7,100		NA	

Notes:

ND = Not Detected

NA = Not Analyzed

N/A = Not Applicable

B = Compound was also detected in laboratory blank.

J = Estimated concentration below the sample quantitation limit but greater than zero.



ATTACHMENT B – SUMMARY OF WORK FROM SITE DESIGN

SECTION 01010

SUMMARY OF WORK

PART 1 - GENERAL

1.01 SCOPE OF WORK

This Contract includes all of the work defined by the entire Contract Documents, including Technical Specifications, Contract Drawings and referenced documents. The purpose of the sub-section is to provide a general overview of the work for the Contractor's information and convenience only.

The work for this Contract involves site remediation and grading to be conducted at the Riverview Site (5335 River Road) located in the Town of Tonawanda, New York. In general the work involves dewatering of the containment ponds, in-place landfarming (tilling) of pond sediments, excavation/disposal of petroleum impacted pond sediments, backfilling of ponds, removal of below grade drain pipes, general site grading, seeding and site drainage improvement.

The work of this Contract includes, but is not limited to:

- Development and implementation of a Site Health and Safety Plan (Base Bid);
- Dewatering of former containment ponds and maintaining entire site in adequately dry condition to complete all Contract Work (Base Bid);
- Underground piping excavation, removal and backfilling (Alternate 1);
- Tilling of sediments located within the limits of currently bermed areas (Base Bid);
- Soil/sediment excavation, staging, characterization and disposal (if warranted) as specified in the Contract Drawings (Base Bid);
- Site debris cleanup (Base Bid);
- Site restoration through backfilling, grading, and seeding as shown or specified in the Contract Documents Base Bid);
- Importing, placing, and grading clean fill material across the site (Alternate 2);
- Importing, placing and grading topsoil across the site (Alternate 3);
- Remediation of a former landfill area (Alternate 4).

A more detailed description of the site background and project work is provided below.

SITE BACKGROUND

The Riverview Industrial Site is located at 5335 River Road in Tonawanda, NY. The site was formerly used for oil storage and distribution from the 1930's until the site was abandoned in the 1990's. The site's remaining structures were recently demolished including a 2-story former vehicle repair/office building, an empty 5,000,000-gallon above-ground petroleum storage tank, and fuel supply appurtenances used to support the former operations. In addition, the New York State Department of Environmental Conservation (NYSDEC) completed subsurface investigation and remedial activities which included the removal of USTs, piping and contaminated soil.

Two former containment ponds currently remain on the property and will require dewatering and backfilling as part of site restoration activities. Residual contamination is associated with the sludge/sediment present within the ponds containment berms. The remaining sediments are impacted with aged or weathered petroleum products. Previous testing conducted by NYSDEC has shown that these sediments contain residual petroleum compounds which have been found to be below NYSDEC Part 375 Commercial Criteria. In various areas of the ponds, these sediments have been found to emit a petroleum odor which is considered to be a nuisance characteristic of the waste material.

1.02 CURRENT PROJECT WORK DESCRIPTION

In general, this project shall include dewatering of the containment ponds; excavation and disposal of potentially contaminated soils; in-place landfarming (tilling) and earthwork related to backfilling the ponds, leveling bermed areas and promoting site drainage as directed by the Engineer.

Additional work items that may be awarded as part of this Contract, should available funding allow, include removal of underground piping; importing and placing clean fill and/or topsoil across the site to create a more preferential final grading plan; and remediation of the landfill area located at the southern portion of the Site.

The Site will be evaluated by the Town, Engineer and NYSDEC as the Contract Work progresses. In the event that a significant amount of previously unidentified contamination is identified, the NYSDEC may choose to engage the services of an on-call spill remediation contractor to address any newly identified contamination/areas of concern. In the event that the NYSDEC engages the services of an on-call remediation contractor, the Contractor shall be required (at no additional cost) to coordinate their work activities at the site in cooperation with the NYSDEC and the NYSDEC on-call remediation contractor so as to allow them to conduct any necessary remedial actions in a timely manner.

A more detailed description of the Contract work is included below.

Base Bid Work – Dewatering, Sediment Staging, and Site Regrading:

Site Dewatering: The Contractor shall include costs for fully dewatering both the North and South former containment ponds including all applicable costs for characterization, treatment and disposal/discharge in accordance with the specifications. At the time of design, it is estimated that the North containment pond contains approximately 800,000 gallons of water. The South containment pond has been substantially dewatered by the Town utilizing a drain pipe and gate valve installed at the south end of the pond to discharge the water to adjacent Rattlesnake Creek, however some water remains. The Contractor shall be responsible for fully dewatering both containment ponds regardless of the water volume encountered at the time of contract award or during execution of the work under his Base Bid Price. The Contractor shall also be responsible for maintaining the ponds (and the entire site) in a sufficiently dry state to allow for inspection of all pond bottom sediments/soils by the Engineer and completion of all Contract Work. Dewatering methods and discharge of the water may be determined by the Contractor pending approval of the Engineer and all applicable agencies (i.e. NYSDEC and Town of Tonawanda Waste Water Treatment Plant). Should the Contractor wish to discharge water to Rattlesnake Creek, it shall be conducted in accordance with the conditions outlined by NYSDEC in a letter to the Town which is provided as Appendix A to these Specifications.

Management of Contaminated Pond Bottom Soils/Sediments: Sediments/soils demonstrating significant petroleum contamination (i.e. saturated with petroleum product), as determined by the Engineer, shall be excavated and staged on polyethylene sheeting in a bermed area as directed by the Engineer. It is estimated that up to 100 cubic yards of pond bottom soils/sediments may show

evidence of contamination. The Contractor shall provide pricing for excavating, handling, staging, characterization and offsite disposal at a properly permitted facility of the contaminated soils/sediments (assume non-hazardous petroleum contaminated) as directed by the Engineer.

Tilling of Pond Bottom Soils/Sediments: The Contractor shall provide unit pricing to perform in-place landfarming of sediments/soils of the North and South containment ponds, the approximate limits of which are identified in the Contract Drawings. All pond bottom sediments/soils shall be tilled to depths up to 18", and as directed by the Engineer, to promote aeration and drying of soils/sediments and mitigation of nuisance odors. Tilling of each containment pond area shall be conducted until the Engineer determines that soils/sediments have been adequately tilled to meet the intent of the specifications. A minimum of 1 tilling event and a maximum of 3 tilling events shall be performed as directed by the Engineer. The actual number of tilling events will be determined by the Engineer in consultation with the NYSDEC based on the persistence of nuisance odors related to the sediment. An appropriate drying time allowance (as determined by Engineer) shall be observed between each tilling event. Drying time allowances may range from 3 to 10 calendar days as directed by the Engineer dependent on varying site and weather conditions. A single (1) tilling event shall consist of tilling of all soils/sediments contained within the limits of the earthen berms of BOTH the North and South containment pond areas.

Concrete pad removal: The Contractor shall provide pricing to demolish all steel reinforced concrete pads formerly used to support above grade piping/conduit runs. The concrete pads shall be demolished to a minimum of 24" below the finished site grade. Concrete shall be removed from site or pulverized to 12" minus diameter and dispersed in the site fill material. All rebar and foreign objects generated from the concrete demolition shall be removed from the site at the Contractor's expense. The approximate location of the concrete pads are shown on the Contract Drawings. All concrete pads to be removed are visible at the site and shall be confirmed by the Contractor prior to bid. Failure of all concrete pads to be illustrated on the Contract Drawings shall not relieve the Contractor from his responsibility to remove all visible concrete pads as directed by the Engineer at the Contractor's base bid price.

Debris Cleanup: The Contractor shall provide unit cost pricing to collect, load, transport and dispose of miscellaneous non-hazardous site debris as directed by the Engineer. Typical site debris to be removed includes, but is not limited to, items such as concrete, CMU block, rubber tires, scrap metal, wood, plastics, brick, etc.

Site Grading: The Contractor shall provide pricing to conduct earthwork to meet the base site grading plan shown on Contract Drawing No. 4 to facilitate site drainage. The Contractor shall perform cutting, backfilling, rough grading and compaction to meet the site grading plan. Rough grading in all areas shall be to within 4" of the final grades shown in the Contract Drawings. Compaction shall be completed using site grading equipment (i.e. dozers, graders, etc.) to prevent/eliminate "soft spots". The existing site drain identified in Contract Drawing No. 3 shall be removed by the Contractor prior to regarding the site. The Contractor shall include the cost to remove the existing site drain as part of this work item.

Site Seeding: The Contractor shall provide pricing to provide and apply hydroseed across all disturbed portions of the Site. The northern site area which currently consists of asphalt pavement and crushed concrete is not anticipated to be disturbed during site re-grading. The total seeding coverage area is approximately 35,000 square yards.

Soil/Sediment Characterization and Offsite Disposal: The Contractor shall provide pricing for characterization, handling, loading, transport and off-site disposal of any of the aforementioned

soils/sediments which is determined by the Engineer to be unsuitable for re-use onsite. Disposal of the material shall be at a facility properly permitted to accept the waste (assume non-hazardous petroleum contaminated). Characterization samples shall be at a frequency and for analytical parameters appropriate to satisfy the requirements of a landfill properly permitted to accept the waste.

Alternate 1 – Underground Piping Removal:

Removal of underground piping: If available funding allows, the Town will award the removal of approximately 400 linear feet of asbestos cement sewer pipe and 120 feet of clay pipe which are expected to be present beneath the containment pond floors. The depth to pipe is expected to range from as shallow as 2-5 feet below the northern pond bottom to as deep as 8-10 feet below the southern pond bottom. Under Alternate 1, the Contractor shall also be responsible for removal of a manhole located within the limits of the southern containment pond which is associated with the drain line. The manhole is expected to extend upwards of 10 feet below the bottom of the southern containment pond. The Contractor shall include costs for excavation, transport, and disposal of the piping in accordance with the specifications. All handling of the asbestos cement pipe shall be by a licensed asbestos abatement contractor. In the event that signs of petroleum contamination (i.e. visible product, sheens, elevated PID readings) are present along the piping lines and/or in the manhole, the Contractor shall be responsible for the excavation, handling, characterization, transport, and disposal of visibly contaminated soils as directed by the Engineer. The Contractor shall also be responsible for the recovery and disposal of up to 2,000-gallons of free product, should it be discovered during this work. The Contractor shall note that the potential exists for asbestos cement pipe to be cross contaminated with petroleum, which shall not relieve the Contractor from his responsibility to properly dispose of the pipe at a properly permitted facility at his contract unit price.

Alternate 2 – Provide and Place Clean Soil Fill:

If available funding allows, the Town may choose to enhance the final site grading by importing and placing clean soil fill across the site prior to performing hydroseeding (which shall be performed as part of the Base Bid Work). Under Alternate 2, the Contractor shall provide pricing to provide, place, rough grade and compact clean soil fill across the site to meet the alternate site grading plan provided as Contract Drawing No. 5). The northern site area which currently consists of asphalt pavement and crushed concrete will not be covered with topsoil and seed. Rough grading in all areas shall be to within 4” of the final grades shown in the Contract Drawings. Compaction shall be completed using site grading equipment (i.e. dozers, graders, etc.) to not create “soft spots”.

Alternate 3 – Provide and Place Topsoil:

If available funding allows, the Town may choose to cover the site with topsoil prior to performing the hydroseeding (which shall be performed as part of the Base Bid Work). Under Alternate 3, the Contractor shall provide pricing to provide and place 4” topsoil and across the site to meet the site grading plan. The northern site area which currently consists of asphalt pavement and crushed concrete will not be covered with topsoil and seed. The topsoil coverage area is approximately 35,000 square yards.

Alternate 4 – Fill Area Excavation:

If available funding allows, the Town may choose to award work related to the remediation of a historical landfill area previously identified in the southern portion of the site the approximate limits of which are identified in the Contract Drawings. It is anticipated that the depth of the landfill area excavation work will range from 2 feet below grade to over of 8 feet below grade. The Contractor shall provide costs for excavation of the landfill area. Clean excavated soils shall be segregated from soils showing evidence of contamination as directed by the Engineer. Clean soils may be approved

by the Engineer for reuse onsite. Suspected contaminated soils shall be staged on polyethylene sheeting in a bermed area as directed by the Engineer. The Contractor shall be responsible for characterization and offsite disposal of the contaminated soil at a facility properly permitted to accept the waste (assume non-hazardous; potential contaminants include petroleum compounds, PCBs, metals, pesticides, herbicides). Characterization samples shall be at a frequency and for analytical parameters appropriate to satisfy the requirements of a landfill properly permitted to accept the waste. The Contractor shall be responsible for all dewatering necessary to complete the work. The Contractor shall also provide pricing to import the necessary clean soil fill material, backfill the excavation, apply 4" topsoil across the disturbed area, and hydroseed the disturbed area. The Contractor must be able to demonstrate that the imported clean fill material meets the NYSDEC Part 375 restricted residential criteria (minimum 1 analytical sample per source material).

The Town will evaluate the bid prices for each phase of work and reserves the right to award work for any combination of the base bid and Alternates. The work will be awarded to the lowest responsible and qualified bidder that, in the opinion of the Town, provides the lowest price for the individual and/or combined work items.

Additionally, the bidders are required to stipulate that their bid prices will be valid for a period of one (1) year from Contract award.

1.03 WORK SEQUENCE

Prior to conducting any work (remediation and demolition) the following preliminary activities shall be performed:

- The Contractor shall obtain all necessary permits and make all notifications required;
- Provide all project submittals;
- Set up all dust and water control facilities;
- Provide garbage pickup and disposal. Provide snow clearing as required to conduct site work;
- Post all necessary signage and implement site security measures;
- Confirm and/or disconnect and terminate all utilities as indicated in the Contract Drawings before proceeding with any work which may result in contamination entering into an active utility connection or damage to equipment or structures owned by the utility.

1.04 CONTRACTOR USE OF PREMISES:

- A. The Contractor shall conform site operations to all applicable laws, ordinances, permit requirements and Contract Documents.
- B. The Contractor is responsible for protection and safekeeping of his materials, products and equipment stored or used on premises until the Contract is complete and accepted.
- C. The Contractor is responsible for storage within the project work area limits. The Engineer shall approve a storage location for the Contractor's use during project activities. The Contractor shall secure the storage area and provide any and all necessary fencing, security and safety as required to protect equipment and stored materials.

1.05 QUALIFICATIONS:

The low bidder shall demonstrate its responsibility to perform and complete all required work by submitting a statement of its experience and the experience of any Subcontractor which the low bidder intends to use to perform the work. The low bidder must demonstrate a minimum of 5 years experience and the completion of 2 similar environmental remediation projects. The Contractor or his subcontractor must have a valid NYSDOL Asbestos Handling License. The Contractor's onsite personnel shall also have valid documentation of current OSHA 40-hr HAZWOPER certification.

The Town may require the low bidder to further demonstrate its responsibility to perform and complete the work by submitting additional information regarding the low bidder's experience and financial resources. The Contractor shall provide proof of insurance as required by the Town, including \$2,000,000 in pollution liability coverage. If requested by the Town, additional information must be submitted by the low bidder within seven (7) days of the request. All information pertaining to the bidder's financial resources shall be submitted by a Certified Public Accountant.

1.06 DRAWING AND INVENTORY TABLE:

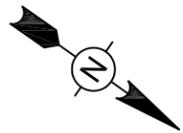
The Contract Drawing and Table which accompany and form part of the Contract Documents bear the general title "Containment Pond Remediation and Sitework for 5335 River Road". Contract Drawings included are:

- | | |
|---|-----------------------------|
| | Title Sheet |
| 1 | General Notes |
| 2 | Site Work |
| 3 | Existing Site Drain Detail |
| 4 | Base Bid Site Grading Plan |
| 5 | Alternate Site Grading Plan |

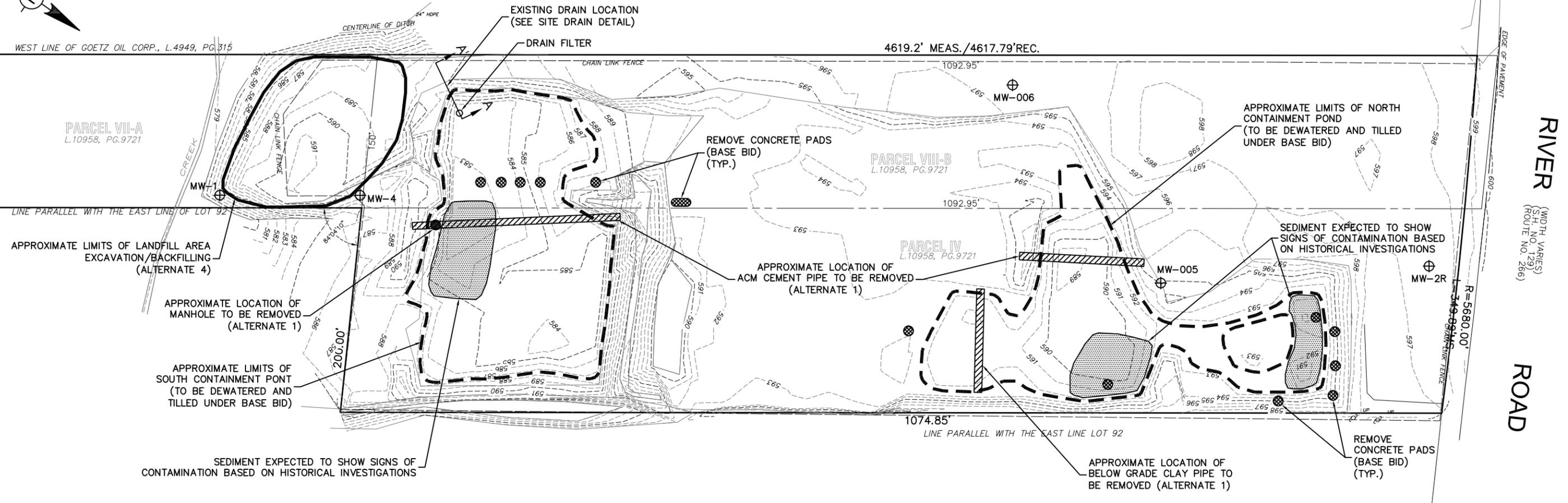
PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION



5201 RIVER ROAD INC
(REPUTED OWNER)
L.11085, PG.8916
L.11085, PG.8935



NOTES:

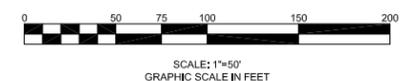
1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DEWATERING NECESSARY TO COMPLETE THE AWARDED WORK ITEMS AND ALLOW FOR PROPER INSPECTION OF ALL CONTRACT WORK.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR EXCAVATION, HANDLING, STAGING, CHARACTERIZATION AND DISPOSAL OF UP TO 100 CUBIC YARDS OF CONTAMINATED POND BOTTOM SEDIMENT, AS DIRECTED BY THE ENGINEER.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TILLING POND BOTTOM SEDIMENTS AND SOILS WITHIN THE APPROXIMATE LIMITS OF THE NORTH AND SOUTH CONTAINMENT PONDS AS DIRECTED BY THE ENGINEER. TILLING SHALL BE TO A DEPTH UP TO 18". THE CONTRACTOR SHALL BE DIRECTED TO CONDUCT UP TO 3 TILLING EVENTS TO AERATE AND DRY THE SEDIMENTS. A DRYING PERIOD OF 3 TO 10 CALENDAR DAYS SHALL BE REQUIRED BY THE ENGINEER BETWEEN TILLING EVENTS.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DEMOLITION/REMOVAL OF ALL SURFICIAL CONCRETE PADS PRESENT AT THE SITE UNDER HIS BASE BID PRICE. THE LOCATION AND QUANTITY OF ALL CONCRETE PADS SHALL BE CONFIRMED BY THE CONTRACTOR PRIOR TO BIDDING. ALL CONCRETE PADS SHALL BE REMOVED/DEMOLISHED TO A MINIMUM 24" BELOW THE FINISHED SITE GRADE.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF NON-HAZARDOUS DEBRIS (I.E. CONCRETE, CMU BLOCK, RUBBER TIRES, SCRAP METAL, WOOD, PLASTICS, BRICK, ETC.) AS DIRECTED BY THE ENGINEER UNDER HIS BASE BID PRICE.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REGRADING EXISTING SITE SOILS TO MEET THE SITE GRADING PLAN PROVIDED AS CONTRACT DRAWING NO. 4 UNDER HIS BASE BID PRICE. THE CONTRACTOR MAY BE REQUIRED TO PROVIDE AND PLACE ADDITIONAL CLEAN FILL (ALTERNATE 2) TO MEET THE ALTERNATE SITE GRADING PLAN PROVIDED AS CONTRACT DRAWING NO. 3 AND/OR TO PROVIDE AND PLACE 4" TOPSOIL ACROSS THE SITE (ALTERNATE 3).

7. FOLLOWING THE ENGINEER'S ACCEPTANCE OF FINAL GRADING, THE CONTRACTOR SHALL BE RESPONSIBLE FOR APPLYING HYDROSEED TO ALL AREAS OF DISTURBED SITE SOILS.

8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHARACTERIZATION, TRANSPORT AND DISPOSAL OF PETROLEUM CONTAMINATED MATERIALS AS DIRECTED BY THE ENGINEER IN ACCORDANCE WITH THE REQUIREMENTS OF THE APPLICABLE WORK ITEM(S).

LEGEND:

- NYSDEC MONITORING WELL TO BE PROTECTED
- APPROXIMATE LIMIT OF CONTAINMENT POND SEDIMENT
- TOPOGRAPHICAL CONTOUR (EXISTING)
- APPROXIMATE LOCATION OF CONCRETE PADS TO BE REMOVED



SOURCE:

SITE SURVEY PROVIDED BY WM SCHUTT, 37 CENTRAL AVE., LANCASTER NY.
DRAWING TITLE: 5335 RIVER ROAD PARTIAL TOPOGRAPHICAL SURVEY
DATE: 2/14/11

11-09-0428 River Road Remediation/5335 RIVER ROAD DEWATER PLAN.dwg, 7/26/2011 1:51:33 PM ANK

WARNING
IT IS A VIOLATION OF SECTION 7209, SUBDIVISION 2, OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, OTHER THAN THOSE WHOSE SEAL APPEARS ON THIS DRAWING, TO ALTER IN ANY WAY AN ITEM ON THIS DRAWING. IF AN ITEM IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO.	DATE	DESCRIPTION
REVISIONS		



PROJ. ENG.:	CLIENT:		JOB TITLE AND LOCATION: CONTAINMENT POND REMEDIATION AND SITEWORK FOR 5335 RIVER ROAD	LIRO JOB NO.:
DESIGNED BY:	DATE:			11-09-0428
CHECKED BY:	SCALE:			3 OF 6
DRAWN BY:	JULY 2011			AS SHOWN
			DRAWING TITLE:	DRAWING NO.:
			SITE WORK	2



ATTACHMENT C – TEST PIT LABORATORY RESULTS

TABLE X
5335 River Road - Fill Area Test Pits
SUMMARY OF VOCS AND SVOCS IN SOIL
Page 1 of 2

Sample Location	NYSDEC TAGM Value	NYSDEC Part 375 Residential	NYSDEC Part 375 Restricted Residential	TP-5 comp	TP-8 comp
Sample Type/Location				11/30/11	11/30/11
Date Sampled					
Compound					
VOCs	mg/kg			Concentration in mg/kg	
Acetone	0.2	100	100	ND	0.0937
Ethylbenzene	5.5	30	41	7.85	0.0179
Xylene (Ortho)	1.2	100	100	ND	0.13
Xylene (para & meta)	1.2	100	100	3.3	0.0111
SVOCs	mg/kg			Concentration in mg/kg	
2-Methylnaphthalene	36.4	NC	NC	7.27	ND
Naphthalene	13	100	100	4.75	ND

Notes:

ND = Not detected above laboratory MDL; NC = No criteria

Bold = Result exceeds 6 NYCRR Part 375 Restricted-Residential Objective

Underline - Results exceed TAGM 4046 when Part 375 Residential Criteria is NC

TABLE XX
5335 River Road - Fill Area Test Pits
SUMMARY OF PESTICIDES, PCBS AND METALS IN SOIL
Page 2 of 2

Sample Location	NYSDEC	NYSDEC	TP-5	TP-8
Sample Type/Location	Part 375	Part 375	comp	comp
Date Sampled	Residential	Restricted	11/30/11	11/30/11
Compound	Residential	Residential		
Pesticides			Concentration in mg/kg	
alpha-BHC	0.097	0.48	ND	ND
beta-BHC	0.072	0.36	ND	ND
delta-BHC	100	100	ND	ND
gamma-BHC	0.28	1.3	ND	ND
Heptachlor	0.42	2.1	ND	ND
Aldrin	0.019	0.097	ND	ND
Heptachlor Epoxide	NC	NC	ND	ND
Endosulfan I	4.8	24	ND	ND
Dieldrin	0.039	0.2	ND	ND
4,4'-DDE	1.8	8.9	ND	ND
Endrin	2.2	11	ND	ND
Endosulfan II	4.8	24	ND	ND
4,4'-DDD	2.6	13	ND	ND
Endosulfan Sulfate	4.8	24	ND	ND
4,4'-DDT	1.7	7.9	ND	ND
Methoxychlor	NC	NC	ND	ND
Endrin Ketone	NC	NC	ND	ND
Endrin Aldehyde	NC	NC	ND	ND
alpha-Chlordane	0.91	4.2	ND	ND
gamma-Chlordane	NC	NC	ND	ND
Toxaphene	NC	NC	ND	ND
PCBs			Concentration in mg/kg	
Total PCBs	1	1	ND	ND
Metals			Concentration in mg/kg	
Aluminum	NC	NC	22800	15500
Antimony	NC	NC	ND	ND
Arsenic	16	16	5.14	2.46
Barium	350	400	128	114
Beryllium	14	72	1.01	1.06
Cadmium	2.5	4.3	ND	ND
Calcium	NC	NC	3870	46600
Chromium (Total)	22**	110**	24.4	16.5
Cobalt	NC	NC	10.4	8.1
Copper	270	270	16	14.8
Iron	NC	NC	34000	19900
Lead	400	400	25.4	25.9
Magnesium	NC	NC	4520	10900
Manganese	2000	2000	714	718
Mercury	0.81	0.81	0.074	ND
Nickel	140	310	20.1	18.1
Potassium	NC	NC	1970	2370
Selenium	36	180	ND	ND
Silver	36	180	ND	ND
Sodium	NC	NC	ND	ND
Thallium	NC	NC	ND	ND
Vanadium	NC	NC	43.6	24.2
Zinc	2200	10000	112	74.6
Cyanide	27	27	ND	ND

Notes:

ND or U = Not detected above laboratory MDL; NC = No criteria

N/A = Not Available; B = Compound detected in method blank

* Surface PCB criteria = 1 ppm, Subsurface PCB criteria = 10 ppm

** 6NYCRR Criteria for Chromium is specific to Chromium VI

Bold = Result exceeds 6 NYCRR Part 375 Restricted-Residential Objective



ATTACHMENT D – NYSDEC CORRESPONDANCE

1 – Letter Dated 12/9/2010

2 – Spill Report #1109400

3 – Email Correspondence 3/4/2013

New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 9
270 Michigan Avenue, Buffalo, New York 14203-2915
Phone: (716) 851-7220 • FAX: (716) 851-7226
Website: www.dec.ny.gov



Peter Iwanowicz
Acting Commissioner

December 9, 2010

Mr. Kenneth Swanekamp
Director of Business Assistance
Erie County Environment & Planning
95 Franklin St., Room 1060
Buffalo, NY 14202

Dear Mr. Swanekamp:

As mandated by Section 27-1305.2 of the Environmental Conservation Law (ECL), the New York State Department of Environmental Conservation (DEC) must investigate all suspected or known inactive hazardous waste disposal sites. We had received information which led us to suspect that hazardous waste has been disposed of at the following location:

Site Name: Riverview Industrial Center
Site Address: 5335 River Road, Tonawanda, Erie County, New York
Tax Map No. 52.06-3.10
DEC Site No. 915225

This site was designated as a potential inactive hazardous waste disposal site, "P" site. Letters were sent to the last known address of the previous owners in June 2009 advising of this designation. As you know, investigations to determine the environmental conditions at this site were begun on May 2009 under the authority of a Temporary Incidents of Ownership granted to Erie County and filed with the Erie County Clerk on February 25, 2009.

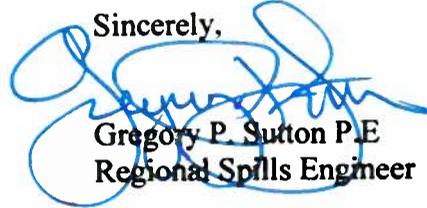
The investigation conducted at this site did not identify the presence of hazardous waste but did find significant petroleum contamination. As a result, the DEC initiated cleanup activities at the site that concluded with a Site Investigation & Remedial Action Report dated October 2010. Copies of this report were provided to you and are available at the DEC Region 9 office in Buffalo.

Based on the results of the site investigation and remedial action the DEC is re-classifying this site from the current "P" designation to a class "N" indicating that No Further Action is required. The Site Investigation & Remedial Action Report did provide some recommendations to address residual contamination that should be considered in any future site redevelopment.

Mr. Kenneth Swanekamp
December 9, 2010
Page 2

If you should have any information that may be relevant to our determination, please forward it to me. If you have any questions, please feel free to contact Michael J Hinton at 716-851-7220.

Sincerely,

A handwritten signature in blue ink, appearing to read "Gregory P. Sutton", is written over the typed name and title.

Gregory P. Sutton P.E
Regional Spills Engineer

GPS:dcg
hinton\swanekamp-decl.ltr

Enclosures

cc: Michael J. Hinton P.E. Division of Environmental Remediation Region 9
Mr. Matthew Forcucci, NYS DoH, Western Regional Office



NYSDEC SPILL REPORT FORM



DEC REGION: 9 SPILL NUMBER: 1109400
 SPILL NAME: RIVERVIEW INDUSTRIAL CENTER DEC LEAD: mjhinton

CALLER NAME: JASON COLVIN NOTIFIER'S NAME: _____
 CLR'S AGENCY: LIRO ENGINEERING NOTIFIER'S AGENCY: _____
 CALLER'S PHONE: _____ NOTIFIER'S PHONE: _____

SPILL DATE: 10/26/2011 SPILL TIME: 1:00 pm DISPATCHER: _____
 CALL RECEIVED DATE: 10/26/2011 RECEIVED TIME: 1:30 pm _____

SPILL LOCATION

PLACE: RIVERVIEW INDUSTRIAL CENTER COUNTY: Erie
 STREET: 5335 RIVER RD TOWN/CITY: Tonawanda
 COMMUNITY: TONAWANDA
 CONTACT: _____ CONTACT PHONE: _____

CONT. FACTOR: Other SPILL REPORTED BY: Other
 FACILITY TYPE: Commercial/Industrial WATERBODY: _____

CALLER REMARKS:

Found Abandoned Tank at abandoned former MOSF

MATERIAL	CLASS	SPILLED	RECOVERED	RESOURCES AFFECTED
UNKNOWN PETROLEUM	Petroleum	0.00 G	0.00 G	Soil,

POTENTIAL SPILLERS

COMPANY	ADDRESS	CONTACT
RIVERVIEW INDUSTRIAL CENTER	5335 RIVER RD TONAWANDA NY	

Tank No.	Tank Size	Material	Cause	Source	Test Method	Leak Rate	Gross Failure
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DEC REMARKS:

10/26/2011 -1330 hrs Call from Jason Colvin LIRO Engineers Found another UST. Petroleum contamination suspected in tank contents and surrounding soil. Requested Sketch and photo of tank.

10/27/2011 - MJH onsite at 0830 hrs. Town of Tonawanda Engineer Jim Jones on site along with their consultant, LIRO and Contractor, OpTech. Erie county representatives also on site. Advised OpTech that we will be authorizing them to remove the tank, disposae of the tank contents along with any contaminated soil, and directed that they collect 5 confirmation soil samples after excavation is determined to be complete. Optech to handle all lab costs and must get solicitations from labs for DEC approval. Will provide Optech with SN and PIN.

11/10/2011 - MJH on site at 1420 hrs. OpTech on site with operator, excavator and PM. Pumped water from tank through carbon filters. Pulled tank, est tank at 10,000 gallons. Contaminated soil excavated and placed on poly adjacent to hole. Side walls appear clean. Red silty clay with little to no odor. Requested OpTech to clean out hole and collect 5 confirmation samples, 1 from each wall and a floor sample. Estimated that there will be about 100 tons of contaminated soil. Requested



NYSDEC SPILL REPORT FORM



DEC REGION: 9 **SPILL NUMBER:** 1109400
SPILL NAME: RIVERVIEW INDUSTRIAL CENTER **DEC LEAD:** mjhinton

OpTech to collect sample from waste for characterization and disposal. Optech indicated that they will use Tonawanda for disposal site. Took Photo's. MJH left site at 1445 hrs.

11/17/2011 - MJH on site at 1430 hrs. OpTech on site doing grading work for the Town of Tonawanda. Tank excavation backfilled with re-cycled concrete. Took photos. MJH left site at 1440 hrs

02/22/2013 - Project completed and Final ISR submitted in April 2012. No further action anticipated.

PIN
05634

T & A

COST CENTER
90056344-11

CLASS: C2 **CLOSE DATE:** 02/22/2013 **MEETS STANDARDS:** True

--

Paul Kranz, P.E. | Associate Engineer (Environmental Compliance)
Erie County | Environment & Planning
95 Franklin St., Room 1074 | Buffalo, NY 14202
P:(716) 858-7897 | F:(716) 858-7713
Paul.Kranz@erie.gov | <http://www.erie.gov>

-----Original Message-----

From: Michael Hinton [mailto:mjhinton@gw.dec.state.ny.us]
Sent: Monday, March 04, 2013 12:38 PM
To: Kranz, P.E., Paul
Subject: RE: Riverview Industrial center

Yes, we are not doing any long term monitoring.

>>> "Kranz, P.E., Paul" <Paul.Kranz@erie.gov> 3/4/2013 12:14 PM >>>
Mike
Also, can the remaining sampling wells (2?) on site be removed?
Thanks!

--

Paul Kranz, P.E. | Associate Engineer (Environmental Compliance) Erie County
| Environment & Planning
95 Franklin St., Room 1074 | Buffalo, NY 14202
P:(716) 858-7897 | F:(716) 858-7713
Paul.Kranz@erie.gov | <http://www.erie.gov>

-----Original Message-----

From: Michael Hinton [mailto:mjhinton@gw.dec.state.ny.us]
Sent: Monday, March 04, 2013 11:55 AM
To: Kranz, P.E., Paul
Subject: Riverview Industrial center

Paul,
Attached are the completed spill report, analytical data and photos.
This is pretty much all I have, a close out report similar to what was done
for the larger investigation and remedial work was not prepared.
Mike

Recommended by _____
Director, Technical Support

Date _____

Recommended by _____
Director, Community Development

Date _____

Approved by _____
Contractor

Date _____

Approved by _____
Supervisor

Date _____

2787.1_CO2_Op-Tech