
Division of Environmental Remediation

**Environmental Restoration
Record of Decision
Former Willow Island Restaurant
Environmental Restoration Project
Canton, St. Lawrence County, New York
Site No. E645044**

March 2007

New York State Department of Environmental Conservation
ELIOT SPITZER, *Governor*

DECLARATION STATEMENT ENVIRONMENTAL RESTORATION RECORD OF DECISION

Former Willow Island Restaurant Environmental Restoration Site Canton, St. Lawrence County, New York Site No. E645044

Statement of Purpose and Basis

The Record of Decision (ROD) presents the selected remedy for the Former Willow Island Restaurant site, an environmental restoration site. The selected remedial program was chosen in accordance with the New York State Environmental Conservation Law and is consistent 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 Former Willow Island Restaurant 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 hazardous substances and petroleum products from this site have been addressed by implementing the interim remedial measure identified in this ROD. The removal of contaminated soil and groundwater from the site has significantly reduced the threat to public health and the environment.

Description of Selected Remedy

Based on the results of the Interim Remedial Measures/Alternative Analysis Report (IRM/AAR) for the Former Willow Island Restaurant site and the criteria identified for evaluation of alternatives, the Department concludes that No Further Action is needed, provided that the following institutional controls are implemented as listed below:

- The property owner will provide a periodic certification which will certify that the institutional controls put in place are unchanged from the previous certification and nothing has occurred that will impair the ability of the control to protect public health or the environment.
- Imposition of an institutional control in form of an environmental easement that will: (a) limit the use and development of the property to restricted residential and/or active

recreational uses only; (b) restrict use of groundwater as a source of potable or process water without necessary water quality treatment as determined by the State Health Department; (c) require that an evaluation of soil vapor be conducted or the implementation of a vapor system for any buildings developed on the site, including provision for mitigation of any impacts identified and, (d) require the property owner to complete and submit to the NYSDEC a periodic certification.

New York State Department of Health Acceptance

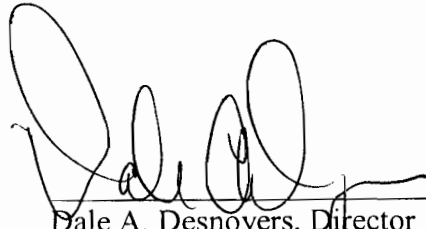
The New York State Department of Health (NYSDOH) concurs that the remedy selected for this site is protective of human health.

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.

MAR 29 2007

Date



Dale A. Desnoyers, Director
Division of Environmental Remediation

TABLE OF CONTENTS

SECTION	PAGE
1: SUMMARY OF THE RECORD OF DECISION	1
2: SITE LOCATION AND DESCRIPTION	2
3: SITE HISTORY	3
3.1: Operational/Disposal History	3
3.2: Remedial History	3
4: ENFORCEMENT STATUS	7
5: SITE CONTAMINATION	3
5.1: Summary of the Site Investigation	3
5.2: Interim Remedial Measures	6
5.3: Summary of Human Exposure Pathways	6
5.4: Summary of Environmental Assessment	7
6: SUMMARY OF THE REMEDIATION GOALS AND PROPOSED USE OF THE SITE ..	8
7: SUMMARY OF THE EVALUATION OF ALTERNATIVES	9
7.1: Description of Remedial Alternatives	9
7.2: Evaluation of Remedial Alternatives	10
8: SUMMARY OF THE SELECTED REMEDY	12
Tables	
- Table 1: Nature and Extent of Contamination	13
- Table 2: Remedial Alternative Costs	14
Figures	
- Figure 1: Site Location Map	15
- Figure 2: Site Map	16
- Figure 3: Site Layout Map	17
- Figure 4: Excavation Limits	18
- Figure 5: Vertical Limit of Contamination	19
- Figure 6: Final Grading Plan	20
- Figure 7: Closeup of Northern End Buffer Zone	21
Appendices	
- Appendix A: Responsiveness Summary	A1 & A2
- Appendix B: Administrative Record	B2

Environmental Restoration
RECORD OF DECISION

Former Willow Island Restaurant
Canton, St. Lawrence County, New York
Site No. E645044
March 2007

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 a remedy for the Former Willow Island Restaurant Site.

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, petroleum releases from a former petroleum distribution system and automobile maintenance facility resulted in the disposal of hazardous substances, including volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs). These hazardous substances contaminated the soils and groundwater at the site and resulted in the following:

- a threat to human health associated with exposure to asbestos containing materials and petroleum products found in the on-site building and in subsurface soils and groundwater.
- an environmental threat associated with the known impacts to the soils and groundwater and the potential release to the adjacent surface waters of the Grasse River.

During the course of the investigation, certain actions known as interim remedial measures (IRMs) were undertaken at the Former Willow Island Restaurant 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/Alternative Report (SI/AR). The IRM undertaken at this site included an asbestos abatement program, building demolition, the excavation of petroleum contaminated soil and the collection of petroleum contaminated groundwater within the boundaries of the site.

Based on the implementation of the above IRM, 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. Institutional controls (IC) in the form of an

environmental easement (EE) will be implemented to address residual off-site soil contamination, use of groundwater, and future development on-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 is 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 0.69 acre site is located on the south side of West Main Street (a.k.a. US Route 11) in the Village of Canton, St. Lawrence County, New York (Figure 1). The site is situated in the central portion of Willow Island, bounded on the west and east sides by respective channels of the Grasse River. Main Street traverses the central portion of the island and represents the northern boundary of the site (Figure 2). The southerly portion of the site is a municipal park owned by the Village of Canton. Two bridges connect the island to US Route 11 from the west and Main Street to the east, which is the entrance into the Village of Canton.

The northern portion of the site, where the former building stood, is approximately level with US Route 11 (Figure 3). The site slopes to the east and west toward the channels of the Grasse River and south toward the Village Park. The Grasse River channels flow in a northwesterly direction around the site.

The material beneath the northern portion of the site in the vicinity of the former building was comprised of fill and debris, including old foundations, car parts, brick and ash up to twelve (12) feet below grade. From approximately thirteen (13) to twenty (20) feet below grade, the site is comprised of intermingled silts, clay, and gravel layers, which are located above the glacial till unit. The surrounding Grasse River channels are on top of the glacial till and bedrock. Groundwater flow is from the northern portion of the site toward the south with a varying southeastern and southwestern component.

SECTION 3: SITE HISTORY

3.1: Operational/Disposal History

Since the 1930s, multiple retail gasoline sales, automobile repair and service stations and automobile dealerships have occupied this site. The site was originally two separate parcels which were both occupied by an automobile repair and service stations. In 1958, the separate parcels were consolidated and the building on the easterly lot was burned. In 1963, the site was purchased by Texaco and the remaining structures were demolished and replaced with a new two-bay garage/gasoline station. The Texaco Station closed in 1982. From 1982 to 1996, the Willow Island Restaurant operated within the former on-site structure. Between 1997 and 2005, the building remained vacant. In 2004, St. Lawrence County took temporary ownership and applied to the NYSDEC for participation in the Environmental Restoration Program (ERP). The storage and distribution of petroleum products since the 1930s resulted in the release and contamination of soil

and groundwater. Poor housekeeping and leaking tanks, pumps and piping are the method by which the petroleum was released to the environment.

3.2: Remedial History

Between 1998 and 2004, several environmental investigations were conducted onsite. The purpose of these investigations were to delineate the extent of any soil or groundwater contamination from past operations. The following is a listing of the studies conducted:

- Subsurface Investigation and Remedial Planning Report, April 2004;
- Expanded Subsurface Investigation and Remedial Planning Report, February 16, 2004;
- Phase I/II Environmental Site Assessment, September 15, 1998;
- Phase I Environmental Site Assessment, formerly "The Cottage Restaurant" - Willow Island.

Twelve (12) groundwater monitoring wells were installed and forty-nine (49) soil borings were advanced during the course of these investigations. Sampling identified a significant mass of petroleum contaminated soil and groundwater beneath the site (Figure 3 and 4). The petroleum contamination was identified from four (4) feet to a depth of nineteen (19) feet below grade with the greatest depth at the northern portion of the site. The contamination narrowed at the southern portion of the property. However, contamination had migrated off the property onto the Village Park.

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

SECTION 5: SITE CONTAMINATION

Previous site investigations identified the nature and extent of contamination at the Site. In December of 2005, groundwater was sampled to verify that site conditions were still consistent with the past investigations. This data was evaluated and no significant changes in the nature and extent of groundwater contamination was found. Based on the completeness of the previous studies, the Interim Remedial Measure (IRM) was proposed.

5.1: Summary of the Site Investigation

During the course of the most recent (2005) site investigation, ten (10) of the twelve (12) groundwater monitoring wells were capable of yielding samples. The groundwater data was compared to the previous 2004 sampling effort conducted by Strategic Environmental and was found to be consistent. A predemolition asbestos survey was performed at the abandoned building to identify any Asbestos Containing Materials (ACM). Thirty-four soil samples were collected during the Interim Remedial Activities to document compliance with soil cleanup objectives. Visual inspection of the river bank was conducted to identify any evidence of contamination from the site into the Grasse River.

5.1.1: Standards, Criteria, and Guidance (SCGs)

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

- Groundwater, drinking water, and surface water 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 (Technical and Administrative Guidance Memorandum [TAGM] 4046; Determination of Soil Cleanup Objectives and Cleanup Levels.” and 6 NYCRR Subpart 376-6 - Remedial Program Soil Cleanup Objectives).

Based on the IRM/AAR and previous investigation 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 IRM/AAR.

5.1.2: Nature and Extent of Contamination

As described in the IRM/AAR, many soil and groundwater samples were collected to characterize the nature and extent of contamination. As seen in Figures 3 and 4, and 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 billion (ppb) for groundwater and parts per million (ppm) for soil.

Figures 3 and 4 and Table 1 summarizes the degree of contamination for the contaminants of concern and compares 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.

Waste Materials

ACM was identified in the on-site building during a predemolition survey. Non friable asbestos roofing was identified, which covered approximately 1,400 square feet. Approximately 90 square feet of asbestos containing window caulk/glaze was identified on the former restaurant building. During the abatement of the roofing material, an exhaust ventilation duct was found to contain approximately 6 linear feet of friable asbestos wrap. All ACM was identified and removed under the approval of the New York State Department of Labor. Waste identified during the IRM/AAR was addressed during the IRM, as described in Section 5.2

Surface Soil

Sidewalks, asphalt and the on-site building covered the majority of the property along Main Street. A vegetated slope was at the rear of the facility which transcended into the Village Park. No visual evidence of contamination was found on the surface soils and because all surface soils were excavated for disposal, no surface soil sampling was conducted before or after the IRM. Clean soils from a certified off-site source was brought in during the restoration. Topsoil and seed provided a vegetative cover over the majority of the site. The remainder of the site is covered with an asphalt parking lot.

Subsurface Soil

During the various phases of the previous investigation, forty-nine (49) Geoprobe soil borings were advanced. Subsurface soils were collected and analyzed. Based on the analysis, subsurface soils were found to be impacted with VOCs and SVOCs over the majority of the site. Figure 4 shows the extent of contamination that was predicted and subsequently found to be above TAGM 4046 soil cleanup objectives. The gasoline impacted soils existed from approximately thirteen (13) feet to nineteen (19) feet below grade in the northern portion of the site and from four (4) feet to eight (8) feet below grade at the southern end of the property. Contaminated debris and soil were found from near the ground surface to the heavily contaminated soils at depth. The upper layer of material was comprised of ash, lumber, lesser petroleum contaminated soil, auto parts and concrete. The readings taken from the photo-ionization detector (PID) were used as a field screening method to identify the limits of the IRM and followed up with the collection of confirmatory soil samples. Soils and related groundwater along US Route 11 are expected to attenuate and/or be removed at some future time during the reconstruction of the state highway. Any residual contamination found adjacent to or beneath US Route 11 is not expected to adversely impact the site and/or future use. Subsurface petroleum contaminated soils identified during the IRM/AAR was addressed during the IRM, as described in Section 5.2.

Groundwater

Based on investigations conducted at the site between 1998 and 2004, significant groundwater contamination was identified. Twelve (12) monitoring wells were originally installed on the site to characterize groundwater conditions. VOCs were found in all monitoring wells south of US Route 11. VOC contamination was significant (well above regulatory standards) in monitoring wells MW-5, MW-6 and MW-8. Lesser (slightly elevated above regulatory standards) levels of VOC contamination were found in MW-1, MW-3 and MW-4. VOCs included ethyl benzene (non-detect (ND) - 3000 ppb), m&p-xylene (ND - 9300 ppb), o-xylene (ND - 2400 ppb) and toluene (ND - 1100 ppb). Each of these compounds is a component of gasoline.

The SVOCs detected in groundwater included 2-methyl phenol (ND - 11ppb), Bis(2-Ethylhexyl) phthalate (ND- 96 ppb) and naphthalene (ND - 96 ppb). Naphthalene was the predominant SVOC and was detected in MW-1, MW-4, MW-5 and MW-8.

Groundwater flows generally to the south. However, a varied south, southeast flow has been demonstrated over the several monitoring periods (See Figure 3). Contaminated groundwater encountered during the IRM was removed for off-site treatment and disposal. Contaminated soil in the vicinity of historically contaminated monitoring wells was removed during the IRM. Confirmatory, post IRM soil sampling demonstrated that soil cleanup objectives were achieved in all areas except along US Route 11. It is believed that with the achievement of on-site soil cleanup objectives that on-site groundwater may be restored to or near to pre-release conditions. However, no post groundwater sampling was conducted.

Surface Water

No site-related surface water impacts were identified for sampling during the IRM/AAR. Inspection of the river bank was conducted to identify any staining, odors and/or evidence of contamination. No field indicators were found to support surface water sampling. In addition, the IRM achieved cleanup goals for the on-site soils, which were closest to the east and west branch of the Grasse River. The source of any contamination, which would have caused surface water contamination, was successfully removed. In addition, the source of groundwater contamination was successfully removed, and therefore, has reduced the potential for migration of contamination to the Grasse River. Therefore, no remedial alternatives need to be evaluated for surface water.

Sediments

No impacts of site-related sediment contamination of concern were identified for sampling during the IRM/AAR. Inspection of the river bank was conducted to identify any staining, odors and/or evidence of contamination. No field indicators were found to support sediment sampling. In addition, the IRM achieved cleanup goals for the on-site soils, which were closest to the east and west branch of the Grasse River. The source of any contamination, which would have caused sediment contamination, was successfully removed. In addition, the source of groundwater contamination was successfully removed, and therefore, has reduced the potential for migration of contamination to the Grasse River. Therefore, no remedial alternatives need to be evaluated for sediment.

Soil Vapor/Sub-Slab Vapor/Air

No soil vapor sampling was conducted during the IRM/AAR. All on-site contaminated soils were removed during the IRM and soil cleanup objectives were achieved. However, VOCs may still be present in the groundwater, therefore the potential for soil vapor intrusion exists in any future buildings to be constructed on-site. The proposed remedial alternative provides institutional controls to evaluate the potential for soil vapor contamination. Soil Vapor is not a current issue because there are no structures currently on-site.

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/AR. Based on previous investigations, a large mass of petroleum contaminated soils and groundwater were identified beneath the site (Figure 3 and 4). In addition, ACM was identified in the on-site building, which was

scheduled for demolition in order to gain access to the contaminated soil and groundwater. Camp Dresser and McKee (CDM) evaluated the existing data and determined that the investigations conducted to date were adequate to support the implementation of the following IRM elements.

The IRM contained the following elements:

- Asbestos survey and abatement program.
- Demolition and off-site disposal of the on-site building at an approved solid waste disposal facility.
- Excavation of all petroleum contaminated soils found above TAGM 4046 within the limits of the site and the boundaries established by the New York State Department of Transportation (Figure 7)
- Handling and disposing of all contaminated water collected during the excavation.
- Confirmation sampling to show compliance with the soil cleanup objectives.
- Restoration of the site, including backfill, grading, topsoil, seeding, and reestablishment of the on-site road and parking lot.

An IRM Work Plan was developed and approved on February 27, 2006 for implementation. During the week of March 13, 2006, the contractor (OPTECH) mobilized to the site in preparation of the IRM work.

On March 20 and 21, 2006, the asbestos was abated from the on-site building and taken offsite for proper disposal. ACM was removed from the roof of the building, window glazing and from a heating duct. A total of 3.55 tons of ACM was transported to the St. Lawrence County Transfer Station for disposal.

On March 21, 2006, demolition of the building was conducted. A total of 540 tons of materials was transported to the Solid Waste Management Landfill in Rodman, Jefferson County, New York.

Between March 24, 2006 and April 17, 2006, a total of 12,019 tons of petroleum contaminated soils were excavated and transported to Clinton County Landfill located in Morrisonville, New York. The excavation was conducted in grids utilizing tracked excavators. As work progressed, verification sampling was conducted in predetermined 30 foot x 30 foot grids to determine if soil cleanup goals were achieved. The limits of the excavation are shown on Figure 4.

Between March 24, 2006 and April 17, 2006, a total of 41,727 gallons of petroleum contaminated groundwater was removed from within excavation areas for treatment at the Watertown Wastewater Treatment Plant.

To document the effectiveness of the cleanup, the site was divided into 22 grids, each 30 feet x 30 feet (Figure 5). Side wall and bottom soil samples were obtained from each grid and the analytical results were compared to TAGM 4046. All samples met the soil cleanup objectives, except those located along US Route 11. The northern edge of the excavation located off-site along US Route 11 was established by the New York State Department of Transportation (NYSDOT). The boundary is based on a forty (40) foot setback from the center of the US Route 11 highway. The setback is established so earthwork or intrusive excavations along the highway does not undermine the road, the bridge supports, the sidewalk and/or the underground utilities. A post excavation survey (Figure 4 and 7) has shown that the soil removal actually extended roughly two (2) to three (3) feet into the NYSDOT's forty (40) foot set back. Therefore, the IRM has successfully removed all contaminated soils from the site and the residual contamination exists two (2) to three (3) feet off site on to the NYSDOT set back.

The site was backfilled, graded, covered with top soil and seeded (Figure 6). The driveway and parking lot to the Village Park were reestablished and new guardrails were installed to replace the previous railing system. Grass has been established and the site is being used by the public.

The NYSDOT will be provided all relevant reports and data to identify the location and requirements to handle the contaminated soils in the NYSDOT right-of-way during future repairs and/or replacements of this section of the highway

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 7.2 of the IRM/AAR.

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.

Potential pathways of exposure to site contaminants are discussed below:

Subsurface Soil

There are currently no complete exposure pathways for subsurface soil. Direct contact or ingestion of the remaining subsurface soil located off-site in the NYSDOT set back, contaminated with petroleum-related VOCs and SVOCs, are potential exposure pathways for future workers who may contact subsurface soil during future remedial or construction work. Inhalation of contaminated vapor and/or particulates remaining in this off-site location also presents a potential exposure pathway for future workers. Site visitors, trespassers and nearby community residents could potentially be exposed to contaminants in subsurface soil through inhalation of dusts and/or vapors generated during future excavation/construction work within the NYSDOT set back.

The proposed remedy will minimize potential exposure through notification provided to the NYSDOT documenting the location and handling procedures of the remaining contaminated soil within the NYSDOT right-of-way.

Groundwater

The site and surrounding area are served by public water; therefore, exposure to groundwater contaminants via ingestion or direct contact is unlikely. Under the proposed remedy, an institutional control (e.g., environmental easement) will be imposed to prevent the use of groundwater as a potable source without treatment as determined by NYSDOH.

Soil Vapor

Volatile petroleum-related chemicals which may potentially be present in on-site groundwater can be a source of soil vapor contamination and can potentially affect the indoor air quality of future on-site structures through the process of vapor intrusion.

The proposed remedy will include implementation of institutional controls, which will require an evaluation of the potential for soil vapor intrusion for any buildings developed on the site, including provisions for mitigation of any impacts identified.

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.

Based on investigations conducted at the site between 1998 and 2004, significant groundwater and soil contamination was identified. Twelve (12) groundwater monitoring wells were originally installed on the site to characterize groundwater conditions. VOCs were found in all monitoring wells south of US Route 11. VOCs contamination was significant in MW-5, MW-6 and MW-8. Lesser levels of VOCs contamination were found in MW-1, MW-3 and MW-4. VOCs included ethyl benzene (ND - 3000 ppb), m&p-xylene (ND - 9300 ppb), o-xylene (ND - 2400) and toluene (ND - 1100 ppb). Each of these compounds is a component of gasoline.

The SVOCs detected in groundwater included 2-methyl phenol (ND - 11 ppb), Bis(2-Ethylhexyl) phthalate (ND - 96 ppb) and naphthalene (ND - 96 ppb). Naphthalene was the predominant SVOC and was detected in MW-1, MW-4, MW-5 and MW-8.

During the various phases of the investigation, forty-nine (49) soil borings were advanced. Subsurface soils were collected and analyzed. Based on the analysis, subsurface soils were found to be impacted with VOCs and SVOCs over the majority of the site. Figure 4 shows the extent of contamination that was predicted and subsequently found to be above TAGM 4046 soil cleanup objectives.

SECTION 6: SUMMARY OF THE REMEDIATION GOALS, SELECTED REMEDY, 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 ACM, which was found in the building. All ACM was identified, sampled and abated. All materials were taken offsite for proper disposal.
- exposures of persons at or around the site to petroleum contamination found in on-site subsurface soil and groundwater.
- the release of contaminants from soil into groundwater that may create exceedances of groundwater quality standards; and
- the release of contaminants from site into the surface waters of the Grasse River.

The Department believes that the IRM has accomplished these remediation goals.

The main SCGs applicable to this project are as follows:

- ambient groundwater quality standards
- soil cleanup objectives

The following elements of the IRM already completed have achieved the remediation goals and satisfy SCGs for the site:

- Asbestos abatement
- Demolition and off-site disposal of the on-site building in a secure landfill
- Excavation of all petroleum contaminated soils found above TAGM 4046 within the limits of the site and the boundaries established by the New York State Department of Transportation
- Handling and disposing of all contaminated water collected during the excavation
- Confirmation sampling to show compliance with the soil cleanup objectives

Based on the results of the investigations at the site, the IRM that has been performed, and the evaluation presented here, the Department has selected No Further Action as the preferred alternative for the site. The basis for this proposal is the Departments conclusion that No Further Action will be protective of human health and the environment and will satisfy all SCGs as described above. Overall protectiveness is achieved through meeting the remediation goals listed above.

Therefore, the Department concludes that No Further Action is needed, provided that the following institutional controls are implemented as listed below:

- The property owner will provide a periodic certification which will certify that the institutional controls put in place are unchanged from the previous certification and nothing has occurred that will impair the ability of the control to protect public health or the environment.
- Imposition of an institutional control in form of an environmental easement that will: (a) limit the use and development of the property to restricted residential and/or active recreational uses only; (b) restrict use of groundwater as a source of potable or process water without necessary water quality treatment as determined by the State Health Department; (c) require that an evaluation of soil vapor be conducted or the implementation of a vapor system for any buildings developed on the site, including provision for mitigation of any impacts identified and, (d) require the property owner to complete and submit to the NYSDEC a periodic certification.

SECTION 7: 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 activities were conducted at the site:

- Repositories for documents pertaining to the site were established.
- A Fact Sheet was issued at the start of field work to provide notice to all interest parties what work was going to be conducted and to provide project contacts.
- A public contact list, which included nearby property owners, elected officials, local media, and other interested parties, was established
- A public availability session was held on January 30, 2007 to discuss the PRAP with any interested parties and to answer any questions.
- The PRAP was issued for a 45 public comment period. No comments were received during this period which was from January 22, 2007 to March 8, 2007.

TABLE 1
Nature and Extent of Contamination
September 1998 - April 2006

SUBSURFACE SOILS	Contaminants of Concern	Concentration Range Detected (ppm)^a	SCG^b (ppm)^a	Frequency of Exceeding SCG
Volatile Organic Compounds (VOCs)	n-Butylbenzene	ND-14	10	1 out of 15
	Ethyl benzene	ND - 47	5.5	7 out of 15
	Isopropyl benzene	ND - 38	2.3	6 out of 15
	4-Isopropyl toluene	ND - 18	10	1 out of 15
	MTBE	ND - 1.2	0.120	1 out of 15
	Naphthalene	ND - 52	13	3 out of 15
	N-Propylbenzene	ND - 52	3.7	3 out of 15
	Toluene	ND - 46	1.5	3 out of 15
	1,2,4-Trimethylbenzene	ND - 110	10	6 out of 15
	1,3,5-Trimethylbenzene	ND - 55	3.3	6 out of 15
	Xylene	ND - 230	0.120	9 out of 15

GROUNDWATER	Contaminants of Concern	Concentration Range Detected (ppb)^a	SCG^b (ppb)^a	Frequency of Exceeding SCG
Volatile Organic Compounds (VOCs)	Benzene	ND - 20	1	2 out of 12
	Ethyl benzene	ND - 3000	5	6 out of 12
	Xylene	ND - 7000	5	5 out of 12
	Toluene	ND - 1100	5	4 out of 12
Semivolatile Organic Compounds (SVOCs)	Bis(2-Ethylhexyl) phthalate	ND - 96	50	1 out of 12
	Naphthalene	ND - 96	10	3 out of 12
	2-methyl phenol	ND - 11	5	1 out of 12

POST IRM SOIL SAMPLING	Contaminants of Concern	Concentration Range Detected (ppm)^a	SCG^b (ppm)^a	Frequency of Exceeding SCG
Volatile Organic Compounds (VOCs)	Acetone	ND- 0.19	0.11	2 out of 34
	Ethyl benzene	ND - 17	5.5	2 out of 34
	m&p Xylene	ND - 77	1.2	3 out of 34
	O-Xylene	ND - 30	1.2	3 out of 34
	Toluene	ND - 7.2	1.5	1 out of 34

^a ppb = parts per billion, which is equivalent to micrograms per liter, ug/L, in water;
 ppm = parts per million, which is equivalent to milligrams per kilogram, mg/kg, in soil;
 ug/m³ = micrograms per cubic meter

^b SCG = standards, criteria, and guidance values;
 TAGM 4046 Soil Cleanup Objectives - Soil
 6NYCRR Part 703 Groundwater Quality Standards

^c LEL = Lowest Effects Level and SEL = Severe Effects Level. A sediment is considered to be contaminated if either of these criteria is exceeded. If both criteria are exceeded, the sediment is severely impacted. If only the LEL is exceeded, the impact is considered to be moderate.

^c ER-L = EffectRange - Low and ER-M = Effect Range - Moderate. A sediment is considered to be contaminated if either of these criteria is exceeded. If both criteria are exceeded, the sediment is severely impacted. If only the ER-L is exceeded, the impact is considered to be moderate.

ND = Non Detected - The chemical compound was not detected at a level above the detection limit.

Table 2
Remedial Alternative Costs

Remedial Alternative	Capital Cost (\$)	Annual Costs (\$)	Total Present Worth (\$)
No Action	0	0	0

APPENDIX A

Responsiveness Summary

RESPONSIVENESS SUMMARY

Former Willow Island Restaurant
Canton, St. Lawrence County, New York
Site No. E645044
March 2007

The Proposed Remedial Action Plan (PRAP) for the Former Willow Island Restaurant 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 January 22, 2007. The PRAP outlined the no further action proposal for the Former Willow Island Restaurant 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 availability session was held on January 30, 2007, which included a presentation of the IRM/AAR as well as a discussion of the no further action PRAP. The session was attended by:

1. Tom Cutter, Grasse River Heritage Association
2. Peter Van de Water, Grasse River Heritage Association
3. Nathan Freeman, NYSDOH
4. Tamara Girard, NYSDOH
5. Todd Furnia, CDM
6. John Montan, St. Lawrence County Planning Office
7. Peter Ouderkirk, NYSDEC

The group discussed the following topics:

Question 1: What is the proposed future use of the site?

Response 1: The site use is limited to restricted residential and/or active recreational uses only. This will allow for the development of the site as a park and the construction of the proposed amphitheater. The restricted residential is the land use category which shall only be considered when there is a common ownership or a single owner/managing entity of the site. Restricted residential use shall at a minimum, include restrictions which prohibit: 1) any vegetable gardens on a site, although community vegetable gardens may be considered with Department approval; and 2) single family housing; and includes active recreational uses, which are public uses with a reasonable potential for soil contact.

Question 2: What is the timing of the Record of Decision?

Response 2: The Record of Decision will be issued shortly after the public comment period ends. The public comment period ends on March 8, 2007. The Record of Decision is expected to be finalized by March 30, 2007.

Question 3: When is the release letter expected to be issued?

Response 3: The release letter should be issued within 90 days from the signing of the Record of Decision.

Question 4: When will the site be ready for redevelopment?

Response 4: The site should be available once the release letter is issued.

No comments or concerns were raised which required modification of the Proposed Remedial Action Plan or explanation in a Responsiveness Summary. The group was very complimentary of the project and the achieved outcome.

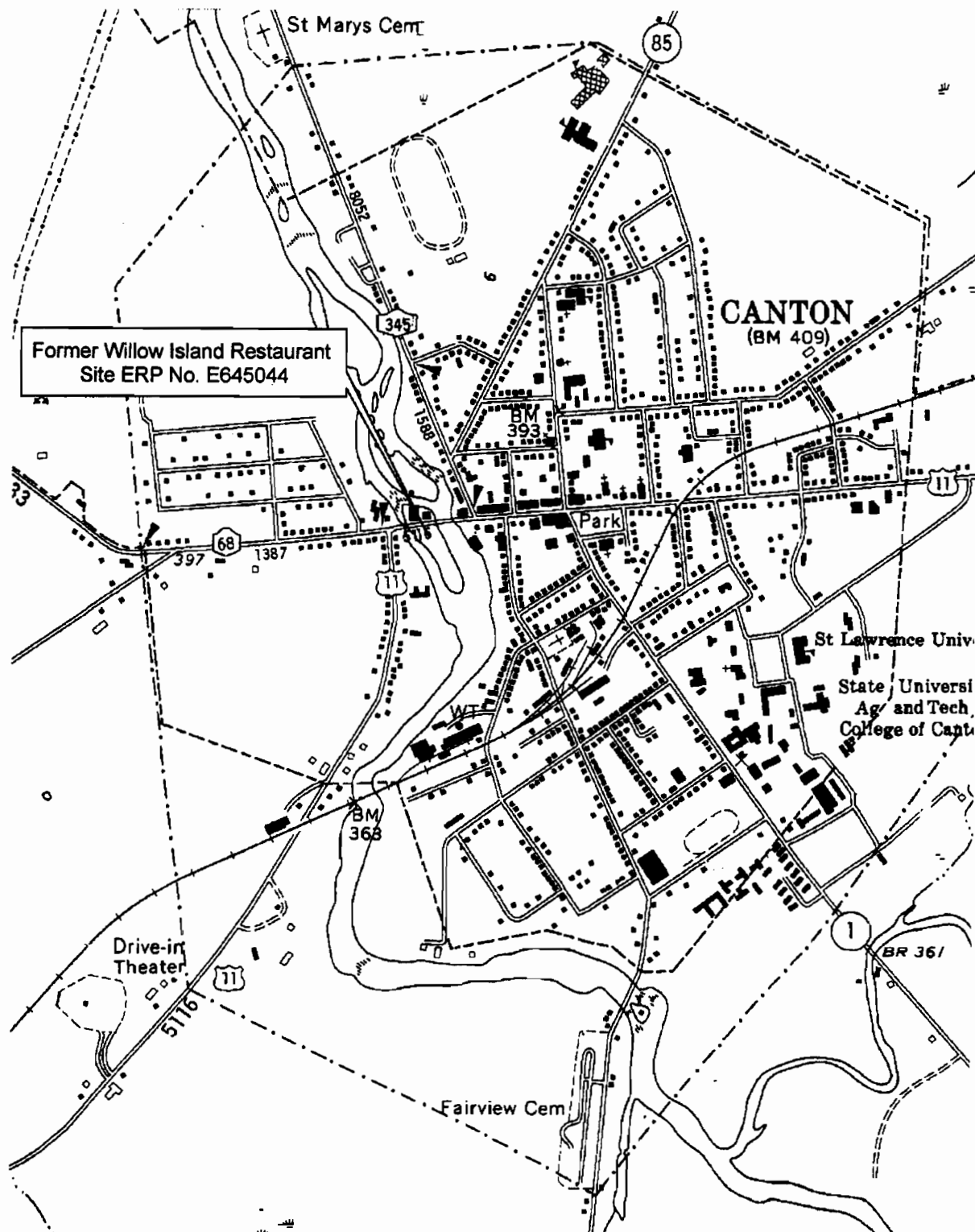
The public comment period for the PRAP ended on March 8, 2007

APPENDIX B

Administrative Record

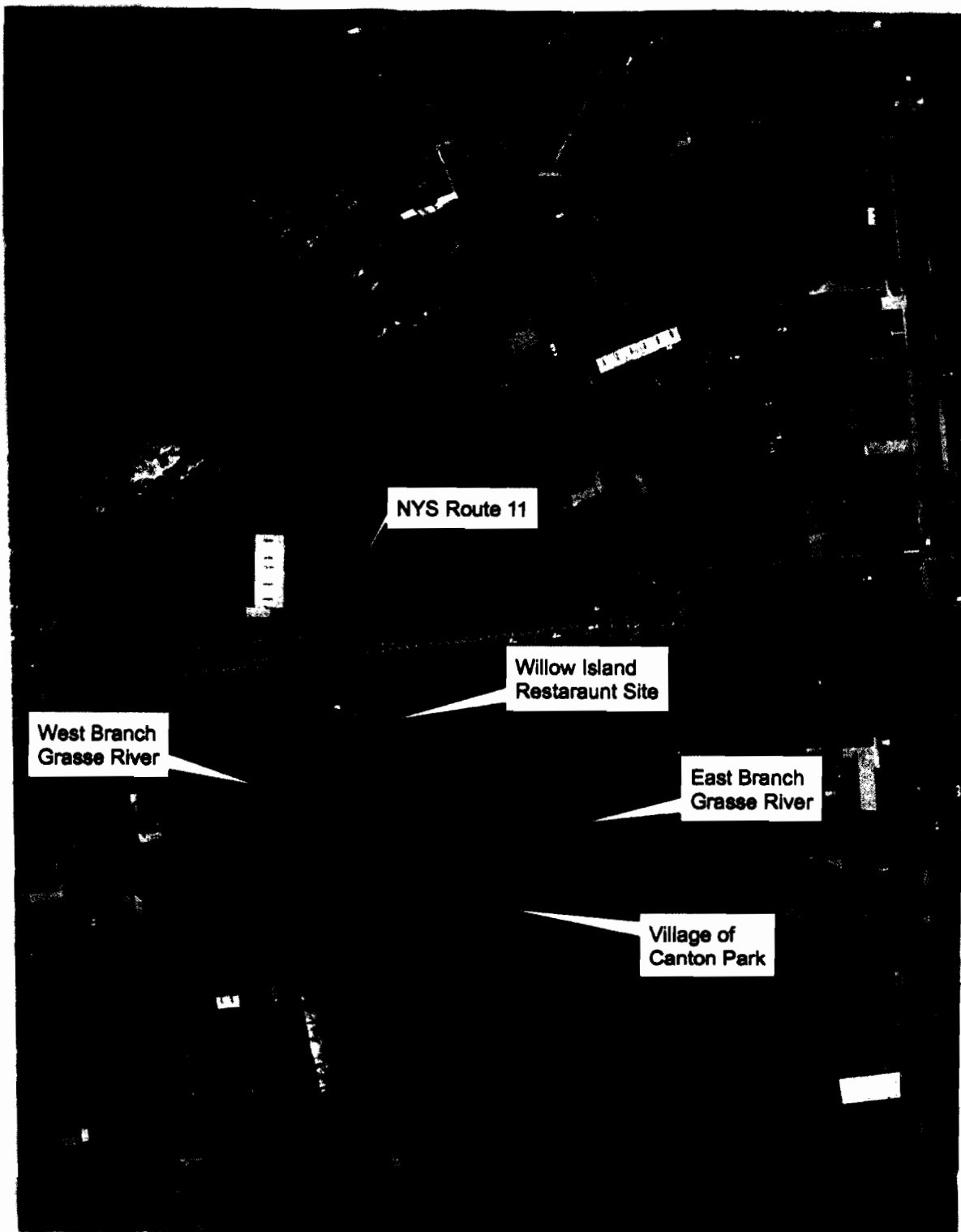
Administrative Record
Former Willow Island Restaurant
Canton, St. Lawrence County, New York
Site No. E645044
March 2007

1. The "Interim Remedial Measures / Alternative Analysis Report", September 8, 2006, prepared by Camp Dresser and McKee (CDM).
2. The "Remedial Investigation / Alternative Analysis Work Plan, February 2006, prepared by CDM.
3. The Proposed Remedial Action Plan, February 2006, prepared by NYSDEC.



**FORMER WILLOW ISLAND RESTAURANT
ERP NO. 645044, CANTON, ST. LAWRENCE COUNTY**

**FIGURE 1
SITE LOCATION MAP**



**FORMER WILLOW ISLAND RESTAURANT
ERP NO. 645044, CANTON, ST. LAWRENCE COUNTY**

**FIGURE 2
SITE DETAIL MAP**

