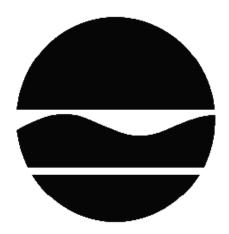
# **RECORD OF DECISION**

Salm's Repair Environmental Restoration Project Poland, Herkimer County Site No. E622023 March 2011



Prepared by Division of Environmental Remediation New York State Department of Environmental Conservation

# **DECLARATION STATEMENT - RECORD OF DECISION**

# Salm's Repair Environmental Restoration Project Poland, Herkimer County Site No. E622023 March 2011

#### **Statement of Purpose and Basis**

This document presents the remedy for the Salm's Repair site, an environmental restoration site. The remedial program was chosen in accordance with the New York State Environmental Conservation Law and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR) Part 375.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (the Department) for the Salm's Repair site and the public's input to the proposed remedy 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.

#### **Description of Selected Remedy**

During the course of the investigation certain actions, known as interim remedial measures (IRMs), were undertaken at the above referenced site. An IRM is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the remedial investigation (RI) or alternatives analysis (AA). The IRM(s) undertaken at this site are discussed in Section 5.2.

Based on the implementation of the IRM(s), 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 is the selected remedy. The remedy may include continued operation of a remedial system if one was installed during the IRM and the implementation of any prescribed institutional controls/engineering controls (ICs/ECs) that have been identified as being part of the remedy for the site.

The IRM(s) conducted at the site attained the remediation objectives identified for this site in Exhibit B for the protection of public health and the environment.

#### New York State Department of Health Acceptance

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

#### Declaration

Date

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. This remedy utilizes permanent solutions and alternative treatment or resource recovery technologies, to the maximum extent practicable, and satisfies the preference for remedies that reduce toxicity, mobility, or volume as a principal element.

MAR 3 0 2011

Dale A. Desnoyers, Director Division of Environmental Remediation

Based on the implementation of the IKM(s), the maines of the investigation of this site insteam hat the site no longer poses a threat to litiman health or the environment; therefore No Further Action is the remedy selected by this Record of Decision (ROD). A No Further Action remedy may include continued operation of any remedial system installed stiring the IRM and the mplementation of any prescribed controls that have been identified as being part of the proposed emedy for the site.

The IRM(a) conducted at the site utained the remediation objectives identified for this site, which are presented in the attached exhibits, for the protection of public health and the anyironment. This ROD identifies the IRM(s) conducted and discusses the basis for No Further

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# **RECORD OF DECISION**

Salm's Repair Poland, Herkimer County Site No. E622023 March 2011

#### SECTION 1: SUMMARY AND PURPOSE

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), is proposing a remedy for the above referenced site. The disposal of contaminants at the site resulted in threats to public health and the environment that were addressed by actions known as interim remedial measures (IRMs), which were undertaken at the site. An IRM is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the remedial investigation (RI) or feasibility study (FS). The IRMs undertaken at this site are discussed in Section 5.2. Contaminants include hazardous wastes and/or petroleum.

Based on the implementation of the IRM(s), 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 is the remedy selected by this Record of Decision (ROD). A No Further Action remedy may include continued operation of any remedial system installed during the IRM and the implementation of any prescribed controls that have been identified as being part of the proposed remedy for the site.

The IRM(s) conducted at the site attained the remediation objectives identified for this site, which are presented in the attached exhibits, for the protection of public health and the environment. This ROD identifies the IRM(s) conducted and discusses the basis for No Further Action.

The 1996 Clean Water/ Clean Air Bond Act provides funding to municipalities for the investigation and cleanup of brownfields. Brownfields are abandoned, idled, or under-used properties where redevelopment is complicated by real or perceived environmental contamination. They typically are former industrial or commercial properties where operations may have resulted in environmental contamination. Brownfields often pose not only environmental, but legal and financial burdens on communities. 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.

The Department has issued this document in accordance with the requirements of New York State Environmental Conservation Law and 6 NYCRR Part 375. This document is a summary of the information that can be found in the site-related reports and documents.

# SECTION 2: SITE DESCRIPTION AND HISTORY

Location: The Salm's Repair site consists of approximately 1.0 acre of property located at 32 Cold Brook Road in the Village of Poland, Town of Russia, Herkimer County, New York. The site is bordered by Cold Brook Street (NYS Route 8) to the northwest, residential properties to the northeast and west, a Post Office to the west, the Poland Central School to the east-northeast and Cold Brook to the south. Cold Brook flows to the west and empties into West Canada Creek approximately 2,000 feet downstream from the site.

Site Features: The site topography is relatively flat. The ground surface drops approximately 5 feet in elevation from the northeast corner of the site to the southwest corner, a distance of approximately 500 feet. Cold Brook flows to the west and empties into West Canada Creek approximately 2000 feet downstream from the site.

Current Zoning/Use(s): The site is currently zoned B-1, Business District use by the Village of Poland. The neighborhood is a mix of light commercial and residential properties. The site is currently vacant and is paved.

Historical Use(s): A single building was located on the subject site and was formerly used as a vehicle repair and gasoline retail facility. Several underground storage tanks were present on the property as well as three subsurface vehicle maintenance lifts. Prior uses of the site that appear to have led to site contamination were the former operations as a gasoline filling station. A petroleum spill from this site is documented in the NYSDEC records.

The ground cover included a mix of gravel and paved parking areas and a small strip of grass along the southern property boundary, along Cold Brook. Following the remedial site work, the entire site was paved with asphalt with the exception an area along the southern border which was returned to a vegetative state.

Site Geology and Hydrogeology: Groundwater was found to be 8 to 10 feet below the ground surface. Groundwater flow was found to be consistent with the surface topography and appears to be influenced by Cold Creek. The soils on the site were comprised of fine to medium sands with some silt and at least two clay lense layers.

A site location map is attached as Figure 1.

# SECTION 3: LAND USE AND PHYSICAL SETTING

The Department may consider the current, intended, and reasonably anticipated future land use of the site and its surroundings when evaluating a remedy for soil remediation. For this site, alternatives (or an alternative) that restrict(s) the use of the site to residential use (which allows for restricted-residential use, commercial use and industrial use) as described in Part 375-1.8(g) is/are being evaluated in addition to an alternative which would allow for unrestricted use of the site.

A comparison of the results of the investigation to the appropriate standards, criteria and guidance values (SCGs) for the identified land use and the unrestricted use SCGs for the site contaminants is included in the Tables for the media being evaluated in Exhibit A.

# SECTION 4: ENFORCEMENT STATUS

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

No PRPs have been documented to date.

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 Town of Russia will assist the state in its efforts by providing all information to the state which identifies PRPs. The Town of Russia will also not enter into any agreement regarding response costs without the approval of the Department.

# SECTION 5: SITE CONTAMINATION

# 5.1: <u>Summary of the Remedial Investigation</u>

A Remedial Investigation (RI) has been conducted. The purpose of the RI was to define the nature and extent of any contamination resulting from previous activities at the site. The field activities and findings of the investigation are described in the RI Report.

The following general activities are conducted during an RI:

- Research of historical information,
- Geophysical survey to determine the lateral extent of wastes,
- Test pits, soil borings, and monitoring well installations,
- Sampling of waste, surface and subsurface soils, groundwater, and soil vapor,
- Sampling of surface water and sediment,
- Ecological and Human Health Exposure Assessments.

# 5.1.1: Standards, Criteria, and Guidance (SCGs)

The remedy must conform to 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.

To determine whether the contaminants identified in various media are present at levels of

concern, the data from the RI were compared to media-specific SCGs. The Department has developed SCGs for groundwater, surface water, sediments, and soil. The NYSDOH has developed SCGs for drinking water and soil vapor intrusion. The tables found in Exhibit A list the applicable SCG in the footnotes. For a full listing of all SCGs see: <u>http://www.dec.ny.gov/regulations/61794.html</u>

# 5.1.2: <u>RI Information</u>

The analytical data collected on this site includes data for:

- groundwater
- surface water
- soil
- sediment
- soil vapor
- indoor air

The data have identified contaminants of concern. A "contaminant of concern" is a contaminant that is sufficiently present in frequency and concentration in the environment to require evaluation for remedial action. Not all contaminants identified on the property are contaminants of concern. The nature and extent of contamination and environmental media requiring action are summarized in Exhibit A. Additionally, the RI Report contains a full discussion of the data. The contaminant(s) of concern identified at this site is/are:

benzene	sodium
xylene (mixed)	dieldrin
bis(2-ethylhexyl)phthalate	copper
phenol	lead
iron	nickel
pcb-aroclor 1260	zinc
pcb-aroclor 1248	benzo(b)fluoranthene
chromium	arsenic
1,2,4-trimethylbenzene	benzo(a)pyrene
ethylbenzene	chrysene
1,2-dichloroethane	benzo[k]fluoranthene
acetone	indeno(1,2,3-cd)pyrene
antimony	chlorobenzene
manganese	1,2-dichlorobenzene

Based on the investigation results, comparison to the SCGs, and the potential public health and environmental exposure routes, certain media and areas of the site required remediation. These media were addressed by the IRM(s) described in Section 6.2. More complete information can be found in the RI Report and the IRM Construction Completion Report.

### 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 issuance of the Record of Decision.

The following IRM(s) has/have been completed at this site based on conditions observed during the RI.

#### IRM - Asbestos Abatement & Building Demolition

In 2007, the site structure was demolished and asbestos contaminated debris was removed from the site in order to investigate and remediate sub-surface soils beneath the building.

#### IRM - UST Removal and Soil Excavation

In 2008, a total of six tanks ranging in size from 550 to 8,000 gallons were removed from the site. A vehicle maintenance lift was also removed. A drain line to Cold Brook and associated contaminated soils were also removed. Contaminated soils were removed to a maximum depth of 10 feet below the ground surface. The lateral excavation limits were determined by field monitoring devices, and confirmation samples were collected. The samples documented that "residential use" soil cleanup objectives were achieved at all sampling locations, with the exception of 1,2,4 trimethylbenzene at one location along the west wall of the excavation. The excavation could not be expanded further to remove this soil due to the proximity of an off-site structure. A soil sample collected from a boring installed five feet beyond the west wall of the excavation met the "residential use" soil cleanup objectives.

#### 5.3: <u>Summary of Human Exposure Pathways</u>

This human exposure assessment identifies ways in which people may be exposed to site-related contaminants. Chemicals can enter the body through three major pathways (breathing, touching or swallowing). This is referred to as *exposure*.

Access to the site is unrestricted. However, contact with residual contamination in groundwater is unlikely unless people dig below the ground surface. People are not drinking the contaminated groundwater because the area is served by a public water supply that is not contaminated by the site. Volatile organic compounds in the groundwater may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. Sampling indicates that soil vapor intrusion is not a concern for the property or off-site buildings.

### 5.4: <u>Summary of Environmental Assessment</u>

This section summarizes the assessment of existing and potential future environmental impacts presented by the site. Environmental impacts may include existing and potential future exposure pathways to fish and wildlife receptors, wetlands, groundwater resources, and surface water.

Based upon the resources and pathways identified and the toxicity of the contaminants of ecological concern at this site, a Fish and Wildlife Resources Impact Analysis (FWRIA) was deemed not necessary for OU 01.

Remediation at the site is complete. Prior to remediation, the primary contaminants of concern were metals and halogenated VOCs from the vehicle repair operations and petroleum related VOCs and SVOCs from the retail gasoline facility.

Soil samples collected from the edge of the excavation showed contaminant levels were generally below residential soil cleanup objectives. Groundwater samples collected after remediation were either below groundwater standards, criteria or guidance (SCGs) or were only slightly exceeding SCGs. The source has been removed and it is expected any residual groundwater contamination will attenuate naturally.

### SECTION 6: <u>SUMMARY OF SELECTED REMEDY</u>

Based on the results of the investigations at the site, the IRMs that have been performed, and the evaluation presented here, the Department is proposing No Further Action and the implementation of an institutional control, in the form of an environmental easement, as the proposed remedy for the site. The Department believes that this remedy is protective of human health and the environment and satisfies the remediation objectives described in Exhibit B.

The elements of the restricted use remedy include:

1. Imposition of an institutional control in the form of an environmental easement that will: (a) allow for residential, restricted-residential, commercial and industrial uses as defined by Part 375-1.8(g), though land use is subject to local zoning laws; (b) restrict the use of groundwater as a source of potable or process water without necessary water quality treatment as determined by the New York State Department of Health or County Department of Health; and (c) require the property owner to complete and submit to the NYSDEC a periodic certification

2. The Town or property owner will provide a periodic certification of the institutional control for the site, 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 control put in place is 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.

#### Exhibit A

#### **Nature and Extent of Contamination**

This section describes the findings of the Remedial Investigation for all environmental media that were evaluated. As described in Section 5.1.2, samples were collected from various environmental media to characterize the nature and extent of contamination.

For each medium, a table summarizes the findings of the investigation. The tables present the range of contamination found at the site in the media and compares the data with the applicable SCGs for the site. The contaminants are arranged into four categories; volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), inorganics (metals and cyanide), and pesticides/polychlorinated biphenyls (PCBs). For comparison purposes, the SCGs are provided for each medium that allows for unrestricted use. For soil, if applicable, the Restricted Use SCOs identified in Section 5.1.1 are also presented.

#### Waste/Source Areas

As described in the RI report, waste/source materials were identified at the site and are impacting groundwater, soil, surface water, sediment, and soil vapor.

Wastes are defined in 6 NYCRR Part 375-1.2 and include solid, industrial and/or hazardous wastes. Source Areas are defined in 6 NYCRR Part 375. Source areas are areas of concern at a site where substantial quantities of contaminants are found which can migrate and release significant levels of contaminants to another environmental medium. Wastes and source areas identified at the site include: asbestos and building debris from demolition of the structure; petroleum contaminated soils from a retail gasoline facility; petroleum contaminated soils, sediment, and sludge from a sub-surface drainage line to Cold Creek; and petroleum and chlorinated solvent contaminated soils from operation of the vehicle maintenance facility.

The waste/source areas identified at the site were addressed by the IRM(s) described in Section 5.2. Figure 2 shows the location of the site structure that was removed, the underground storage tanks, pump island, the sub-slab mechanical lifts, and drainage pipe to Cold Creek.

#### Groundwater

Groundwater samples were collected from overburden monitoring wells. The samples were collected to assess groundwater conditions both on-site and off-site. The results collected after the soil removal IRM are presented in Table 1 and indicate that contamination in shallow groundwater at the site exceeds the SCGs for volatile organic compounds, inorganics and pesticides. Individual drinking water wells are not in the immediate vicinity of the site.

Table #1 – Groundwater (Post-Soil Removal IRM)				
Detected Constituents	Concentration Range Detected (ppb) <sup>a</sup>	SCG <sup>b</sup> (ppb)	Frequency Exceeding SCG	
VOCs				
1,1,2-Trichloroethane	ND-1.66J <sup>c</sup>	1	1 of 5	
Benzene	ND – 1.24J	1	1 of 5	
Ethylbenzene	ND - 6.63J	5	1 of 5	
METALS				
Antimony	ND – 4.5J	3	1 of 5	
Iron	ND - 478J	300	1 of 5	

Manganese	ND – 1160J	300	2 of 5
Sodium	28,800 - 183,000J	20,000	5 of 5
PESTICIDES/PCBS			
Dieldrin	ND-0.042J	0.004	4 of 5
Gamma-chlorine	ND0576J	0.05	1 of 5

a - ppb: parts per billion, which is equivalent to micrograms per liter, ug/L, in water.

b - SCG: Standard Criteria or Guidance - Ambient Water Quality Standards and Guidance Values (TOGs 1.1.1), 6 NYCRR Part 703, Surface water and Groundwater Ouality Standards, and Part 5 of the New York State Sanitary Code (10 NYCRR Part 5).

c - J means the compound was detected by the laboratory below the quantitation limit. The result is considered an estimated value.

Groundwater samples were collected from the five (5) monitoring wells installed following the soil removal IRM. Refer to Figure 3 for monitoring well locations. The results indicate that previously identified VOC contamination in groundwater has been remediated. Groundwater samples from MW-2, MW-3 and MW-5 revealed no detections of any VOCs or SVOCs. Low level VOC detections in the sample from MW-4 were below the appropriate groundwater standards. The sample collected from MW-1 identified three (3) VOC detections at estimated concentrations slightly exceeding the applicable 6NYCRR Part 703.5 groundwater standards. The three (3) exceedances are likely attributed to a minor amount of residual sub-surface contamination on the western sidewall of Excavation 2, along the sidewalk. Based on the results of this investigation, residual groundwater impacts appear to be limited to the right-of-way. The exceedances do not warrant additional sampling and it is likely that the residual VOCs will naturally attenuate.

Concentrations of metals detected above groundwater standards in the wells are naturally occurring minerals found in groundwater. The metal exceedances detected are likely attributed to water hardness and are considered to be background concentrations for the area based on their widespread and consistent occurrence.

The pesticide dieldrin was detected at concentrations exceeding the 6NYCRR Part 703.5 groundwater standard in wells MW-1, MW-3, MW-4 and MW-5. Well MW-3 also revealed a detection of the pesticide gamma-Chlordane slightly above the applicable standard. Due to its distribution in the environment, the source of this pesticide is unknown and does not appear to be the result of past operations at the site. Further, it is likely that the source areas of these pesticides have been removed as part of the IRM and that these detections are a result of residual levels of contaminants that will decrease over time.

Groundwater contamination that was related to on-site sources of contamination was addressed during the IRM described in Section 5.2. Since the source of contamination was removed and the post excavation samples confirmed only minimal contamination remained in the groundwater following the IRM (except as noted above), additional remedial measures or sampling is not warranted.

#### Soil

Surface and subsurface soil samples were collected at the site during the RI, both before and after the IRM. Surface soil samples were collected from a depth of 0-2 inches to assess direct human exposure. Subsurface soil samples were collected from a depth of 2-10 feet to assess soil contamination impacts to groundwater.

#### **Surface Soils**

Surface soil sampling locations are shown on Figure 4. The following constituents were identified as exceeding the SCO for unrestricted use during the RI: chromium, copper, lead, nickel, zinc, acetone, benzo (b) fluoranthene, PCBs and 4,4 DDD. With the exception of chromium, all of the surface soil concentrations which exceeded unrestricted SCOs were removed during the IRM.

All of the surface soil sample locations that were not removed as part of the IRMs showed detections of chromium between the unrestricted and residential SCOs. Chromium is a naturally occurring mineral. While some chromium found at the site may have been associated with waste disposal areas, the levels are consistent with the background concentration of chromium.

#### **Subsurface Soils**

Subsurface sampling locations included samples collected during the RI, IRM and historic investigations at the site. The sampling locations included post excavation confirmation sampling and soil borings.

The following constituents were found to exceed the unrestricted SCOs in the subsurface soils: chromium, copper, lead, mercury, nickel, zinc, petroleum related VOCs, asphalt related SVOCs, PCBs and pesticides.

Acetone was found at several sampling locations across the site. This compound is easily bio-degraded in the environment and therefore not a contaminant expected at a site without a recent disposal history. Acetone is also a common chemical used at laboratories which analyze environmental samples. Unless an obvious source can be found at the site, detections of acetone are usually considered artifacts from handling the samples at the laboratory and not a site specific contaminant of concern. Based on the numerous occasions where acetone was detected at the site, even at areas that were not contaminated with other site related contaminants, acetone is not considered a site related contaminant.

Copper, chromium, lead, mercury, nickel and zinc are naturally occurring minerals. These metals were identified in the subsurface at levels that exceeded the unrestricted SCOs. Based on the widespread distribution, which is inconsistent with the waste disposal at this site, it appears these contaminants are related to natural background conditions. Soils where levels of these compounds were found to be in excess of residential SCOs were removed as part of the IRMs.

Figure 3 shows the IRM excavations and the confirmation sample locations which exceed the unrestricted SCOs. The excavations identified on Figure 3 include:

- Excavation #1 Former tank number 005, an 8,000 gallon diesel tank.
- Excavation #2 Former tanks 001-004, pump island, and northern hydraulic lifts.
- Excavation #3 Former drainage line to Cold Creek.
- Excavation #4 Former southern hydraulic lift.

Exit samples confirmed the unrestricted SCOs were achieved in excavations #1, #3, and #4.

Based on excavation sidewall and floor sampling, SCO exceedances for unrestricted use along the limits of excavation #2 were limited to the northern and western edges. Additional excavation to reach unrestricted SCOs was not possible due to the public road along the northern sidewall and a residential structure located along the western side of the excavation.

The contaminants along the northern sidewall which exceed unrestricted SCOs included benzene and xylene. The northwest corner of the excavation additionally exhibited an exceedance of 1,2 dichloroethane. The exceedances along the western wall included 1,2,4 and 1,3,5 trimethylbenzene, ethylbenzene, n-propylbenzene, and xylene. Two additional soil borings were advanced beyond the western limit of the excavation and

confirmed exceedances of the unrestricted SCOs for ethylbenzene, trimethylbenzenes and xylene. As shown below, only one of the post excavation sampling results exceeded the SCOs for residential use.

Table #2 – Subsurface, Post Excavation					
Detected Constituents	Concentration	Unrestricted SCO <sup>b</sup>	Frequency	Residential Use	Frequency
	Range Detected	(ppm)	Exceeding	SCO <sup>c</sup> (ppm)	Exceeding
	(ppm) <sup>a</sup>		Unrestricted SCO		Residential SCO
VOCs					
1,2-dichloroethane	ND-0.140	0.020	1 of 22	2.3	0 of 33
1,2,4-	ND - 71	3.6	1 of 22	47	1 of 33
thrimethylbenzene					
1,3,5-trimethylbenzene	ND – 26	8.4	1 of 22	47	0 of 33
Benzene	ND - 0.52	0.06	2 of 22	2.9	0 of 33
Ethylbenzene	ND – 11	1	1 of 22	30	0 of 33
n-propylbenzene	ND - 14	3.9	1 of 22	100	0 of 33
Xylene-total	ND – 16	0.26	4 of 22	100	0 of 33

a - ppm: parts per million, which is equivalent to milligrams per kilogram, mg/kg, in soil.

b - SCO: Part 375-6.8(a), Unrestricted Soil Cleanup Objectives.

c - SCO: Part 375-6.8(b), Residential Soil Cleanup Objectives

The lone exceedance of residential SCOs for soil was at sample location TR-EX2-CSW-20. To determine the extent of contamination beyond the excavation limits, a soil boring was installed approximately 5 feet beyond the edge of the excavation. The soil boring showed that all contaminants of concern were below the residential SCOs. Therefore, the volume of soil which remains in excess of the SCOs for residential use is not considered to be significant. Further, since the on-site sources of contamination have been removed, the residual contamination is expected to naturally degrade and attenuate with time.

Two sub-surface sampling locations located on the Post Office property near the border with the residence west of the site, were found to contain levels of pesticides, PCBs, and SVOCs in excess of unrestricted SCOs. However, based on the character, nature, and extent of contamination at the site and the remote locations of these borings, this finding does not appear attributable to the contamination at the Salm's site. Pavement covers these sample locations. All other subsurface sample locations outside of the areas of excavation met unrestricted SCOs except as noted above, with the exception of 1,2,4 trimethylbenzene which was found slightly above the SCO at one exit sample location.

In summary, soil contamination identified during the RI was addressed during the IRM described in Section 5.2, meeting SCOs for residential use.

#### **Surface Water**

Surface water samples were collected during the RI from upstream, near the drainage pipe discharge to Cold Creek, and downstream locations. The samples were collected to assess the surface water conditions on and off-site. The results indicated that contaminants in surface water at the site exceeded the Department's SCG for 4-methylphenol, bis(2-ethylhexyl)phthalate, phenol, iron and gamma-chlorine. Pre-IRM surface water sample locations are depicted on Figure 4 and are summarized in the following table.

Table #3 – Surface Water				
Detected Constituents	Concentration Range Detected (ppb) <sup>a</sup>	SCG <sup>b</sup> (ppb)	Frequency Exceeding SCG	
SVOC				
4-methylphenol	ND-60J	5	1 of 3	

Bis(2- ethylhexyl)phthalate	ND – 36J	0.6	1 of 3
phenol	ND - 14J	5	1 of 3
METALS			
Iron	ND – 47,800J	300	1 of 3
PESTICIDES/PCBS			
Gamma-chlorine	ND - 0.57J	0.00002	1 of 3

a - ppb: parts per billion, which is equivalent to micrograms per liter, ug/L, in water.

b - SCG: Ambient Water Quality Standards and Guidance Values (TOGs 1.1.1) and 6 NYCRR Part 703: Surface Water and Groundwater Quality Standards.

Bis (2-ethylhexyl) phthalate is a common laboratory contaminant because it is a component of many of the plastics used in sample collection and analysis supplies. Therefore, bis (2-ethylhexyl) phthalate in surface water is not considered a site specific contaminant of concern.

The iron found in surface water is a naturally occurring mineral that is commonly found in surface water. The presence of iron at elevated levels can be the result of many natural biological activities. Therefore, iron in the surface water is not considered a site specific contaminant of concern.

On-site sources of contamination that were contributing to surface water contamination were addressed during the IRM described in Section 5.2. Therefore, additional sampling of the surface water is not warranted. The Table above represents pre-IRM surface water quality.

#### Sediments

Sediment samples were collected during the RI from upstream and downstream locations along Cold Creek. The samples were collected to assess the potential impacts to Cold Creek sediment from the site. The results indicated that the sediment in Cold Creek contained elevated levels of chromium. Figure 4 shows the sampling locations for sediment and also the distribution of chromium in soils across the site.

Chromium is a naturally occurring mineral. Figure 4 also shows the distribution of chromium in soils across the site. While some chromium found at the site appears to have been associated with waste disposal areas, there also appears to be a background concentration of chromium that is above the unrestricted ecological resource SCO. The chromium concentrations found in sediments downstream of the discharge pipe were consistent with upstream sampling locations. The chromium concentrations detected in sediment during the RI appears to be attributable to background conditions and not from the historic site operations. Since no site-related sediment contamination of concern was identified during the RI, no remedial alternatives need to be evaluated for sediment.

#### Soil Vapor

The evaluation of the potential for soil vapor intrusion resulting from the presence of site related soil or groundwater contamination was evaluated by the sampling of soil vapor, sub-slab soil vapor under structures, and indoor air inside structures. A full suite of samples were collected to evaluate whether soil vapor intrusion was occurring.

There are no buildings located on-site, therefore there was no sampling conducted on-site to evaluate for soil vapor intrusion. Soil vapor samples were collected from the residential property west of the petroleum waste disposal areas. Moist, low-permeability soils prevented the collection of sub-slab samples.

None of the chlorinated VOC compounds listed in the NYSDOH guidance document decision matrices were detected in the samples. Background PID readings were noted throughout the basement while an inventory of chemicals was assembled.

Petroleum compounds detected in the indoor and outdoor air samples were consistent with background levels presented in the NYSDOH 2003 Study of Volatile Organic Chemicals in Air of Fuel Oil Heated Homes (Table C1), with the exception of styrene, 1,2-dichloroethane and trichloroethene.

A solvent-based product containing trichloroethene was observed during the inventory of household products stored in the basement. This product was removed just prior to sample collection. It is possible that the detection of this compound is a result of residual VOCs venting from the container the product was stored in prior to it being removed from the basement.

Styrene and 1,2-dichloroethane are used in plastic, rubber, and vinyl products. Even though these compounds were not specifically listed within the materials inventoried, based on the common occurrence of these materials and the concentrations found, it is most likely these chemicals originated from products located within the house and/or basement.

In summary, the sample results indicated that indoor and outdoor air concentrations were generally within the background ranges typically found in homes with a fuel oil tank inside and do not indicate a concern with public exposure to petroleum-impacted soil vapor at the time of sampling.

Additionally, the IRMs described in Section 5.2 have removed the source for soil vapor contamination, allowing any potential impacts to soil vapor to mitigate with time.

### Exhibit B

#### SUMMARY OF THE REMEDIATION OBJECTIVES

The objectives for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375. The goal for the remedial program is to restore the site to pre-disposal conditions to the extent feasible. At a minimum, the remedy shall eliminate or mitigate all significant threats to public health and the environment presented by the contamination identified at the site through the proper application of scientific and engineering principles.

The remedial objectives for this site are:

#### Groundwater

**RAOs for Public Health Protection** 

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of volatiles, from contaminated groundwater.

#### **RAOs** for Environmental Protection

- Restore ground water aquifer to pre-disposal/pre-release conditions, to the extent practicable.
- Prevent the discharge of contaminants to surface water.
- Remove the source of ground or surface water contamination.

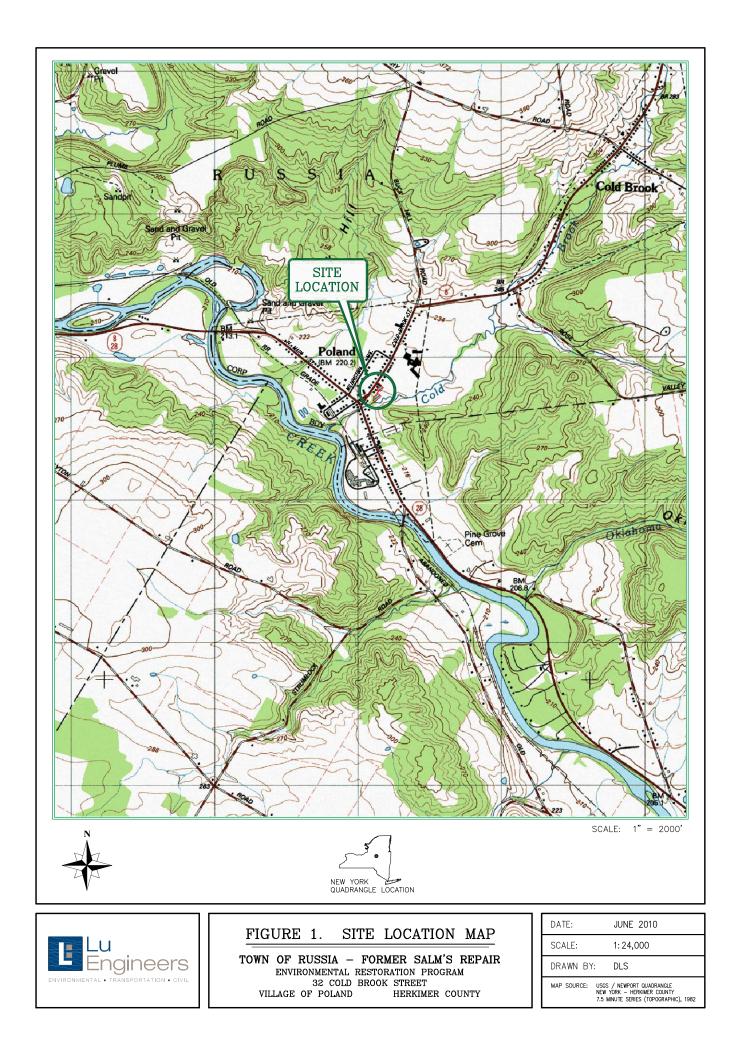
#### Soil

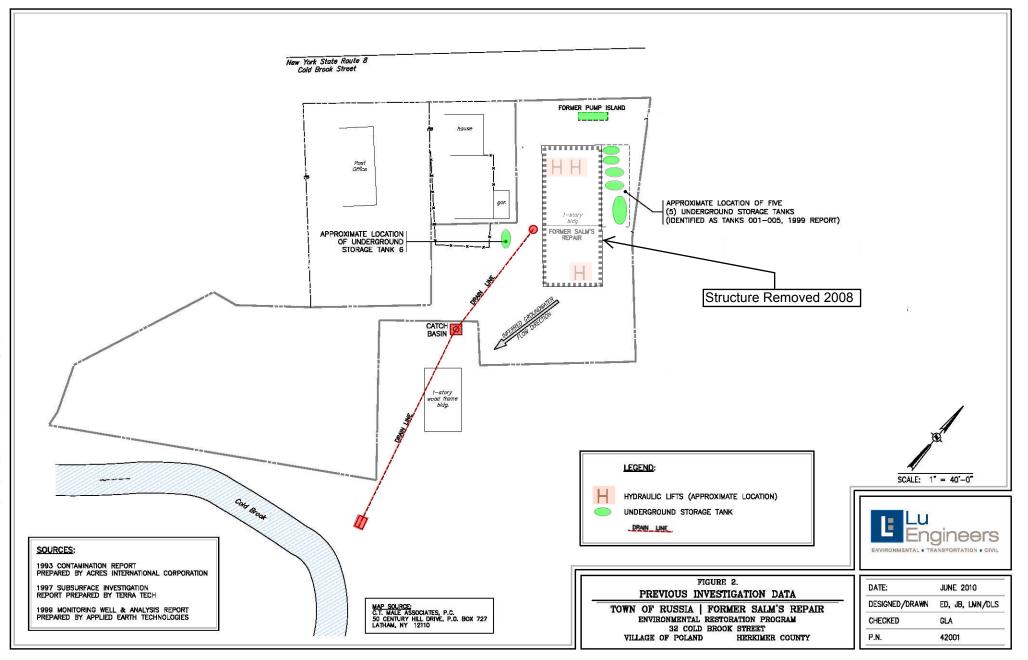
**RAOs for Public Health Protection** 

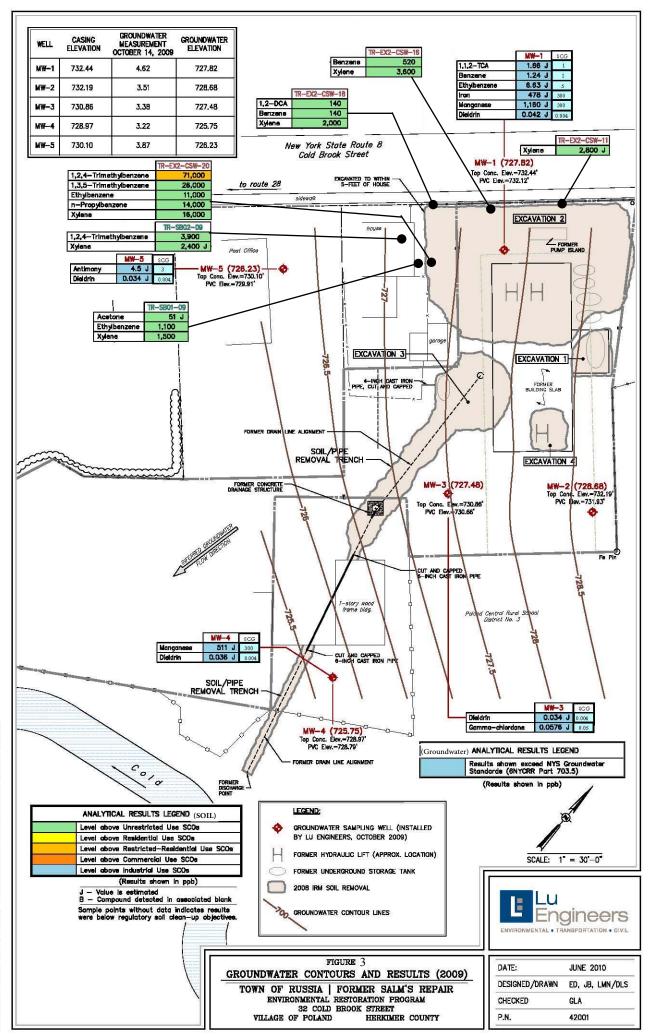
- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of or exposure from contaminants volatilizing from contaminants in soil

#### **RAOs** for Environmental Protection

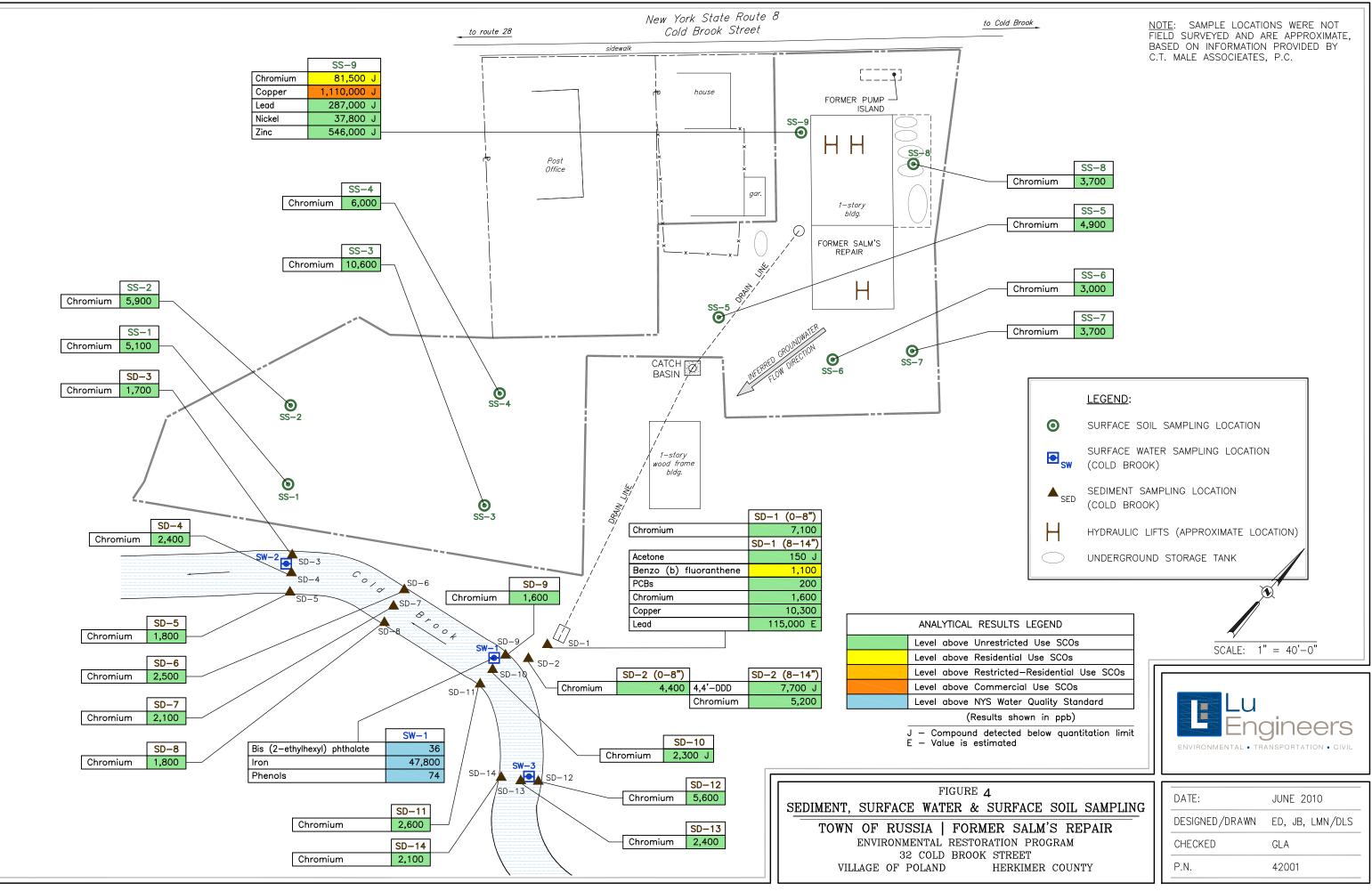
• Prevent migration of contaminants that would result in groundwater or surface water contamination.

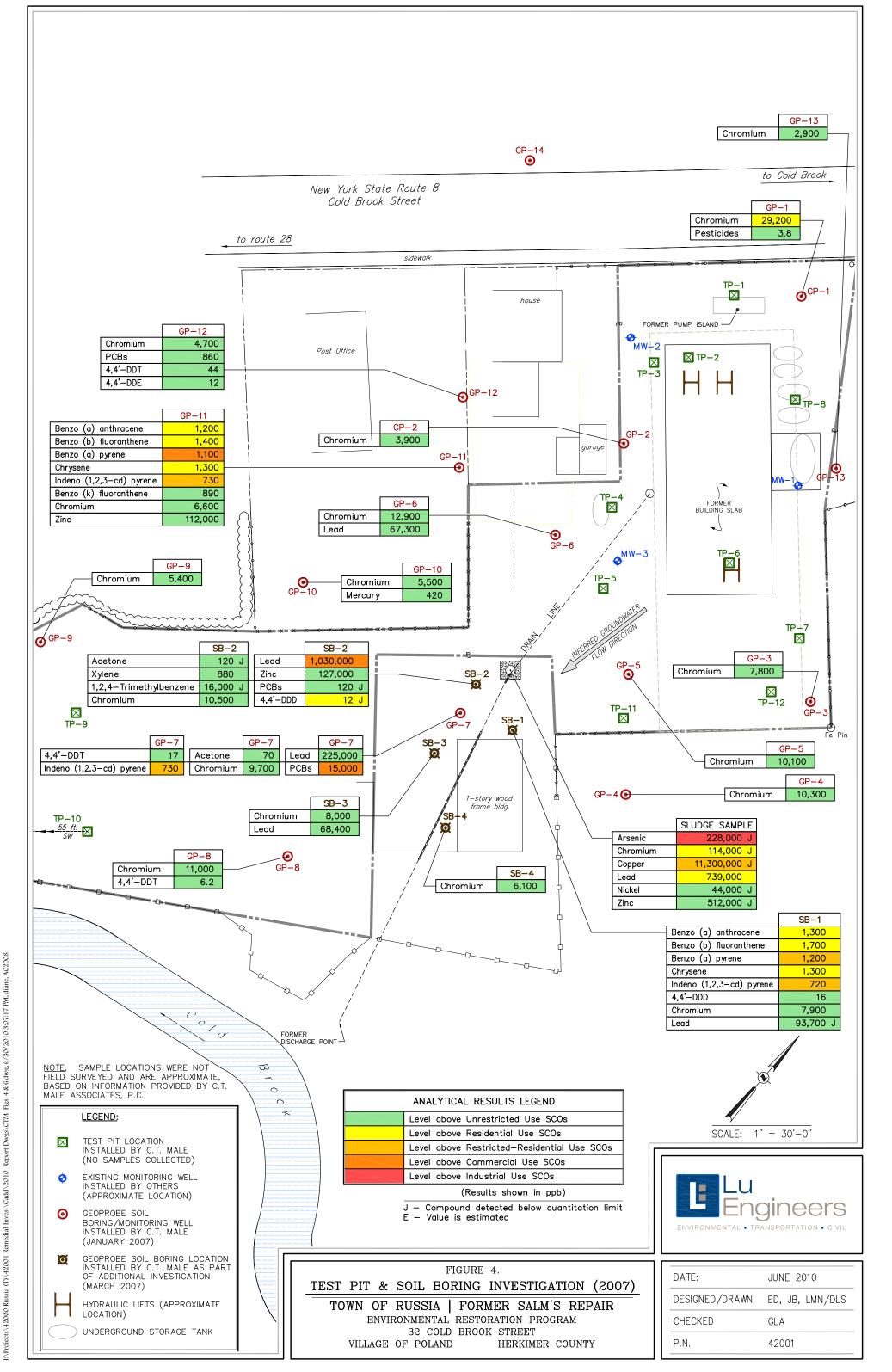






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# **APPENDIX** A

**Responsiveness Summary** 

# **RESPONSIVENESS SUMMARY**

#### Former Salm's Repair Shop Environmental Restoration Project Town of Russia, Herkimer County New York Site No. E622023

The Proposed Remedial Action Plan (PRAP) for the Former Salm's Repair Shop 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 February 11, 2011. The PRAP outlined the remedial measure proposed for the contaminated soil and groundwater at the Former Salm's Repair Shop 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 March 1, 2011, which included a presentation of the remedial investigation alternative analysis (RI/AA) for the Former Salm's Repair Shop 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 March 29, 2011.

This responsiveness summary responds to all questions and comments raised during the public comment period. The following are the comments received, with the Department's responses:

COMMENT 1: If the Village pursues a groundwater use ordinance for the Village of Poland's Water District, would an environmental easement still be required?

RESPONSE 1: If an ordinance restricting the use of groundwater in the Village were to be put in place after the issuance of the ROD or even the execution of the environmental easement (EE), the Village may petition the Department to revisit this requirement. The ROD and/or EE could then be modified as appropriate.

COMMENT 2 When will the ROD be issued?

RESPONSE 2: The ROD will be issued following the close of the public comment period and upon review of the public comments received.

COMMENT 3: Completion of this project has been a very positive experience for the community. A Farmer's Market is held in the new parking lot every Wednesday during the summer. It provides additional parking for downtown visitors, eases traffic at the Post Office, and is used for parking for school sporting events held behind the site. This was a very good project and there was no way the Town could have completed the project without the financial assistance from the ERP Fund and the technical assistance provided by the NYSDEC and NYSDOH.

**RESPONSE 3:** Comment noted. The Department is encouraged that assistance provided to the Village of Poland and the Town of Russia has resulted in the reuse of this site in a manner that is so well received by the Community.

# **APPENDIX B**

**Administrative Record** 

# **Administrative Record**

Former Salm's Repair Shop Environmental Restoration Project Town of Russia, Herkimer County New York Site No. E622023

- Proposed Remedial Action Plan for the Former Salm's Repair Shop, dated February 11, 2011, prepared by the Department.
- "Remedial Investigation/Interim Remedial Measures Report", January 2011 prepared by Lu Engineers.