

DRAFT

APPENDIX I

**CONTINGENCY PLAN
FOR IN-SITU SOLIDIFICATION**

**HEMPSTEAD INTERSECTION STREET
FORMER MANUFACTURED GAS PLANT SITE
VILLAGES OF HEMPSTEAD AND GARDEN CITY
NASSAU COUNTY, NEW YORK**

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TABLES

Table I1	Emergency Contacts
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LIST OF ACRONYMS AND ABBREVIATIONS

BOD	Basis of Design
CAMP	Community Air Monitoring Plan
HASP	Health and Safety Plan
ISS	in-situ solidification
MSDS	material safety data sheet(s)
NCDH	Nassau County Department of Health
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
OSHA	Occupational Safety and Health Administration
PEC	Project Emergency Coordinator
PELs	Permissible Exposure Limits
SHSO	Site Health and Safety Officer

1.0 CONTINGENCY PLAN

This Contingency Plan addresses potential emergencies that may arise during construction activities associated with the in-situ solidification (ISS) remedial action that will be completed at the Hempstead Intersection Street Former MGP site (Site). This Plan supplements the Basis of Design (BOD) Report for In-Situ Solidification.

The Site Health and Safety Officer (SHSO) will be made aware of any emergencies and coordinate any response activities carried out at the Site. The SHSO will also serve as the overall Project Emergency Coordinator (PEC) and have the ultimate authority in specifying and facilitating any contingency action.

If the SHSO is not able to perform the duties of the PEC, he/she will specify another experienced individual to serve in this capacity. The alternate PEC will be familiar with contingency plans developed by each contractor and subcontractor.

1.1 Identifying the Hazards and Assessing the Risk

The objectives during any emergency will be to protect human health and safety; and the environment. Possible hazards to human health or the environment that may result from any emergency situation will be identified by the PEC. The PEC will take into consideration both direct and indirect effects of the incident.

The PEC will assess the possible risks to human health or the environment that may result from the emergency (e.g., release, fire, explosion, or severe weather conditions) by performing the following activities:

- Identifying the materials involved in the incident.
- Consulting the appropriate occupational health guideline or material safety data sheets (MSDS) to determine the potential effects of exposure/release and appropriate safety precautions.
- Identifying the exposure and/or release pathways and the quantities of materials involved.

Based on this information the PEC will determine the best course of action for dealing with the emergency and possible follow-up requirements that may result from implementing those actions (e.g., equipment repair, material disposal, etc.).

The PEC will implement Site evacuation procedures (Section 2.1) if operating personnel cannot control the incident without incurring undue risk. If the off-site neighboring population is at risk the PEC will implement off-Site evacuation procedures (Section 2.2). The PEC will notify National Grid's Project Manager and the appropriate government agencies and departments that a situation resulting in evacuation has occurred. Should emergency assistance in treating injuries or carrying out the evacuation be required, the PEC will request assistance of the appropriate parties. The PEC will contact the local health department in cases when there are possible risks to human health from emergency situations such as fire, explosions or severe weather conditions.

1.2 Conditions for Implementing a Contingency Plan

Some of the conditions under which the Contingency Plan would be implemented are as follows:

- Fire or explosion.
- Occurrence of a significant spill or material release.
- Severe weather conditions.
- Physical or chemical injury to a worker.

1.2.1 Fire and/or Explosion Conditions

Contingency procedures will immediately be implemented upon notification that any of the following scenarios involving fire and/or explosion is imminent or has occurred:

- A fire that causes, or could cause, the release of toxic fumes.
- A fire that could possibly ignite nearby flammable materials or could cause heat-induced explosions.
- A fire that could possibly spread to off-site areas.
- A danger exists that an explosion could occur causing a safety or health hazard.
- An explosion has occurred.

1.2.2 Spill or Material Release Conditions

Contingency procedures will be implemented if any of the following scenarios involving a spill or material release has occurred or is imminent:

- A spill or material release that could result in the release of flammable liquids or vapors, thus causing a fire or gas explosion hazard.
- A spill or material release that could cause the release of toxic vapors or fumes into the atmosphere in concentrations higher than the Occupational Safety and Health Administration (OSHA) Permissible Exposure Limits (PELs).
- A spill or material release that can be contained onsite where a potential exists for groundwater or surface water contamination.
- A spill or material release that cannot be contained onsite, resulting in a potential for off-site soil contamination and/or groundwater or surface water pollution.

The PEC (or sub-contractor's emergency coordinator) will immediately identify the character, source, amount, and extent of any release. Spills or material releases will be reported immediately to the PEC. Initial identification will be based on visual analysis of the material and location of the release. If the release material cannot be identified, samples will be taken for analysis.

1.2.3 Severe Weather Conditions

The following severe weather conditions, whether imminent or having occurred, may cause implementation of contingency procedures:

- A lightning storm is underway in the area (e.g., storm center less than 5 miles away).
- A tornado has been sighted in the area.
- A tornado warning is in effect for the area.
- Other severe weather or weather induced conditions (e.g., hurricane or flood).

1.2.4 Physical or Chemical Injury Conditions

The following worker injuries may cause implementation of the Contingency Plan:

- Major physical injuries.
- Chemical injuries.
- Severe symptoms of chemical overexposure.

1.3 Contingency Procedures

If any of the aforementioned conditions for implementing the Contingency Plan are met, the appropriate contingency procedure(s) described in the following sections will be performed.

1.3.1 Contingency Procedures for Fire/Explosion

When fire or explosion appear imminent or have occurred, all normal activity in affected areas will cease. The PEC will make an assessment of the potential risk and severity of the situation to decide whether the emergency event will or will not be readily controllable with existing portable fire extinguishers or site equipment and materials at hand. Fire fighting will not be performed at the risk to site workers. Local fire departments will be contacted in all situations in which fires and/or explosions have occurred. A list of emergency contacts and agencies requiring notification can be found in Table K1 and the Contractor's Health and Safety Plan (HASP). The following steps will be taken for localized fire:

- Contact local fire departments.
- Move all personnel to an upwind location at an appropriately safe distance away.
- Determine if fire is within on-site personnel capabilities to attempt initial fire fighting.
- Determine if smoke and/or fumes from fire are potentially impacting offsite areas.
- If the fire is not impacting offsite areas and is within on-site personnel capabilities, utilize most appropriate means of extinguishing fire (e.g., fire extinguishers, water, covering with soil, etc.).
- Once fire is extinguished, containerize and properly dispose of any spilled material, runoff, or soil.

If the situation appears uncontrollable and poses a direct threat to human life, fire departments will be contacted and an evacuation plan will be implemented. If the chances of an impending explosion are high, the entire area within approximately 1,000-foot radius of the fire source will be evacuated. The PEC will alert personnel when all danger has passed, as determined by the chief fire fighter from the responding fire department. All equipment

used in the emergency will be cleaned and refurbished as soon as possible after the emergency has passed so that it will be ready for use in the event of any future emergency.

1.3.2 Contingency Procedures for Spills or Material Releases

If a hazardous waste spill or material release or process upset resulting in probable vapor release is identified, the PEC will immediately assess the magnitude and potential seriousness of the spill or release based upon the following:

- MSDS for the material spilled or released.
- Source of the release or spillage of hazardous material.
- An estimate of the quantity released and the rate at which it is being released.
- The direction in which the spill or air release is moving.
- Personnel who may be or may have been in contact with the material, or air release, and possible injury or sickness as a result.
- Potential for fire and/or explosion resulting from the situation,
- Estimates of area under influence of the release.

If the spill or release is determined to be within the on-site emergency response capabilities, the PEC will ensure implementation of the necessary remedial action. If the accident is beyond the capabilities of the operating crew, all personnel not involved with emergency response activity will be evacuated from the immediate area and the appropriate emergency response group(s) will be contacted. Spills must be reported to the New York State Department of Environmental Conservation (NYSDEC) unless they meet all of the following:

- The spill is known to be less than five gallons.
- The spill is contained and under the control of the spiller.
- The spill has not and will not reach the State's water or any land,
- The spill is cleaned up within two hours of discovery.

All reportable petroleum spills and most hazardous materials spills must be reported to the NYSDEC hotline (1-800-457-7362) within two hours of discovery.

1.3.3 Contingency Procedures for Severe Weather

When a tornado is sighted in the area, when a tornado warning has been issued, or when a lightning storm occurs, such information will be immediately relayed to the PEC. In the case of a tornado sighting, the PEC will institute emergency shutdown procedures and all personnel will be directed to proceed indoors after completing the shutdown procedures. In the case of a tornado warning, or lightning storm, the PEC will have operations stopped and direct all personnel to stand by for emergency procedures. Other types of weather or weather-induced conditions (e.g., hurricane or flooding) for which long range prediction is available may also require positive action.

When the severe weather has passed, the PEC will direct all contractors to inspect on-site equipment to ensure its readiness for operation prior to restarting operations. If an inspection indicates a fire, explosion, or release has occurred as the result of a severe weather condition, the procedures for those respective events will be followed.

1.3.4 Contingency Procedures for Physical Injury to Workers

Regardless of the nature and degree of the injury, the PEC will be appraised of all injuries requiring first aid of any kind. A report of the injury or incident will be completed.

Upon notification that a worker has been injured, the PEC will immediately determine the severity of the accident, and whether the victim can be safely moved from the incident site. Appropriate medical assistance will be summoned immediately.

Minor injuries sustained by workers will be treated onsite using materials from first aid kits. Whenever possible, such treatment will be administered by trained personnel in a “clean zone”. Examples of minor injuries include small scrapes and blisters. Minor injuries would not be expected to trigger implementation of this Contingency Plan.

Major injuries sustained by workers will require professional medical attention at a hospital. The PEC will immediately summon an ambulance and contact the hospital to which the injured worker will be transported. A listing of hospital contacts and the route to the hospital can be found in Table K1 and the Contractor’s HASP. The PEC will notify the National Grid project manager as soon as practical. The hospital and ambulance should be advised of the following:

- The nature of the injury.
- Whether the injured worker will be decontaminated prior to transport.
- When and where the injury was sustained.
- The present condition of the injured worker (e.g., conscious, breathing).

1.3.5 Contingency Procedures for Chemical Injury to Workers

Injuries involving hazardous chemicals or symptoms of severe chemical overexposure will automatically trigger implementation of this Contingency Plan. Upon notification that a chemical injury has been sustained or severe symptoms of chemical exposure are being experienced, the PEC will notify the hospital and ambulance of the occurrence. The PEC will provide, to the extent possible, the following information:

- The nature of the injury (e.g., eyes contaminated).
- The chemical(s) involved.
- The present condition of the injured worker (e.g., conscious, breathing).
- Whether the injured worker will be decontaminated prior to transport.
- When and where the injury was sustained.

Steps will immediately be taken to remove the victim from the incident site using whatever PPE and safety equipment is necessary. Rescuers will check for vital signs and, if possible, remove contaminated outer clothing. If the victim's eyes have been contaminated, personnel trained in administering first aid will flush the victim's eyes with eyewash solution until the emergency response team arrives.

Details on the nature of the contaminant and methods for treating exposure or injury can be obtained from the MSDS or Occupational Health Guidelines that are maintained on-site with the Contractor's HASP.

2.0 EMERGENCY EVACUATION PROCEDURES

2.1 Site Evacuation Procedures

If an emergency occurs that requires the evacuation of an area to ensure personnel safety, including (but not limited to) fire, explosion, severe weather or hazardous waste/material spills, or a significant release of vapors into the atmosphere, an air horn will be sounded on the Site by the nearest person aware of the event. The horn will sound continuously for approximately 15 seconds, signaling that immediate evacuation of all personnel from the area is necessary as a result of some existing or impending danger. In areas where only two or three people are working side by side, and the need to evacuate can be communicated verbally by the nearest person aware of the event, the air horn will not be necessary.

All heavy equipment in the area will be shut down. Under no circumstances will incoming visitors (other than emergency response personnel) be allowed to enter any area where an emergency is occurring. Visitors or observers and all non-essential personnel present in the area of an emergency will be instructed to evacuate the area immediately.

Contractor and subcontractor emergency coordinators and/or health and safety officers (as designated) will be responsible for ensuring that emergency response requirements specific to their own operations are carried out. These parties will report their activities to the PEC. The PEC, however, has final authority regarding all emergency response activities.

All non-essential personnel will evacuate the emergency areas and notify personnel in adjacent areas to evacuate also. The evacuated workers will assemble at the primary assembly area at the Contractor's Site construction office trailer, where the PEC will give directions for implementing necessary actions. In the event that the primary assembly area is involved, unapproachable, or unsafe due to the event, evacuated workers will assemble at an alternate assembly area that will be located at the Site entrance located at Intersection Street. The PEC will phone for backup assistance.

Personnel are to avoid encountering smoke/gas plumes as practicable during evacuation and assembling.

The PEC will take charge of all emergency response activities and dictate the procedures that will be followed until emergency personnel arrive. The PEC will assess the seriousness of the situation and direct whatever efforts are necessary until the emergency response units arrive.

After initiating emergency response procedures, the PEC will assign appropriate personnel to check and attempt to ensure that access roads are not obstructed. If traffic control is necessary, as in the event of a fire or explosion, personnel who have been trained in these procedures and designated at the project safety meeting will take over these duties until emergency units arrive.

The PEC will remain at the site to provide any assistance requested by emergency-response squads as they arrive to deal with the situation. The PEC will have the authority to shut down any part or the entire project after an emergency until he deems it safe to continue operations. He will dictate any changes in project safety practices, which are made necessary by the emergency that has occurred, or are required for preventing further emergencies.

2.2 Off-Site Evacuation Procedures

If the PEC determines, through perimeter air monitoring, that unnecessary exposure or emissions resulting from project activities may pose a hazard to the community, he will implement the Vapor Emission Response Plan, to be presented in the Site-specific Community Air Monitoring Plan (CAMP). The PEC will notify the National Grid Project manager who will notify the appropriate agencies and departments (e.g., National Grid Project Manager, the Nassau County Department of Health [NCDH], the New York State Department of Health [NYSDOH], the Garden City Police Department, the Hempstead Police Department, and the NYSDEC) of the need, or potential need, to institute off-site evacuation procedures. The PEC will provide, at a minimum, the following information:

- His or her name and telephone number.
- Name and address of facility.
- Time and type and nature of incident (e.g., release, fire, etc.).
- Name and quantity of materials or materials involved, to the extent this information is known.
- The extent of injuries, if any.

- The possible hazards to human health or environment, and cleanup procedures.

TABLES

**Table II
Emergency Contacts**

Emergency Response Agencies	
Ambulance	911 - Emergency
Fire Department	911 - Emergency
Police Department	911 - Emergency
Winthrop University Hospital 200 Old Country Road Mineola, NY 11501	(516) 663-9012
Garden City Urgent Medical Care 520 Franklin Avenue Garden City, NY 11530	(516) 279-6911
National Response Center	(800) 424-8802
NYSDEC Spill Report Hotline	(800) 457-7362
EPA National Response Center	(800) 424-8802
Center for Disease Control	(404) 488-4100
Chemtrec	(800) 424-9300
National Grid (Gas Emergencies – KC Brockhoff)	Primary: (516) 523-7173 Alternate: (800) 930-5003
Project Personnel	
National Grid Project Manager (Patrick Van Rossem)	Office: (516) 545-2578 Cell: (917) 572-4075
Contractor (Site Superintendent)	Office: Cell:
Contractor (Site Health and Safety Officer)	Office: Cell:
Construction Manager (Site Manager)	Office: Cell:
NYSDEC (Site Representative)	Office: Cell:
NYSDEC (Project Manager)	(518) 402-9662 [Lech Dolata]
NYSDOH	(518) 402-7880 [Sharon McLelland]
NCDH	(518) 227-9428 [Joe DeFranco]