

COMPANY NAME

NORTHERN UTILITIES, INC.

EXETER GAS WORKS

LINE
NO.

SCHEDULE 4A

1. SITE LOCATION: Water Street and Green Street in Exeter, NH
2. DATE SITE WAS FIRST INVESTIGATED AS A DISPOSAL SITE: 1982 by USEPA
3. SUMMARY OF MATERIAL DEVELOPMENTS AND INTERACTIONS WITH ENVIRONMENTAL AUTHORITIES (July 1, 2006 – June 30, 2007):
 - Northern continued a community outreach program with affected property owners and other interested parties, including Town of Exeter, Exeter Housing Authority, and Phillips Academy officials.
 - Northern retained RETEC to support post-remediation activities, including the upgrade of certain remediation elements, assessment of the effectiveness of the oxygen release compound injection program, and the preparation of a renewal application for the project groundwater permit.
 - Northern retained Carson Landscaping to remove shrubs that were not thriving and replace them with new shrubs to restore Gas Light Park to its original condition. Creation of the park on the site cap was part of the remediation agreed to with the Town and NHDES.
 - Northern sent engineering plans to printing/copying company to be scanned for uploading to electronic filing system. Plans were too large to be scanned on office scanners.
 - Northern retained the services of an independent contractor to manage the assessment and remediation of the site.
4. NEW HAMPSHIRE SITE REMEDIATION PROGRAM PHASE: Remediation and site closure.
5. NATURE AND SCOPE OF SITE CONTAMINATION: Areas containing residual materials from the historic operation and decommissioning of the former manufactured gas plant were discovered on small parcels of land on both sides of Water Street. These residuals, which include tars and oils, were found in the soil at discrete locations and in groundwater. The objective of the cleanup project, as discussed with the New Hampshire Department of Environmental Services, has been to stabilize affected soils to the extent practicable and to enhance the natural attenuation of any residuals in groundwater.

Northern prepared a project Completion Report that was submitted to NHDES in January 2002. The Completion Report documented that all construction work was completed in accordance with the Remedial Action Plan (RAP) that was submitted to the NHDES in October 2001. The

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remedy consisted of the in-situ solidification of MGP residuals on the main parcel by auger mixing using a formulation of Portland cement and organophilic clay followed by grading and planting for site closure. The remedy also consisted of the injection of an oxygen release compound (ORC) into the soils and groundwater in the vicinity of the former settling lagoons on Exeter Housing Authority property.

6. HISTORY AND CURRENT STATUS OF USE AND OWNERSHIP OF SITE: The Exeter Gas Works operated from 1864 through 1955. The gas works was owned and operated by several companies during that time, including Exeter Gas Light Company in 1864, Strafford-York Gas Company in 1911, and Allied New Hampshire Gas Company in 1942. Allied New Hampshire Gas Company was a predecessor of Northern Utilities. Northern sold the eastern portion of the property to the Town of Exeter in 1978. In 1981 the eastern portion of the former MGP property was transferred to the Exeter Housing Authority. This portion of the site is currently used for elderly housing. The western portion of the former MGP is currently owned by Northern Utilities and is a landscaped lot.

7. LISTING AND STATUS OF INSURANCE AND 3RD PARTY LAWSUITS AND SETTLEMENTS: None

NAME OF SUIT: Not Applicable

DATE FILED: Not Applicable

STATUS (PENDING/SETTLED): Not Applicable

NORTHERN UTILITIES, INC.

ROCHESTER GAS WORKS

LINE
NO.

SCHEDULE 4B

1. SITE LOCATION: Route 125 and Spaulding Turnpike, Rochester, NH
2. DATE SITE WAS FIRST INVESTIGATED AS A DISPOSAL SITE: 1989 by property owner
3. SUMMARY OF MATERIAL DEVELOPMENTS AND INTERACTIONS WITH ENVIRONMENTAL AUTHORITIES (July 1, 2006 – June 30, 2007):
 - Northern retained RETEC to support post-remediation activities, including the upgrade of certain remediation elements, assessment of the effectiveness of the natural biological attenuation of MGP constituents in groundwater, and the preparation of a renewal application for the project groundwater permit.
 - ENSR International was contracted by Northern to plan and implement an expansion of the phytoremediation program in order to control contaminated groundwater migrating toward Axe Handle Brook and the Cocheco River. To keep the newly planted trees from dying, Northern paid the City of Rochester to install a water service at the site.
 - Northern retained the services of an independent contractor to manage the assessment and remediation of the site. Northern also retained the services of Environmental Standards, Inc. to support quality assurance efforts for sampling and analysis.
 - For convenience, Northern Utilities – New Hampshire Division’s proportionate share of the cost for developing and operating the computer based laboratory data management system was charged to this site.
 - Northern retained temporary administrative staff to assist in managing projects and maintaining site related documents, including scanning and filing electronic copies of documents on a central server. For convenience, Northern Utilities – New Hampshire Division’s proportionate share of these costs were all charged to the Rochester site.
4. NEW HAMPSHIRE SITE REMEDIATION PROGRAM PHASE: Site closure and monitoring
5. NATURE AND SCOPE OF SITE CONTAMINATION: Areas containing residual materials from the historic operation and decommissioning of the former manufactured gas plant were discovered on the two-acre parcel. These residuals, which include tars and oils, were found in the soil at discrete locations and in groundwater. The objective of the cleanup project, as approved by the New Hampshire Department of Environmental Services, has been to remove affected soils to the extent practicable and to enhance the natural attenuation of any residuals.

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SCHEDULE 4B

Addenda to the remediation program have included the removal of a tar well that had previously been inaccessible because of propane storage equipment, the purchase of the former MGP parcel from AmeriGas, the demolition of an historic MGP structure, the implementation of a multiphase phytoremediation program to mitigate contaminated groundwater flow, and the further assessment of MGP residuals in the subsurface that continue to contaminate groundwater.

6. HISTORY AND CURRENT STATUS OF USE AND OWNERSHIP OF SITE: The Rochester Gas Light Company owned and operated the gas works from 1906 through 1911. The gas works was owned and operated by two companies after that time, Strafford-York Gas Company in 1911 and Allied New Hampshire Gas Company in 1942. The plant ceased operating in 1957. Allied New Hampshire Gas Company was a predecessor of Northern Utilities. Northern sold the property to Pyrofax Gas Corporation in 1971. Pyrofax sold the property to Petrolane Gas Service, Limited Partnership in 1987. AmeriGas purchased Petrolane in 1994. The property is currently used by Amerigas as a propane sales and distribution facility. Northern purchased the eastern portion of the property from Mr. Peter Field in 1990. This portion of the site is undeveloped and contains remnants of a railroad bed. Northern also owns land adjacent to the former gas works.

7. LISTING AND STATUS OF INSURANCE AND 3RD PARTY LAWSUITS AND SETTLEMENTS:

NAME OF SUIT: Field vs. Petrolane and Northern Utilities, and Petrolane vs. Northern Utilities

DATE FILED: 1988

STATUS: (PENDING/SETTLED): Settled 1994

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NORTHERN UTILITIES, INC.

SOMERSWORTH GAS WORKS

LINE
NO.

SCHEDULE 4C

1. SITE LOCATION: Main Street and Depot Road in Somersworth, NH
2. DATE SITE WAS FIRST INVESTIGATED AS A DISPOSAL SITE: 1985 by New Hampshire Division of Public Health Services and New Hampshire Water Supply and Pollution Control Commission
3. SUMMARY OF MATERIAL DEVELOPMENTS AND INTERACTIONS WITH ENVIRONMENTAL AUTHORITIES (July 1, 2006 – June 30, 2007):
 - AMEC, the prime construction contractor for Northern, continued to evaluate the effectiveness of the limited excavation, targeted subsurface grouting, and in-situ chemical oxidation (ISCO) remediation program throughout the reporting period. AMEC invoices include the last subcontractor invoice for the ISCO remediation completed prior to this reporting period.
 - Northern retained the services of an independent contractor to manage the assessment and remediation of the site.
 - Northern retained temporary administrative staff to assist in managing projects and maintaining site related documents, including scanning and filing electronic copies of documents on a central server. Northern – New Hampshire Division’s proportionate share of the cost of Purchase Requisition forms was charged to this site for convenience.
4. NEW HAMPSHIRE SITE REMEDIATION PROGRAM PHASE: Remedy Implementation.
5. NATURE AND SCOPE OF SITE CONTAMINATION: Because the Somersworth site is very small, space constraints made it unlikely that significant amounts of MGP residuals were used as fill on-site. The extensive test-pit program at Somersworth substantiates the assertion that significant amounts of MGP residuals were not used as fill on-site. Tars and liquors that may have accumulated in sub-grade vessels did not result in substantial releases, as indicated by the absence of any significant oil-like material in test pits and borings in the upper 10 to 15 feet of soil at the site. Most of the Northern parcel is now covered with re-graded soil from local street work, with four inches of imported topsoil.

As indicated by the site-specific groundwater quality data, metals and high heavy organic compounds (e.g., PAHs) detected in soil do not leach to groundwater at significant concentrations. Two suspected sources of lighter-weight PAHs (e.g., naphthalene) and target volatile organic compounds (VOCs) detected in groundwater were identified – two former gasholders on the Northern parcel. Oily residuals of limited extent were found in soil at depth below these holders. This material has been in periodic contact with the fluctuating water

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table. Because the MGP operations ceased more than 70 years ago, the period of rapid degradation of MGP-related chemicals in groundwater has probably occurred. The relatively stable groundwater quality data is indicative of natural biodegradation.

Northern contracted with AMEC to act as prime contractor for design and remediation services. Earthwork activities were awarded to ENPRO and were completed in April 2005. This consisted of the removal of subsurface bodies of tar and the jet grouting of a small area of MGP impacted soil below a foundation floor. Northern-NH and AMEC awarded GeoCleanse the subcontract for the remediation of soil and groundwater using ISCO technology. The installation of oxidant injector wells and the first round of oxidant injection were completed in June 2005. Subsequent injections were conducted in the September 2005 and May 2006.

6. HISTORY AND CURRENT STATUS OF USE AND OWNERSHIP OF SITE: Available information indicates that the plant began operation as the Great Falls Gas Light Company in 1856 and may have been associated with the mills of the Great Falls Manufacturing Company. The plant was deeded to the Strafford-York Gas Company in 1911 (a predecessor of Allied New Hampshire Gas Company and subsequently Northern Utilities). The gas company leased two small parcels from the Great Falls Manufacturing Company in 1907, one to the north and one to the south of the main plant site. At its peak in 1917, the plant was supplying Rochester, East Rochester, Gonic, Somersworth, and Berwick, Maine. Available information indicates that the plant ceased production in 1928 and that the Rochester gas plant began supplying Somersworth with gas. It has been inferred from available information that the plant was demolished during the 1930's. Northern Utilities constructed a high-pressure Horton Sphere (gas ball) on the property in the 1940's as storage for propane and natural gas from the high-pressure main. The Horton Sphere was in operation into the 1980's when it was decommissioned and removed.

7. LISTING AND STATUS OF INSURANCE AND 3RD PARTY LAWSUITS AND SETTLEMENTS: None

NAME OF SUIT: Not Applicable

DATE FILED: Not Applicable

STATUS (PENDING/SETTLED): Not Applicable