Department of Environmental Conservation

Division of Environmental Remediation

Record of Decision Amendment

NYSEG Cortland Homer Former MGP Site
Operable Unit No. 1
Village of Homer, Cortland County, New York
Site Number 712005

December 2010

New York State Department of Environmental Conservation
DAVID A. PATERSON, *Governor* PETER M. IWANOWICZ, *Acting Commissioner*

DECLARATION STATEMENT - RECORD OF DECISION AMENDMENT

NYSEG Cortland Homer MGP Site
Operable Unit No. 1
Village of Homer, Cortland County, New York
Site No. 712005

Statement of Purpose and Basis

This Record of Decision (ROD) Amendment presents the selected remedy for the Operable Unit No. 1 of the NYSEG Cortland Homer MGP Site. The selected remedial program was chosen in accordance with the New York State Environmental Conservation Law, 6 NYCRR Part 375, 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 Operable Unit No. 1 of the NYSEG Cortland Homer MGP Site and the public's input to the ROD Amendment 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 Amendment.

Description of Selected Remedy

Based on the results of new information from the pre-design investigations completed for the NYSEG Cortland Homer MGP Site and the criteria identified for evaluation of alternatives, the Department has amended the 2007 ROD to require targeted excavation of impacted soils with off-site disposal; performing in-situ solidification of contaminated soils; and containing contaminated soils under major utilities and Route 11. All other elements of the 2007 ROD remain unchanged. The components of the remedy are as follows:

1. A remedial design program to provide the details necessary for the construction, operation, maintenance, and monitoring of the remedial program. Any uncertainties identified during the RI/FS will be resolved.

2. Demolition of the southern portion of the on-site building as necessary to enable the excavation of contaminated soils. The northern portion of the current site building will remain in place. This will require additional construction efforts to shore and support the building's continued use during excavation.

3. Excavation and off-site disposal of existing former MGP structures, debris, piping, and major obstructions, including highly impacted soils in the immediate vicinity of these

structures, to allow in-situ solidification of soils containing greater than 500 ppm total PAHs.

4. In-situ solidification (ISS) of impacted soils. The method of ISS will be determined in the remedial design. The ISS will extend to the approximate vertical and horizontal limits of the excavation indicated in the 2007 ROD, which will be expanded as necessary to include areas of impacted soil containing greater than 500 ppm PAHs. Further delineation of the affected areas will be carried out after the partial building demolition, prior to the start of remedial construction. Solidified soils will be covered by a four-foot layer of soil to protect them from freeze-thaw cycles. To account for the expansion in volume associated with ISS and the four-foot frost protection layer, additional soil will be excavated and the excavated area graded to the required ISS elevation. Only the volume of soil necessary to account for the volume of the expansion associated with the ISS and the 4-foot frost protection layer will be required to be excavated. The additional soil to be excavated to account for the volume expansion associated with ISS and the 4-foot frost protection layer will be targeted to accessible areas of highly contaminated material, both above and below the groundwater table, focusing on soils containing visible coal tar, NAPL, oil, or visible purifier waste. Excavated soil containing these materials or total PAHs greater than 500 ppm will be disposed of at an off-site treatment or disposal facility. Excavated materials not meeting the disposal criteria will be stockpiled and evaluated for re-use on site as needed to establish the ISS elevation.

5. Jet grouting of impacted soils at locations where other ISS methods are not feasible due to the presence of utilities or other potential interferences.

6. Construction of jet-grouted vertical barrier walls beneath Route 11 to divert groundwater flows around potentially impacted soils that will be contained under Route 11.

7. Excavated materials which are below the 500 ppm PAH criteria will be stockpiled and evaluated for reuse on-site. The excavation will be backfilled with stockpiled soils and clean soil as defined in 6 NYCRR 375-6.7(d), graded, and the ground surface will be prepared to meet future land use requirements. A soil cover consisting of a minimum of one foot of soil meeting the commercial requirements for cover material set forth in 6 NYCRR Part 375-6.7(d), will be placed over a demarcation layer. Non-vegetated areas (buildings, roadways, parking lots, etc.) will be covered by a paving system or concrete at least 6 inches thick.

8. To maximize the net environmental benefit, Green remediation and sustainability efforts are considered in the design and implementation of the remedy to the extent practicable, including

    - using renewable energy sources
    - reducing green house gas emissions
    - encouraging low carbon technologies
    - fostering green and healthy communities
    - conserving natural resources

- increasing recycling and reuse of clean materials
- preserving open space and working landscapes
- enhancing recreational use of natural resources
- designing cover systems to be usable for habitat or recreation
- designing storm water management systems to recharge aquifers

9. Soil vapor intrusion in the remaining portion of the building will be evaluated after soil excavation and building modification, with mitigation and/or monitoring as determined to be necessary.

10. Imposition of an institutional control in the form of an environmental easement that will require: (a) limiting the use and development of the property to commercial use, which would also permit industrial use; (b) compliance with the approved site management plan; (c) restricting the use of groundwater as a source of potable water, without necessary water quality treatment as determined by NYSDOH; and (d) the property owner to complete and submit to the Department a periodic certification of institutional and engineering controls.

11. Development of a site management plan which will include the following institutional and engineering controls: (a) management of the final soil cover system to restrict excavation below the soil cover's demarcation layer, pavement, or buildings. Excavated soil will be tested, properly handled to protect the health and safety of workers and the nearby community, and will be properly managed in a manner acceptable to the Department; (b) continued evaluation of the potential for soil vapor intrusion for any building developed on the site, including provisions for mitigation of any impacts identified; and (c) a monitoring program that contains groundwater monitoring and contingencies to be implemented should the site remedy fail to achieve the remedial action objectives in a timely manner or NAPL is observed in the monitoring wells.

12. NYSEG will provide periodic certification of institutional and engineering controls, prepared and submitted by a professional engineer or such other expert acceptable to the Department, until the Department notifies the property owner in writing that this certification is no longer needed. This submittal will: (a) contain certification that the institutional controls and engineering controls put into place are still in place and are either unchanged from the previous certification or are compliant with the Department-approved modifications; (b) allow the Department access to the site; and (c) state that nothing has occurred that would impair the ability to control to protect public health or the environment, or constitute a violation or failure to comply with the site management plan unless otherwise approved by the Department.

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. 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.

DEC 29 2010
Date

Dale A. Desnoyers, Director
Division of Environmental Remediation

RECORD OF DECISION AMENDMENT
NYSEG CORTLAND HOMER FORMER MGP SITE
OPERABLE UNIT NO. 1

Village of Homer / Cortland County/ Registry No. 712005 December 2010

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

1.0 SUMMARY AND PURPOSE OF THE AMENDED REMEDY

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), has amended the remedy for the above referenced site. The disposal of hazardous waste at the site has resulted in threats to public health and the environment that are addressed by this Record of Decision (ROD) Amendment. The disposal of hazardous wastes at this site, as more fully described in Sections 2 of this document, have contaminated various environmental media. The remedy, discussed in detail in Section 3, is intended to attain the remedial action objectives identified for this site in Section 4.1 for the protection of public health and the environment. This ROD identifies the selected remedy, summarizes the other alternatives considered, and discusses the reasons for the selected remedy. The Department has selected a final remedy for the site after careful consideration of all comments received during the public comment period.

The New York State Inactive Hazardous Waste Disposal Site Remedial Program (also known as the State Superfund Program) is an enforcement program, the mission of which is to identify and characterize suspected inactive hazardous waste disposal sites and to investigate and remediate those sites found to pose a significant threat to public health and environment.

The Department has issued this ROD in accordance with the requirements of 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.

2.0 SITE INFORMATION

2.1 Site Description

The NYSEG Cortland Homer Former MGP Site is located at 216 South Main Street, in the Village of Homer, Cortland County, New York (see Figure 1), just north of the City of Cortland. The site is approximately 2 acres in area and consists of two adjoining land parcels that are privately owned. The southern parcel is vacant and the northern parcel contains a single story commercial building which is occupied by a general plumbing and electrical supply store and a parking lot.

The site parcels are bordered by New York State (NYS) Route 11 to the east, the New York and Susquehanna railroad line to the west and commercial properties to the north and south. East of NYS Route 11 is the West Branch of the Tioughnioga River. The west bank of the river is approximately 150 feet to the east of the site parcels.

Current land uses adjacent to the site include retail/convenience stores, automotive/equipment repair shops, gasoline service stations and a motel. A private residence and a park with athletic fields are located immediately east of the West Branch of the Tioughnioga River. The Cortland Country Club is located to the west of the site, beyond the railroad line.

Operable Unit (OU) No. 1, which is the subject of this document, consists of the former manufactured gas plant (MGP) and adjacent off-site contaminated soils under NYS Route 11. An operable unit represents a portion of the site remedy that for technical or administrative reasons can be addressed separately to eliminate or mitigate a release, threat of release or exposure pathway resulting from the site contamination. The remaining operable unit for this site, Operable Unit 2 (OU 2), consists of the parcel of land between the river and NYS Route 11, and includes contaminated sediments in the West Branch of the Tioughnioga River. OU 2 is the subject of a separate ROD that was issued in March 2005. The OU2 ROD included ISS of subsurface soils between Route 11 and the Tioughnioga River and sediment excavation as components of the off-site remedy. Figure 2 presents the operable units of the site and the major site features.

2.2 Site History

In 1858, the NYSEG Cortland- Homer MGP plant was constructed and began supplying manufactured gas to the Village of Homer under the name, "Homer and Cortland Gas Light Company". An MGP is a facility where gas for lighting and heating homes and businesses was produced. Manufactured gas was produced at this site using the coal gasification and carburetted water gas processes. Coal gas was produced on site until 1921, and then carburretted water gas was produced from 1921 to 1932. The gas holder was used until early 1935 for storing natural gas.

In the 1940's, NYSEG partially decommissioned the plant. In 1944 the Brockway Motor Company purchased the subject property and razed the remaining structures. The building that presently stands on the site is presumed to have been built by Brockway Motors and modified by subsequent owners.

2.3 Nature and Extent of Site Contamination

As described in the original ROD and other documents, many surface soil, subsurface soil and groundwater samples were collected at the site to characterize the nature and extent of contamination. The primary contaminants of concern include: volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCs). The VOCs of concern include benzene, toluene, ethylbenzene and xylene. These compounds are referred to as BTEX in this document. SVOCs of concern are primarily a group of chemicals referred to as polycyclic aromatic hydrocarbons (PAHs).

Waste Materials

The production of manufactured gas created many by-products, some of which remain on the site. A dense, oily liquid known as coal tar would condense out of the gas at various stages during its production, purification and distribution. Although some of the coal tar produced by plants may have been reused or sold, recovery of the tar was incomplete. Substantial amounts of tar leaked or were discharged from storage and processing facilities over the long life of the plant, contaminating subsurface soils on the site, as well as groundwater. Another by product, purifier waste, was the exhausted lime and/or iron oxide treated wood

chips that were used to remove cyanide and sulfur from the gas. Purifier waste was often discarded on the site of a gas plant or used as a fill material.

The source of much of the BTEX and PAH contamination found on site is the coal tar or non-aqueous phase liquids (NAPL) which is found both in and around the various subsurface structures, or is migrating through the subsurface at the site. The NAPL was found to saturate the unconsolidated deposits and/or exist in scattered, discontinuous globules. Either of these conditions generally coincides with high BTEX and PAH concentrations in soils and typically results in significant contamination to the groundwater as well. Areas with a substantial volume of contaminants have been termed "source areas" and are defined as the locations at the site of former MGP structures and/or those areas of soil which contain significant volumes of coal tar waste or which are saturated with visually observed separate phase product (NAPL). Soils exhibiting odors, staining and/or sheens are not necessarily included in the definition of "source areas." At the site, these "source areas" appear to be directly associated with several of the former plant structures, some of which remain on site below the current ground surface.

Surface Soil

The surface soil for the site is either fill that was placed after MGP operations ceased or asphalt pavement. Site-related constituents were found above analytical detection limits; however, they are orders of magnitude below those found in the waste materials and found in subsurface soil.

Total PAHs (TPAHs) detected in surface (0-1 inch) samples ranged from 1.5 to 34.7 ppm. Two samples collected to represent background ranged from 5.9 to 7.1 ppm for TPAHs. PAHs are common in fuel, asphalt, combustion and coal residues and are therefore common in developed areas.

The following individual compounds and their range of concentrations were found to be above background levels and/or soil cleanup objectives: benzo (a) anthracene (0.6 to 3.6 ppm), chrysene (0.62 to 3.3 ppm), benzo (a, h) fluoranthene (1.4 to 2.5 ppm), benzo (k) fluoranthene (1.9 to 2.1 ppm), benzo (a) pyrene (0.58 to 3.3 ppm), dibenzo (a, h) anthracene (0.034 to 1.1 ppm).

Subsurface Soil

During the RI, approximately 43 subsurface soil samples were collected and analyzed. These samples show that certain areas of the site are heavily impacted by MGP tar and related constituents, while other areas had more discrete impacts.

Contaminant concentrations are generally higher on the site and become more limited in concentration and physical extent to the east of the site building, under New York State Route 11. NAPL observed on the site occurs primarily as saturation of unconsolidated deposits and/or product in discrete horizontal zones, particularly towards the top of the water table and directly above the silty clay unit. PAHs levels in subsurface soils range from non-detect to 60,300 ppm. BTEX levels in subsurface soils range from non-detect to 950 ppm.

Groundwater

The RI identified significant groundwater contamination at the site. This groundwater contamination originates in the area of the former MGP structures under the on-site building and extends beyond the site

property to the West Branch of the Tioughnioga. In the vicinity of the site, the groundwater discharges to the river. Monitoring wells installed on the opposite bank of the river (the east bank) show no impacts from the site.

The contamination in groundwater at the site was found at comparable levels in both the shallow and deep wells at the site. For example, in the well couplet of MW-3, which is screened at 7-12 feet, and MW-24, which is screened at 30-40 feet, the BTEX levels were 5,550 ppb and 3,030 ppb, respectively. The TPAH levels were similarly contaminated at 6,680 ppb and 7,570 ppb, respectively. The principal VOCs detected above groundwater quality standards include benzene, toluene, ethylbenzene, and xylenes (BTEX). The extent of these exceedances is shown in Figure 3. The BTEX compounds are the most mobile of the groundwater contaminants and are often present well above their individual groundwater quality standards in the on-site wells. SVOC groundwater contamination is comprised primarily of PAHs and their distribution in groundwater is similar to the VOC plumes (shallow and deep). The extent of SVOC groundwater contamination is shown in Figure 4.

Soil Vapor/Sub-Slab Vapor/Air

During the RI, air samples were collected with summa canisters to assess potential impacts to indoor air quality and soil vapor. Six indoor air samples from the on-site building were collected and submitted for analysis of volatile organic compounds by analytical method TO-14. BTEX was detected in all of the samples collected. Generally these detections were low and commingled with various chlorinated solvents. Individual concentrations ranged up to 87 ug/m^3 for toluene and 150 ug/m^3 for tetrahydrofuran.

Subsequently, three sub-slab soil vapor grab samples were collected with summa canisters from beneath the site building. These samples found the sub slab vapor to be contaminated with BTEX. The most heavily impacted sample was collected from SB-9, near the relief holder. Values detected in this sample included: 2851 ug/m^3 of BTEX, 173 ug/m^3 of benzene, 60 ug/m^3 of cumene and 1832 ug/m^3 of xylenes.

2.4 Summary of Human Exposure Pathways

This section describes the types of human exposures that may present added health risks to persons at or around OU1. A more detailed discussion of the human exposure pathways can be found in Section 1.2 of the Final Feasibility Study (FS) report.

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 are documented. An exposure pathway is considered a potential pathway when one or more of the elements currently does not exist, but could in the future.

Potential Exposure Pathways identified are:

- Dermal contact with NAPL, contaminated soil or groundwater;
- Incidental ingestion of contaminated soils or groundwater; and
- Inhalation of contaminated soil vapors or dust.

The potential for exposure to contaminated soil and NAPL is unlikely since contaminated soils are subsurface and the site area is covered by a building, gravel, or grass. However, redevelopment, subsurface utility work or building maintenance work in the future could bring workers into contact with contaminated material or bring contaminated soils to the surface.

Exposure to contaminated groundwater is unlikely since the area is served by public water. However, the potential for exposure to contaminated groundwater in the future exists if a well were installed or construction was to occur below the shallow groundwater table.

There is currently an active industrial building on the site; therefore the potential exists for exposure to indoor air contamination. Sampling indicates the sub slab vapor is contaminated. Indoor air sampling in this building also identified site-related chemicals which may originate from site contamination, as well as from the use of the same chemicals in the current industrial use of the site. For example, chlorinated solvents are attributed to the building's current use since chlorinated solvents are not associated with MGP operations.

2.5 Summary of Environmental Assessment

This section summarizes the 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, as well as damage to natural resources such as aquifers and wetlands. Due to the size and industrial nature of the site there are very limited opportunities for fish and wildlife resources at the OU1 portion of the site. Site contamination at the site has negatively impacted the groundwater resource in the unconsolidated geologic units. This resource is identified as a sole source aquifer, the Homer/Preble aquifer, which provides area residents and businesses with water. The well field that extracts water from the aquifer is located 1.5 miles north of the site. The site has no direct impact on this water supply because of the groundwater flow direction is eastward.

The Fish and Wildlife Impact Analysis, which is included in the RI report, presents a detailed discussion of the existing and potential impacts from the site to fish and wildlife receptors. These impacts were addressed in the March 2005 Record of Decision for OU2.

2.6 Original Remedy

Based upon the results of the RI/FS and an evaluation of the data, the Department selected a site remedy in 2007 that included:

1. Demolishing the southern portion of the on-site building as necessary to excavate the contaminated soils.

2. Excavating MGP waste, NAPL and contaminated soils meeting one or more of the following criteria: visible tar or oil; the presence of sheens or odors with total PAHs over 1000 ppm; purifier waste with reactive cyanide levels above 250 ppm; or purifier waste with reactive sulfide levels above 500 ppm. Treatment and/or disposal of excavated materials meeting the above criteria would occur at an off-site facility.

3. Extracting and treating groundwater properly during construction in compliance with applicable standards.

4. Stockpiled materials which are below the criteria would be evaluated for reuse on-site. The excavation would be backfilled with stockpiled soils and clean soil, and the ground surface would be prepared to meet future land use requirements. Non-vegetated areas (buildings, roadways, parking lots, etc.) would be covered by a paving system or concrete at least 6 inches thick.

5. Evaluating the potential for soil vapor intrusion in the remaining portion of the building after soil excavation and building modification are completed.

6. Imposition of an institutional control in the form of an environmental easement that restricts the use of the property to industrial/commercial, requires compliance with the site management plan, and requires periodic certification of the effectiveness of the remedy.

7. Development of a site management plan which would include institutional and engineering controls for future use and monitoring at the site. This plan would manage future use and monitor the effectiveness of the soil remediation.

8. The property owner would provide a periodic certification to the Department that the institutional and engineering controls are still in place and are effective.

The current configuration of the original remedy is shown on Figure 5.

3.0 DESCRIPTION OF THE AMENDMENTS TO THE ROD

3.1 New Information

Since the issuance of the FS and ROD, significant new information about the site has been obtained. Groundwater modeling results indicate that contaminated soil which could not be excavated due to the presence of the roadway and critical utilities along the east side of the site would pose an unacceptable source of groundwater contamination and migration if the groundwater continued to pass through it. These utilities include the sanitary sewer that services the Village of Homer, a water main, gas main, telephone line and storm sewer. Information derived from groundwater modeling indicates that targeted excavation and ISS at the OU-1 site offers better long-term groundwater protection by reducing the mobility of the remaining source material. The model results show that the solidification of soils in the OU2 area between Route 11

and the Tioughnioga River would divert groundwater approaching from beneath the site and Route 11. This diversion would increase the velocity of groundwater flow through areas of remaining contamination, and thereby increase the potential for contaminant migration from the unexcavated areas beneath the utility corridor and Route 11. The model further demonstrates that construction of a low permeability ISS area beneath the site would divert groundwater flow around the entire contaminated area. The remaining contamination would be isolated from groundwater flow, and groundwater velocities would be increased only through uncontaminated areas. This approach would better protect groundwater resources and would improve the long-term effectiveness of the remedy.

3.2 Changes to the 2007 ROD

Based on the new information submitted, the Department determined that the requested modification to the 2007 ROD would require a ROD Amendment.

The Department selected the following changes:

1. Excavation and off-site disposal of MGP structures, debris, piping, and major obstructions, including highly impacted soils in the immediate vicinity of these structures, to allow in-situ solidification of soils containing greater than 500 ppm total PAHs.

2. In-situ solidification (ISS) of impacted soils. The method of ISS will be determined in the remedial design. The ISS will extend to the approximate vertical and horizontal limits of the excavation indicated in the 2007 ROD to be expanded as necessary to include areas of impacted soil containing greater than 500 ppm PAHs. Further delineation of the affected areas will be carried out after the partial building demolition, prior to the start of remedial construction. Solidified soils will be covered by a four-foot layer of soil to protect them from freeze-thaw cycles. The top foot of this cover will be soil that meets the restricted commercial requirements for cover material set forth in 6 NYCRR Part 375-6.8(d), which will be placed over a demarcation layer. To account for the expansion in volume associated with ISS and the four-foot frost protection layer, additional soil will be excavated. Only a volume of soil sufficient to account for the volume expansion associated with the ISS and the 4-foot frost protection layer will be required to be excavated. The additional soils to be excavated to account for the volume expansion associated with ISS and the 4-foot frost protection layer will target highly contaminated material that is accessible, both above and below the groundwater table, focusing on soils containing visible coal tar, NAPL, oil, or visible purifier waste. Soil containing these materials or total PAHs greater than 500 ppm will be disposed at an off-site treatment or disposal facility. Excavated materials not meeting these criteria will be stockpiled and evaluated for re-use on site.

3. Jet grouting of impacted soils at locations where other ISS methods are not feasible due to the presence of utilities or other potential interferences.

4. Construction of jet-grouted vertical barrier walls connecting the OU1 and OU2 areas of ISS beneath Route 11 to divert groundwater flows around potentially impacted soils that will remain isolated under Route 11.

The elements of the revised remedy are shown on Figure 6. Other components of the amended remedial

action, including institutional controls to restrict land and groundwater uses, and a site management plan, and groundwater monitoring, will be unchanged from the 2007 ROD.

4.0 EVALUATION OF CHANGES

4.1 Remedial Goals

Goals for the cleanup of the site were established in the original ROD. The goals selected for this site are to eliminate or reduce to the extent practicable:

- Exposures of persons at or around the site to site-related constituents, VOCs, SVOCs and PAHs, in groundwater and subsurface soils;
- The release of contaminants from soil into groundwater that may create exceedances of groundwater quality standards;
- The release of contaminants from subsurface soil under buildings into indoor air through soil vapor; and
- The migration of coal tar beyond the site boundary.

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

- Ambient groundwater quality standards

4.2 Evaluation Criteria

The criteria used to compare the remedial alternatives are defined in the regulation that directs the remediation of inactive hazardous waste sites in New York State (6 NYCRR Part 375). For each criterion, a brief description is provided. A detailed discussion of the evaluation criteria and comparative analysis is contained in the original Feasibility Study.

The first two evaluation criteria are called 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.

Both the remedy selected in the 2007 ROD and the selected remedy would be equally protective of human health and the environment since both would remove or address the MGP-contaminated soils, implement long-term groundwater monitoring programs, and establish institutional controls and engineering controls for OU1.

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 most significant SCGs of concern are ambient groundwater quality standards (6NYCRR Parts 700-705) and the 6NYCRR Part 375 Soil Cleanup Objectives (SCOs) pertaining to MGP-related NAPL and PAHs.

The selected remedy would address a greater volume of soil that exceeds the SCOs from the site than the original remedy. The selected remedy would better achieve groundwater quality standards because the solidified material would divert the groundwater around the remaining contaminated soil.

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.

The short-term impacts of vehicle traffic, contaminated material excavation and handling, and soil backfill would represent noise, dust and emission concerns which would need to be controlled with health and safety plans and engineering controls. The amended remedy represents a decrease in short term impacts due to the reduced excavation volume and associated decrease in odors, truck traffic and duration. However, routine procedures will be used to monitor and mitigate odor and dust resulting from the construction activities. The impacts from the ISS will be similar to the impacts for the soils across Route 11.

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.

The excavation and off-site treatment or disposal component of the amended remedy provides a higher degree of long-term effectiveness than on-site containment and collection. The source material above the groundwater table would be excavated and properly disposed off-site for both the amended remedy and the original remedy. The four-foot frost protection layer over the ISS material would ensure that the soil treatment is effective in the long term. The contaminated soils in the utility corridor and under Route 11, which were not addressed by the original remedy, would be addressed by containment under the amended remedy. Therefore, the reliability is greater and the magnitude of risk is lower for the amended remedy as compared to the original remedy.

Both the original and amended remedy would require monitoring of the groundwater. However, the risk associated with the potential release of contaminated groundwater under the amended remedy would be lower than the risk of allowing the contaminated soils in the utility corridor and under Route 11 to remain untreated.

Additionally, the time needed to achieve compliance with groundwater SCGs across the site would be expected to be less than for the amended remedy, due to the ISS of the soils and installing a jet grouted vertical barrier walls within the Route 11 right-of-way to divert groundwater flows around potentially impacted soils under Route 11.

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.

The amended remedy will remove some of the NAPL-contaminated soil for treatment off-site, which would provide a permanent reduction in volume. The remainder would be treated in place to reduce its mobility. By comparison, the remedy selected in the 2007 ROD would excavate a larger portion of contaminated soil and thereby provide a greater reduction in volume. However, the original remedy would have increased the potential mobility of contamination remaining beneath Route 11, while the amended remedy would reduce the mobility of this contamination by isolating it within a solidified area. The amended remedy will therefore provide a greater reduction in mobility than the original remedy.

6. Implementability. The technical feasibility 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.

The ISS and excavation alternatives pose different implementability challenges at this site. Excavation is performed using standard construction techniques and readily-available equipment, while ISS requires specialized equipment and personnel. Excavation at this site is made more difficult by the depth required for excavation and the highly productive groundwater aquifer, which together would require an extensive dewatering and groundwater treatment system. The remedial design of the ROD-specified excavation remedy also identified a number of critical utilities which would have to be avoided or relocated to achieve the remedial goals for the site. The ISS technology does not require excavation dewatering, but is made more difficult by the coarse sand and gravel beneath the site and the potential presence of obstructions, such as former MGP structures and subsurface utilities. Jet grouting around the utilities and beneath Route 11 to create vertical barrier walls is more implementable than excavation of these areas. Based on this evaluation the amended remedy is more readily implementable than the remedy selected in the 2007 ROD.

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 estimated cost of the amended remedy is $10,800,000. The estimated cost of the original ROD remedy, as determined during the design process and based on current prices, is $13,700,000.

The amended remedy will provide substantial benefit to the environment by addressing a greater volume of contaminated soil, reducing the mobility of residual contamination and shortening the time required for the restoration groundwater quality for this increase in cost.

This final criterion is considered a modifying criterion and is considered after evaluating those above. It is focused upon after public comments on the proposed ROD amendment have been received.

8. Community Acceptance. Concerns of the community regarding the proposed changes have been evaluated. The responsiveness summary (Appendix A) presents the public comments received and the manner in which the Department addressed the concerns raised. The public generally supported the amended remedy.

5.0 SUMMARY OF ROD AMENDMENT

The Department has amended the Record of Decision (ROD) for the NYSEG Cortland Homer Former MGP Site, Operable Unit 1. The selected changes include:

- Reducing the area of excavation to include the former MGP structures, impacted soils in the immediate vicinity of these structures, and targeted soils as necessary to accommodate the volume expansion and four-foot frost protection layer .

- Replacing excavation of the remaining soils with in-situ solidification (ISS). This includes jet grouting at locations where excavation was not specified in the original remedy due to the presence of existing utilities along Route 11 or other potential interferences.

- Lowering the action level for soils to be addressed from 1000 ppm total PAHs to 500 ppm total PAHs.

- Construction of jet grouted vertical barrier walls beneath Route 11 to divert groundwater flows around contaminated soils that remain under Route 11.

The estimated present worth cost to carry out the amended remedy is $10,800,000. The estimated present worth to complete the original remedy was $13,700,000. The cost to construct the amended remedy is estimated to be $10,300,000 and the estimated average annual cost for 30 years is $33,000.

The elements of the amended remedy are as follows:

1. A remedial design program to provide the details necessary for the construction, operation, maintenance, and monitoring of the remedial program. Any uncertainties identified during the RI/FS will be resolved.

2. Demolition of the southern portion of the on-site building as necessary to enable the excavation of contaminated soils. The northern portion of the current site building will remain in place. This will require additional construction efforts to shore and support the building's continued use during excavation.

3. Excavation and off-site disposal of existing former MGP structures, debris, piping, and major obstructions, including highly impacted soils in the immediate vicinity of these structures, to allow in-situ solidification of soils containing greater than 500 ppm total PAHs.

4. In-situ solidification (ISS) of impacted soils. The method of ISS will be determined in the remedial design. The ISS will extend to the approximate vertical and horizontal limits of the excavation indicated in the 2007 ROD, which will be expanded as necessary to include areas of impacted soil containing greater than 500 ppm PAHs. Further delineation of the affected areas will be carried out after the partial building demolition, prior to the start of remedial construction. Solidified soils will be covered by a four-foot layer of soil to protect them from freeze-thaw cycles. To account for the expansion in volume associated with ISS and the four-foot frost protection layer, additional soil will be excavated and the excavated area graded to the required ISS elevation. Only the volume of soil necessary to account for the volume of the expansion associated with the ISS and the 4-foot frost protection layer will be required to be excavated. The additional soil to be excavated to account for

the volume expansion associated with ISS and the 4-foot frost protection layer will be targeted to accessible areas of highly contaminated material, both above and below the groundwater table, focusing on soils containing visible coal tar, NAPL, oil, or visible purifier waste. Excavated soil containing these materials or total PAHs greater than 500 ppm will be disposed of at an off-site treatment or disposal facility. Excavated materials not meeting the disposal criteria will be stockpiled and evaluated for re-use on site as needed to establish the ISS elevation.

5. Jet grouting of impacted soils at locations where other ISS methods are not feasible due to the presence of utilities or other potential interferences.

6. Construction of jet-grouted vertical barrier walls beneath Route 11 to divert groundwater flows around potentially impacted soils that will be contained under Route 11.

7. Excavated materials which are below the 500 ppm PAH criteria will be stockpiled and evaluated for reuse on-site. The excavation will be backfilled with stockpiled soils and clean soil as defined in 6 NYCRR 375-6.7(d), graded, and the ground surface will be prepared to meet future land use requirements. A soil cover consisting of a minimum of one foot of soil meeting the commercial requirements for cover material set forth in 6 NYCRR Part 375-6.7(d), will be placed over a demarcation layer. Non-vegetated areas (buildings, roadways, parking lots, etc.) will be covered by a paving system or concrete at least 6 inches thick.

8. To maximize the net environmental benefit, Green remediation and sustainability efforts are considered in the design and implementation of the remedy to the extent practicable, including

    - using renewable energy sources
    - reducing green house gas emissions
    - encouraging low carbon technologies
    - fostering green and healthy communities
    - conserving natural resources
    - increasing recycling and reuse of clean materials
    - preserving open space and working landscapes
    - enhancing recreational use of natural resources
    - designing cover systems to be usable for habitat or recreation
    - designing storm water management systems to recharge aquifers

9. Soil vapor intrusion in the remaining portion of the building will be evaluated after soil excavation and building modification, with mitigation and/or monitoring as determined to be necessary.

10. Imposition of an institutional control in the form of an environmental easement that will require: (a) limiting the use and development of the property to commercial use, which would also permit industrial use; (b) compliance with the approved site management plan; (c) restricting the use of groundwater as a source of potable water, without necessary water quality treatment as determined by NYSDOH; and (d) the property owner to complete and submit to the Department a periodic certification of institutional and engineering controls.

11. Development of a site management plan which will include the following institutional and engineering controls: (a) management of the final soil cover system to restrict excavation below the

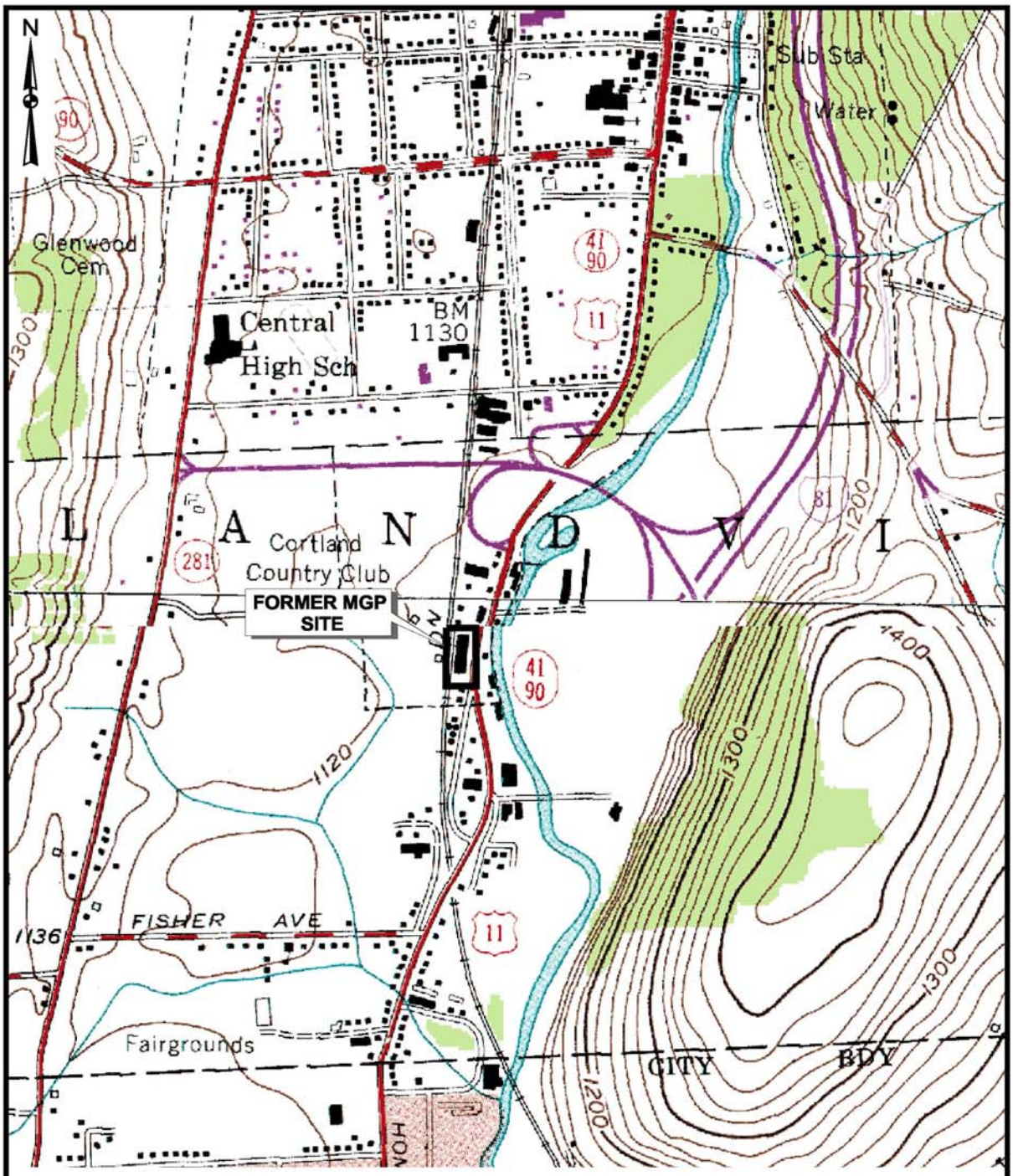
soil cover's demarcation layer, pavement, or buildings. Excavated soil will be tested, properly handled to protect the health and safety of workers and the nearby community, and will be properly managed in a manner acceptable to the Department; (b) continued evaluation of the potential for soil vapor intrusion for any building developed on the site, including provisions for mitigation of any impacts identified; and (c) a monitoring program that contains groundwater monitoring and contingencies to be implemented should the site remedy fail to achieve the remedial action objectives in a timely manner or NAPL is observed in the monitoring wells.

12. NYSEG will provide periodic certification of institutional and engineering controls, prepared and submitted by a professional engineer or such other expert acceptable to the Department, until the Department notifies the property owner in writing that this certification is no longer needed. This submittal will: (a) contain certification that the institutional controls and engineering controls put into place are still in place and are either unchanged from the previous certification or are compliant with the Department-approved modifications; (b) allow the Department access to the site; and (c) state that nothing has occurred that would impair the ability to control to protect public health or the environment, or constitute a violation or failure to comply with the site management plan unless otherwise approved by the Department.

6.0 HIGHLIGHTS OF COMMUNITY PARTICIPATION

As part of the remedial investigation process, a number of Citizen Participation activities were undertaken to inform and educate the public about conditions at the site and the potential remedial alternatives. The following public participation activities were conducted for the site:

- Repositories for documents pertaining to the site were established.
- A public contact list, which included nearby property owners, elected officials, local media and other interested parties, was established.
- A fact sheet was sent to the mailing list in October 2010 describing the proposed amendment and soliciting public comment.
- A public meeting was held on November 9, 2010 to present and receive comments on the proposed amendment.
- A responsiveness summary (Appendix A) was prepared to address the comments received during the public comment period for the ROD Amendment.

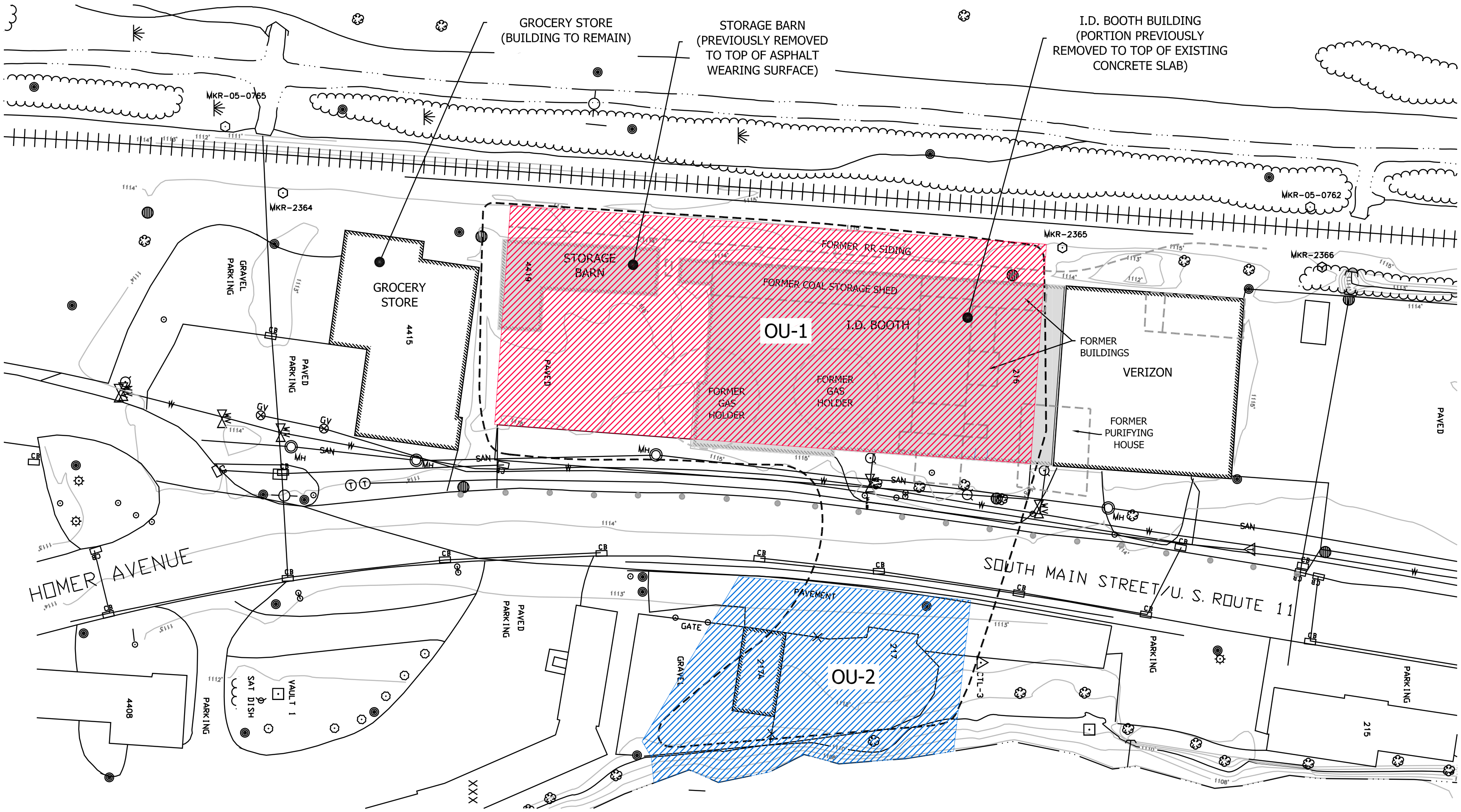


SOURCE:
USGS Topographic 7.5 Minute Quadrangles
Homer, New York
Cortland, New York

1000 0 1000 Feet

N:\1117323.00000\DB\GIS\nyseg.apr SITE LOCATION
1/26/2004

URS	NYSEG - CORTLAND/HOMER FORMER MGP SITE LOCATION	FIGURE 1



NOTES:

1. BUILDINGS LABELED AS "PREVIOUSLY REMOVED" TO BE REMOVED UNDER A SEPARATE CONTRACT.

2. EXISTING FLOOR SLABS, WEARING SURFACES, FOUNDATION AND OTHER BURIED ITEMS FROM PREVIOUS STRUCTURES, SHOWN OR NOT SHOWN, TO BE REMOVED AND DISPOSED OF UNDER THIS CONTRACT.

3. IN-SITU STABILIZATION AREA SHOWN TO BE INSTALLED IN THE AREA OF EXISTING UTILITIES.SEE DETAILS DWG. 06.

4. FOR INFORMATION ON EXISTING UNDERGROUND UTILITIES SEE DWG. 05.

5. FOR SHEETPILE PHASE LAYOUT INFORMATION SEE DWG. 07.

6. FOR SHEETPILE BRACING AND CONNECTION DETAILS SEE DWG. 08.

MAPPING REFERENCE:

1. BASE MAPPING, INCLUDING EXISTING UTILITY INFORMATION, PROVIDED NEW YORK STATE ELECTRIC & GAS (NYSE&G)

2. ADDITIONAL EXISTING SANITARY SEWER INFORMATION, INCLUDING R.O.W. AND EASEMENT INFORMATION TAKEN FROM A PLAN TITLED " VILLAGE OF HOMER, NEW YORK, SANITARY SEWER CONSTRUCTION, 24" TRUNK SEWER, SOUTH MAIN STREET, DATE LAST REVISED 5/18/1971, BY STEARNS AND WHEELER, CAZENOVIA, NY.

LEGEND

SOILS CONTAINING TOTAL SVOC'S ABOVE RECOMMENDED CLEAN-UP OBJECTIVES (TAGM 4046) (FROM URS FEASIBILITY STUDY,EXTENT OF SOIL CONTAMINATION, FIGURE 6)

PROPOSED EXCAVATION AREA (SHEET PILE)

PROPOSED ISS AREA

CB CATCH BASIN

MH EXISTING SANITARY MANHOLE

TEST STATION

CONTROL POINT

TELEPHONE MARKER

TELEPHONE MANHOLE

IRON PIN

GV GAS VALVE

WV WATER VALVE

UTILITY POLE (CARRYING OVERHEAD UTILITIES, NOT SHOWN)

LIGHT

N

0' 15' 30' 60'

SCALE

FILE = L:\WORK\102050\CADD\...\NYSEG-HOMER-DESIGN.DWG

NO	REVISIONS	DRN	CHK	DATE

DRN	KAM
DES	DJW
CHK	SAU
APP	CHF

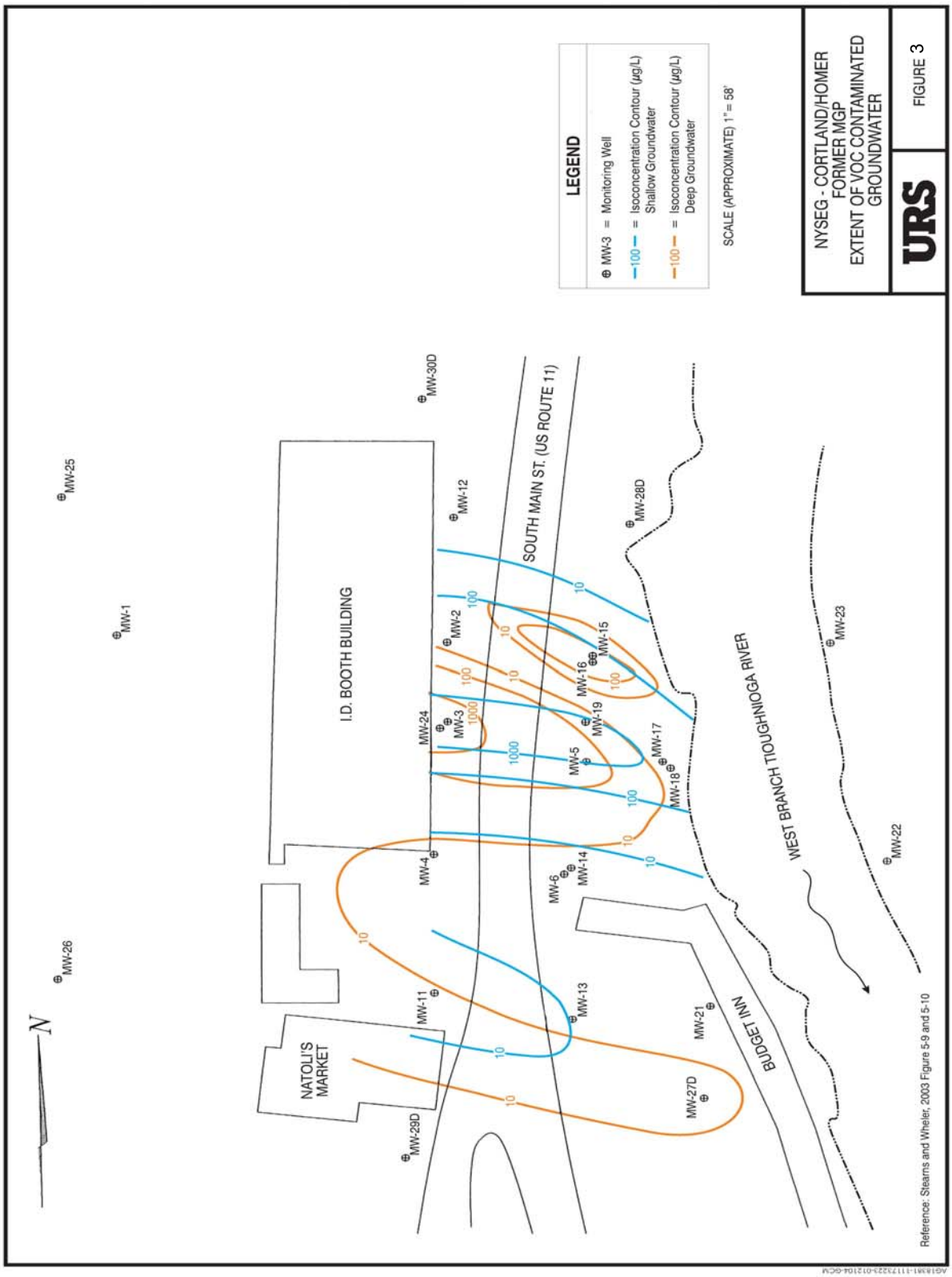
40 British American Blvd.
Latham NY
518-951-2200

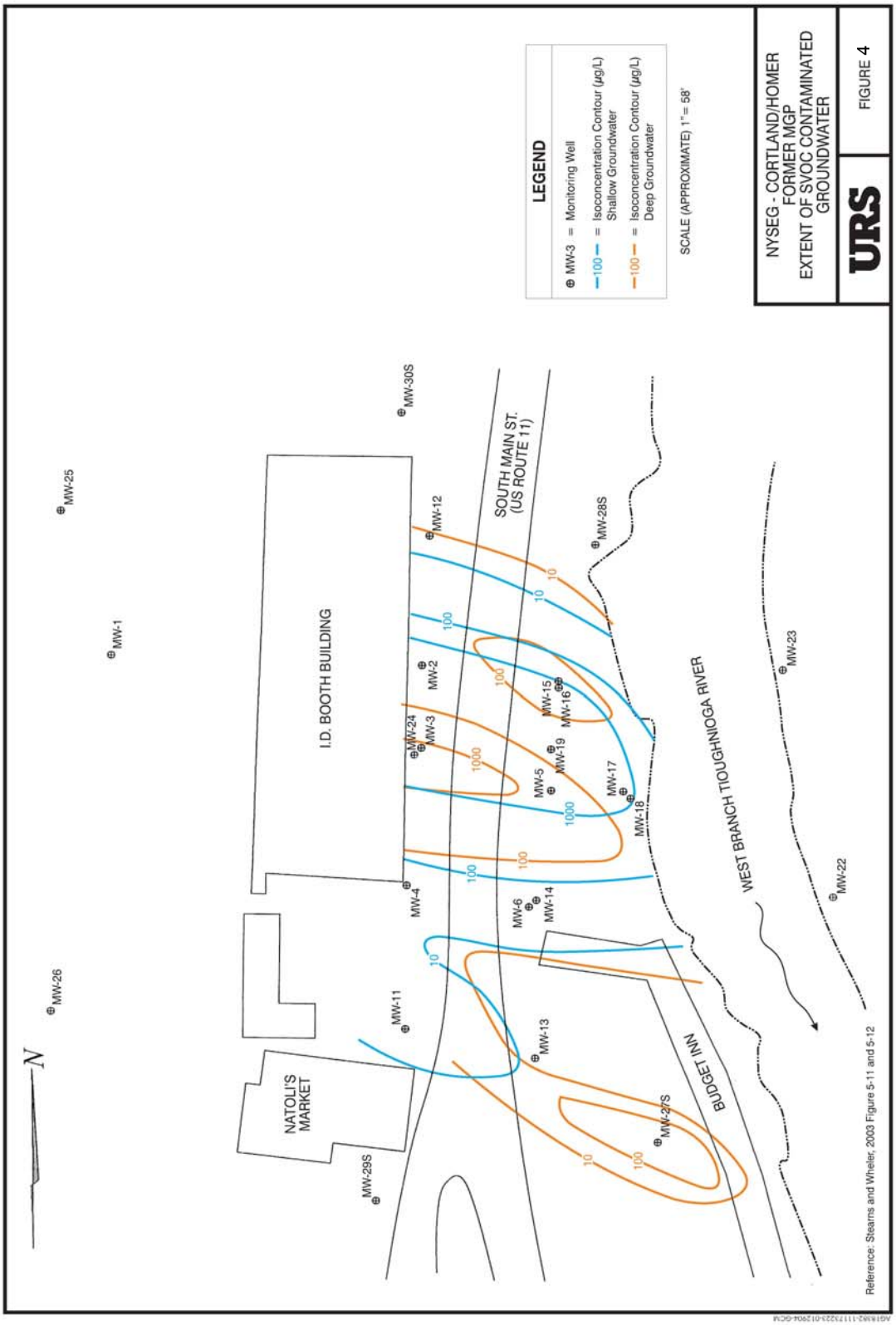
AECOM

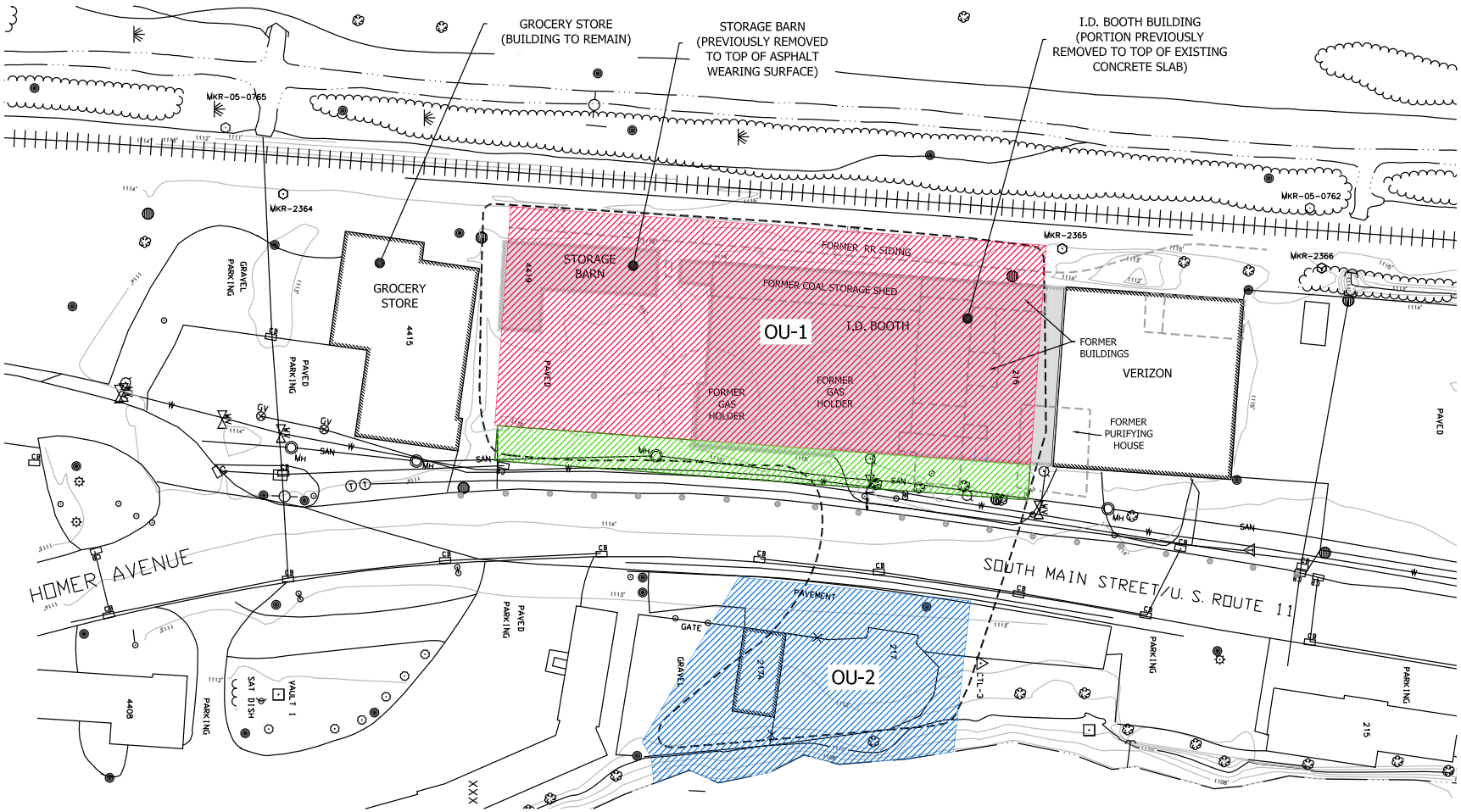
NYSEG - REMEDIAL DESIGN FOR
FORMER CORTLAND-HOMER MGP SITE (OU-1)
HOMER, NEW YORK

SITE OPERABLE UNITS

DATE	JULY 2009
PROJECT NO	102050
FILENAME	102050
SHEET NO	2
DRAWING NO	2


LEGEND
MW-3 = Monitoring Well
100 = Isoconcentration Contour (µg/L) Shallow Groundwater
100 = Isoconcentration Contour (µg/L) Deep Groundwater
SCALE (APPROXIMATE) 1" = 58'
NYSEG - CORTLAND/HOMER FORMER MGP
EXTENT OF VOC CONTAMINATED GROUNDWATER
URS
FIGURE 3
N
MW-25
MW-1
MW-26
MW-30D
MW-12
MW-2
MW-24
MW-3
MW-4
MW-11
MW-29D
MW-6
MW-14
MW-5
MW-19
MW-16
MW-15
MW-17
MW-18
MW-13
MW-21
MW-27D
MW-28D
MW-23
MW-22
I.D. BOOTH BUILDING
SOUTH MAIN ST. (US ROUTE 11)
NATOLI'S MARKET
BUDGET INN
WEST BRANCH TIOUGHNIOGA RIVER
10
100
1000
Reference: Stearns and Wheler, 2003 Figure 5-9 and 5-10


LEGEND
MW-3 = Monitoring Well
100 = Isoconcentration Contour (µg/L) Shallow Groundwater
100 = Isoconcentration Contour (µg/L) Deep Groundwater
SCALE (APPROXIMATE) 1" = 58'
NYSEG - CORTLAND/HOMER FORMER MGP
EXTENT OF SVOC CONTAMINATED GROUNDWATER
URS
FIGURE 4
N
I.D. BOOTH BUILDING
SOUTH MAIN ST. (US ROUTE 11)
WEST BRANCH TIOUGHNIOGA RIVER
NATOLI'S MARKET
BUDGET INN
MW-1
MW-2
MW-3
MW-4
MW-5
MW-6
MW-11
MW-12
MW-13
MW-14
MW-15
MW-16
MW-17
MW-18
MW-19
MW-22
MW-23
MW-24
MW-25
MW-26
MW-27S
MW-28S
MW-29S
MW-30S
10
100
1000
Reference: Stearns and Wheler, 2003 Figure 5-11 and 5-12



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3. IN-SITU STABILIZATION AREA SHOWN TO BE INSTALLED IN THE AREA OF EXISTING UTILITIES.SEE DETAILS DWG. 06.

4. FOR INFORMATION ON EXISTING UNDERGROUND UTILITIES SEE DWG. 05.

5. FOR SHEETPILE PHASE LAYOUT INFORMATION SEE DWG. 07.

6. FOR SHEETPILE BRACING AND CONNECTION DETAILS SEE DWG. 08.

MAPPING REFERENCE:

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LEGEND

- SOILS CONTAINING TOTAL SVOC'S ABOVE RECOMMENDED CLEAN-UP OBJECTIVES (TAGM 4046) (FROM URS FEASIBILITY STUDY,EXTENT OF SOIL CONTAMINATION, FIGURE 6)
- PROPOSED EXCAVATION AREA (SHEET PILE)
- UTILITY CORRIDOR (NO EXCAVATION)
- PROPOSED ISS AREA

- CB — CATCH BASIN
- MH — EXISTING SANITARY MANHOLE
- TEST STATION
- CONTROL POINT
- TELEPHONE MARKER
- TELEPHONE MANHOLE
- IRON PIN
- GV — GAS VALVE
- WV — WATER VALVE
- UTILITY POLE (CARRYING OVERHEAD UTILITIES, NOT SHOWN)
- LIGHT

0' 15' 30' 60'
SCALE

NO	REVISIONS	DRN	CHK	DATE

40 British American Blvd. Latham, NY 518-951-2200

DRN KAM
DES CLW
CHK SAU
APP CHF

AECOM

NYSEG - REMEDIAL DESIGN FOR
FORMER CORTLAND-HOMER MGP SITE (OU-1)
HOMER, NEW YORK

EXCAVATION REMEDY LAYOUT

DATE	JULY 2009
PROJECT NO	102050
FILENAME	102050
SHEET NO	10
DRAWING NO	5

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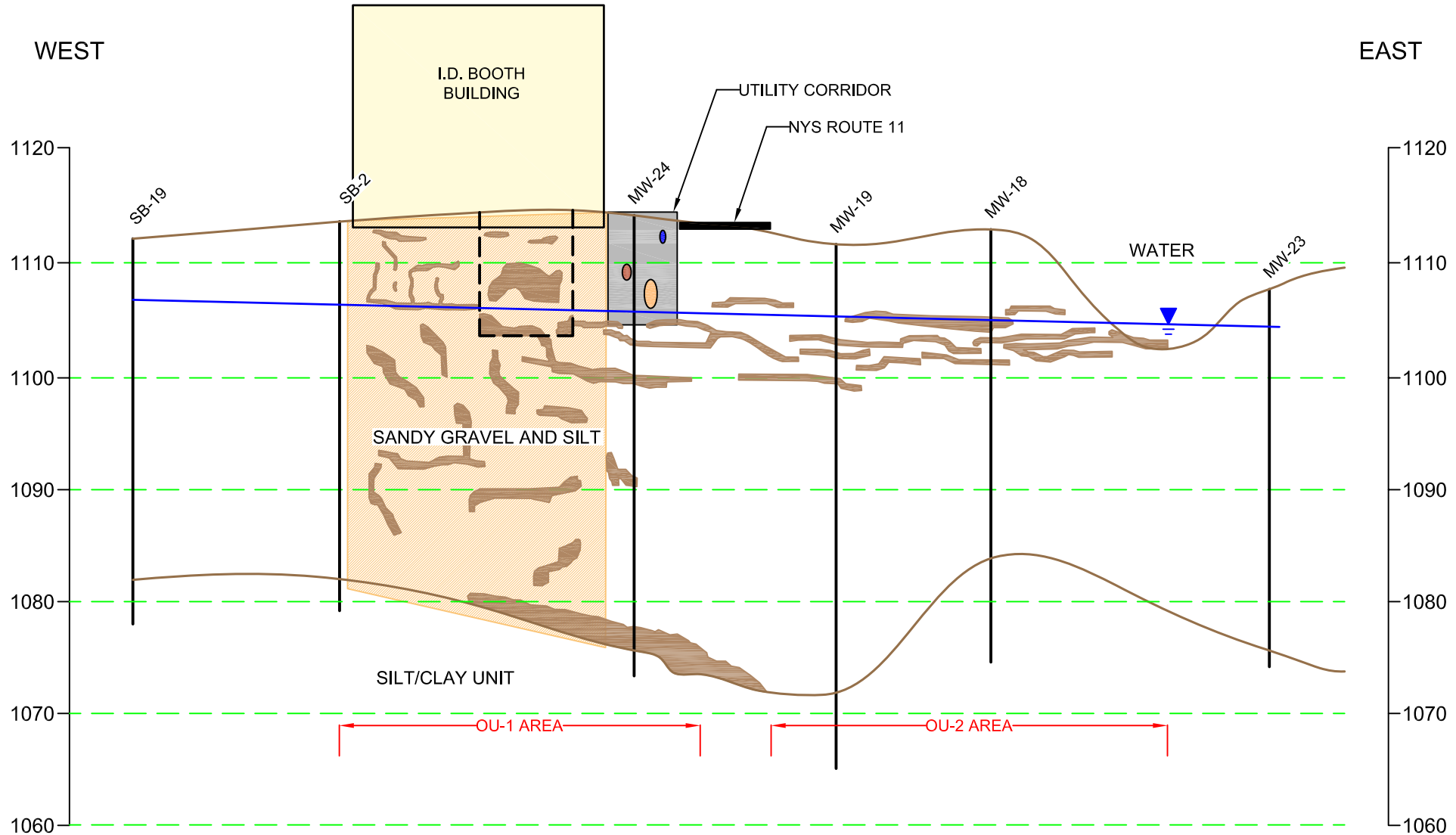


LEGEND:

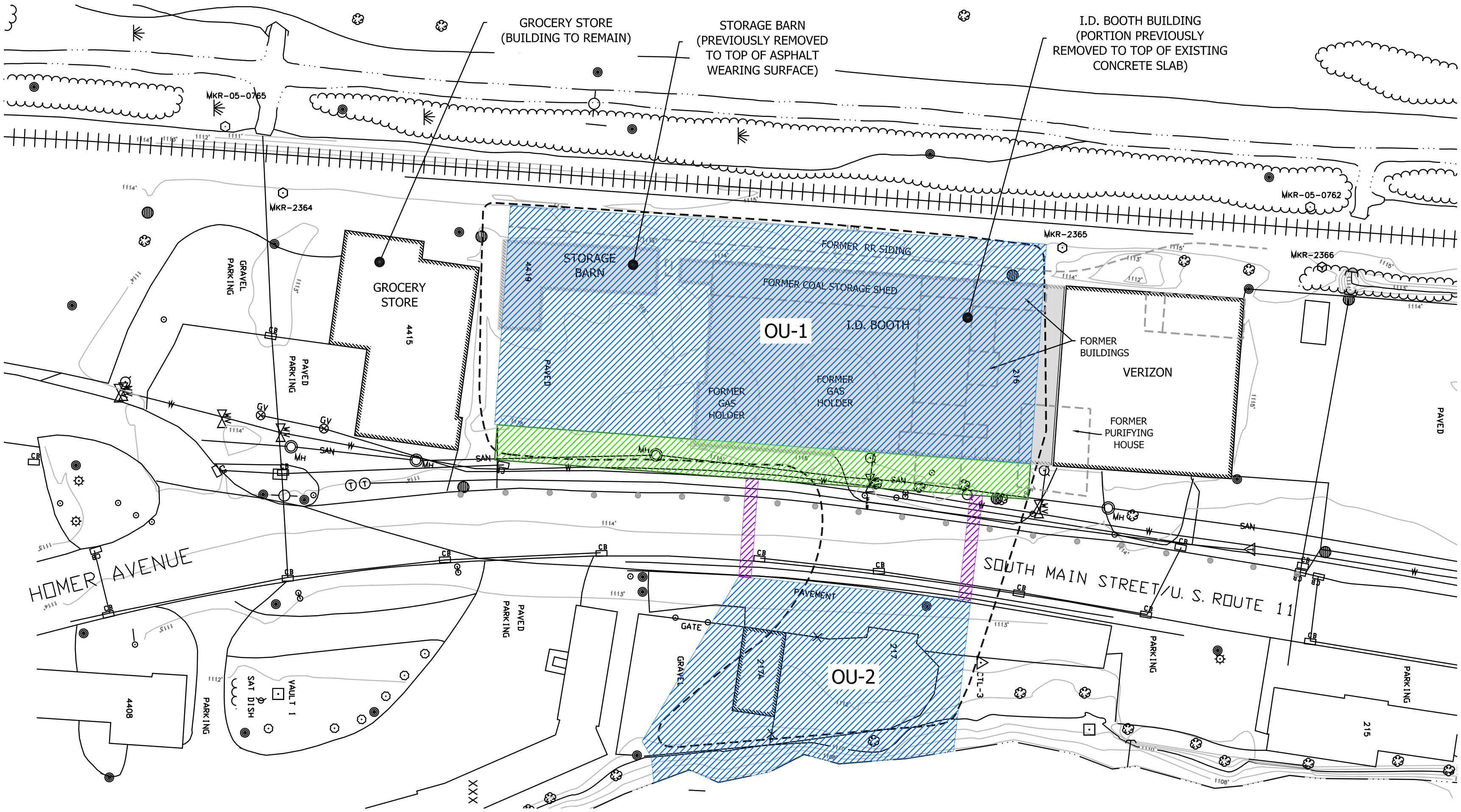
- REPRESENTS MGP WASTE MATERIAL
- GAS MAIN
- 6-INCH WATER MAIN
- 24-INCH SEWER MAIN
- RELIEF HOLDER
- REMEDIATION AREA

NOTES:

1. SANDY GRAVEL = VARIABLE MIX OF GRAVELLY FILL MATERIAL AND NATIVE GRAVEL, SAND AND SILT.
2. SILT/CLAY = SILT WITH VARIABLE AMOUNTS OF CLAY

0 25 50
SCALE IN FEET

\\USGRNS01\data\work\earth\Latham NY Work\NYSEG Homer\60133566_002 Conceptual Site Model_Current Remediation Area OU-1.dwg, 8/30/2010 11:18:08 AM, splawnm



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LEGEND

SOILS CONTAINING TOTAL SVOC'S ABOVE RECOMMENDED CLEAN-UP OBJECTIVES (TAGM 4046) (FROM URS FEASIBILITY STUDY,EXTENT OF SOIL CONTAMINATION, FIGURE 6)
PROPOSED ISS AREA
PROPOSED JET GROUT AREA (UTILITY CORRIDOR)
PROPOSED CUTOFF WALL

CB CATCH BASIN
MH EXISTING SANITARY MANHOLE
TEST STATION
CONTROL POINT
TELEPHONE MARKER
T TELEPHONE MANHOLE
IRON PIN
GV GAS VALVE
WV WATER VALVE
UTILITY POLE (CARRYING OVERHEAD UTILITIES, NOT SHOWN)
LIGHT

0' 15' 30' 60'
SCALE

AECOM

40 British American Blvd.
Latham NY
518-951-2200

DRN KAM
DES DJW
CHK SAU
APP CHF

NO | REVISIONS | DRN | CHK | DATE

NYSEG - REMEDIAL DESIGN FOR
FORMER CORTLAND-HOMER MGP SITE (OU-1)
HOMER, NEW YORK

IN SITU SOLIDIFICATION (ISS)
REMEDY LAYOUT

DATE	JULY 2009
PROJECT NO	102050
FILENAME	102050
SHEET NO	11
DRAWING NO	6

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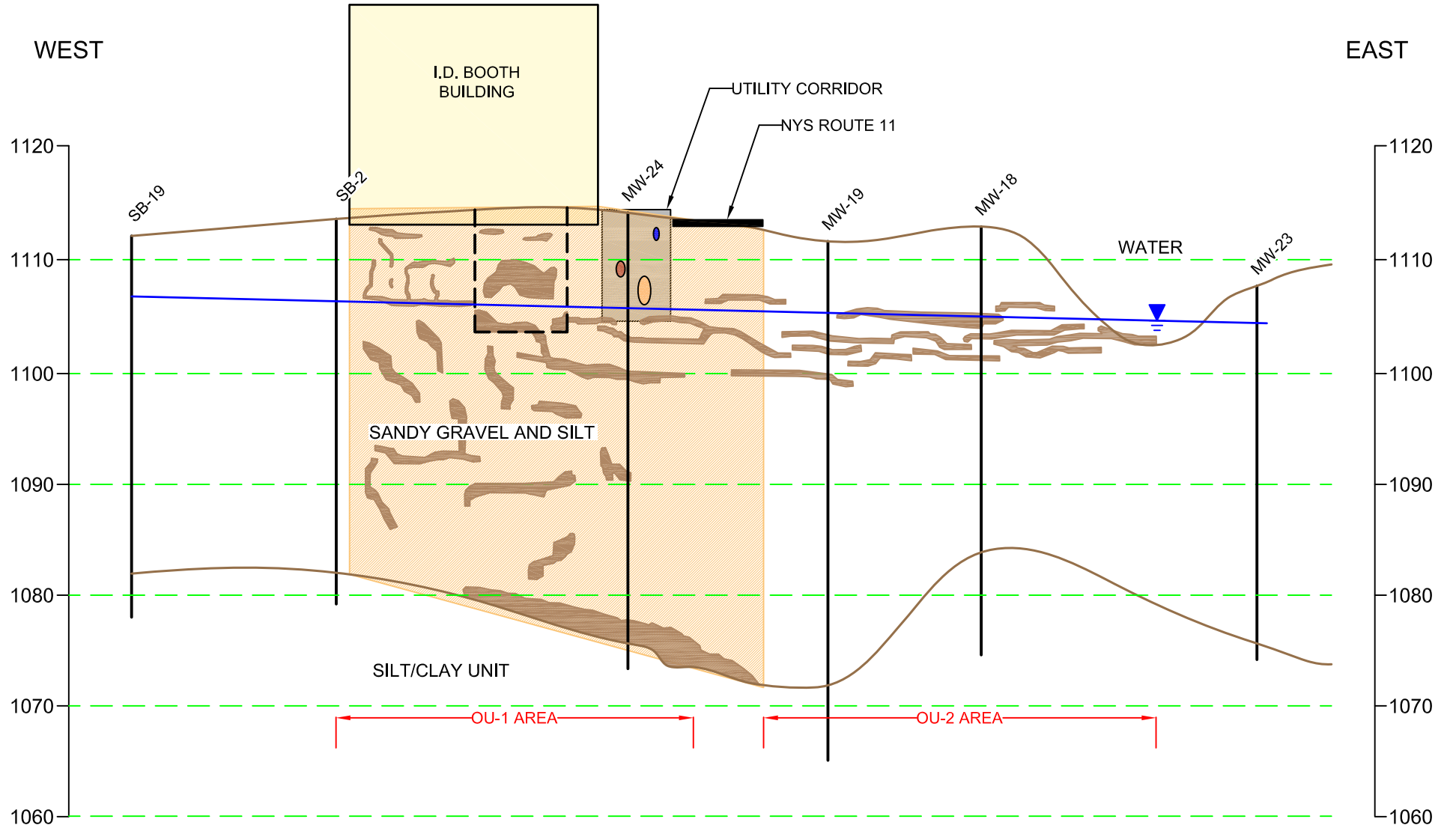

LEGEND:

- REPRESENTS MGP WASTE MATERIAL
- GAS MAIN
- 6-INCH WATER MAIN
- 24-INCH SEWER MAIN
- RELIEF HOLDER
- AREA TO BE REMEDIATED

NOTES:

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2. SILT/CLAY = SILT WITH VARIABLE AMOUNTS OF CLAY

0 25 50
SCALE IN FEET

\\USGRNS01\data\work\earth\Latham NY Work\NYSEG Homer\60133566_003 Conceptual Site Model_Proposed Treatment Area OU-1.dwg, 8/30/2010 11:20:03 AM, splawnm

APPENDIX A

Responsiveness Summary

NYSEG Cortland Homer Former MGP Site
Operable Unit No. 1
Homer, Cortland County, New York
Site No. 712005

The Record of Decision Amendment (Amendment) for the NYSEG Cortland Homer Former MGP 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 October 20, 2010. The proposed Amendment outlined the remedial measure proposed for the contaminated soil and groundwater at the NYSEG Cortland Homer Former MGP site.

The release of the Amendment 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 9, 2010, which included a presentation of the pre-design investigation for the NYSEG Cortland Homer Former MGP as well as discussion of the proposed amended remedy. The meeting provided an opportunity for citizens to discuss their concerns, ask questions and comment on the proposed amendment to the remedy. These comments have become part of the Administrative Record for this site. The public comment period for the ROD Amendment ended on November 19, 2010.

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: Where will the material that is being excavated be disposed?

RESPONSE 1: The excavated material where contaminants are present above the site cleanup criteria will be properly treated or disposed of at an off-site facility that is permitted by the Department to accept this type of material. Some of the excavated material may be evaluated for reuse in on-site excavations where levels are below the site cleanup criteria. The remedial design will identify the appropriate handling for the excavated material.

COMMENT 2: When will the river remediation work be performed?

RESPONSE 2: The exact timing has not been established at this time. However, the river remediation work is expected to begin after the completion of the in-situ stabilization remediation of the site.

COMMENT 3: When will the jet grouting under Route 11 be done?

RESPONSE 3: The timing of the jet grouting under Route 11 has not been established at this time. The schedule for the work will need to be coordinated with the New York State Department of Transportation. The remedial design will consider appropriate timing in conjunction with the other remedial activities.

COMMENT 4: What will be monitored after the remediation is complete?

RESPONSE 4: The monitoring following remediation will primarily include sampling groundwater and possibly surface water to confirm the Department's expectation that contaminant levels and the migration of contaminants to the river will decrease over time. The details of the monitoring plan will be developed with the remedial design and included in the Site Management Plan (SMP).

John Helgren of the Cortland County Health Department submitted a letter dated November 19, 2010, which included the following comments:

COMMENT 5: The condition of the Village of Homer water main which is located on the site will be evaluated by excavations in December 2010. As discussed in the meeting, the integrity of the Village's water main may be in question due to corrosion from interaction with contaminants at the site. Cortland County Health Department requests that you consider the need for replacement of the main at this time.

RESPONSE 5: The need for replacing the section of the water main pipe will be evaluated based on the findings of the excavation planned for December 2010.

COMMENT 6: The proposed remedial work on the east side of Rte. 11 and in the Tioughnioga River (OU2) would proceed after the work on the west side of Rte. 11 (OU1). It was indicated that on-going air monitoring of the site would be done during the remediation work. The Cortland County Health Department requests that results for this monitoring, and any other monitoring of the remediation work (such as groundwater and soil sampling), be made readily available to our Department.

RESPONSE 6: The monitoring data from the remedial work will be shared with the Cortland County Health Department.

COMMENT 7: The Cortland County Health Department would appreciate the opportunity to review the plan for long term monitoring subsequent to remediation of the site and river, and ask how the results will be available for review. We recommend ongoing monitoring to confirm that the finished work prevents migration of contaminants to groundwater and the river. We request these results be shared with this Department.

RESPONSE 7: The SMP (which includes the monitoring plan) and subsequent data will be shared with Cortland County Health Department. We agree with the recommendation that one of the goals of the monitoring plan will be to determine the concentrations of contaminants in groundwater. This information will allow an evaluation of the potential for migration of

contaminants to groundwater and the river.

COMMENT 8: The Cortland County Health Department would also appreciate the opportunity to review the temporary/permanent easements and restrictions proposed for the site. Of interest are restrictions on groundwater use, particularly for drinking water wells in the area, and easements, all of which to prevent public (including utility worker) exposure to contamination.

RESPONSE 8: The Cortland County Health Department will be provided the easement language relative to the restrictions to be included in the easement and the SMP for review.

Administrative Record

NYSEG Cortland Homer Former MGP Site
Operable Unit No. 1
Homer, Cortland County, New York
Site No. 712005

1. Proposed Record of Decision Amendment NYSEG Cortland Homer Former MGP Site, Operable Unit No.1, dated October 2010, prepared by the Department.

2. Record of Decision NYSEG Cortland Homer Former MGP site, Operable Unit No.1, dated March 30, 2010, prepared by the Department

3. Multi-Site Order on Consent, Index No. D0-0002-9309, between the NYSDEC and New York State Electric and Gas (NYSEG), executed on March 30, 1994. The NYSDEC and NYSEG the entered into a multi-site Consent Order on March 30, 1994.

4. "Cortland Including McGraw, Cortland County, New York," January 1926, Sanborn Map Company

5. "Investigation of Former Coal Gasification Sites, Cortland/Homer Homer, New York, Task 2 Investigation Report, Initial Field Investigation Report, New York State Electric and Gas", July 1987, E.C. Jordan Co.

6. "Investigation of the Former Coal Gasification Site, Cortland/Homer Homer New York, Task 3 Report Expanded Problem Definition Program, New York State Electric and Gas Corporation", May 1989, E.C. Jordan Co.

7. "Historical Summary NYSEG Cortland/Homer Former MGP, Cortland County", April 2001, Stearns and Wheler Corporation

8. "Supplemental Remedial Investigation (SRI) Work Plan, NYSEG Cortland/Homer Former MGP, Cortland County, New York", August 1999, Stearns & Wheler Corporation

9. "Work Plan Addendum Supplemental Remedial Investigation Phase 2, NYSEG Cortland/Homer Former MGP, Cortland County, New York", June 2001, Stearns & Wheler Corporation

10. "New York State Electric and Gas, Interim Remedial Measures Final Engineering Report, Storm Drain Construction Activities Adjacent to Cortland/Homer South Main Street (Route 11) Former Manufactured Gas Plant (MGP) Site", March 2002, NYSEG Licensing and Environmental Operations Department

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12. “New York State Electric and Gas Corporation, Former Cortland/Homer Former Manufactured Gas Plant, Homer, New York, Feasibility Study Report”, April 2004, URS Corporation.

13. February 15, 2007 Fact Sheet/Notice for Proposed Remedy, Public Meeting and Comment Period

14. “Proposed Record of Decision Amendment”, July 2010, AECOM

15. October 2010 Fact Sheet/Notice for Proposed Record of Decision Amendment, Public Meeting and Comment Period