Department of Environmental Conservation

Division of Environmental Remediation

Environmental Restoration
Record of Decision
1 Bristol Avenue Site
Lockport (C), Niagara County, New York
Site Number E932125

February 2009

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

DECLARATION STATEMENT
ENVIRONMENTAL RESTORATION RECORD OF DECISION

1 Bristol Avenue Environmental Restoration Site
City of Lockport, Niagara County, New York
Site No. E932125

Statement of Purpose and Basis

The Record of Decision (ROD) presents the selected remedy for the 1 Bristol Avenue 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 1Bristol Avenue 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.

Description of Selected Remedy

Based on the results of the Remedial Investigation/Alternatives Analysis Report (RI/AAR) for the 1Bristol Avenue 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 as the remedy. The components of the completed IRM are as follows:

1. Removal, cleaning, and off-site disposal of 2 Underground Storage Tanks.

2. Excavation and off-site disposal of approximately 2,250 tons of petroleum contaminated soils.

3. Placement and compaction of approximately 1,500 cubic yards of clean backfill materials.

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.

FEB 1 7 2009

Date

Dale A. Desnoyers, Director
Division of Environmental Remediation

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RECORD OF DECISION

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Lockport, Niagara County, New York
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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 1 Bristol Avenue 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 at the site, and resulted in:

- a threat to human health associated with potential exposure to site soils.

During the course of the investigation certain actions, known as interim remedial measures (IRMs), were undertaken at the 1 Bristol Avenue 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 remedial investigation/remedial alternatives report (RI/RAR). The IRMs undertaken at this site included removal of 2 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.

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 1 Bristol Avenue site is located in the City of Lockport, in Niagara County (see Figure 1). The site is located in a mixed commercial/residential area, and is approximately 1 acre in size. The site is bordered on the north by a rail road line and Niagara Street, on the east by Bristol Avenue, and on the south and west by other commercial buildings. The site is currently vacant, and has grass and small woody growth present.

The site geology consists of a thin layer of soil/fill material (0-1.5 feet) over native silt and clay soils. Red brown silty clay extends from beneath the fill material to an average depth of 8.5 feet below ground surface, where bedrock is encountered. The bedrock in this area is Dolostone. The surface of the bedrock that was encountered at the site was very smooth and unfractured. Overburden groundwater was not present in the soils above the bedrock.

SECTION 3: SITE HISTORY

3.1: Operational/Disposal History

The site was used for agricultural retail (feed and grain store) for more than 80 years. Associated with these operations were two oil tanks situated along the southern border of the property. These oil tanks were removed some time prior to 1948. A gasoline tank was also removed from the site in 1969. Several of these tanks were believed to have leaked petroleum products into site soils.

3.2: Remedial History

A phase I and II investigation of the property immediately south (known as the Magavern site) of the 1 Bristol Avenue site identified petroleum contamination in soils. As a result of those investigations, Spill No. 9975170 was assigned by the Department Spill Response Program, and a soil contaminant investigation was performed on the 1 Bristol Avenue property in 2000-2001. That Spill Program investigation documented the presence of petroleum contamination in 1 Bristol Avenue soils. In 2004, the City of Lockport removed approximately 750 tons of petroleum contaminated soils from the Magavern site. The excavations on the Magavern site were terminated near the property line shared by the 1 Bristol Avenue site.

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 Lockport 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 Lockport has recently completed a remedial investigation/remedial alternatives report (RI/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 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 November 2008 "Remedial Investigation/Alternatives Analysis Report (RI/AAR) report.

The RI included installation of numerous soil borings which included soil sample collection and analysis. Soil samples were collected from the soil boring locations during the 2007 RI, and are presented along with the previous 2001 soil boring locations in Figure 3.

5.1.1: Standards, Criteria, and Guidance (SCGs)

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

- Soil SCGs are based on the Department's Cleanup Objectives contained in 6NYCRR Part 375.

Based on the RI 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 RI 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 RI report, many soil samples were collected to characterize the nature and extent of contamination. As summarized in Table 1, 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 million (ppm).

Table 1summarizes the degree of contamination for the contaminants of concern in soil and compare the data with the SCGs for the site. The following are the media which were investigated and a summary of the findings of the investigation.

Surface Soil

All soil boring locations were examined and field screened for the presence of petroleum constituents. Surface soils (0-6 inches) at the site did not exhibit any evidence of petroleum impacts, and therefore no surface soil samples were collected at the site.

Subsurface Soil

Soil borings were completed at 38 locations during the 2007 investigations. Figure 3 shows the soil boring locations for both the 2007 and the previous 2001 investigations. Each 2007 soil boring was screened in the field for the presence of volatile organic compounds, and soil samples analyzed at 27 of the 38 locations. The contaminants detected in the soil samples were petroleum constituents likely associated with leakage or spillage from the former above ground and under ground storage tanks. 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: ethylbenzene (up to 7.5 ppm), 1,2,4-trimethylbenzene (up to 35 ppm), 1,3,5-trimethylbenzene (up to 13 ppm), and total xylenes (up to 42 ppm). Indeno(1,2,3-cd)pyrene (at 0.58 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 RI/AAR was addressed during the IRM through the excavation and proper disposal of the soil as described in Section 5.2. Confirmatory samples were collected from the excavations to verify that the soil cleanup objectives were achieved. 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

Moist soils were noted within some of the deeper intervals (generally more than 6 feet below ground surface) of the soil borings. However, soil was removed in the IRM excavations to the surface of the underlying bedrock (from 7 to 9 feet below ground surface), and no groundwater was encountered. Due to the lack of overburden groundwater and the unfractured nature of the bedrock surface, no groundwater investigations were performed.

Soil Vapor

Soil vapor sampling was attempted during the site investigation. However, due to the low permeability soils, samples of soil vapor could not be collected. Both soil vapor and soil vapor migration potential are considered extremely limited due to the low permeability soils, lack of groundwater, and the low concentrations of residual soil contaminants.

No site-related soil vapor or indoor air contamination of concern was identified during the RI/AAR. Therefore, no remedial alternatives need to be evaluated for this medium.

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 RI/AAR.

An IRM was conducted in 2008 to remove the impacted site soils. Approximately 2,250 tons of impacted site soils were excavated and properly disposed at a permitted off-site disposal facility. After removal of the impacted soils, approximately 1,500 cubic yards of clean backfill material was placed and compacted in the excavations. The excavation and backfill areas are presented in Figure 4. The IRM work is summarized in detail in the November 2008 report titled "Removal and Disposal of Contaminated Soil at One Bristol Avenue". Remaining soil contaminant concentrations are below Part 375 Residential Use 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 Section 5 of the November 2008 Remedial Investigation/Alternatives Analysis Report (RI/AAR), 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, the petroleum contamination that was present in site soils was addressed through the IRM, and Part 375 Residential soil cleanup objectives were achieved. As a result, no potential pathways of exposure remain for the site.

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. No significant environmental impacts were noted during the investigation.

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.

The main SCGs applicable to this project are as follows:

- 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 1 Bristol Street 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 as the remedy for this site.

The selected remedy is based on the results of the RI and the evaluation of alternatives presented in the AAR. The elements of the IRM already completed are listed below:

1. Removal, cleaning, and off-site disposal of 2 Underground Storage Tanks.

2. Excavation and off-site disposal of approximately 2,250 tons of petroleum contaminated soils.

3. Placement and compaction of approximately 1,500 cubic yards of clean backfill materials.

There are no capital or operation and maintenance costs associated with the No Further Action Remedy.

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 February 2008 and December 2008 to the public contact list.
- A public meeting was held on January 26, 2009 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.

No public comments were received on the December 2008 Proposed Remedial Action Plan during the public comment period.

TABLE 1
1 Bristol Avenue Site
Nature and Extent of Subsurface Soil Contamination
Subsurface Soil Samples Collected 2007

SUBSURFACE SOIL	Contaminants of Concern	Concentration Range Detected (ppm)[a]	SCG[b] - Unrestricted Use (ppm)[a]	Frequency Exceeding Unrestricted Use SCG
Compounds (VOCs)	benzene	ND [c] - 0.2	0.06	2 of 27
	ethylbenzene	ND - 6.4	1	4 of 27
	1,2,4 trimethylbenzene	ND - 35	3.6	5 of 27
	1,3,5 trimethylbenzene	ND - 13	8.4	1 of 27
	xylenes (mixed)	ND - 42	0.26	6 of 27
Semivolatile Organic Compounds (SVOCs)	indeno(1,2,3-cd)pyrene	ND-0.58	0.5	1 of 27

[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
1Bristol Avenue Site
Nature and Extent of Subsurface Soil Contamination
Confirmatory Soil Samples - Post 2008 IRM Excavations

SUBSURFACE SOIL	Contaminants of Concern	Concentration Range Detected (ppm)[a]	SCG[b]-Residential Use (ppm)[a]	Frequency Exceeding Residential Use SCG
Volatile Organic Compounds (VOCs)	benzene	ND [c] - 0.45	2.9	0 of 25
	ethylbenzene	ND - 6.75	30	0 of 25
	1,2,4 trimethylbenzene	ND - 33	47	0 of 25
	1,3,5 trimethylbenzene	ND - 15.3	47	0 of 25
	xylenes (mixed)	ND - 17.2	100	0 of 25
Semivolatile Organic Compounds (SVOCs)	indeno(1,2,3-cd)pyrene	ND	0.5	0 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

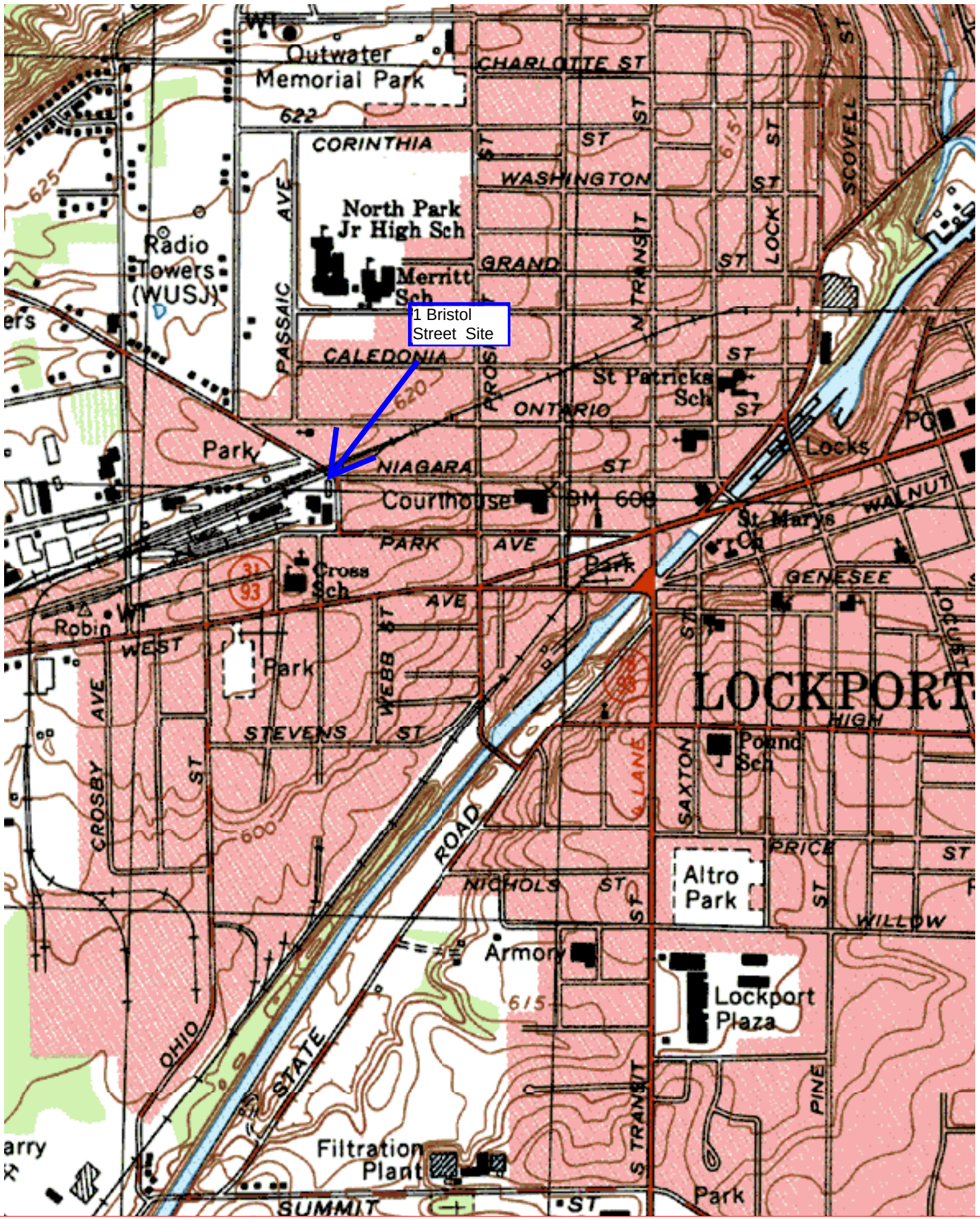
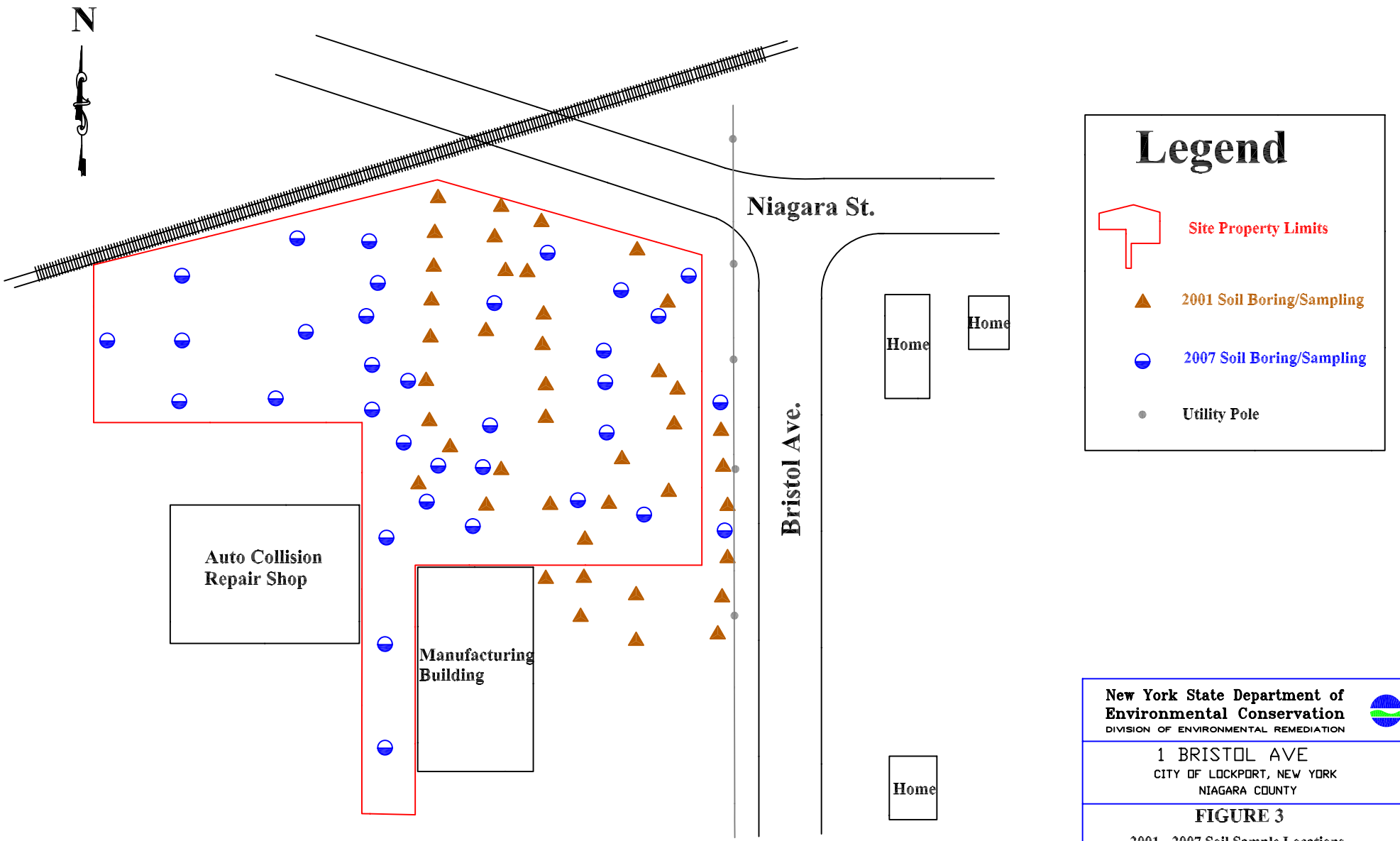


FIGURE 1 -SITE LOCATION

Figure 2 - 1 Bristol Street Site (#E932125)



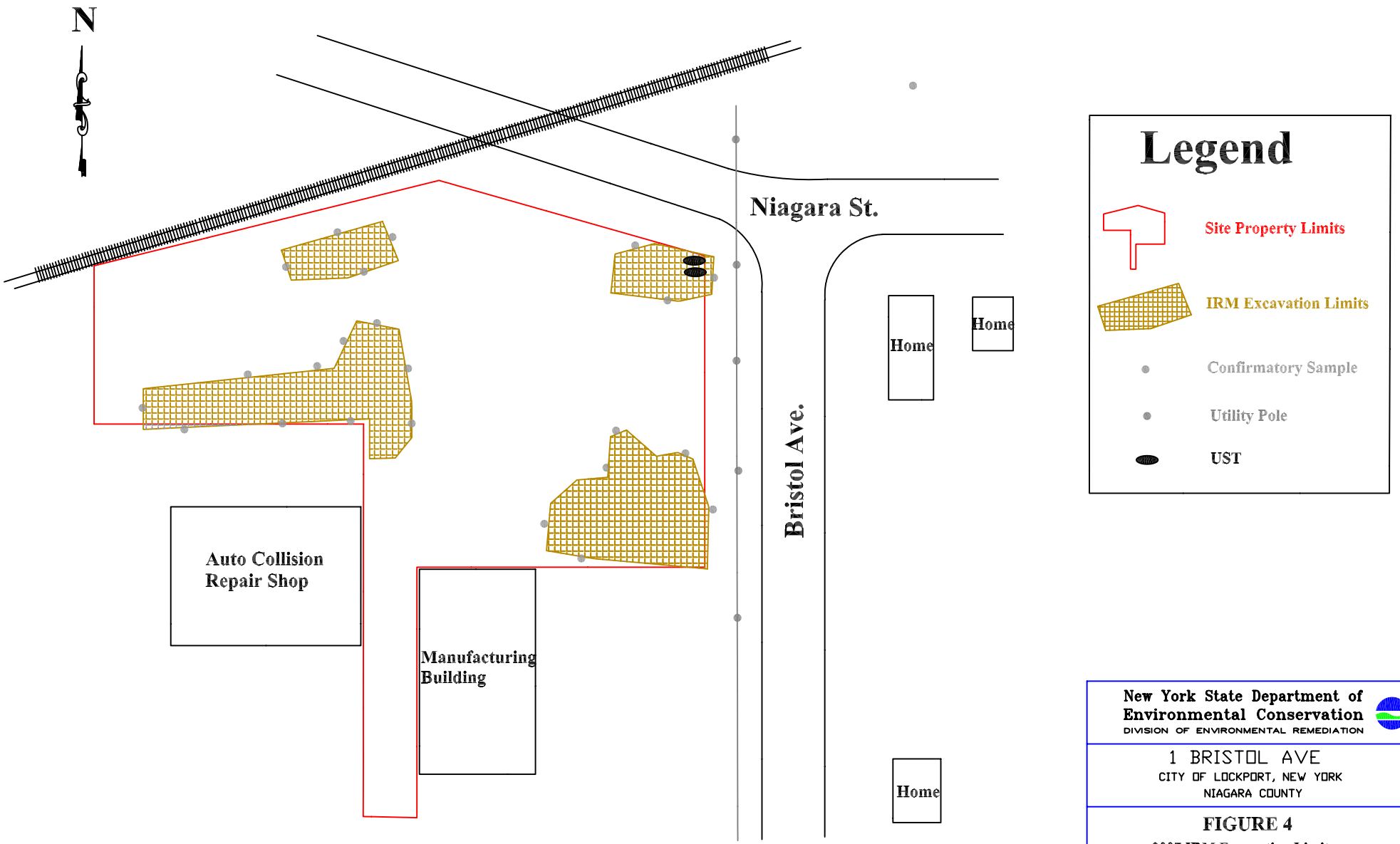
New York State Department of Environmental Conservation
DIVISION OF ENVIRONMENTAL REMEDIATION

1 BRISTOL AVE
CITY OF LOCKPORT, NEW YORK
NIAGARA COUNTY

FIGURE 3

2001 - 2007 Soil Sample Locations

DATE	SITE NO.	
AUG. 2008	E932125	NOT TO SCALE



New York State Department of Environmental Conservation
DIVISION OF ENVIRONMENTAL REMEDIATION

1 BRISTOL AVE
CITY OF LOCKPORT, NEW YORK
NIAGARA COUNTY

FIGURE 4
2007 IRM Excavation Limits

DATE	SITE NO.	
AUG. 2008	E932125	NOT TO SCALE

APPENDIX A

Responsiveness Summary

RESPONSIVENESS SUMMARY

1 Bristol Avenue Environmental Restoration Site
Lockport, Niagara County, **New York**
Site No. E932125

The Proposed Remedial Action Plan (PRAP) for the 1 Bristol Avenue 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 December 18, 2008. The PRAP outlined the remedial measure proposed for the contaminated soil at the 1 Bristol Avenue 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 January 26, 2009, which included a presentation of the Remedial Investigation (RI) and the Alternatives Analysis Report (AAR) 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 February 2, 2009.

This responsiveness summary responds to all questions and comments raised during the public comment period. No written comments were received. No questions were raised at the public meeting.

APPENDIX B

Administrative Record

Administrative Record

1 Bristol Street
Site No. E932125

1. Proposed Remedial Action Plan for the 1 Bristol Street site, dated December 2008, prepared by the Department.

2. "Remedial Investigation/Alternatives Analysis Work Plan", April 2007, prepared by TVGA.

3. "Interim Remedial Measure Work Plan", June 2007, prepared by TVGA.

4. "Contract Documents for Removal and Disposal of Contaminated Soil at One Bristol Avenue", Dec. 2007, prepared by TVGA.

5. "Remedial Investigation/Remedial Alternatives Report", November 2008, prepared by TVGA.

6. "Final Interim Remedial Measures Report- Removal and Disposal of Contaminated Soil at One Bristol Avenue", November 2008, prepared by TVGA.