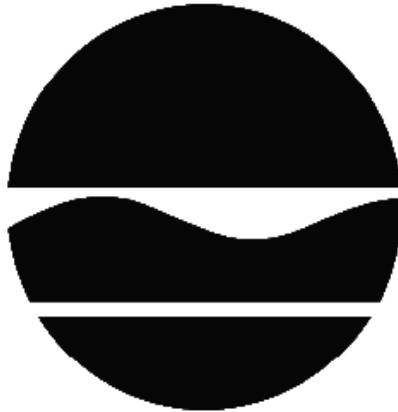


RECORD OF DECISION

Former Jones/Day Property
Operable Unit Number 02: Off-Site
Environmental Restoration Project
Dolgeville, Herkimer County
Site No. B00117
March 2012



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

DECLARATION STATEMENT - RECORD OF DECISION

Former Jones/Day Property
Operable Unit Number: 02
Environmental Restoration Project
Dolgeville, Herkimer County
Site No. B00117
March 2012

Statement of Purpose and Basis

This document presents the remedy for Operable Unit Number: 02: Off-Site of the Former Jones/Day Property site, an environmental restoration site. The remedial program was chosen in accordance with the New York State Environmental Conservation Law and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR) Part 375.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (the Department) for Operable Unit Number: 02 of the Former Jones/Day Property site and the public's input to the proposed remedy presented by the Department. A listing of the documents included as a part of the Administrative Record is included in Appendix B of the ROD.

Description of Selected Remedy

The elements of the selected remedy are as follows:

1. A remedial design program will be implemented to provide the details necessary for the construction, operation, maintenance, and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DER-31. The major green remediation components are as follows;

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gas and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which will otherwise be considered a waste;
- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals; and
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development.

2. A soil excavation program will be implemented using site-specific soil cleanup objectives (SCOs) relevant to the planned use of the site, to guide excavation of contaminated soils. Soils which exceed site-specific SCOs or exhibit visual or olfactory evidence of contamination will be excavated and transported off-site for disposal. The site-specific SCOs are residential use SCOs (as defined by 6 NYCRR Part 375-6.8). Approximately 500 cubic yards of soil will be removed. Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to replace the excavated soil and establish the designed grades. In order to treat any residual levels of petroleum, bio-nutrients will be applied to the bottom and sidewalls of the excavation prior to backfilling.

3. A post remedial groundwater monitoring program will be implemented to evaluate the effectiveness of the removal program. It is anticipated that one year of monitoring will be sufficient. However, the Department will determine when the monitoring period can be terminated based upon the data. This monitoring program will be incorporated as part of the Site Management Plan presented in the OU1 remedial program.

New York State Department of Health Acceptance

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

Declaration

The selected remedy is protective of human health and the environment, complies with State and Federal requirements that are legally applicable or relevant and appropriate to the remedial action to the extent practicable, and is cost effective. This remedy utilizes permanent solutions and alternative treatment or resource recovery technologies, to the maximum extent practicable, and satisfies the preference for remedies that reduce toxicity, mobility, or volume as a principal element.



March 19, 2012

Date

Robert W. Schick, P.E., Acting Director
Division of Environmental Remediation

RECORD OF DECISION

Former Jones/Day Property
Dolgeville, Herkimer County
Site No. B00117
March 2012

SECTION 1: SUMMARY AND PURPOSE

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), has selected a remedy for the above referenced site. The disposal of contaminants at the site has resulted in threats to public health and the environment that would be addressed by the remedy. The disposal or release of contaminants at this site, as more fully described in this document, has contaminated various environmental media. Contaminants include hazardous waste and/or petroleum. The remedy is intended to attain the remedial action objectives identified for this site for the protection of public health and the environment. This Record of Decision (ROD) identifies the selected remedy, summarizes the other alternatives considered, and discusses the reasons for selecting the remedy.

The 1996 Clean Water/ Clean Air Bond Act provides funding to municipalities for the investigation and cleanup of brownfields. Brownfields are abandoned, idled, or under-used properties where redevelopment is complicated by real or perceived environmental contamination. They typically are former industrial or commercial properties where operations may have resulted in environmental contamination. Brownfields often pose not only environmental, but legal and financial burdens on communities. Under the Environmental Restoration Program, the state provides grants to municipalities to reimburse up to 90 percent of eligible costs for site investigation and remediation activities. Once remediated, the property can then be reused.

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

SECTION 2: CITIZEN PARTICIPATION

The Department seeks input from the community on all remedies. A public comment period was held, during which the public was encouraged to submit comment on the proposed remedy. All comments on the remedy received during the comment period were considered by the Department in selecting a remedy for the site. Site-related reports and documents were made available for review by the public at the following document repository:

Village of Dolgeville Offices
Attn: Tammy Chmielewski
41 North Main Street
Dolgeville, NY 13329
Phone: 315-429-3112

A public meeting was also conducted. At the meeting, the findings of the remedial investigation (RI) and the alternatives analyses (AA) were presented along with a summary of the proposed remedy. After the presentation, a question-and-answer period was held, during which verbal or written comments were accepted on the proposed remedy.

Comments on the remedy received during the comment period are summarized and addressed in the responsiveness summary section of the ROD.

Receive Site Citizen Participation Information By Email

Please note that the Department's Division of Environmental Remediation (DER) is "going paperless" relative to citizen participation information. The ultimate goal is to distribute citizen participation information about contaminated sites electronically by way of county email listservs. Information will be distributed for all sites that are being investigated and cleaned up in a particular county under the State Superfund Program, Environmental Restoration Program, Brownfield Cleanup Program, Voluntary Cleanup Program, and Resource Conservation and Recovery Act Program. We encourage the public to sign up for one or more county listservs at <http://www.dec.ny.gov/chemical/61092.html>

SECTION 3: SITE DESCRIPTION AND HISTORY

Location: The Former Jones/Day Property Site is approximately 0.23 acres in size and is located at 107 South Main Street in the Village of Dolgeville, Oneida County. The site is bounded on all sides by single and multi-family residential homes. South Main Street is directly west and adjacent to the site and Spofford Avenue is located 100 feet to the south.

Site Features: The site is relatively flat and slopes to the east at the rear of the property. The site is completely vegetated with perennial grasses. A single story service and gas station was located in the middle of the site. The structure has been removed. OU2 encompasses the off-site contaminated groundwater plume and includes a single family, two story home with a full basement.

Current Zoning/Use: OU1 is zoned commercial and OU2 is zoned residential. OU1 is vacant and OU-2 is occupied by a single family home.

Historic Uses: OU1 was used as a gasoline fueling station and automobile repair shop until the 1980's. The facility had five underground storage tanks containing various grades of gasoline and one waste oil tank. A pump island was located along South Main Street. A roofing company also occupied the site until the demolition of the building in approximately 2002. The Village of Dolgeville took title to the site in May of 2008. OU2 has always been used as a private residence.

Previous environmental investigations relate to two NYSDEC Spills. Spill No. 9204662 related to the release of waste oil at the rear of the OU1 garage. The spill was investigated and no evidence of contamination was found. The spill was closed meeting standards. Spill No. 9303706 was related to a release from the waste oil tank fill pipe. The spill was investigated and closed meeting standards.

Operable Units: The site is comprised of two operable units (OU). OU1 is the on-site area and OU2 is an area off-site where groundwater contamination remains. The off-site groundwater plume is approximately 150 feet in length and 50 feet in width and is located immediately to the north of OU1.

Site Geology and Hydrology: The geology of the site consists of brown sand and silts with traces of gravel and cobble. Groundwater flow is from the southwest to the northeast. The depth of groundwater ranges from 3 to 9 feet below the surface.

Operable Unit (OU) Number 02 is the subject of this document.

A Record of Decision was issued previously for OU 01.

A site location map is attached as Figure 1.

SECTION 4: LAND USE AND PHYSICAL SETTING

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

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

SECTION 5: ENFORCEMENT STATUS

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

No PRPs have been documented to date.

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

SECTION 6: SITE CONTAMINATION

6.1: Summary of the Remedial Investigation

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

The following general activities are conducted during an RI:

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

The analytical data collected on this site includes data for:

- groundwater
- soil
- indoor air

6.1.1: Standards, Criteria, and Guidance (SCGs)

The remedy must conform to promulgated standards and criteria that are directly applicable or that are relevant and appropriate. The selection of a remedy must also take into consideration guidance, as appropriate. Standards, Criteria and Guidance are hereafter called SCGs.

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

6.1.2: RI Results

The data have identified contaminants of concern. A "contaminant of concern" is a contaminant that is sufficiently present in frequency and concentration in the environment to require

evaluation for remedial action. Not all contaminants identified on the property are contaminants of concern. The nature and extent of contamination and environmental media requiring action are summarized in Exhibit A. Additionally, the RI Report contains a full discussion of the data. The contaminant(s) of concern identified for this Operable Unit at this site is/are:

BENZENE	XYLENE (MIXED)
ETHYLBENZENE	NAPHTHALENE
TOLUENE	1,1,2 TCA

As illustrated in Exhibit A, the contaminant(s) of concern exceed the applicable SCGs for:

- groundwater

6.2: Interim Remedial Measures

An interim remedial measure (IRM) is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before issuance of the Record of Decision.

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

Chemical Injection Program

In February of 2010 bioremediation nutrients (ORC) were injected into the contaminated groundwater at OU2. Approximately 275 pounds of ORC was mixed with water to form slurry. The mixture was injected into six injection wells that were screened in groundwater. Post injection groundwater monitoring has shown reduced levels of contamination in the groundwater at OU2.

6.3: Summary of Environmental Assessment

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

Based upon the resources and pathways identified and the toxicity of the contaminants of ecological concern at this site, a Fish and Wildlife Resources Impact Analysis (FWRIA) was deemed not necessary for OU 02.

Nature and Extent of Contamination:

Groundwater: Based upon the remedial investigation (RI) the primary contaminants of concern in the groundwater are metals, volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs) associated with the release of petroleum products. Groundwater exceeds standards for petroleum related compounds and the RI indicates that groundwater contamination has migrated off-site.

Soils: Based on the RI and following the on-site and off-site IRMs, only residual levels of cadmium remain at the site (i.e., OU1). Cadmium was found at levels of 2.85 ppm and 3.56 ppm, which only slightly exceeds the residential SCO of 2.5 ppm. Following the IRMs, no exceedances of residential SCOs remained at either OU1 or OU2. However, strong visual and olfactory evidence of petroleum contaminated soils remain at OU2 in a smear zone in the vicinity of the groundwater table. The smear zone is acting as the source of contamination for off-site (OU2) groundwater.

Indoor Air: The potential for soil vapor intrusion (SVI) into off-site (OU-2) structures was evaluated and no concerns related to SVI were identified.

6.4: Summary of Human Exposure Pathways

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

Persons who dig below the ground surface may come into contact with contaminants in subsurface soil. People are not drinking the contaminated groundwater because the area is served by public water supply that obtains water from a different source. Volatile organic compounds in groundwater may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. The process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to soil vapor intrusion. Sampling indicates that soil vapor intrusion is not a concern for off-site buildings.

6.5: Summary of the Remediation Objectives

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

The remedial action objectives for this site are:

Groundwater

RAOs for Public Health Protection

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

RAOs for Environmental Protection

- Restore ground water aquifer to pre-disposal/pre-release conditions, to the extent practicable.

- Remove the source of ground or surface water contamination.

Soil

RAOs for Public Health Protection

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

RAOs for Environmental Protection

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

Soil Vapor

RAOs for Public Health Protection

- Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site.

SECTION 7: SUMMARY OF THE SELECTED REMEDY

To be selected the remedy must be protective of human health and the environment, be cost-effective, comply with other statutory requirements, and utilize permanent solutions, alternative technologies or resource recovery technologies to the maximum extent practicable. The remedy must also attain the remedial action objectives identified for the site, which are presented in Section 6.5. Potential remedial alternatives for the Site were identified, screened and evaluated in the alternatives analysis (AA) report.

A summary of the remedial alternatives that were considered for this site is presented in Exhibit B. Cost information is presented in the form of present worth, which 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. As a convention, a time frame of 30 years is used to evaluate present worth costs for alternatives with an indefinite duration. This does not imply that operation, maintenance, or monitoring would cease after 30 years if remediation goals are not achieved. A summary of the Remedial Alternatives Costs is included as Exhibit C.

The basis for the Department's remedy is set forth at Exhibit D.

The selected remedy is referred to as the Soil Excavation remedy.

The estimated present worth cost to implement the remedy is \$261,000. The cost to construct the remedy is estimated to be \$251,000 and the estimated average annual cost is \$10,000.

The elements of the selected remedy are as follows:

1. A remedial design program will be implemented to provide the details necessary for the construction, operation, maintenance, and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design,

implementation, and site management of the remedy as per DER-31. The major green remediation components are as follows;

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gas and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which will otherwise be considered a waste;
- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals; and
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development.

2. A soil excavation program will be implemented using site-specific soil cleanup objectives (SCOs) relevant to the planned use of the site, to guide excavation of contaminated soils. Soils which exceed site-specific SCOs or exhibit visual or olfactory evidence of contamination will be excavated and transported off-site for disposal. The site-specific SCOs are residential use SCOs (as defined by 6 NYCRR Part 375-6.8). Approximately 500 cubic yards of soil will be removed. Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to replace the excavated soil and establish the designed grades. In order to treat any residual levels of petroleum, bio-nutrients will be applied to the bottom and sidewalls of the excavation prior to backfilling.

3. A post remedial groundwater monitoring program will be implemented to evaluate the effectiveness of the removal program. It is anticipated that one year of monitoring will be sufficient. However, the Department will determine when the monitoring period can be terminated based upon the data. This monitoring program will be incorporated as part of the Site Management Plan presented in the OU1 remedial program.

Exhibit A

Nature and Extent of Contamination

Groundwater

Groundwater wells were installed both on-site (OU1) and off-site (OU2) (see Figures 2 and 3) in April of 2009 to characterize groundwater quality and flow direction. Based on groundwater and soil data, an interim remedial measure was performed in December of 2009 to remove petroleum impacted soils at OU1. In February of 2010 bioremediation nutrients (ORC) were injected into the contaminated groundwater on the south side OU2. Approximately 275 pounds of ORC was mixed with water to form slurry. The mixture was injected into six injection wells that were screened in groundwater. Post injection groundwater monitoring has shown an overall reduction in levels of contamination in the groundwater at OU2 (see Figure 4) and is presented below.

The following results identify groundwater sampling results for OU2 (see Figures 5 and 6). OU1 has been addressed in a separate document.

Table 1 (Pre IRM Groundwater – Operable Unit 2 – Off- Site – May 2009)

Detected Constituents	Concentration Range Detected (ppb) ^a	SCG ^b (ppb)	Frequency Exceeding SCG
VOCs			
Benzene	ND – 3.5	1	2 out of 5
Ethylbenzene	ND – 320	5	2 out of 5
Isopropylbenzene	ND – 50	5	1 out of 5
Xylene	ND – 1530	5	2 out of 5
Toluene	ND – 120	5	1 out of 5

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

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

Table 2 (Post IRM Groundwater – Operable Unit 2 – Off-Site – May 2010)

Detected Constituents	Concentration Range Detected (ppb) ^a	SCG ^b (ppb)	Frequency Exceeding SCG
VOCs			
Ethylbenzene	ND – 580	5	4 out of 5
Isopropylbenzene	ND – 97	5	3 out of 5
Xylene	ND – 2810	5	4 out of 5
Toluene	ND – 290	5	4 out of 5
Naphthalene	ND – 230	10	3 out of 5
1,1,2-Trichloroethane	ND – 9.2	1	1 out of 5
2-Butanone	ND – 48	50	1 out of 5

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

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

Table 3 (Post IRM Groundwater – Operable Unit 2 – Off-Site – July 2010)

Detected Constituents	Concentration Range Detected (ppb) ^a	SCG ^b (ppb)	Frequency Exceeding SCG
VOCs			
Ethylbenzene	ND – 720	5	7 out of 8
Isopropylbenzene	ND – 82	5	4 out of 8
Xylene	ND – 3410	5	7 out of 8
Toluene	ND – 250	5	3 out of 8
2-Butanone	ND – 88	50	2 out of 8

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

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

Table 4 (Post IRM Groundwater – Operable Unit 2 – Off-Site – November 2010)

Detected Constituents	Concentration Range Detected (ppb) ^a	SCG ^b (ppb)	Frequency Exceeding SCG
VOCs			
Ethylbenzene	ND – 470	5	5 out of 7
Isopropylbenzene	ND – 69	5	3 out of 7
Xylene	ND – 2540	5	7 out of 7
Toluene	ND – 96	5	4 out of 7
2-Butanone	ND – 80	50	2 out of 7

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

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

Table 5 (Post IRM Groundwater – Operable Unit 2 – Off-Site – April 2011)

Detected Constituents	Concentration Range Detected (ppb) ^a	SCG ^b (ppb)	Frequency Exceeding SCG
VOCs			
Ethylbenzene	ND – 230	5	4 out of 7
Isopropylbenzene	ND – 140	5	4 out of 7
Xylene	ND – 980	5	6 out of 7
Toluene	ND – 91	5	5 out of 7
2-Butanone	ND – 59	50	1 out of 7
Naphthalene	ND – 220	10	1 out of 7

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

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

Based on the findings of the RI, the presence of petroleum has resulted in the contamination of groundwater (see Figure 3). The site contaminants that are considered to be the primary contaminants of concern which will drive the remediation of groundwater are volatile and semi-volatile organic compounds. Groundwater contamination will be addressed by the proposed remedy.

Surface Soil

No surface soil samples were collected off-site OU2 (see Figure 3). The property has always been a residential dwelling and there was no evidence of surface impacts migrating from OU1 onto OU2. No site-related surface soil contamination of concern was identified during the RI. Therefore, no remedial alternatives need to be evaluated for soil.

Sub-Surface Soil

Thirty one subsurface soil samples were collected from OU1 and OU2 locations during the RI. Subsurface soil samples were collected from a depth of 2 - 10 feet to assess soil contamination impacts to groundwater. Out of the 31 locations sampled during the RI, six locations showed exceedances of the residential SCOs. All exceedances of the residential SCOs were on OU1. No subsurface soil samples exceeded residential SCOs on OU2. Although, no exceedances of residential SCOs were found, a smear zone of contamination does exhibit visual and olfactory evidence of petroleum contamination. Based on the findings of the RI, the presence of petroleum has resulted in the contamination of soil. The site contaminants identified in soil which are considered to be the primary contaminants of concern, to be addressed by the remedy selection process are, VOCs and SVOCs.

Vapor Intrusion

The evaluation of the potential for soil vapor intrusion (SVI) into off-site (OU-2) structures was evaluated and no concerns related to SVI were identified.

Exhibit B

Description of Remedial Alternatives

The following alternatives were considered based on the remedial action objectives (see Section 6.5) to address the contaminated media identified at the site as described in Exhibit A.

Alternative 1: No Further Action

The No Further Action Alternative recognizes the remediation of the site completed by the IRM(s) described in Section 6.2. This alternative leaves the site in its present condition and does not provide any additional protection of the environment.

Alternative 2: In-Situ Enhanced Bioremediation

This alternative includes the in-situ injection of bio-nutrients into the subsurface soil smear zone of contamination and groundwater to accelerate the bio-attenuation of petroleum contaminants. Soil and groundwater monitoring to determine the effectiveness of the treatment and to evaluate when additional injections would be required are included. The program is expected to take approximately 5 years to achieve residential SCOs and groundwater standards. Monitoring costs are part of the performance testing to achieve remedial goals.

Present Worth.....	\$256,000
Capital Cost:.....	\$213,000
Annual Costs (Year 1-5):	\$10,000

Alternative 3: Soil Excavation, Groundwater Dewatering and Enhanced Bioremediation

This alternative includes removal of approximately 500 cubic yards of petroleum impacted soils located in the identified smear zone at OU2 to meet the residential SCOs. The limits of the groundwater plume and the extent of the soil contamination will be delineated as part of the remedial design to ensure that the remedial program address all areas of contamination. Collection and proper handling for disposal of groundwater encountered during the soil removal program is also included in this alternative. In order to treat any residual levels of petroleum, bio-nutrients will be applied to the bottom of the excavation and along the sidewalls of the excavation prior to backfilling. The excavation will be backfilled with soil that meets the residential SCOs. Groundwater monitoring will be performed quarterly for as long as necessary to document the effectiveness of the remediation. One year of monitoring has been assumed for the purpose of cost estimation.

Present Worth:	\$262,000
Capital Cost:.....	\$251,000
Annual Costs (Year 1):	\$10,000

Exhibit C

Remedial Alternative Costs

Remedial Alternative	Capital Cost (\$)	Annual Costs (\$)	Total Present Worth (\$)
No Action	0	0	0
Alternative 2: In-Situ Enhanced Bioremediation	213,000	10,000	256,000
Alternative 3: Soil Excavation, Groundwater Dewatering and Enhanced Bioremediation	251,000	10,000	262,000

Exhibit D

SUMMARY OF THE PROPOSED REMEDY

The Department is proposing Alternative 3, Soil Excavation, Groundwater Dewatering and Enhanced Bioremediation as the remedy for this site. Alternative 3 will achieve the remediation goals for the site by removing all petroleum impacted soil from OU2. The elements of this remedy are described in Section 7 of the Proposed Remedial Action Plan. The proposed remedy is depicted in Figure 6.

Basis for Selection

The proposed remedy is based on the results of the RI, the IRM and the evaluation of alternatives. The criteria to which potential remedial alternatives are compared are defined in 6 NYCRR Part 375. A detailed discussion of the evaluation criteria and comparative analysis is included in the AA report.

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.

The proposed remedy Alternative 3 (Soil Excavation, Groundwater Dewatering and Enhanced Bioremediation) will satisfy this criterion by removing the contaminated soils from above and below the water table for proper off-site disposal. Alternative 3 addresses the source of the groundwater contamination, which is the most significant threat to public health and the environment. Alternative 1 (No Further Action) does not provide any protection to public health and the environment and will not be evaluated further. Alternative 3, by removing all soil contaminated above the "Residential" soil cleanup objective, meets the threshold criteria. Alternative 2 also complies with this criterion but will take longer to achieve.

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.

Alternative 3 complies with SCGs to the extent practicable. It addresses source areas of contamination and complies with the residential use soil cleanup objectives. It also creates the conditions necessary to restore groundwater quality to the extent practicable. Alternative 2 also complies with this criterion but will take longer to achieve.

The next six "primary balancing criteria" are used to compare the positive and negative aspects of each of the remedial strategies.

3. 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.

Long-term effectiveness is best accomplished by those alternatives involving excavation of the contaminated overburden soils (Alternatives 3). Since all the contamination identified as being impacted by petroleum will be removed and the groundwater is expected to be restored, this removes the need for long-term monitoring. Alternative 2 also results in long-term effectiveness, however it would take longer to achieve.

4. 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.

Alternative 3, excavation and off-site disposal, reduces the toxicity, mobility and volume of on-site waste by transferring the material to an approved off-site location. However, depending on the disposal facility, the volume of the material would not be reduced. Although the volume of the contaminated soil is not reduced, the overwhelming majority of contamination from above and below the water table would be excavated and placed above the water table in the permitted landfill reducing toxicity and mobility. Alternative 2 would permanently reduce the toxicity, mobility and volume of contaminants by use of chemical treatment.

5. Short-term Impacts and 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.

Alternatives 2 and 3 both have short-term impacts which could easily be controlled; however, Alternative 2 would have the smallest impact. The time needed to achieve the remediation goals is the shortest for Alternative 3 and longer for Alternative 2.

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.

Alternatives 2 and 3 are readily implementable. Alternative 3 is also implementable, but the volume of soil excavated under this alternative would necessitate increased truck traffic on local roads for several weeks. Alternative 2 is implementable but would cause minor disruption to the homeowner over the five year period.

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 of the alternatives 2 and 3 are very similar. Alternative 2 has a lower cost, but the duration of the project is longer and may result in institutional controls if SCOs and SCGs are not met. Alternative 3 has a slightly higher cost, however the duration of the project is less than 2 months and the ability to achieve SCOs and SCGs is very high.

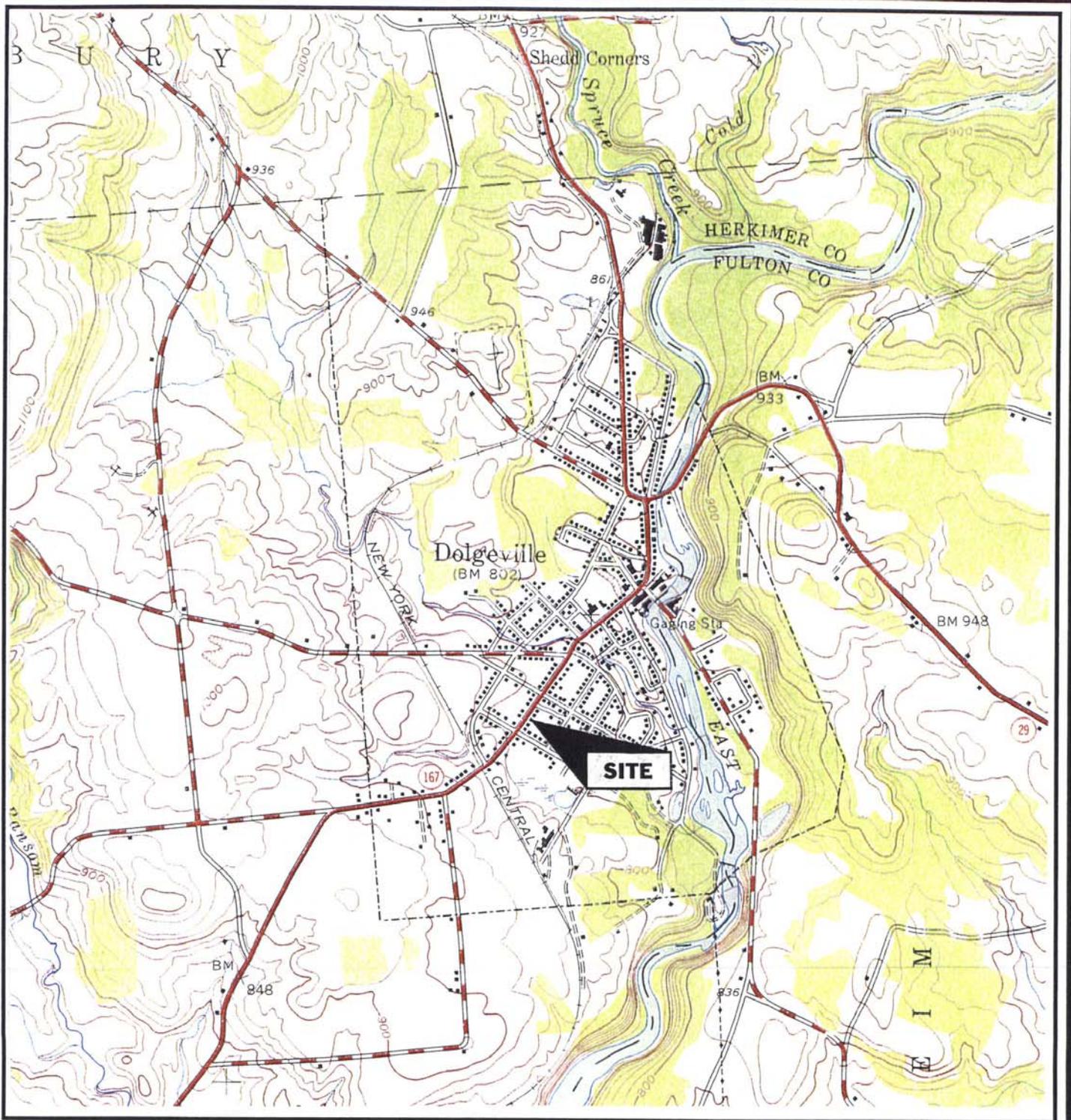
8. Land Use. When cleanup to pre-disposal conditions is determined to be infeasible, the Department may consider the current, intended, and reasonable anticipated future land use of the site and its surroundings in the selection of the soil remedy.

Since the current and future site use is residential, Alternatives 2 would be slightly because at least some contamination may remain on the property whereas Alternative 3 would remove the contaminated soil permanently.

The final criterion, Community Acceptance, 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.

9. Community Acceptance. Concerns of the community regarding the investigation, the evaluation of alternatives, and the PRAP are evaluated. A responsiveness summary will be prepared that describes public comments received and the manner in which the Department will address the concerns raised. If the selected remedy differs significantly from the proposed remedy, notices to the public will be issued describing the differences and reasons for the changes.

Alternative 3 is being proposed because, as described above, it satisfies the threshold criteria and provides the best balance of the balancing criterion.



MAP REFERENCE

United States Geological Survey
 7.5 Minute Series Topographic Map
 Quadrangle: Little Falls, New York
 Date: 1943



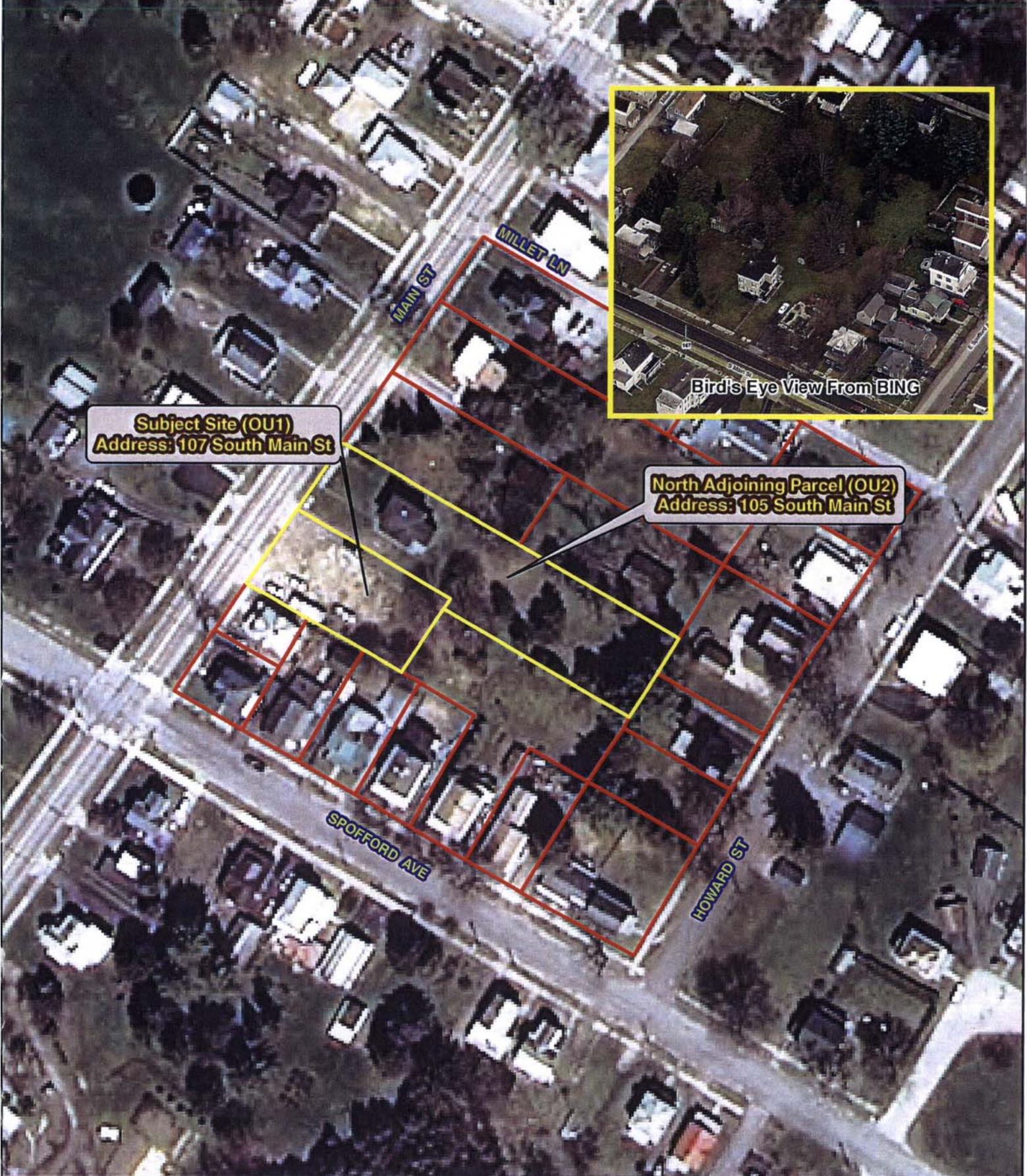
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C.T.MALE ASSOCIATES, P.C.

50 CENTURY HILL DRIVE, PO BOX 727 LATHAM, NY 12110
 PHONE (518) 786-7400 FAX (518) 786-7299

FIGURE 1 - SITE LOCATION MAP
107 SOUTH MAIN STREET

VILLAGE OF DOLGEVILLE	HERKIMER COUNTY, NY
SCALE: 1" = 2,000'	
DRAFTER: JLF	
PROJECT No.	



Subject Site (OU1)
Address: 107 South Main St

North Adjoining Parcel (OU2)
Address: 105 South Main St



Legend

- ▭ Subject Site & North Adjoining Property
- ▭ Dolgeville Tax Parcels (Approx.)



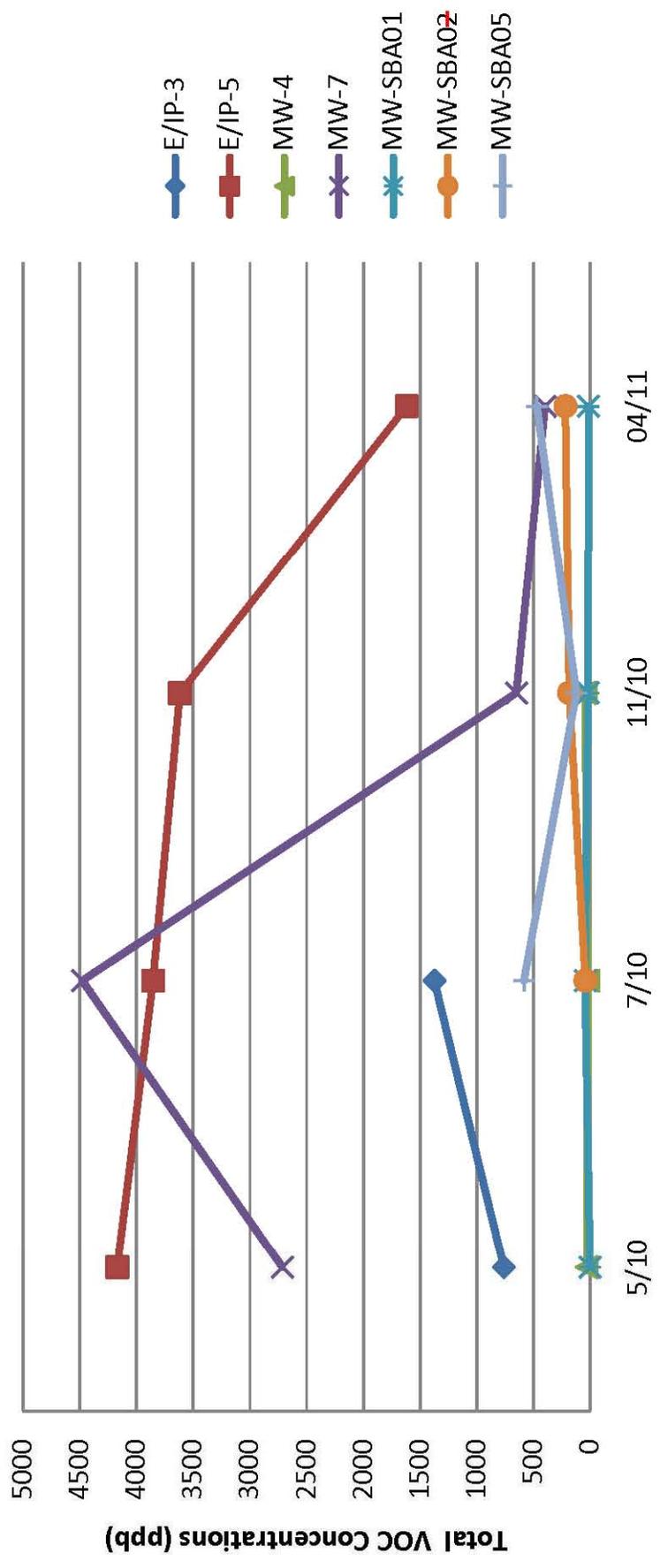
Project Number: 07.7719
 Data Source: NYSGIS Clearinghouse
 Herkimer County Real Properties Tax Service
 Projection: State Plane NAD83 NYE (feet)
 Date: October 11, 2011
 File: 107SouthMainSt8x11.mxd
 GIS: C Secor

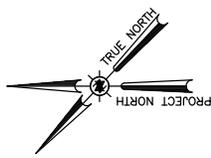


Figure 2
Subject Site (OU1) & North Adjoining Parcel (OU2)
 Village of Dolgeville Herkimer County, New York

<p>FOUNDED IN 1910</p>	<p>C.T. MALE ASSOCIATES Engineering, Surveying, Architecture & Landscape Architecture, P.C. 50 CENTURY HILL DRIVE, LATHAM, NEW YORK 12110 (518) 786-7400 * FAX (518) 786-7299 * WWW.CTMALE.COM Architecture * Building Systems Engineering * Civil Engineering * Environmental Services * Geographic Information Services (GIS) * Land Development * Land Surveying</p>
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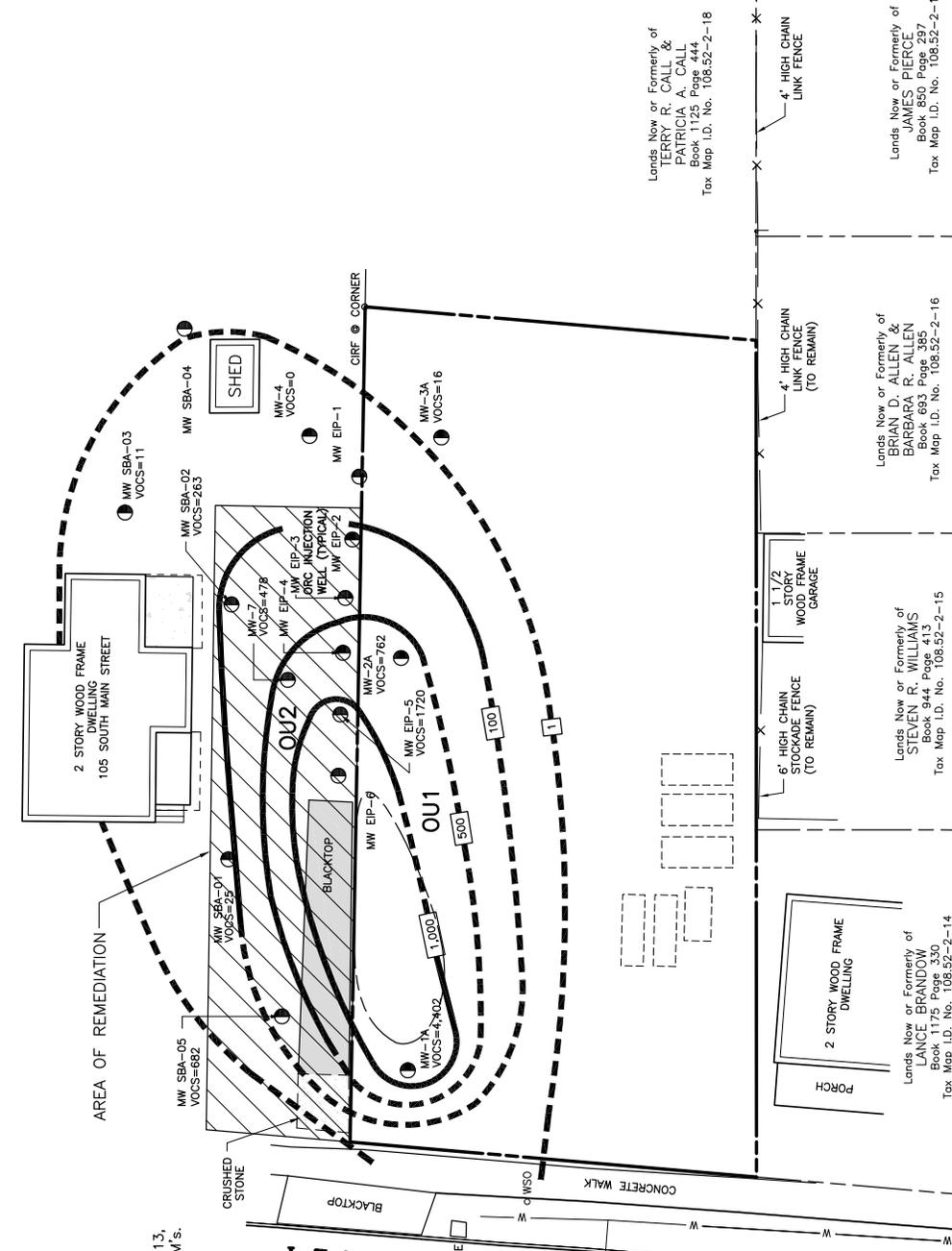
**Figure 4 Former Jones/Day Property - OU2
Total VOC Trends in Groundwater**





- LEGEND:**
- MW-1A to MW-3A Monitoring wells installed on April 20, 2011.
 - SBA01 Monitoring well installed on July 13, 2010 after completion of the IRM's.
 - E/IP-1 ORC injection well installed during the IRM's.
 - OU1 Operable Unit No. 1
 - OU2 Operable Unit No. 2
 - Location of former underground storage tanks.
 - Contour line depicting total VOC's in groundwater.
 - Contour line is dashed where inferred. Total VOC concentrations expressed in micrograms per liter (ug/l).

Map Reference:
 7-ALTA/ACSM Land Title Boundary & Topographic Survey for 107 South Main Street, Village of Dolgeville, Herkimer County, New York. Prepared by C.T. Male Associates, P.C. Project No. 09-0106, dated December 2, 2008, last revised September 20, 2011.



UNAUTHORIZED ALTERATION OR REVISION OF THIS DRAWING IS A VIOLATION OF SECTION 7209 SUBDIVISION 2 OF THE NEW YORK STATE EDUCATION LAW.
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 C.T. MALE ASSOCIATES, P.C.

DATE	REVISIONS	RECORD/DESCRIPTION	DRAFTED/CHECK	APPR.

MAP NOTES:
 1.) THE LOCATIONS AND FEATURES DEPICTED ON THIS MAP ARE APPROXIMATE AND DO NOT REPRESENT AN ACTUAL FIELD SURVEY.

MAP REFERENCES:
 1.) ALTA/ACSM TITLE BOUNDARY AND TOPOGRAPHIC SURVEY 107 SOUTH MAIN STREET PREPARED BY C.T. MALE ASSOCIATES, P.C. DWG NO.09-0106 DATED DECEMBER 2, 2008.

FIGURE 6
AREA OF REMEDIATION

FORMER JONES/DAY PROPERTY - 107 SOUTH MAIN STREET

VILLAGE DOLGEVILLE
 HERKIMER COUNTY, NEW YORK

C.T. MALE ASSOCIATES, P.C.
 50 CENTURY HILL DRIVE, P.O. BOX 727, LATHAM, NY 12110
 518.786.7400 • FAX 518.766.7299
 ARCHITECTURE & BUILDINGS SYSTEMS ENGINEERING • CIVIL ENGINEERING
 ENVIRONMENTAL SERVICES • SURVEY & LAND INFORMATION SERVICES

SHEET 1 OF 1
 DWG. NO:11-0481

Lands Now or Formerly of
 TERRY R. CALL &
 PATRICIA A. CALL
 Book 1125 Page 444
 Tax Map I.D. No. 108.52-2-18

Lands Now or Formerly of
 JAMES PIERCE
 Book 850 Page 297
 Tax Map I.D. No. 108.52-2-17

Lands Now or Formerly of
 BRIAN D. ALLEN &
 BARBARA R. ALLEN
 Book 693 Page 385
 Tax Map I.D. No. 108.52-2-16

Lands Now or Formerly of
 STEVEN R. WILLIAMS
 Book 944 Page 413
 Tax Map I.D. No. 108.52-2-15

Lands Now or Formerly of
 LANCE BRANDOW
 Book 1175 Page 330
 Tax Map I.D. No. 108.52-2-14

APPENDIX A

Responsiveness Summary

RESPONSIVENESS SUMMARY

**Former Jones/Day Property
Operable Unit No. 2
Environmental Restoration Project
Village of Dolgeville, Herkimer County, New York
Site No. B00117**

The Proposed Remedial Action Plan (PRAP) for Operable Unit No. 2 at the Former Jones/Day 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 31, 2012. The PRAP outlined the remedial measure proposed for the off-site contaminated soil and groundwater (i.e., OU2) at the Former Jones/Day 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 February 16, 2012, which included a presentation of the site investigation remedial alternatives report (SI/RAR) for the Former Jones/Day site as well as a discussion of the proposed remedy. The meeting provided an opportunity for citizens to discuss their concerns, ask questions and comment on the proposed remedy. These comments have become part of the Administrative Record for this site. The public comment period for the PRAP ended on March 16, 2012.

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

COMMENT 1: Has access to the site been granted in order to implement the remedial program?

RESPONSE 1: No, at this time access has been denied. The Department will continue to work with the home owner to implement the cleanup program.

COMMENT 2: Is the Village of Dolgeville responsible for the cleanup of the off-site property?

RESPONSE 2: If the project moves forward under the Environmental Restoration Program, the Village would be responsible for the off-site remedial program, however, the full cost would be reimbursed by the Department.

APPENDIX B

Administrative Record

Administrative Record

**Former Jones/Day Property
Operable Unit No. 2
Environmental Restoration Project
Village of Dolgeville, Herkimer County, New York
Site No. B00117**

Proposed Remedial Action Plan for the Former Jones/Day site, Operable Unit No. 1, dated January 2012, prepared by the Department.

Alternatives Analysis Report, dated November 2011, prepared by C.T. Male Associates, P.C.

Remedial Investigation/Interim Remedial Measure Report, dated October 2011, prepared by C.T. Male Associates, P.C.

Vapor Intrusion Assessment Work Plan, dated October 2010, prepared by C.T. Male Associates, P.C.

Interim Remedial Measure Project Manual, dated October 2009, prepared by C.T. Male Associates, P.C.

The Department and the Village of Dolgeville entered into a State Assistance Contract, Contract No. February 27, 2009.

Remedial Investigation Work Plan, dated November 2008, prepared by C.T. Male Associates, P.C.