
Division of Environmental Remediation

**Environmental Restoration
Record of Decision
815 River Road Site
North Tonawanda (C), Niagara County, New York
Site Number B00178**

December 2008

New York State Department of Environmental Conservation
DAVID PATERSON, *Governor* ALEXANDER GRANNIS, *Commissioner*

DECLARATION STATEMENT ENVIRONMENTAL RESTORATION RECORD OF DECISION

815 River Road Environmental Restoration Site City of North Tonawanda, Niagara County, New York Site No. B00178

Statement of Purpose and Basis

The Record of Decision (ROD) presents the selected remedy for the 815 River Road site, an environmental restoration site. The selected remedial program was chosen in accordance with the New York State Environmental Conservation Law and is not inconsistent with the National Oil and Hazardous Substances Pollution Contingency Plan of March 8, 1990 (40CFR300), as amended.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (the Department) for the 815 River Road environmental restoration site, and the public's input to the Proposed Remedial Action Plan (PRAP) presented by the Department. A listing of the documents included as a part of the Administrative Record is included in Appendix B of the ROD.

Assessment of the Site

Actual or threatened release of petroleum products from this site have been addressed by implementing the interim remedial measure identified in this ROD. The removal of contaminated soil from the site has significantly reduced the threat to public health and the environment. Therefore, a groundwater monitoring program will be implemented to monitor the effectiveness of previous remedial actions in preventing further contamination of the groundwater.

Description of Selected Remedy

Based on the results of the Site Investigation/Remedial Alternatives Report (SI/RAR) for the 815 River Road site, the success of the IRM in removing contaminant sources, and the criteria identified for evaluation of alternatives, the Department has selected No Further Action, with continued monitoring and institutional controls as the remedy. The components of the completed IRM and the remedy are as follows:

1. Removal, cleaning, and off-site disposal of 14 Underground Storage Tanks.
2. Excavation and off-site disposal of approximately 7,700 tons of petroleum contaminated soils.
3. Placement and compaction of approximately 5,200 tons of clean backfill materials.

4. Imposition of an institutional control in the form of an environmental easement that will require (a) compliance with the approved site management plan; (b) restricting the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by NYSDOH; and (c) the property owner to complete and submit to the Department a periodic certification of institutional controls.
5. Development of a site management plan which will include monitoring of groundwater.
6. The property owner will provide a periodic certification of institutional controls, prepared and submitted by a professional engineer or such other expert acceptable to the Department, until the Department notifies the property owner in writing that this certification is no longer needed. This submittal will: (a) contain certification that the institutional controls put in place are still in place and are either unchanged from the previous certification or are compliant with Department-approved modifications; (b) allow the Department access to the site; and (c) state that nothing has occurred that would impair the ability of the control to protect public health or the environment, or constitute a violation or failure to comply with the site management plan unless otherwise approved by the Department.
7. Since the remedy results in residual groundwater contamination along the site frontage along River Road, a long-term groundwater monitoring program will be instituted. The two existing groundwater monitoring wells (MW#1 and MW#2 indicated in Figure 3) will be sampled annually (unless otherwise approved by the Department) to assess the presence of the residual petroleum contamination in the site groundwater.

New York State Department of Health Acceptance

The New York State Department of Health (NYSDOH) concurs that the remedy selected for this site is protective of human health.

Declaration

The selected remedy is protective of human health and the environment, complies with State and Federal requirements that are legally applicable or relevant and appropriate to the remedial action to the extent practicable, and is cost effective.

Date

Dale A. Desnoyers, Director
Division of Environmental Remediation

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Environmental Restoration RECORD OF DECISION

**815 River Road Site
North Tonawanda, Niagara County, New York
Site No. B00178
December 2008**

SECTION 1: SUMMARY OF THE RECORD OF DECISION

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), has selected this remedy for the 815 River Road site. The presence of hazardous substances has created threats to human health and/or the environment that are addressed by this remedy.

The 1996 Clean Water/ Clean Air Bond Act provides funding to municipalities for the investigation and cleanup of brownfields. Under the Environmental Restoration Program, the state provides grants to municipalities to reimburse up to 90 percent of eligible costs for site investigation and remediation activities. Once remediated, the property can then be reused.

As more fully described in Sections 3 and 5 of this document, storage and use of oil and gasoline resulted in the disposal of hazardous substances, including various petroleum constituents. These hazardous substances contaminated the soil and groundwater at the site, and resulted in:

- a threat to human health associated with potential exposure to site soils;
- an environmental threat associated with the current and potential impacts of contaminants to site groundwater.

During the course of the investigation certain actions, known as interim remedial measures (IRMs), were undertaken at the 815 River Road site in response to the threats identified above. An IRM is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the site investigation/remedial alternatives report (SI/RAR). The IRMs undertaken at this site included demolition of the former buildings; removal of 14 Underground Storage Tanks (USTs); removal of impacted site soils; and restoration of the excavations with clean backfill material.

Based on the implementation of the above IRMs, the findings of the investigation of this site indicate that the site no longer poses a threat to human health or the environment; therefore No Further Action has been selected as the remedy for this site. As part of the actions performed at the site, a Site Management Plan has been prepared which includes the following: continued groundwater monitoring, a soils management plan, and an Environmental Easement for institutional controls .

The selected remedy, discussed in detail in Section 6, is intended to attain the remediation goals identified for this site in Section 6. The remedy must conform with officially promulgated standards and criteria that are directly applicable or that are relevant and appropriate. The selection of a remedy must also take into consideration guidance, as appropriate. Standards, criteria and guidance are hereafter called SCGs.

SECTION 2: SITE LOCATION AND DESCRIPTION

The 815 River Road site is located in the City of North Tonawanda, in Niagara County (see Figure 1). The site is located in a commercial area on the east side of River Road directly across from the North Tonawanda waste water treatment plant. The Niagara River runs along the western edge of the waste water treatment plant approximately 500 feet west of the site. The 815 River Road site is approximately 1 acre in size. Commercial properties, including an asphalt, brick, and concrete recycling operation, are located to the north and south of the site. On the east side of the site is a rail line, and beyond that is the Former Roblin Steel site. The Former Roblin Steel site has also been remediated by the City under the Environmental Restoration Program (see aerial view of area in Figure 2).

The site geology consists of several feet of soil and stone fill over native silts and clay soils. Grey silty clay and reddish brown clay extend from beneath the fill material to at least 12 feet below ground surface. Bedrock was not encountered during the remedial work. Bedrock in this area of North Tonawanda is reportedly Camillus Shale of the Salina Group. Overburden groundwater in the upper fill was present in some areas of the site, but was not continuous due to the low permeability of the overburden soils. Overburden groundwater was typically encountered within 6 feet of the ground surface.

SECTION 3: SITE HISTORY

3.1: Operational/Disposal History

The site was used for several decades for automotive repairs, most recently by a company which leased and maintained school buses. The City acquired the property through tax foreclosure in 2000. The presence of underground storage tanks (USTs) were documented on the site as far back as 1961. Several of these tanks were believed to have leaked petroleum products into site soils.

3.2: Remedial History

In January 2001, four of the USTs were removed. During this work, it became clear that significant soil contamination was likely from these and other USTs on the property. In December 2001 the City applied for financial assistance under the Environmental Restoration Program (ERP). The City's ERP application was approved in April 2002. In 2002-2003, site investigations were begun that included soil and groundwater sampling. The site buildings were also demolished in 2003 to access the remaining USTs. Following building demolition, the remaining ten USTs, as well as a concrete vault and a former service bay trench, were removed. During 2003 and 2004, approximately 6,200 tons of impacted soils (containing petroleum

contaminants) were removed, and approximately 2,200 tons of clean backfill (recycled concrete) was placed and compacted in the excavation. In September 2004, the City halted the investigation and soil work due to cost concerns. The City resumed the work in 2007, and completed the IRM work in November 2007.

SECTION 4: ENFORCEMENT STATUS

Potentially Responsible Parties (PRPs) are those who may be legally liable for contamination at a site. This may include past owners and operators, waste generators, and haulers.

Since no viable PRPs have been identified, there are currently no ongoing enforcement actions. However, legal action may be initiated at a future date by the state to recover state response costs should PRPs be identified. The City of North Tonawanda will assist the state in its efforts by providing all information to the state which identifies PRPs. The City will also not enter into any agreement regarding response costs without the approval of the Department.

SECTION 5: SITE CONTAMINATION

The City of North Tonawanda has recently completed a site investigation/remedial alternatives report (SI/RAR) to determine the nature and extent of any contamination by hazardous substances at this environmental restoration site.

5.1: Summary of the Site Investigation

The purpose of the SI was to define the nature and extent of any contamination resulting from previous activities at the site. As discussed in Section 3.2, initial SI activities were conducted in 2003-2004. Due to the litigation between the City and the original consultant, limited documentation of those previous activities is available. The subsequent SI and reporting was conducted between July 2007 and December 2007. The purpose of this work was to determine what additional work was necessary to complete the remedial the project. The field activities and findings of the investigation are described in the June 2008 "Site Investigation/Remedial Alternatives Report (SI/RAR) report.

The SI included installation of several soil borings, some of which were finished with temporary piezometers. The soil and groundwater sampling that was performed in 2007 served two purposes: to verify that previous soil excavations had addressed the majority of the impacted site soils; and to determine the extent of any additional soil excavations that were needed in order to meet soil cleanup objectives. Soil and groundwater samples were collected from the sampling points during the 2007 SI, and are presented along with the previous 2003 sampling points in Figures 3 and 4.

5.1.1: Standards, Criteria, and Guidance (SCGs)

To determine whether the soil and groundwater contains contamination at levels of concern, data from the investigation were compared to the following SCGs:

- Groundwater SCGs are based on the Department's "Ambient Water Quality Standards and Guidance Values" and Part 5 of the New York State Sanitary Code.
- Soil SCGs are based on the Department's Cleanup Objectives contained in 6NYCRR Part 375.

Based on the SI results, in comparison to the SCGs and potential public health and environmental exposure routes, certain media and areas of the site required remediation. These are summarized in Section 5.1.2. More complete information can be found in the SI report.

5.1.2: Nature and Extent of Contamination

This section describes the findings of the investigation for all environmental media that were investigated.

As described in the SI report, many soil and groundwater samples were collected to characterize the nature and extent of contamination. As summarized in Tables 1-4, the main categories of contaminants that exceed their SCGs are volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCs). For comparison purposes, where applicable, SCGs are provided for each medium. Chemical concentrations are reported in parts per billion (ppb) for water and parts per million (ppm) for soil.

Tables 1 and 2 summarize the degree of contamination for the contaminants of concern in soil and compare the data with the SCGs for the site. Tables 3 and 4 summarize the degree of contamination for the contaminants of concern in groundwater and compare the data with SCGs for the site. The following are the media which were investigated and a summary of the findings of the investigation.

Surface Soil

Site buildings were present above the USTs. Since all surface soils near the contaminant sources (USTs) were excavated and disposed during the building demolition and tank removal efforts, no surface soil sampling was performed at the site.

Subsurface Soil

Numerous soil borings were completed during the original (halted) 2003-2004 site investigation and during the 2007 site investigation. Figure 3 indicates these sampling locations. The site contaminants detected were generally petroleum constituents likely associated with leakage or spillage from the USTs. Numerous volatile and semi-volatile contaminants associated with petroleum were detected in site soils. In addition, there were significant odors and some petroleum staining noted in some subsurface soils. Volatile organic compounds detected above Part 375 Unrestricted Use soil cleanup objectives include: benzene (up to 19 ppm), ethylbenzene (up to 89 ppm), toluene (up to 150 ppm), 1,2,4-trimethylbenzene (up to 189 ppm), 1,3,5-trimethylbenzene (up to 57 ppm), and total xylenes (up to 510 ppm). Benzo(a)pyrene (at 1.2 ppm) was the only semi-volatile organic compound detected above Part 375 Unrestricted Use

soil cleanup objectives. Table 1 presents a summary of the site contaminants of concern and the concentrations detected in subsurface site soils.

Subsurface soil contamination identified during the SI/RAR was addressed during the IRM through the excavation and proper disposal described in Section 5.2. Confirmatory samples were collected from the excavations to demonstrate that the soil cleanup objectives were achieved. This confirmatory soil sampling included analysis for VOCs, SVOCs, pesticides, PCBs, and metals. All constituent concentrations were below Part 375 Residential Use soil cleanup objectives. Table 2 presents a summary of the concentrations of the compounds of concern in the post-IRM confirmatory soil samples.

Groundwater

Numerous temporary piezometers were installed and groundwater samples taken in both the original (halted) 2003-2004 site investigation and the 2007 site investigation. In addition, the 2007 site investigation included the installation of two groundwater monitoring wells located near the western property line, down gradient from the former contaminant source areas (tanks). Figure 3 indicates the groundwater piezometer and well sampling locations. The contaminants detected in site groundwater were generally petroleum constituents. The VOCs detected above groundwater SCGs include: benzene (up to 12,300 ppb), ethylbenzene (up to 2,020 ppb), n-propylbenzene (up to 257 ppb), isopropylbenzene (up to 66 ppb), toluene (up to 18,600 ppb), 1,2,4- trimethylbenzene (up to 1,850 ppb), 1,3,5- trimethylbenzene (up to 478 ppb), m,p- xylenes (up to 7,610 ppb), and o-xylene (up to 2,820 ppm). Napthalene (up to 237 ppb) was the only SVOC detected in groundwater samples above SCGs. No pesticides or PCBs were detected in groundwater samples. While several metals were detected in the groundwater samples above SCGs, these metals concentrations were typical of groundwater within silt and clay overburden soils. Table 3 presents a summary of the site contaminants of concern detected in site groundwater.

Groundwater contamination identified during the SI/RAR was addressed during the IRM through excavation of the contaminant sources described in Section 5.2. Some residual groundwater contaminants were detected in the two down gradient monitoring wells. These wells are located in the River Road right-of-way, and represent residual groundwater contamination which could not be addressed due to the close proximity to River Road and related utilities that were present in the right-of-way. While no groundwater contaminants were detected in MW-1 above SCGs, Table 4 lists several VOC contaminants that were detected in MW-2 above SCGs. These contaminants include benzene (at 140 ppb vs. SCG of 0.7 ppb), 1,2-dichloropropane (at 40 ppb vs. SCG of 5 ppb), toluene (at 100 ppb vs. SCG of 5 ppb), ethylbenzene (at 780 ppb vs. SCG of 5 ppb), m,p- xylenes (at 1770 ppb vs. SCG of 5 ppb), and o-xylene (at 70 ppm vs. SCG of 5 ppm).

While groundwater flow direction in this area is to the west, towards the Niagara River, off-site groundwater contaminant migration is not a significant concern at this site for two primary reasons. First, the low permeability nature of the site soils (silt and clay) prevents significant groundwater migration. Second, there is a major combined storm and sanitary sewer line

running under River Road to the west of the site, and localized groundwater flows are intercepted by the sewer trench and prevented from migrating further westward.

Soil Vapor

Soil vapor sampling was not performed during the site investigation since the contaminant sources were removed during the IRM, and since groundwater contamination is limited to one down gradient well at the edge of the site. Both soil vapor and soil vapor migration potential are considered limited due to the combination of low permeability soils and the limited extent of residual groundwater contaminants.

5.2: Interim Remedial Measures

An interim remedial measure (IRM) is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the SI/RAR.

The IRM conducted in 2007 was performed to remove any impacted soils that were not addressed by the 2003-2004 (halted) soil excavation work. In 2007, 200 tons of previously excavated and stockpiled soils (from 2003) were properly disposed. In addition, approximately 1,300 tons of impacted soils were excavated and properly disposed. After removal of the remainder of the impacted soils, approximately 3,000 cubic yards of clean backfill material was placed and compacted in the excavations. The excavation and backfill areas are presented in Figure 4. The 2007 IRM work is summarized in detail in the June 2008 “Final Engineering Report”. A total of 7,700 tons of contaminated soils were removed and properly disposed from 2003-2007. Some residual soil contamination exists on site along the River Road frontage, but this soil could not be addressed due to the close proximity to River Road and utilities that are present in the right-of-way. Table 2 summarizes the remaining site soil contaminant concentrations in this area of the site. Remaining soil contaminant concentrations are below Part 375 Residential soil cleanup objectives.

5.3: Summary of Human Exposure Pathways:

This section describes the types of human exposures that may present added health risks to persons at or around the site. A more detailed discussion of the human exposure pathways can be found in Sections 8 and 9 of the June 2008 Site Investigation/Remedial Alternatives Report (SI/RAR), which can be found in the document repository.

An exposure pathway describes the means by which an individual may be exposed to contaminants originating from a site. An exposure pathway has five elements: [1] a contaminant source, [2] contaminant release and transport mechanisms, [3] a point of exposure, [4] a route of exposure, and [5] a receptor population.

The source of contamination is the location where contaminants were released to the environment (any waste disposal area or point of discharge). Contaminant release and transport mechanisms carry contaminants from the source to a point where people may be exposed. The exposure point is a location where actual or potential human contact with a contaminated

medium may occur. The route of exposure is the manner in which a contaminant actually enters or contacts the body (e.g., ingestion, inhalation, or direct contact). The receptor population is the people who are, or may be, exposed to contaminants at a point of exposure.

An exposure pathway is complete when all five elements of an exposure pathway exist. An exposure pathway is considered a potential pathway when one or more of the elements currently does not exist, but could in the future.

At this site, residual petroleum contamination exists in site soils and groundwater along the River Road frontage. However, the IRM has achieved Part 375 Residential soil cleanup objectives. For a complete exposure pathway to occur, persons would have to come into contact with the contaminated groundwater. Since the residual groundwater contamination is several feet below ground surface, exposures to this media would only occur during subsurface construction activities along the site's River Road frontage.

The potential pathway of exposure is:

- Dermal (skin) contact with contaminated subsurface groundwater.

The site is located in a commercial area that is currently used for concrete and asphalt recycling. Exposures to contaminated groundwater via drinking water are not expected since all occupied structures in the area are served by public water.

5.4: Summary of Environmental Assessment

This section summarizes the assessment of existing and potential future environmental impacts presented by the site prior to the IRM. Environmental impacts include existing and potential future exposure pathways to fish and wildlife receptors, as well as damage to natural resources such as aquifers and wetlands.

Since there are no significant wildlife habitat, surface water, or wetlands on the site, there was no formal environmental assessment necessary. Environmental impacts are limited to residual groundwater contamination near the River Road right-of-way. These residual groundwater concentrations are shown in Table 4.

Several factors significantly reduce the potential for environmental impacts associated with the residual groundwater contamination. One factor is that the site soil is primarily low permeability clay, which restricts groundwater migration. Another factor is the presence of a major City sanitary sewer and trench which runs under River Road. Local groundwater is intercepted by this sewer trench, and is prevented from migrating westward.

SECTION 6: SUMMARY OF THE REMEDIATION GOALS AND THE PROPOSED USE OF THE SITE

Goals for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375. At a minimum, the remedy selected must eliminate or mitigate all

significant threats to public health and/or the environment presented by the hazardous substances disposed at the site through the proper application of scientific and engineering principles.

Prior to the completion of the IRM described in Section 5.2, the remediation goals for this site were to eliminate or reduce to the extent practicable:

- exposures of persons at or around the site to petroleum compounds in subsurface site soils; and
- the release of contaminants from soil into groundwater that may create exceedances of groundwater quality standards.

The main SCGs applicable to this project are as follows:

- ambient groundwater quality standards; and
- 6NYCRR Part 375 Restricted Use - Residential - Soil Cleanup Objectives.

The Department believes that the IRM has accomplished the remediation goals and satisfied the SCGs for the site. The proposed future use for the 815 River Road site is commercial use.

SECTION 7: SUMMARY OF THE SELECTED REMEDY

Based on the Administrative Record (Appendix B) and the discussion presented below, the Department has selected No Further Action other than continued groundwater monitoring and institutional controls.

The selected remedy is based on the results of the SI and the evaluation of alternatives presented in the RAR. The elements of the IRM already completed and the monitoring and institutional controls are listed below:

1. Removal, cleaning, and off-site disposal of 14 Underground Storage Tanks.
2. Excavation and off-site disposal of approximately 7,700 tons of petroleum contaminated soils.
3. Placement and compaction of approximately 5,200 tons of clean backfill materials.
4. Imposition of an institutional control in the form of an environmental easement that will require (a) compliance with the approved site management plan; (b) restricting the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by NYSDOH; and (c) the property owner to complete and submit to the Department a periodic certification of institutional controls.
5. Development of a site management plan which will include monitoring of groundwater.

6. The property owner will provide a periodic certification of institutional controls, prepared and submitted by a professional engineer or such other expert acceptable to the Department, until the Department notifies the property owner in writing that this certification is no longer needed. This submittal will: (a) contain certification that the institutional controls put in place are still in place and are either unchanged from the previous certification or are compliant with Department-approved modifications; (b) allow the Department access to the site; and (c) state that nothing has occurred that would impair the ability of the control to protect public health or the environment, or constitute a violation or failure to comply with the site management plan unless otherwise approved by the Department.
7. Since the remedy results in residual groundwater contamination along the site frontage along River Road, a long-term groundwater monitoring program will be instituted. The two existing groundwater monitoring wells (MW#1 and MW#2 indicated in Figure 3) will be sampled annually (unless otherwise approved by the Department) to assess the presence of the residual petroleum contamination in the site groundwater.

There are no capital costs associated with the No Further Action Remedy. The annual operation and maintenance (O&M) costs and present worth costs are presented in Table 5. The annual O&M cost estimates assume performance of annual groundwater monitoring and reporting, as well as the costs to prepare annual certifications to the NYSDEC that the site remedy continues to be effective. The annual O&M costs are estimated at \$2,000 per year, and the 30 year present worth cost is estimated at \$31,000.

SECTION 8: HIGHLIGHTS OF COMMUNITY PARTICIPATION

As part of the environmental restoration process, a number of Citizen Participation activities were undertaken to inform and educate the public about conditions at the site and the potential remedial alternatives. The following public participation activities were conducted for the site:

- Repositories for documents pertaining to the site were established.
- A public contact list, which included nearby property owners, elected officials, local media and other interested parties, was established.
- Fact sheets were sent on October 2007 and October 2008 to the public contact list.
- A public meeting was held on November 3, 2008 to present and receive comment on the PRAP.
- A responsiveness summary (Appendix A) was prepared to address the comments received during the public comment period for the PRAP.

In general, the public comments received were supportive of the selected remedy.

TABLE 1
815 River Road Site
Nature and Extent of Subsurface Soil Contamination
Subsurface Soil Samples Collected from 2003-2007

SUBSURFACE SOIL	Contaminants of Concern	Concentration Range Detected (ppm)^a	SCG^b - Unrestricted Use (ppm)^a	Frequency Exceeding Unrestricted Use SCG
Volatile Organic Compounds (VOCs)	benzene	ND ^c - 19	0.06	2 of 25
	ethylbenzene	ND - 89	1	3 of 25
	toluene	ND - 150	0.7	1 of 25
	1,2,4 trimethylbenzene	ND - 189	3.6	3 of 25
	1,3,5 trimethylbenzene	ND - 57	8.4	3 of 25
	xylene (mixed)	ND - 510	0.26	4 of 25
Semivolatile Organic Compounds (SVOCs)	benzo(a)pyrene	ND-1.2	1	1 of 25

^a ppm = parts per million, which is equivalent to milligrams per kilogram, mg/kg, in soil;

^b SCG = standards, criteria, and guidance values; Part 375 Unrestricted Use Soil Cleanup Objectives

^c ND = Compound not detected

TABLE 2
815 River Road Site
Nature and Extent of Subsurface Soil Contamination
Confirmatory Soil Samples - Post 2007 Final Excavations

SUBSURFACE SOIL	Contaminants of Concern	Concentration Range Detected (ppm)^a	SCG^b-Unrestricted Use (ppm)^a	SCG^b-Residential Use (ppm)^a	Frequency Exceeding Unrestricted Use SCG
Volatile Organic Compounds (VOCs)	benzene	ND ^c - 0.066	0.06	2.9	1 of 25
	ethylbenzene	ND - 5	1	30	1 of 25
	toluene	ND - 2	0.7	100	1 of 25
	xylene (mixed)	ND - 25	0.26	100	1 of 25

^a ppm = parts per million, which is equivalent to milligrams per kilogram, mg/kg, in soil;

^b SCG = standards, criteria, and guidance values; Part 375 Soil Cleanup Objectives

^c ND = Compound not detected

TABLE 3
815 River Road Site
Nature and Extent of Groundwater Contamination
 Pre IRM Groundwater Sampling (2003-2007)

GROUNDWATER	Contaminants of Concern	Concentration Range Detected (ppb)^a	SCG^b (ppb)^a	Frequency Exceeding SCG
Volatile Organic Compounds (VOCs)	Benzene	ND ^c - 12,300	0.7	5 of 22
	Ethylbenzene	ND - 2,020	5	5 of 22
	Toluene	ND - 18,600	5	2 of 22
	1,2,4- trimethylbenzene	ND - 1,850	5	5 of 22
	1,3,5- trimethylbenzene	ND - 478	5	4 of 22
	n-propylbenzene	ND - 257	5	5 of 22
	isopropylbenzene	ND - 66	5	3 of 22
	m,p-Xylene	ND - 7,610	5	5 of 22
	o-Xylene	ND - 2,820	5	5 of 22
Semivolatile Organic	Naphthalene	ND - 237	10	5 of 22

^a ppb = parts per billion, which is equivalent to micrograms per liter, ug/L, in water;

^b SCG = standards, criteria, and guidance values; NYSDEC Division of Water TOGS 1.1.1

^c ND = Compound not detected

TABLE 4
815 River Road Site
Nature and Extent of Groundwater Contamination
Down Gradient Monitoring Wells - Post IRM Sampling (2007)

GROUNDWATER	Contaminants of Concern	Concentration Range Detected (ppb) ^a	SCG ^b (ppb) ^a	Frequency Exceeding SCG
Volatile Organic Compounds (VOCs)	Benzene	ND ^c - 140	0.7	1 of 2
	Ethylbenzene	2 - 780	5	1 of 2
	Toluene	ND - 100	5	1 of 2
	1,2- dichloropropane	ND - 40	5	1 of 2
	m,p-Xylene	4 - 1,700	5	1 of 2
	o-Xylene	ND - 70	5	1 of 2

^a ppb = parts per billion, which is equivalent to micrograms per liter, ug/L, in water;

^b SCG = standards, criteria, and guidance values; NYSDEC Division of Water TOGS 1.1.1

^c ND = Compound not detected

Table 5
Remedial Alternative Costs

Remedial Alternative	Capital Cost (\$)	Annual Costs (\$)	Total Present Worth (\$)
Alt. 1: No Further Action	\$0	\$0	\$0
Alt. 2: Institutional Controls	\$0	\$2,000	\$31,000



Figure 1
815 River Road Site Location
(Site #B00178)



Figure 2
815 River Road (Site #B00178)



Legend

-  Former Building Limits
-  Tank Location
-  2003/2004 Soil Stockpile
-  PZ-16 2003 Soil Boring - Soil & Groundwater Sample
-  PZ-1 2007 Groundwater Sample (Piezometer)
-  P-14 2007 Soil Boring with Soil Sample
-  P-11 2007 Soil Boring - PID Screening Negative
-  MW-1 2007 Groundwater Sample (Mon. Well)
-  Utility Pole
-  Fire Hydrant
-  Property Line

New York State Department of
Environmental Conservation
DIVISION OF ENVIRONMENTAL REMEDIATION



815 RIVER ROAD
NORTH TONAWANDA, NEW YORK
NIAGARA COUNTY

FIGURE 3
Former Building and Tank Locations with 2003 -
2007 Soil and Groundwater Sample Locations

DATE JULY 2008	SITE NO. B00178	NOT TO SCALE
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River
Road

Former
Building

MW-1

MW-2

PZ-8

PZ-2
P-14

P-1

PZ-6

P-3

P-2

P-4

P-5

P-6

P-7

P-8

P-9

P-10

P-11

P-12

P-13

P-14

P-15

P-16

P-17

P-18

P-19

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APPENDIX A

Responsiveness Summary

RESPONSIVENESS SUMMARY

815 River Road Environmental Restoration Site North Tonawanda, Niagara County, New York Site No. B00178

The Proposed Remedial Action Plan (PRAP) for the 815 River Road site, was prepared by the New York State Department of Environmental Conservation (the Department) in consultation with the New York State Department of Health (NYSDOH) and was issued to the document repositories on October 6, 2008. The PRAP outlined the remedial measure proposed for the contaminated soil at the 815 River Road site.

The release of the PRAP was announced by sending a notice to the public contact list, informing the public of the opportunity to comment on the proposed remedy.

A public meeting was held on November 3, 2008, which included a presentation of the Site Investigation (SI) and the Remedial Alternatives Report (RAR) as well as a discussion of the proposed remedy. The meeting provided an opportunity for citizens to discuss their concerns, ask questions and comment on the proposed remedy. These comments have become part of the Administrative Record for this site. The public comment period for the PRAP ended on November 21, 2008.

This responsiveness summary responds to all questions and comments raised during the public comment period. No written comments were received. The following questions were raised at the public meeting, with the Department's responses:

COMMENT 1:

Are there any concern that groundwater contaminants could migrate to the Niagara River?

RESPONSE 1:

While area groundwater generally flows to the west and toward the Niagara River, several factors significantly reduce the potential for residual groundwater contaminant migration. One factor is that the site soil is primarily low permeability clay, which significantly restricts groundwater migration. Another factor is the presence of a major City sanitary sewer and trench which runs under River Road. Local groundwater is intercepted by this sewer trench, and is prevented from migrating westward toward the Niagara River.

APPENDIX B

Administrative Record

Administrative Record

815 River Road

Site No. B00178

1. Proposed Remedial Action Plan for the 815 River Road site, dated October 2008, prepared by the Department.
2. “Work Plan for Site Investigation at 815 River Road Site”, September 2002, prepared by Parsons.
3. “Interim Remedial Measure Work Plan for Building Demolitions at 815 River Road Site”, June 2003, prepared by Parsons.
4. “Work Plan for Completion Activities at 815 River Road Site Remediation: Remedial Investigation/Remedial Alternatives Report/Interim Remedial Measures”, July 2007, prepared by Stearns & Wheler.
5. “Contract Documents for 815 River Road Site Remediation”, August 2007, prepared by Stearns & Wheler.
6. “Site Investigation/Remedial Alternatives Report for 815 River Road Site”, June 2008, prepared by Stearns & Wheler.
7. “Final Engineering Report for 815 River Road Site”, June 2008, prepared by Stearns & Wheler.
8. “Site Management Plan for 815 River Road Site”, June 2008, prepared by Stearns & Wheler.
9. Letter dated July 29, 2004 (which was incorrectly dated July 29, 2003) from Parsons on UST removal, containing soil and groundwater data.