

UTILITY EXCAVATION PROTOCOL

For Area Around

ITHACA COURT STREET
FORMER MANUFACTURED GAS PLANT (MGP) SITE
City of Ithaca, Tompkins County, New York

AUGUST 2002

Prepared By:

NYSEG Licensing & Environmental Operations Department
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Reviewed and Approved By:

New York State Department of Environmental Conservation

1.0 INTRODUCTION

This Utility Excavation Protocol is developed to ensure the safety of the public, workers and the environment during excavation activities in and around the Ithaca Court Street former manufactured gas plant (MGP) site. The utility excavation activities have been divided into three categories as follows:

- *Emergency Excavation:* Immediate excavation activities are necessary to protect human health, the environment or major property damage (i.e., blowing natural gas, major water main break), see Attachment A.
- *Urgent Excavation:* While not an emergency, excavation cannot wait more than 5 days (i.e., minor natural gas leak, minor water main break, non-emergency pole replacement). Work may require NYSEG to develop a job specific Work Plan that would be approved by NYSDEC, see Attachment B.
- *Routine Excavation:* Excavation can wait for up to 30 days with minimal consequences, see Attachment C.

1.1 Site Location and Description

The Ithaca City School District maintenance facility located on West Court, North Plain and Esty Streets is the location of a former MGP site operated by NYSEG predecessors.

A subsurface wooden duct transported coal tar from the MGP site to tar wells located at a coal tar transfer site on the Cayuga Inlet. The coal tar from the tar wells was pumped into either barges or railroad cars and used off site. This wooden duct is located along the north side of Court Street between the curb and the sidewalk, is approximately 18 inches square and is three to four feet below the ground surface.

A recent NYSEG investigation of the MGP site and the surrounding area has revealed the presence of both coal tar and contaminated groundwater on and around the MGP site and the wooden duct. Generally, coal tar has been detected at a depth of four feet or more below the ground surface in various samples collected on and around the site. Soil near the area where coal tar is present may also be affected as a result of coming in contact seasonal high contaminated groundwater. The areas of potential MGP impact are shown on Figure 1.

1.2 Potential MGP Residues

The MGP produced byproducts which present a potential public safety and environment concern.

Coal Tar - a black, viscous liquid characterized by a strong odor similar to railroad ties, moth balls or driveway sealer. Coal tar contains a variety of organic compounds which, in sufficient quantities present both short term and long term exposure risks. Coal tar is heavier than water so it tends to sink, but it does contain a fraction that may float on the groundwater surface. Coal tar contains volatile organic compounds (VOCs) which can present an inhalation risk if present in high enough concentrations and semi volatile compounds which can present an inhalation risk from breathing contaminated dust.

2.0 WORK ZONES

In order to tailor these work procedures to what is known about the nature and extent of MGP constituents, the following work zones have been defined and are shown on Figure 1.

- **MGP Site:** Coal tar is known to be present at various locations and depths.
- **Zone A:** The wooden duct is located along the north side of Court Street between the curb and the sidewalk at a depth of three to four feet below the ground surface.

Zone B: Area where coal tar may exist at a depth of four feet or more below ground surface. Lower concentrations of contaminants are likely to be present in the soil at the depth of the seasonal high groundwater. Odor may also be present shallower than four feet in limited areas near the MGP site.

- **Zone C:** No coal tar is known to be present, however MGP constituents could be encountered at the seasonal high water level.

3.0 OVERVIEW OF PRECAUTIONS TO ENSURE THE SAFETY OF HUMAN HEALTH AND THE ENVIRONMENT

The following precautions must be considered for any excavation work in the designated work zones on and around the MGP site. The applicability and extent of

each precaution will need to be determined based upon the actual work location and depth of excavation. Workers should err on the side of caution and treat any suspected contamination as possible MGP waste.

- Notification to NYSEG and New York State Department of Environmental Conservation (NYSDEC) as soon as practical, preferably prior to excavation(see section 4.0 Contact List).
- Personal hygiene, at a minimum, will consist of workers washing hands prior to leaving area of excavation, smoking, eating, drinking and/or using toilets. Smoking, eating and/or drinking is not be permitted in the vicinity of the excavation.
- Personal protective equipment (PPE), at a minimum, will consist of long sleeve shirt, long pants, work boots and work gloves. If soil is stained or coal tar is visible, additional PPE will be required including rubber boots, Tyvek suits or rain suits and nitrile or other chemical resistant inner gloves.
- Air monitoring is required for worker and community safety for volatile organic compounds (VOCs) and dust. Exception may be emergency work.
- Soil handling. Contaminated or stained soil will be handled to minimize contaminating adjacent areas by placing soil on polyethylene sheeting or in a container (i.e., 55-gallon drum or dump truck lined with polyethylene sheeting). If sidewall and bottom of excavation is heavily stained, line excavation with polyethylene sheeting prior to workers entering excavation.
- Soil storage. Drums with contaminated soil, polyethylene sheeting or PPE shall be delivered during normal business hours to the storeroom at NYSEG Service Center on Ithaca-Dryden Road. Dump trucks shall place load on polyethylene sheeting and cover soil with polyethylene sheeting behind the NYSEG Etna electrical substation located on Pinckney Road across Route 13 from NYSEG Service Center.
- Dewatering Excavation may require pumping water which is contaminated (has a sheen) into a storage container (i.e. 55-gallon drum) or into a sanitary storm sewer drain (if approved by City of Ithaca sewage treatment plant).
- Dust control by wetting soil with water.

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Equipment Decontamination, at a minimum, will consist of removing accumulated soil prior to leaving job site. Tar contaminated equipment will require washing prior to leaving the area of excavation.

- Personnel Decontamination, at a minimum, will consist of removing soil from footwear and removing any clothing with coal tar on it prior to leaving area of excavation. Workers should wash hands prior to leaving area of excavation, smoking, eating, drinking and/or using toilets.
- OSHA 40-Hour Hazardous Waste Operator (HAZWOPER) trained workers will be required to perform excavation in highly contaminated areas (This requirement will be determined by NYSEG and NYSDEC).

4.0 CONTACT LIST

NYSDEC: William S. Ottaway: Division of Environmental Remediation
NYSDEC
625 Broadway
Albany, New York 12233-7013
Office Phone: (518) 402 9686
E-mail: wsottawa@gw.dec.state.ny.us

NYSEG: Primary
Walter J. Savichky: MGP Remediation Group
NYSEG
Corporate Drive, Kirkwood Industrial Park, P.O. Box 5224
Binghamton, New York 13902-5224
Office Phone: (607) 762-7412
After Hours Phone: (607) 427-0718
E-mail: wjsavichky@nyseg.com

NYSEG: Secondary
Bert W Finch: MGP Remediation Group
NYSEG
Corporate Drive, Kirkwood Industrial Park, P.O. Box 5224
Binghamton, New York 13902-5224
Office Phone: (607) 762-8683
E-mail: bwfinch@nyseg.com

ATTACHMENT A

EMERGENCY EXCAVATION PROTOCOL

For Area Around
Ithaca Court Street
Former Manufactured Gas Plant Site

Emergency Excavation: Immediate excavation activities are necessary to ensure the safety of human health, the environment or major property damage (i.e., blowing natural gas, major water main break).

PROCEDURES IN ORDER OF IMPORTANCE

1. **Do not endanger your own life. Survey the situation before taking any action.** Take whatever action is necessary to ensure the safety of human health and the environment. If at all possible, take action that will avoid or minimize excavation at a depth four feet or more below ground surface.
2. **Personal Hygiene**, at a minimum, will consist of workers washing hands prior to leaving area of excavation, smoking, eating, drinking and/or using toilets. Smoking, eating and/or drinking is not permitted in the vicinity of the excavation.
3. **Personal Protective Equipment (PPE)**, at a minimum, will consist of long sleeve shirt, long pants, work boots and work gloves. If soil is stained or coal tar is visible, additional PPE will be required including rubber boots, Tyvek suits and nitrile inner gloves.

Soil Handling. Contaminated or stained soil will be handled to minimize contaminating adjacent areas by placing soil on polyethylene sheeting or in a container (i.e., 55-gallon drum or dump truck lined with polyethylene sheeting). If sidewall and bottom of excavation is heavily stained, line excavation with polyethylene sheeting prior to workers entering excavation.

5. **Soil Storage.** Drums with contaminated soil, polyethylene sheeting or PPE shall be delivered during normal business hours to the storeroom at NYSEG Service Center on Ithaca-Dryden Road. Dump trucks shall place load on polyethylene sheeting and cover soil with polyethylene sheeting behind the NYSEG Etna electrical substation located on Pinckney Road across Route 13 from NYSEG Service Center.
6. **Dewatering Excavation** may require pumping water which is contaminated (has a sheen) into a storage container (i.e., 55-gallon drum) or into a sanitary sewer drain.
7. **Equipment Decontamination**, at a minimum, will consist of removing accumulated soil prior to leaving the area of excavation.
8. **Personnel Decontamination**, at a minimum, will consist of removing soil from footwear and removing any clothing with coal tar on it prior to leaving area of excavation. Workers should wash hands prior to leaving area of excavation, smoking, eating, drinking and/or using toilets.

Notify NYSEG MGP Remediation Group as soon as practical after emergency is under adequate control.

Primary:	Walter J. Savichky	Normal working hours phone:	(607) 762-7412
		After hours phone:	(607) 427-0718
		E-mail:	wjsavichky@nyseg.com
Secondary:	Bert W Finch	Normal working hours phone:	(607) 762-8683
		E-mail:	bwfinch@nyseg.com

10. **NYSEG will notify NYSDEC Division of Environmental Remediation**
William S. Ottaway - phone: (518) 402-9686, E-mail: wsottawa@gw.dec.state.ny.us

ATTACHMENT B

URGENT EXCAVATION PROTOCOL

For Area Around
Ithaca Court Street
Former Manufactured Gas Plant Site

Urgent Excavation: While not an emergency, excavation cannot wait more than 5 days (i.e., minor natural gas leak, minor water main break, non-emergency pole replacement). Work may require NYSEG to develop a job specific work plan that would be approved by NYSDEC.

PROCEDURES IN ORDER OF IMPORTANCE

1. **Notify NYSEG MGP Remediation Group**
Primary: Walter J. Savichky Normal working hours phone: (607) 762-7412
After hours phone: (607) 427-0718
E-mail: wjsavichky@nyseg.com
Secondary: Bert W Finch Normal working hours phone: (607) 762-8683
E-mail: bwfinch@nyseg.com
2. **NYSEG will notify NYSDEC Division of Environmental Remediation**
William S. Ottaway - phone: (518) 402-9686, e-mail: wsottawa@gw.dec.state.ny.us
3. **Notify Dig Safely New York.** Phone: (800) 962-7962
4. **Personal Hygiene**, at a minimum, will consist of workers washing hands prior to leaving area of excavation, smoking, eating, drinking and/or using toilets. Smoking, eating and/or drinking is not permitted in the vicinity of the excavation.
5. **Personal Protective Equipment (PPE)**, at a minimum, will consist of long sleeve shirt, long pants, work boots and work gloves. If soil is stained or coal tar is visible, additional PPE will be required including rubber boots, Tyvek suits and nitrile inner gloves.
6. **OSHA 40-Hour Hazardous Waste Operator (HAZWOPER)** trained workers will be required to perform excavation in highly contaminated areas (This requirement will be determined by NYSEG and NYSDEC).
7. **Real-Time Air Monitoring (NYSEG)** for volatile organic compounds (VOCs) and dust.
8. **Soil Handling**. Contaminated or stained soil will be handled to minimize contaminating adjacent areas by placing soil on polyethylene sheeting or in a container (i.e., 55-gallon drum or dump truck lined with polyethylene sheeting). If sidewall and bottom of excavation is heavily stained, line excavation with polyethylene sheeting prior to workers entering excavation.
9. **Dust Control** by wetting soil with water. Wet soil only enough to control dust.
10. **Soil Storage**. Drums with contaminated soil, polyethylene sheeting or PPE shall be delivered during normal business hours to the storeroom at NYSEG Service Center on Ithaca-Dryden Road. Dump trucks shall place load on polyethylene sheeting and cover soil with polyethylene sheeting behind the NYSEG Etna electrical substation located on Pinckney Road across Route 13 from NYSEG Service Center.
11. **Dewatering Excavation** may require pumping water which is contaminated (has a sheen) into a storage container (i.e., 55-gallon drum) or into a sanitary storm drain.
12. **Personnel Decontamination** which at a minimum will consist of removing soil from footwear and removing any clothing with coal tar on it prior to leaving area of excavation. Workers should wash hands prior to leaving area of excavation, smoking, eating, drinking and/or using toilets.
13. **Equipment Decontamination**, at a minimum, will consist of removing accumulated soil prior to leaving area of excavation.

ATTACHMENT C

ROUTINE EXCAVATION PROTOCOL

For Area Around
Ithaca Court Street
Former Manufactured Gas Plant Site

Routine Excavation: Excavation can wait for up to 30 days with minimal consequences.

PROCEDURES IN ORDER OF IMPORTANCE

1. **Notify NYSEG MGP Remediation Group**

Primary:	Walter J. Savichky	Normal working hours phone:	(607) 762-7412
		After hours phone:	(607) 427-0718
		E-mail:	wjsavichky@nyseg.com
Secondary:	Bert W Finch	Normal working hours phone:	(607) 762-8683
		E-mail:	bwfinch@nyseg.com

2. **NYSEG will notify NYSDEC Division of Environmental Remediation**

William S. Ottaway - phone: (518) 402-9686, e-mail: wsottawa@gw.dec.state.ny.us

3. NYSEG may develop a work plan that would require approval by NYSDEC. If a job specific work plan is not developed follow the minimum procedures for Urgent Excavation.