

Soil Cleanup to Begin at Niagara Mohawk Power Corporation Superfund Site, Saratoga Springs, N.Y.

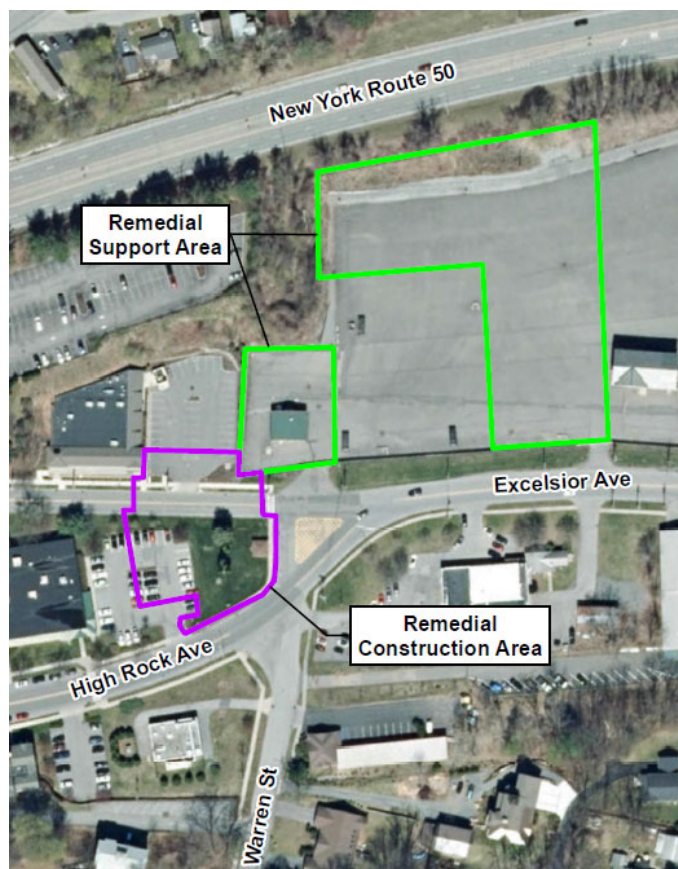
Community Update

November 2018

**Please join us for an
Information Meeting**

**Tuesday, November 13, 2018
at 7 p.m.**

**Excelsior Springs Event Center
47 Excelsior Ave.
Saratoga Springs, NY 12866**



Remedial Construction and Support Areas

PROJECT OVERVIEW

Construction work is scheduled to begin in November 2018 to address contaminated soil at the Niagara Mohawk Power Corporation (NMPC) Superfund site in Saratoga Springs, New York. The project area comprises approximately 0.5 acres of land, consisting of: (1) a grass-covered parcel owned by the City of Saratoga Springs that contains an active bedrock groundwater well, known as the Old Red Spring well, and the associated pavilion (collectively referred to as the “Old Red Spring area”); (2) a portion of Excelsior Avenue north of the Old Red Spring area; and (3) part of the paved church parking lot west of the Old Red Spring area. The project area is bordered to the north by the Excelsior Springs Event Center, to the west by the Grace Fellowship Church, to the east by the Bardino Motors automobile dealership, and to the south by a municipal sewage pumping station. The remedial construction area is shown at left.

The planned soil remediation will be performed by NMPC with oversight by the U. S. Environmental Protection Agency (EPA), New York State Department of Environmental Conservation (NYSDEC), New York State Department of Health (NYSDOH), and City of Saratoga Springs. The soil remediation is required by EPA’s 2013 “Record of Decision,” which is a publicly-available document prepared by EPA that explains the cleanup remedy that was selected by the Agency. The remediation will be performed in accordance with a design plan developed by NMPC and approved by EPA, NYSDEC, NYSDOH, and the City. Regular coordination meetings have been held with the EPA, NYSDEC, NMPC, and property owners within the project area (the city, and two businesses called The Mill, and Saratoga Restaurant Hospitality) in planning for the cleanup.



In May 2017, EPA established a task force to restore the Superfund program to its rightful place at the center of the Agency's core mission to protect health and the environment.

epa.gov/superfund/superfund-task-force

CLEANUP SCHEDULE

Remedial construction work is anticipated to begin in November 2018 and continue through spring 2019. Part of Excelsior Avenue will be closed to through traffic when construction is performed in the roadway, and the Old Red Spring well and pavilion will be closed during the entire construction period.

CLEANUP DETAILS

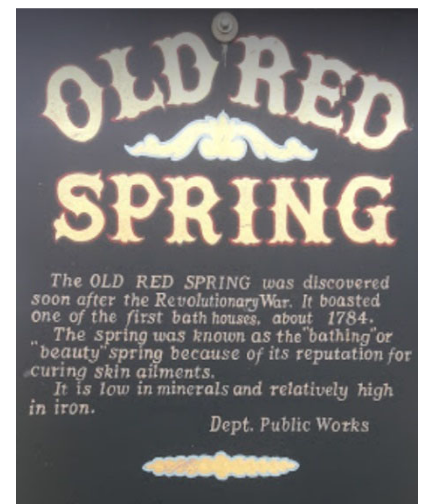
The upcoming remediation will treat and contain tarry liquid, referred to as coal tar dense non-aqueous phase liquid (DNAPL), located approximately 14 to 18 feet below the ground surface in the Old Red Spring area. The DNAPL migrated to this area from a former manufactured gas plant (MGP) site located to the northeast, which was previously addressed in a cleanup that was performed by NMPC (2001 to 2002). The work planned for this fall will also address MGP impacts in the shallow groundwater aquifer within the cleanup site areas. The Old Red Spring well gets its water from a separate deep aquifer that has not been impacted by the coal tar or its associated chemical compounds. The shallow and deep groundwater aquifers are isolated from each other by more than 50 feet of a confining silty clay and an additional 50+ feet of soil. Laboratory testing performed quarterly during the past 15 years has detected no site contaminants in the Old Red Spring water.

The goals of the remediation are to protect public health and the environment through:

- **Containment:** A low-permeability mat and barrier wall will be constructed underground to contain existing DNAPL below Excelsior Avenue and portions of the properties to the north and south. The approximately two-foot wide barrier wall and three-foot thick subsurface mat will be constructed by a process referred to as “jet grouting” in which a cement-grout material will replace existing soil in the subsurface. The 150-foot long wall will extend a minimum of three feet into the underlying clay, and the top of the 6,400-square-foot mat will be at least two-feet below existing underground utilities. Vehicle traffic will be detoured and Excelsior Avenue will be closed to through-traffic during jet grouting operations and subsequent restoration work.
- **Excavation:** Soil will be excavated to depths of four to seven feet below the ground surface from the city-owned Old Red Spring parcel south of Excelsior Avenue. The top two feet of soil will be transported for offsite disposal, and soil below two feet will be segregated and stockpiled in a lined staging area in part of the former MGP site for later re-use as subsurface fill following in-situ (in-place) soil solidification/stabilization (ISS). The top two feet of soil currently contains a class of compounds referred to as polycyclic aromatic hydrocarbons (PAHs) at concentrations slightly greater than DEC soil cleanup objectives for restricted-residential use. PAHs are commonly found in asphalt and other petroleum products such as diesel fuel.



Drill Rig for Jet Grouting



- **Solidification/Stabilization:** Approximately 2,825 cubic yards of soil in the Old Red Spring parcel will be solidified and stabilized in-place via a process referred to as in-situ soil solidification/stabilization (ISS) following the excavation work described above. Two commercial cement products (Portland cement and ground-granulated blast furnace slag cement) will be mixed into the soil using an excavator. The ISS process will prevent potential future migration of DNAPL and other site contaminants within subsurface soils and dissolution into groundwater.
- **Well Retrofitting or Replacement:** The Old Red Spring well will be retrofitted (in-place) by adding a new protective steel outer casing (second casing) or replaced at a new nearby location with a double-casing, as required by EPA. The well will continue to draw water from the deep bedrock aquifer. Although no detectable levels of chemicals associated with the former MGP have been found in the well water for the past 15 years, the extra casing will provide an additional layer of protection around the well and help further protect the deep aquifer that supplies the Old Red Spring well from impacts. The work on the Old Red Spring well may require temporary relocation of the Old Red Spring pavilion. The well and pavilion will be inaccessible to the public during remedial construction.
- **Clean Backfill:** Once the work in the Old Red Spring area is completed, the area will be backfilled with soil to within two feet of the surrounding grade. Clean fill and topsoil meeting NYSDEC requirements will be placed, graded, and compacted to restore the approximate original lines and grades. New trees and landscaping will be installed, a portion of the Greenbelt shared-use recreation trail will be constructed in partnership with the City of Saratoga, grass-covered areas will be replanted, and portions of Excelsior and other paved surfaces disturbed by construction will be repaved.
- **Institutional Controls:** Two forms of institutional controls will be put in place for the properties in the project area, including: (1) environmental easements/restrictive covenants will be filed in the property records of Saratoga County for each property subject to the remediation; and (2) a Site Management Plan will be developed to ensure the effectiveness of the remedial action and provide for long-term groundwater monitoring, periodic reviews, and certifications.



In-Situ Soil Solidification/Stabilization (ISS) by
Excavator Mixing

A site-specific health and safety plan and a community air monitoring plan will be implemented during remediation construction. These plans establish procedures to protect onsite workers and the community, and include required air monitoring as well as dust and odor suppression measures.

TRAFFIC DETOUR

Excelsior Avenue will be closed to vehicle through-traffic between Rock Street and High Rock Avenue during remedial construction within the roadway (see traffic detour map below). Detour signs will reroute traffic from the east and west around the construction area via High Rock Avenue. Access to nearby properties will be continuously maintained throughout construction. Electronic message boards will be deployed before and throughout construction to notify the public of the new traffic pattern. Flaggers will be used to guide construction traffic onto the local roadways. The sidewalk within the work area will also be closed, and a short pedestrian detour will be established.

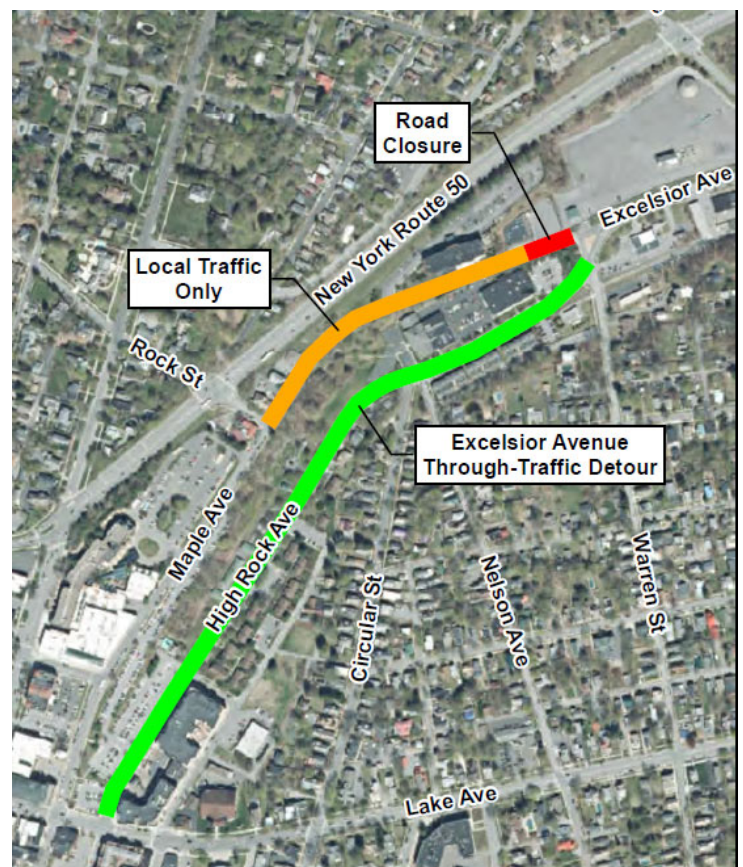


OLD RED SPRING WELL CLOSURE

The Old Red Spring well and pavilion will be inaccessible to the public throughout remedial activities. Temporary chain-link construction fencing with a privacy mesh/ screen will be installed around the perimeter of the work area (part of which includes the pavilion and well) to secure the area. Only contractors and authorized personnel will be allowed in the work area. The pavilion and well will be re-opened to the public once remedial construction is completed and the area is restored.

NEXT STEPS/SUBSEQUENT WORK

After the soil cleanup activities are completed, NMPC will prepare a Remedial Action Report. This report will describe the remedial activities completed and certify that the cleanup requirements have been or are expected to be achieved. In addition, NMPC will develop an in-situ (in-place) groundwater bioremediation program for the project area, once the soil remedial activities are completed and conditions have stabilized. Bioremediation is an engineered technology that modifies environmental conditions (physical, chemical, biochemical, or microbiological) to encourage microorganisms to destroy or detoxify organic and inorganic contaminants in the environment. The details of the bioremediation program will be developed based on the results of a pre-design investigation. Details of the proposed groundwater cleanup will then be presented in a Remedial Design Report. The EPA will provide an update to the community prior to the start of groundwater cleanup activities.



Traffic Detour

EPA encourages public participation. If you have any questions or would like additional information regarding the site, please contact one of the following:

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Where to Find Information:

Information Repository:
Saratoga Springs Public Library
Reference Section
320 Broadway
Saratoga Springs, NY 12866

EPA Site Webpage:
www.epa.gov/superfund/niagara-mohawk

SITE BACKGROUND

The NMPC Superfund site consists of two “operable units” (i.e., distinct portions of a site addressed by separate investigation and/or cleanup approaches):

- **OU 1** includes a seven-acre parcel (the “NMPC Property”), the former skating rink property (a 2.3-acre property) presently owned by NMPC, and portions of Spring Run Creek.
- **OU 2** includes the Old Red Spring area and portions of Excelsior Avenue and a church parking lot north and west, respectively, of the Old Red Spring area, encompassing approximately 0.5 acres in total.

From approximately 1853 to the 1940s, Niagara Mohawk's predecessors, Saratoga Gas and Light and New York Power and Light Corporation, produced gas at the Niagara Mohawk property on Excelsior Ave used to power gas street lights. After gas manufacturing stopped, the Niagara Mohawk Power Corporation used its property for storage and to park vehicles. The EPA added the Niagara Mohawk Power Corporation site to the Superfund list in 1990.

In 1995, the EPA finalized a cleanup plan to address contaminants in the groundwater and soil on the Niagara Mohawk property, at the former skating rink, and in stream sediment along portions of Spring Run Creek. The company removed contaminated soil and sediment from areas containing coal tar waste, installed underground barriers to contain the contaminated groundwater and installed a protective cap to cover contaminated soil. This work finished in 2002. NMPC, currently doing business as “National Grid,” is continuing to operate, maintain, and monitor the systems that were constructed as part of the previously-completed cleanup, including a groundwater pumping and treatment system.

In 2006, additional soil and groundwater contamination was discovered to the west and southwest of the Niagara Mohawk property in the half-acre area near Excelsior, Warren and High Rock Avenues. EPA oversaw Niagara Mohawk's investigation of this newly discovered contamination, including their analysis of various options to address it. In 2013, the EPA finalized a second cleanup plan to clean up additional contaminants present in subsurface soil including the remediation of source material in the form of non-aqueous phase liquid (NAPL) that has migrated from the NMPC Property and has impacted subsurface soil and groundwater in the Old Red Spring area. The details of the planned soil cleanup are discussed in this fact sheet.

The source of drinking water for the City of Saratoga Springs is Loughberry Lake, which has not been impacted by contamination from the NMPC site. A total of 18 mineral springs throughout Saratoga Springs, including the Old Red Spring, provide water for public consumption. The Old Red Spring well is the only spring near the project area and gets water from a separate deep aquifer that has not been impacted by the former MGP.