

Department of Environmental Conservation

**Division of Environmental Remediation**

**Environmental Restoration  
Record of Decision  
37 Commonwealth Drive Site  
Town of Babylon, Suffolk County, New  
York  
Site Number E152195**

**February 2008**

New York State Department of Environmental Conservation  
ELIOT SPITZER, *Governor*      ALEXANDER B. GRANNIS, *Commissioner*

# **DECLARATION STATEMENT ENVIRONMENTAL RESTORATION RECORD OF DECISION**

## **37 Commonwealth Drive Environmental Restoration Site Town of Babylon, Suffolk County, New York Site No. E152195**

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

The Record of Decision (ROD) presents the selected remedy for the 37 Commonwealth Drive 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 37 Commonwealth Drive 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 releases of hazardous substances from this site, if not addressed by implementing the response action selected in this ROD, presents a current or potential threat to public health and/or the environment.

### **Description of Selected Remedy**

Based on the results of the Site Characterization for the 37 Commonwealth Drive site and the criteria identified for evaluation of alternatives, the Department has selected excavation and off-site disposal of contaminated soil. The components of the remedy are as follows:

Excavation of up to two feet of surface soils contaminated at levels above the residential soil cleanup objectives. The excavated soil would be disposed of in accordance with the specific requirements set by the receiving off-site facility. If backfill is needed to achieve proper post-excavation grading, the backfill would be clean soil defined as soil with no analyte in exceedance of NYSDEC Subpart 375-6.8(b) soil cleanup objectives for residential use. For cost estimation purposes, it is assumed that most of the site is contaminated with soil exceeding residential soil cleanup objectives. Up to 4,200 cubic yards of soil would be excavated and transported off-site.

Removal of the surface soil as specified above should immediately eliminate any exposure to on-site contamination sources.

**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.

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Date

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Dale A. Desnoyers, Director  
Division of Environmental Remediation

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# **Environmental Restoration RECORD OF DECISION**

**37 Commonwealth Drive Site  
Town of Babylon, Suffolk County, New York  
Site No. E152195  
January 2008**

## **SECTION 1: SUMMARY OF THE RECORD OF DECISION**

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), has selected this remedy for the 37 Commonwealth Drive. 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, unregulated dumping has resulted in the disposal of hazardous substances, including semi-volatile organic compounds (SVOCs) and metals. These hazardous substances have contaminated the soil at the site, and have resulted in a threat to human health associated with potential exposure to SVOCs.

To eliminate or mitigate these threats, the Department has selected excavation and off-site disposal of contaminated soil.

The selected remedy, discussed in detail in Section 8, 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 1.2-acre site is located at 37 Commonwealth Drive in the hamlet of Wyandanch, Town of Babylon in Suffolk County. The site is located in an suburban area, as shown in Figure 1. The property is an irregularly shaped parcel measuring approximately 380 feet in length along the Commonwealth Drive, and 150 feet in depth. The site is bounded by Commonwealth Drive to the south, Doe Street to the east, and Woodland Road to the north. Neighboring properties abut the site to the west and northwest. This area is served by a public water supply.

The topography of the site and surrounding properties is relatively level at approximately 54.1 feet above mean sea level (msl). The topography slopes gently to the south in the direction of the Great South Bay. The Carlls River is located approximately 2500 feet east of the site.

The following New York State Inactive Hazardous Waste Disposal Site is located within one mile of the 37 Commonwealth Drive property:

Jameco Industries (NYS Site No: 1-52-006) - 248 Wyandanch Avenue, approximately 1 mile south of the site.

The groundwater table is between 5 - 7 feet below the ground surface (bgs). The general groundwater flow direction is towards the east of the site. The discontinuous fill layer observed at the site predominantly consists of brown sand, silt, and gravel mixed with some amounts of brick and organic material.

### **SECTION 3: SITE HISTORY**

#### **3.1: Operational/Disposal History**

Based on aerial photographs taken during the 1950s, the site was heavily vegetated with a surface water body of approximately 300 feet along the northern border. Between 1956 and 1966, Commonwealth Drive was constructed and the surface water body was filled in. There is no indication that the site has been built on, but there is a documented history of unregulated dumping.

#### **3.2: Remedial History**

The Town of Babylon had cleaned up the trash found on the site in December 1993 and February 1997 in response to public complaints.

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

## **SECTION 5: SITE CONTAMINATION**

The Department has recently completed a site characterization 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 site characterization was to define the nature and extent of any contamination resulting from previous activities at the site. The site characterization was conducted between March 2005 and December 2005. The field activities and findings of the investigation are described in the site characterization report.

The following activities were conducted during the site characterization:

- § Research of historical information;
- § Collection and analysis of ten (10) surface soil samples;
- § Collection and analysis of fifteen (15) sub-surface soil samples, and
- § Collection and analysis of fourteen (14) groundwater samples at three different depths.

#### **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 were 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 6 NYCRR Part 375 Environmental Remediation Programs "Subpart 375-6.8(b), Remedial Program Soil Cleanup Objectives for Residential Use".

Based on the site characterization results, in comparison to the SCGs and potential public health and environmental exposure routes, certain media and areas of the site require remediation. These are summarized in Section 5.1.2. More complete information can be found in the site characterization 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 site characterization report, many surface soils, subsurface soils and groundwater 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 in the surface soils are semivolatile organic compounds (SVOCs) and inorganics (metals). No

subsurface soil samples had contaminants detected at concentrations exceeding their SCGs. Volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs) and inorganic compounds were detected at fifteen (15) feet and twenty-five (25) feet below the water table. However, groundwater samples taken from the groundwater table only showed concentrations of inorganic compounds exceeding their SCGs. For comparison purposes, where applicable, SCGs are provided for each medium.

Chemical concentrations are reported in parts per billion (ppb) for water and parts per million (ppm) for soil.

Table 1 summarizes the degree of contamination for the contaminants of concern in soil and groundwater 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.

### **Surface Soil**

Ten surface soil samples were collected at ten locations throughout the site at a depth between 0 - 2 inches below the ground surface. The surface soil samples were analyzed for VOCs, SVOCs, PCBs and metals. No VOCs and PCBs were detected above their SCGs in the surface soil samples. The exceedances for surface soil are shown in Figure 2.

One SVOC, benzo(b)fluoranthene, was detected above the SCG at location SS-5. The concentrations for benzo(b)fluoranthene ranged from 0.1 ppm to 1.6 ppm.

Three metals were detected above their SCGs across the site. Cadmium concentrations ranged from 0.02 ppm at SS-1 to 3.4 ppm at SS-5. Lead concentrations ranged from 23 ppm at SS-1 to 1080 ppm at SS-5. Manganese concentrations ranged from 31 ppm at SS-1 to 2840 ppm at SS-5.

Surface soil contamination identified during the site characterization will be addressed in the remedy selection process.

### **Subsurface Soil**

Fourteen subsurface soil samples were collected at fourteen locations throughout the site at a depth between 0 - 4 feet below the ground surface. The subsurface soil samples were analyzed for VOCs, SVOCs, PCBs and metals. No VOCs, SVOCs, PCBs or metals were detected above their SCGs in the subsurface soil samples. These results are consistent with the site use as a illegal dumping area since most of the contamination is found in the surface soils.

No site-related subsurface soil contamination of concern was identified during the site characterization. Therefore, no remedial alternatives need to be evaluated for subsurface soil.

### **Groundwater**

The groundwater sampling points were co-located with the sub-surface soil sampling points. Groundwater samples were taken from three depths at each of the fourteen locations. The depths were 5, 15 and 25 feet below the groundwater table. The groundwater samples were analyzed for VOCs, SVOCs and metals. The metals analysis were based on unfiltered samples and, as such, their analysis values might be elevated since they include undissolved suspended sediment.

For VOCs, only methyl-tertiary-butyl ether (MTBE) was detected above the SCGs at a level of 20.2 ppb at location SB-5 in the samples collected from 5 feet below the groundwater table. Benzene, isopropylbenzene and MTBE were detected above their SCGs in samples collected from 15 feet below the groundwater table. Concentrations of benzene ranged from non-detect (ND) to 0.84 ppb. Concentrations of isopropylbenzene ranged from ND to 17 ppb. Concentrations of MTBE ranged from 0.31 ppb to 22.9 ppb. At 25 feet below the water table, 1,4-dichlorobenzene, MTBE and toluene were detected above their SCGs. Concentrations of 1,4-dichlorobenzene ranged from ND to 9.21 ppb. Concentrations of MTBE ranged from ND to 78.6 ppb. Concentrations of toluene ranged from ND to 125 ppb. This information has been forwarded to the DEC Region 1 Spill Response Unit for follow-up.

No SVOCs were detected above the SCGs in the samples collected from 5 feet or 15 feet below the groundwater table. At 25 feet below the water table, phenol, 4-methylphenol and 2,4-dimethylphenol were detected above their SCGs. Concentrations of phenol ranged from ND to 4 ppb. Concentrations of 4-methylphenol ranged from ND to 74 ppb. Concentrations of 2,4-dimethylphenol ranged from ND to 3 ppb.

Of the four metals that were detected in the surface soil samples above their SCGs, i.e. cadmium, copper, lead and manganese, only lead and manganese were detected above their groundwater SCGs at 5 feet below the groundwater table. Concentrations of lead ranged from ND to 40 ppb. Manganese concentrations ranged from 178 ppb to 2400 ppb. At 15 feet below the groundwater table, lead and manganese were again detected out of the four metals that were detected in the surface soil samples above their SCGs. Lead concentrations ranged from 6 ppb to 32 ppb. Manganese concentrations ranged from 374 ppb to 13100 ppb. At 25 feet below the groundwater table, only manganese were detected above the SCG out of the four metals that exceeded their SCGs in the surface soils. Manganese concentrations ranged from 1320 ppb to 15500 ppb. For a complete listing of all metals exceedances found in the groundwater, please refer to Table 1.

Since no VOCs, SVOCs, or metals were detected above their SCGs for residential use in the subsurface soil samples, the exceedances observed in the groundwater results could be due to an off-site source and/or from a naturally occurring source. Therefore, no remedial alternatives need to be evaluated for groundwater.

## **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 site characterization. There were no IRMs performed at this site during the site characterization.

### **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. 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.

Present records indicated that the neighborhood surrounding the site is connected to the public water supply. As such, there is no exposure to the SVOCs and/or metals present in the groundwater. However, if a shallow well were to be installed on-site, users could be exposed to the groundwater contaminants through ingestion, inhalation, and direct contact. Persons who come into contact with the surface soil could be exposed to the SVOCs and/or metals through ingestion. Also, dust generated from the surface soil could potentially expose the SVOCs and/or metals contamination to an individual through inhalation.

### **5.4: Summary of Environmental Assessment**

This section summarizes the assessment of existing and potential future environmental impacts presented by the site. 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.

The site characterization results did not indicate any on-site related groundwater contamination. Hence, there is no impact to the fish and/or wildlife receptors.

## **SECTION 6: SUMMARY OF THE REMEDIATION GOALS AND 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. The subject site may be temporarily utilized for municipal parking. The future use of the site will likely involve development of a mixed land use; commercial and residential. Currently, the vacant land is zoned E Business.

The remediation goals for this site are to eliminate or reduce to the extent practicable:

- § exposures of persons at or around the site to SVOCs and metals in the surface soils;
- § the release of contaminants from surface soil into groundwater that may create exceedances of groundwater quality standards; and

Further, the remediation goals for the site include attaining to the extent practicable:

- § The Department’s 6 NYCRR Part 375 Environmental Remediation Programs “Subpart 375-6.8(b), Remedial Program Soil Cleanup Objectives for Residential Use”.

**SECTION 7: SUMMARY OF THE EVALUATION OF ALTERNATIVES**

The selected remedy must be protective of human health and the environment, be cost-effective, comply with other statutory requirements.

A summary of the remedial alternatives that were considered for this site is discussed below. The present worth represents the amount of money invested in the current year that would be sufficient to cover all present and future costs associated with the alternative. This enables the costs of remedial alternatives to be compared on a common basis.

**7.1: Description of Remedial Alternatives**

The following potential remedies were considered to address the contaminated surface soil at the site.

**Alternative 1: No Action**

*Present Worth:* .....\$0  
*Capital Cost:* .....\$0

The No Action Alternative is evaluated as a procedural requirement and as a basis for comparison. It requires continued monitoring only, allowing the site to remain in an unremediated state. This alternative would leave the site in its present condition and would not provide any additional protection to human health or the environment.

**Alternative 2: Limited Excavation of Contaminated Soil**

*Present Worth:* .....\$300,000  
*Capital Cost:* .....\$300,000

During the targeted site assessment conducted between March 2005 and December 2005, only limited soil sampling was conducted. In order to fully define the extent of contamination, surface soil and subsurface soil samples would be collected. Based on this sampling, areas of the site with contaminants exceeding NYSDEC Subpart 375-6.8(b) residential soil cleanup objectives would be excavated and disposed off-site at a permitted facility.

For cost estimation purposes, it is assumed that about half the site would be contaminated with concentrations exceeding residential soil cleanup objectives. If it is further assumed that top two feet of the contaminated area, approximately 2,000 cubic yards, would be excavated and disposed off-site in a permitted facility.

If backfill is needed to achieve proper post-excavation grading, the backfill would constitute soil with no analyte in exceedance of NYSDEC Subpart 375-6.8(b) soil cleanup objectives for residential use.

A remedial action work plan would be developed to address the specifics of the excavation like dust control, excavation profile, staging set-up and erosion control. This project is scheduled to be completed in 1 year from the record of decision (ROD) approval date.

### **Alternative 3: Excavation and Off-Site Disposal of Contaminated Soil**

*Present Worth:* .....\$350,000  
*Capital Cost:* .....\$350,000

This alternative would consist of excavation of up to two feet of surface soils contaminated at levels above the residential soil cleanup objectives. The excavated soil would be disposed of in accordance with the specific requirements set by the receiving off-site facility. If backfill is needed to achieve proper post-excavation grading, the backfill would be clean soil defined as soil with no analyte in exceedance of NYSDEC Subpart 375-6.8(b) soil cleanup objectives for residential use. For cost estimation purposes, it is assumed that most of the site is contaminated with soil exceeding residential soil cleanup objectives. Up to 4,200 cubic yards of soil would be excavated and transported off-site. Removal of the surface soil as specified above should immediately eliminate any exposure to on-site contamination sources.

A remedial action work plan would be developed to address the specifics of the excavation like dust control, excavation profile, staging set-up and erosion control. This project is scheduled to be completed in one year from the record of decision (ROD) approval date.

## **7.2 Evaluation of Remedial Alternatives**

The criteria to which potential remedial alternatives are compared are defined in 6 NYCRR Part 375, which governs the remediation of environmental restoration projects in New York State.

The first two evaluation criteria are termed “threshold criteria” and must be satisfied in order for an alternative to be considered for selection.

1. Protection of Human Health and the Environment. This criterion is an overall evaluation of each alternative’s ability to protect public health and the environment.
2. Compliance with New York State Standards, Criteria, and Guidance (SCGs). Compliance with SCGs addresses whether a remedy will meet environmental laws, regulations, and other standards and criteria. In addition, this criterion includes the consideration of guidance which the Department has determined to be applicable on a case-specific basis.

The next five “primary balancing criteria” are used to compare the positive and negative aspects of each of the remedial strategies.

3. Short-term Effectiveness. The potential short-term adverse impacts of the remedial action upon the community, the workers, and the environment during the construction and/or implementation are evaluated. The length of time needed to achieve the remedial objectives is also estimated and compared against the other alternatives.

4. Long-term Effectiveness and Permanence. This criterion evaluates the long-term effectiveness of the remedial alternatives after implementation. If wastes or treated residuals remain on-site after the selected remedy has been implemented, the following items are evaluated: 1) the magnitude of the remaining risks, 2) the adequacy of the engineering and/or institutional controls intended to limit the risk, and 3) the reliability of these controls.

5. Reduction of Toxicity, Mobility or Volume. Preference is given to alternatives that permanently and significantly reduce the toxicity, mobility or volume of the wastes at the site.

6. Implementability. The technical and administrative feasibility of implementing each alternative are evaluated. Technical feasibility includes the difficulties associated with the construction of the remedy and the ability to monitor its effectiveness. For administrative feasibility, the availability of the necessary personnel and materials is evaluated along with potential difficulties in obtaining specific operating approvals, access for construction, institutional controls, and so forth.

7. Cost-Effectiveness. Capital costs and annual operation, maintenance, and monitoring costs are estimated for each alternative and compared on a present worth basis. Although cost-effectiveness is the last balancing criterion evaluated, where two or more alternatives have met the requirements of the other criteria, it can be used as the basis for the final decision. The costs for each alternative are presented in Table 2.

This final criterion is considered a “modifying criterion” and is taken into account after evaluating those above. It is evaluated after public comments on the Proposed Remedial Action Plan have been received.

8. Community Acceptance - Concerns of the community regarding the site characterization reports and the PRAP have been evaluated. The responsiveness summary (Appendix A) presents the public comments received and the manner in which the Department addressed the concerns raised. In general, the public comments received were supportive of the selected remedy. Most comments were received, however, pertaining to cleanup logistics.

## **SECTION 8: SUMMARY OF THE SELECTED REMEDY**

Based on the Administrative Record (Appendix B) and the discussion presented below, the Department has selected Alternative 3 - Excavation and Off-Site Disposal of Contaminated Soil - as the remedy for this site. The elements of this remedy are described at the end of this section.

The selected remedy is based on the results of the site characterization and the evaluation of alternatives.

Alternative 3 is selected because, as described below, it satisfies the threshold criteria and provides the best balance of the primary balancing criteria described in Section 7.2. It would achieve the remediation goals for the site (as described in Section 6) by removing all the surface soils that may threaten public health and the environment. Alternative 3 is selected over Alternative 2, since Alternative 2 may not entirely remove all surface soil contaminants. Alternative 3 is also selected over Alternative 1 since Alternative 1 would leave the surface soil contamination exceeding SCGs in place, which would pose a threat to the public health and the environment.

Alternatives 2 and 3 could create potential minor short-term adverse impacts due to fugitive dust emissions and/or soil erosion. However, dust mitigation measures and erosion prevention steps should minimize these impacts. Alternative 1 would not create any short-term impacts since the soil would remain undisturbed.

Achieving long-term effectiveness and the reduction of toxicity, mobility and volume is best accomplished by excavation of the contaminated surface soils which exceed SCGs (Alternative 3). Even though Alternative 2 involves the removal of specific 'hot spots' based on further soil analysis, Alternative 3 goes a step further in removing all surface soils exceeding SCGs. Alternative 1 would leave the surface soil contamination in place, and therefore, would not achieve any long-term effectiveness or toxicity reduction goals.

The cost of the proposed remedy for Alternative 3 is \$350,000 while the cost of Alternative 2 is \$300,000. The slight incremental cost for Alternative 3 is justified since Alternative 3 eliminates the potential exposure pathways and returns the site to residential use, while Alternative 2 may potentially leave behind some pockets of soil contamination. Alternative 3 is also more time-efficient, since it minimizes the amount of time required to clean up the site, without the additional sampling and analysis as required by Alternative 2.

The estimated present worth cost to implement the remedy is \$ 350,000.

The elements of the selected remedy are as follows:

1. This remedy will consist of excavation of up to two feet of surface soils contaminated at levels above the residential soil cleanup objectives. The excavated soil will be disposed of in accordance with the specific requirements set by the receiving off-site facility. If backfill is needed to achieve proper post-excavation grading, the backfill will be clean soil defined as soil with no analyte in exceedance of NYSDEC Subpart 375-6.8(b) soil cleanup objectives for residential use. For cost estimation purposes, it is assumed that most of the site is contaminated with soil exceeding residential soil cleanup objectives. Up to 4,200 cubic yards of soil will be excavated and transported off-site. Removal of the surface soil as specified above should immediately eliminate any exposure to on-site contamination sources.

A remedial action work plan will be developed to address the specifics of the excavation like dust control, excavation profile, staging set-up and erosion control. This project is scheduled to be completed in one year from the record of decision (ROD) approval date.

## **SECTION 9: 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 the 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, were established.
- § A Citizen Participation Plan was created and placed in various document repositories.
- § Fact Sheets were sent to the established public contact list.
- § A public meeting was held on November 27, 2007 to present the Proposed Remedial Action Plan (PRAP) and receive comments on the PRAP.
- § A responsiveness summary (Appendix A) was prepared to address the comments received during the public comment period for the PRAP.
- § A ROD availability notice will be mailed to public meeting attendees once the ROD is finalized.

**TABLE 1**

**Nature and Extent of Contamination (Exceeding SCGs Only)**  
 (Sampling Dates: November 2005 - December 2005)

<b>SURFACE SOIL</b>	<b>Contaminants of Concern</b>	<b>Concentration Range Detected (ppm)<sup>a</sup></b>	<b>SCG<sup>b</sup> (ppm)<sup>a</sup></b>	<b>Frequency of Exceeding SCG</b>
<b>Semivolatile Organic Compounds (SVOCs)</b>	Benzo(b)fluoranthene	0.1 - 1.6	1	1 of 10
<b>Inorganic Compounds</b>	Cadmium	0.02 - 3.4	2.5	1 of 10
	Lead	23 - 1080	400	1 of 10
	Manganese	31 - 2840	2000	1 of 10

<b>GROUNDWATER (5' below water table)</b>	<b>Contaminants of Concern</b>	<b>Concentration Range Detected (ppb)<sup>a</sup></b>	<b>SCG<sup>b</sup> (ppb)<sup>a</sup></b>	<b>Frequency of Exceeding SCG</b>
<b>Volatile Organic Compounds (VOCs)</b>	Methyl tert-butyl ether (MTBE)	ND - 20.2	10	1 of 14
<b>Inorganic Compounds</b>	Aluminum	321 - 64,700	100	14 of 14
	Beryllium	ND - 3.6	3	1 of 14
	Chromium	2.3 - 167	50	2 of 14
	Cobalt	ND - 47.2	5	3 of 14
	Iron	1410 - 67,300	300	14 of 14
	Lead	ND - 40	25	1 of 14
	Magnesium	3250 - 14,900	300	14 of 14
	Manganese	178 - 2410	300	13 of 14
	Sodium	17,800 - 37,800	20,000	13 of 14
	Vanadium	ND - 73	14	5 of 14

<b>GROUNDWATER (15' below water table)</b>	<b>Contaminants of Concern</b>	<b>Concentration Range Detected (ppb)<sup>a</sup></b>	<b>SCG<sup>b</sup> (ppb)<sup>a</sup></b>	<b>Frequency of Exceeding SCG</b>
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<b>GROUNDWATER (15' below water table)</b>	<b>Contaminants of Concern</b>	<b>Concentration Range Detected (ppb)<sup>a</sup></b>	<b>SCG<sup>b</sup> (ppb)<sup>a</sup></b>	<b>Frequency of Exceeding SCG</b>
<b>Volatile Organic Compounds (VOCs)</b>	Methyl tert-butyl ether (MTBE)	0.31 - 22.9	10	4 of 14
	Benzene	ND - 0.84	0.7	2 of 14
	Isopropylbenzene	ND - 17	5	1 of 14
<b>Inorganic Compounds</b>	Aluminum	4000 - 24,700	100	14 of 14
	Arsenic	ND - 33.4	25	1 of 14
	Chromium	9.2 - 168	50	7 of 14
	Cobalt	2.3 - 65.7	5	12 of 14
	Iron	1800 - 118,000	300	14 of 14
	Lead	6 - 32	25	2 of 14
	Magnesium	3820 - 9810	300	14 of 14
	Manganese	374 - 3930	300	14 of 14
	Sodium	21,600 - 97,800	20,000	14 of 14
	Thallium	ND - 27	8	1 of 14
	Vanadium	5.9 - 43.5	14	11 of 14

<b>GROUNDWATER (25' below water table)</b>	<b>Contaminants of Concern</b>	<b>Concentration Range Detected (ppb)<sup>a</sup></b>	<b>SCG<sup>b</sup> (ppb)<sup>a</sup></b>	<b>Frequency of Exceeding SCG</b>
<b>Volatile Organic Compounds (VOCs)</b>	1,4-Dichlorobenzene	ND - 9.21	5	2 of 14
	Methyl tert-butyl ether (MTBE)	ND - 78.6	10	4 of 14
	Toluene	ND - 125	5	1 of 14
<b>Semivolatile Organic Compounds (SVOCs)</b>	Phenol	ND - 4	1	4 of 14
	4-Methylphenol	ND - 74	50	1 of 14
	2,4-Dimethylphenol	ND - 3	1	1 of 14

<b>GROUNDWATER (25' below water table)</b>	<b>Contaminants of Concern</b>	<b>Concentration Range Detected (ppb)<sup>a</sup></b>	<b>SCG<sup>b</sup> (ppb)<sup>a</sup></b>	<b>Frequency of Exceeding SCG</b>
<b>Inorganic Compounds</b>	Aluminum	4150 - 22,000	100	14 of 14
	Antimony	ND - 3.3	3	1 of 14
	Arsenic	4 - 39.2	25	2 of 14
	Chromium	14.1 - 416	50	4 of 14
	Cobalt	4.9 - 208	5	13 of 14
	Iron	9000 - 102,000	300	14 of 14
	Lead	5.4 - 37.8	25	4 of 14
	Magnesium	3360 - 8460	300	14 of 14
	Manganese	1320 - 15,500	300	14 of 14
	Sodium	24,300 - 127,000	20,000	14 of 14
	Thallium	ND - 23.7	8	4 of 14
	Vanadium	9.7 - 65.6	14	12 of 14

<sup>a</sup> 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;

<sup>b</sup> SCG = standards, criteria, and guidance values as described below:

§ 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 6 NYCRR Part 375 Environmental Remediation Programs "Subpart 375-6.8(b), Remedial Program Soil Cleanup Objectives for Residential Use".

ND = Non-Detect



**Table 2**  
**Remedial Alternative Costs**

<b>Remedial Alternative</b>	<b>Capital Cost (\$)</b>	<b>Annual Costs (\$)</b>	<b>Total Present Worth (\$)</b>
No Action	\$0	\$0	\$0
Limited Excavation of Contaminated Soil	\$300,000	\$0	\$300,000
Excavation and Off-Site Disposal of Contaminated Soil	\$350,000	\$0	\$350,000

# **APPENDIX A**

## **Responsiveness Summary**



**RESPONSIVENESS SUMMARY**  
**37 Commonwealth Drive Environmental Restoration Site**  
**Town of Babylon, Suffolk County, New York**  
**Site No. E152195**

The Proposed Remedial Action Plan (PRAP) for the 37 Commonwealth Drive 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 November 19, 2007. The PRAP outlined the remedial measure proposed for the contaminated soil at the 37 Commonwealth Drive site.

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

A public meeting was held on November 27, 2007, which included a presentation of the Site Investigation (SI) 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 January 3, 2008.

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:

TOPIC: CLEANUP LOGISTICS

**COMMENT 1:** How will the site be secured to prevent any future on-site dumping once it is remediated?

**RESPONSE 1:** If the site is not developed immediately following remediation, the Town of Babylon intends to construct a fence to prevent any future on-site dumping. The Department would also recommend that the Town put up "No Dumping" signs with appropriate fines for violators.

**COMMENT 2:** Will any steps be taken to minimize the traffic, dust and noise from the cleanup efforts since there is a day care center across the street from the site?

**RESPONSE 2:** Traffic control is primarily a Town issue. However, this issue will be reviewed during the remedial design. Dust suppression techniques will be implemented at the site, along with air monitoring to maintain acceptable levels of fugitive dust from the site. Noise levels will be monitored in accordance with OSHA guidelines.

**COMMENT 3:** Have there been any new cases of dumping on the site since the last site characterization was done?

**RESPONSE 3:** It is uncertain if any new cases of dumping have occurred since the last site characterization.

Since trash is dumped on the ground surface, the proposed remedial alternative (excavation to 2 feet below ground surface) will clean up any recent solid waste dumping since the last site characterization was done.

**COMMENT 4:** If groundwater is encountered during the excavation work at a specific area, will that area be backfilled with clean soil?

**RESPONSE 4:** Based on the excavation depth, it is not anticipated that the groundwater table will be encountered. However, if an area of groundwater is exposed during the excavation, that area will be backfilled in accordance with the conditions stated in the ROD.

**COMMENT 5:** How much of Commonwealth Avenue will be closed during the excavation work? Will the construction impede access into houses near the site?

**RESPONSE 5:** The logistics of the excavation job will be outlined in the remedial work plan after a careful study to ensure that the construction work does not create access issues for the nearby residents. The Town does not expect any road closures due to the width of Commonwealth Drive.

**COMMENT 6:** Where will the excavated materials be disposed of?

**RESPONSE 6:** As stated in the ROD, the excavated materials will be transported off-site to a yet to be determined permitted receiving facility. The facility will be determined during the remedial design.

**COMMENT 7:** What type of involvement does DEC have with this site? What type of monitoring will DEC be doing at the site?

**RESPONSE 7:** The Department ensures that the remediation project is being managed properly by the Town and the Consultant. This involves making sure that the project is on schedule and is being performed in accordance with the terms of the State Assistance Contract (SAC), ROD and Remedial Design. The Department will be making periodic inspections, reviewing results from the laboratory/consultant and, if necessary, requiring progress reports to facilitate the clean up of this site.

Ms. Louise Hamlett of Wyandanch Day Care Center, Inc. submitted a letter (dated December 28, 2007) which included the following comments:

**COMMENT 8:** The remedial work plan should address issues regarding air safety, any day care center program interruptions, traffic, construction safety, day care center egress and exit, daily site cleanup, site supervision and compliance to any Suffolk County 'No Smoking' Laws.

**RESPONSE 8:** Please see Response 2 regarding traffic, day care center egress and exit and day care center potential program interruptions. The daily site cleanup plan will be outlined in the Quality

Assurance Plan. Compliance to any local county laws (including smoking laws) will be referenced in the Health and Safety Plan in the Remedial Work Plan. The Town will be directly supervising the excavation and backfilling.

TOPIC: REMEDY SELECTION

**COMMENT 10:** Would the removal of the top two feet of soil be sufficient to remediate this site?

**RESPONSE 10:** The site characterization results showed that only the surface soil (0 - 2 inches) was contaminated from the illegal dumping activities. As such, the removal of top two feet of soil through the entire site should remove any contamination from the site.

**COMMENT 11:** Is there a reason why three alternatives were considered when it is apparent that Alternative 3 is the preferred alternative?

**RESPONSE 11:** It is a standard procedure to evaluate all possible and relevant alternatives to remediate this site against the criteria defined in 6 NYCRR Part 375 prior to selecting a preferred remedy.

**COMMENT 12:** Has any effort been made to identify the offsite source for MTBE groundwater contamination and remediate the contamination?

**RESPONSE 12:** Nine of the forty-two groundwater samples taken from various depths exceeded the Standard, Criteria and Guidance (SCG) levels for MTBE. Only one sample taken from 25 feet below the groundwater table detected a maximum concentration of 78 ppb MTBE. These MTBE detections could originate from many different sources, such as underground tanks or abandoned gas cans. It could also originate from non-point sources, such as storm water runoff from roads. The site investigation results do not indicate a definitive source, and the Department is not aware of any gas station that has a leak in the area.

**COMMENT 13:** Is there a possibility for the groundwater contamination to rise to the surface soil and re-contaminate the site after the cleanup is completed?

**RESPONSE 13:** There is a possibility for the groundwater contamination to rise to the surface soil in the event of a major flooding event. However, under normal rainfall conditions, the water on the ground surface tends to sink down to the groundwater table and follow the course of the general groundwater flow.



## **APPENDIX B**

### **Administrative Record**



# **Administrative Record**

## **37 Commonwealth Drive Site No. E152195**

1. Proposed Remedial Action Plan for the 37 Commonwealth Drive site, dated November 2007, prepared by the NYSDEC.
2. “Site Characterization Work Plan”, June 2005, prepared by O’Brien & Gere Engineers, Inc.
3. “Site Characterization Report: Volumes I and II”, August 2006, prepared by O’Brien & Gere Engineers, Inc.
4. “Citizen Participation Plan”, November 5, 2007, prepared by the Town of Babylon.
5. “Proposed Remedial Action Plan Fact Sheet”, November 8, 2007, prepared by the NYSDEC.
6. Comment letter dated December 28, 2007 from Ms. Louise Hamlett of the Wyandanch Day Care Center, Inc.