VOLUNTARY CLEANUP PROGRAM
DECISION DOCUMENT

NM-Ogdensburg Former MGP Site
City of Ogdensburg, New York
Site No. V00479
September 2010

Statement of Purpose and Basis

This Voluntary Cleanup Program (VCP) Draft Decision Document presents the remedy identified by the Department of Environmental Conservation (Department) for the Ogdensburg Former Manufactured Gas Plant (MGP) Site.

Description of the Site

The site is located at 10 King Street, Ogdensburg, St. Lawrence County, New York on approximately 0.75 acres of land (Figure 1). The site property is currently owned by St. Lawrence Gas Company of Massena, NY. The site lies below the ground surface of the surrounding properties to the south and west and at the same elevation as properties to the north and east. The site consists of a grassy, vacant, fenced lot with residential properties bordering the site to the east and southeast. A narrow strip of heavily vegetated land borders the site to the west and a steep vacant grassy slope is located south of the site with the ground surface generally sloping downward to the north and west to King Street. Situated to the north of the site, across King Street, is an industrial/commercial property now owned by the City of Ogdensburg. Lake Street is located beyond the residential properties that border the east/northeastern side of the site. Rensselaer Avenue is present south of the site, between the steep grassy slope and residential properties. Canal Street (a.k.a., Lincoln Avenue) is located west of the site, between the narrow vegetated land and residential properties.

The former MGP operated from 1854 until at least 1930 using the coal carbonization process. The key features associated with the former MGP site included; a gas house and retorts, purifiers, and condensers, gas holders at two locations, a circular tar well and a rectangular tar well, a regulator, governor house, coke room, and coal shed. The site is currently zoned for commercial use.

Nature and Extent of Contamination

Contamination was identified by the Remedial Investigation of this site that represents a threat to public health and the environment, requiring a remedial program. This contamination is identified below:

The MGP-related contaminants which are present in subsurface soils are benzene, toluene,

ethyl benzene and xylenes (BTEX), polycyclic aromatic hydrocarbons (PAHs) and cyanide. Coal tar, also known as a non-aqueous phase liquid (NAPL), was observed in numerous investigation borings and test pits on the site, and also in soil borings off the site to the west. Tar in the off-site borings was found just above the bedrock/overburden soil interface, indicating that this material is migrating from the site along the bedrock surface. Also, indications of cyanide-bearing purifier waste were noted on a property to the southeast of the site, generally 2 – 4 feet below grade. Action is required to address this contamination.

Groundwater contamination is significant, with BTEX and some PAHs detected in all on-site overburden and bedrock monitoring wells at levels exceeding groundwater quality standards. Cyanide was also detected in some on-site overburden wells.

Off-site monitoring wells to the east, west and north showed similar BTEX impacts as on-site wells. The plume of groundwater contamination extends approximately 100 feet to the north in the overburden and 250 feet in the bedrock, reaching past King Street. Action is required for groundwater beneath the site and downgradient areas.

Soil vapor samples were collected above a known tar source on-site, next to the Former St. Lawrence Foods facility off-site and adjacent to a neighboring residence. In addition, indoor air samples were collected from the nearby residence. These sample results indicate that current conditions are unlikely to cause exposures that would results in health effects, and no further action or additional air sampling is necessary at this time.

Description of the Remedy

Based on the results of the Alternatives Analysis and the criteria identified for evaluation of alternatives, the NYSDEC is identifying the remedy for this VCP site. The components of the remedy set forth in the Remedial Work Plan, and shown on Figure 2, are as follows:

1. A remedial design of the remedy to include additional investigation to determine if: (a) MGP NAPL has migrated north of the site towards King Street, along with the identification of how the remedial program will address these impacts; and (b) additional sampling to determine if cyanide is present in soil in off-site parcels to the southeast that require removal.

2. Contaminated surface and subsurface soils on the site and in a portion of the western off-site property, between the site and Canal Street, will be excavated and removed from the site for disposal at a permitted facility. The excavation will extend to bedrock, removing the holder structure, all non-aqueous phase liquid (NAPL), and any soils containing greater than 500 ppm total PAHs. Also, visible purifier wastes and soils containing greater than 27 ppm free cyanide and/or 40 ppm total cyanide identified on the adjacent off-site parcels to the southeast will be excavated and disposed off-site. Soil and fill material overlying this contaminated soil that does not exceed the removal criteria, will be excavated, stockpiled on-site and evaluated for use in backfilling the deeper excavations.

3. Enhanced natural attenuation of contaminated groundwater by the addition of oxygen, nutrients and/or other amendments, as necessary, to stimulate indigenous bacteria to degrade dissolved contaminants. Conceptually, this will be accomplished by blending oxygen enhancing amendments into the backfill of the on-site excavation area.

4. Installation of bedrock NAPL recovery wells and periodic measurement and removal of accumulated NAPL. The locations and number of NAPL recovery wells, along with the method and frequency of NAPL removal, will be determined during the remedial design and remedial action phase. The bedrock surface and joints will be inspected and mapped during the soil excavation to determine the optimal locations of NAPL recovery wells. Recovered NAPL will be transported off site for treatment or disposal. The operation of the NAPL recovery wells will continue until the remedial objectives have been achieved, or until the Department determines that continued recovery is technically impracticable or no longer feasible.

5. A site cover will be installed to allow for restricted-residential use of the site. The cover will consist either of the structures such as buildings, pavement, sidewalks comprising the site development or a soil cover in areas where the upper two feet of exposed surface soil will exceed the restricted-residential soil cleanup objectives (SCOs). Where the soil cover is required it will be a minimum of two feet of soil, meeting the restricted-residential SCOs for cover material as set forth in 6 NYCRR Part 375-6.8(d). The soil cover will be placed over a demarcation layer. The excavation will be backfilled with soil meeting the backfill material requirements for residential use as set forth in 6 NYCRR Part 375-6.8(d) with the upper six inches of the soil of sufficient quality to maintain a vegetation layer.

6. A deed restriction will be implemented which will: (a) limit the use and development of site property to restricted residential use, which would also allow commercial and industrial uses, as permitted by local zoning; (b) require compliance with an approved site management plan; (c) restrict the use of groundwater as a source of drinking water or industrial supply without the necessary water quality treatment as determined by the New York State Department of Health; and (d) require National Grid to prepare and submit to the NYSDEC a periodic certification of institutional and engineering controls.

7. A site management plan will be developed which will include the following institutional and engineering controls: (a) an excavation plan to manage contamination remaining beneath the site cover 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) identification of any use restrictions on the site; (c) provisions for the continued proper operation and maintenance of the components of the remedy: and (d) if any new structures are built onsite, the potential for soil vapor intrusion into the indoor air will be evaluated. If the potential for vapor intrusion is determined to exist, then appropriate control measures will be incorporated into the design of the new structure.

8. National Grid or the property owner will provide a 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 submission will: (a) contain certification that the institutional controls and engineering controls put in place are still in place and are either unchanged from the previous certification or are compliant with Department-approved modifications; (b) allow the Department access to the site; and (c) state that nothing has occurred that will impair the ability of the 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.

Declaration

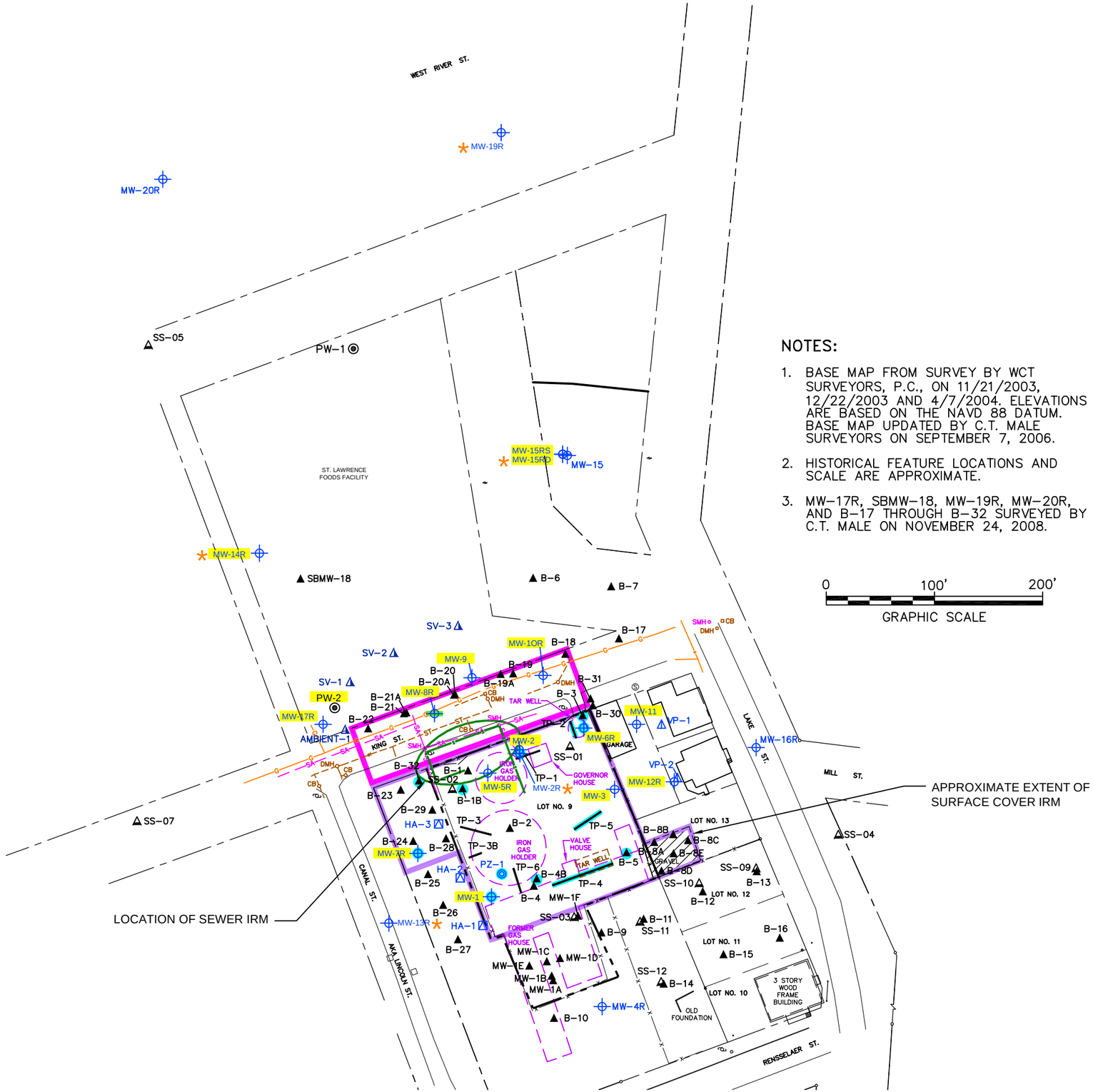
The remedy conforms with promulgated standards and criteria that are directly applicable, or that are relevant and appropriate and takes into consideration Department guidance, as appropriate. The remedy is protective of public health and the environment.

September 16, 2010

Date

Robert Schick, Director
Remedial Bureau C

Figure 1 - Site Location



NOTES:

1. BASE MAP FROM SURVEY BY WCT SURVEYORS, P.C., ON 11/21/2003, 12/22/2003 AND 4/7/2004. ELEVATIONS ARE BASED ON THE NAVD 88 DATUM. BASE MAP UPDATED BY C.T. MALE SURVEYORS ON SEPTEMBER 7, 2006.
2. HISTORICAL FEATURE LOCATIONS AND SCALE ARE APPROXIMATE.
3. MW-17R, SBMW-18, MW-19R, MW-20R, AND B-17 THROUGH B-32 SURVEYED BY C.T. MALE ON NOVEMBER 24, 2008.

0 100' 200'

GRAPHIC SCALE

LEGEND:

- MW-10 MONITORING WELL
- VP-1 SOIL VAPOR SAMPLING POINT
- SV-1 SOIL VAPOR SAMPLING POINT
- PZ-1 PIEZOMETER
- HA-1 HAND-AUGER BORING
- TP-1 TEST PIT
- B-1 SOIL BORING
- SS-01 SURFACE SOIL SAMPLE
- PW-1 APPROXIMATE LOCATION OF PRODUCTION WELL LOCATED INSIDE ST. LAWRENCE FOODS FACILITY
- TAR WELL FEATURE FROM 1909 SANBORN MAP
- TAR WELL FEATURE FROM SEPTEMBER 1925 SANBORN MAP
- APPROXIMATE SITE BOUNDARY
- APPROXIMATE ROAD RIGHT-OF WAY
- CHAINLINK FENCE
- GAS LINE
- STORM LINE
- SANITARY LINE
- STORM LINE CATCH BASIN
- STORM LINE MANHOLE
- SANITARY LINE MANHOLE
- UTILITY POLE
- WELLS CONTAINING CONCENTRATIONS THAT EXCEED NYS CLASS GA GROUNDWATER STANDARDS OR GUIDANCE VALUES DURING DISCRETE SAMPLING
- WELLS CONTAINING CONCENTRATIONS THAT EXCEED NYS CLASS GA GROUNDWATER STANDARDS OR GUIDANCE VALUES DURING PACKER TESTING
- MEASURABLE QUANTITIES OF ACCUMULATED NAPL ENCOUNTERED IN MONITORING WELL
- LOCATIONS OBSERVED WITH NAPL
- AREA PROPOSED TO BE REMOVED AND INSTITUTIONAL CONTROLS PROPOSED TO BE APPLIED TO THIS AREA
- GENERAL AREA SUBJECT TO PRE-DESIGN INVESTIGATION AND POTENTIAL REMEDIAL ACTION AND/OR INSTITUTIONAL CONTROLS
- LOCATION OF IRM SURFACE COVER

NATIONAL GRID
OGDENSBURG (KING STREET) NON-OWNED FORMER MGP SITE
OGDENSBURG, NEW YORK

SELECTED REMEDY

ARCADIS

FIGURE 2

CITY: SYRACUSE,NY DIV/GROUP: ENVCAD DB: LJPOSENAUER LD:(Opt) PIC: J.NUSS PM: S.POWLIN TM: S.POWLIN LYR:(Opt)ON=*;OFF=*REF*
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