

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

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December 12, 2016

Prince Knight
Laboratory, Environmental & Compliance Manager
Norlite, LLC
628 S. Saratoga Street
Cohoes, NY 12047

RE: Minor Permit Modification – Integrated Contingency Plan Update
Norlite LLC, NYSDEC Permit No. 4-0103-00016/16
EPA Id No. NYD080469935

Dear Mr. Knight,

The New York State Department of Environmental Conservation (Department) has completed the review of the Integrated Contingency Plan revisions received on November 9, 2016, and additionally modified on November 18, 2016. The changes consist of updated information for key facility contacts, facility incident commanders, outside organization contact phone numbers and correction of grammar and typographical errors.

This permit modification is a minor modification pursuant to 6 NYCRR 373-1.7(c)(1)(ii) and 373-1.7(c)(2)(v)(‘b’). This approved version of the Integrated Contingency Plan shall replace the version currently document 2. Incorporated by reference in your permit. Under 6 NYCRR Part 373-1.7(e), Norlite is required to notify all persons on the facility mailing list of this modification. Please provide this office with a copy of your notification for our records.

If you have any questions regarding this modification please contact myself or Michael Rich at 518 402-9813.

Sincerely,



Thomas J. Killeen, P.E.
Chief, RCRA Permitting Section

Enc.

Ec: M. Rich, NYSDEC
J. Hadersbeck, NYSDEC
H. Brezner, NYSDEC
R. Mustico, NYSDEC
N. Baker, NYSDEC
D. Monk, Norlite
T. LaGrimas – Tradebe
S. Kowalczyk - Tradebe
D. Messercola – Norlite



Department of
Environmental
Conservation

INTEGRATED CONTINGENCY PLAN

**NORLITE LLC
COHOES, NEW YORK
NYD080469935**

PREPARED BY:

**NORLITE LLC
628 SOUTH SARATOGA STREET
COHOES, NEW YORK 12047**

**November
2016**

INTEGRATED CONTINGENCY PLAN

TABLE OF CONTENTS

SECTION I	PLAN INTRODUCTION ELEMENTS
1.1	Purpose and Scope of Plan Coverage
1.2	Current Revision Date
1.3	General Facility Identification Information
SECTION II	CORE PLAN ELEMENTS
2.1	Discovery
2.2	Initial Response
2.3	Sustained Actions
II.4	Termination and Follow-Up Actions
SECTION III	ANNEXES
Annex 1.	Facility and Locality Information
Annex 2.	Notification
Annex 3.	Response Management System
Annex 4.	Incident Documentation
Annex 5.	Training and Exercise Drills
Annex 6.	Response Critique and Plan Review and Modification Process
Annex 7.	Prevention
Annex 8.	Regulatory Compliance and Cross Reference Materials

INTEGRATED CONTINGENCY PLAN

This Integrated Contingency Plan (ICP or Plan) for the Norlite, LLC facility is organized into three main sections: 1) Plan Introduction Elements; 2) Core Plan Elements; and 3) Annexes. The elements contained in these sections are accepted emergency response activities that are currently addressed in various forms in existing contingency planning regulations. The goal is to provide a mechanism to consolidate existing concepts into a single functional plan structure. This approach should provide a consistent basis for addressing emergency response concerns.

This Integrated Contingency Plan is incorporated by reference into the Part 373 Permit for the Norlite LLC facility. In the event that changes are made to the facility that affects the content of this plan, this plan will be updated in accordance with the requirements of Condition D of Module 1.

Section 1 - Plan Introduction Elements

The introduction section of this ICP is designed to provide facility response personnel, outside responders, and regulatory officials with basic information about the Plan and the entity it covers. It includes a statement of purpose and scope, information on the current revision date of the plan, general facility information, and the key contact(s) for plan development and maintenance.

1.1 Purpose and Scope of Plan Coverage

This Integrated Contingency Plan (ICP) has been prepared by Norlite located at 628 South Saratoga Street, Cohoes NY to fulfill the spill prevention and emergency response requirements of the various federal and state regulations to which Norlite, LLC is subject. A cross-reference matrix is provided for each of the applicable requirements. Specifically, the ICP is designed to comply with the following requirements:

Requirement	Acronym	Agency	Citation
Contingency Plan and Emergency Procedures	Contingency Plan (also HWCP)	New York State Department of Environmental Conservation	6 NYCRR Part 373-2.4
Emergency Action Plan	EAP	Occupational Safety and Health Administration	29 CFR 1910.38(a), 1910.119, 1910.120
Spill Prevention, Control and Countermeasure Plan	SPCC	United States Environmental Protection Agency	40 CFR Part 112

1.2. Current Revision Date

This ICP is maintained on-site and is available for review at all times. The following table provides a brief summary of the revisions made to this ICP.

Revision Number	Revision Date	Revision Description
1	June 16, 2014	Creation of the Integrated Contingency Plan
2	October 17, 2016	Updates to the Emergency Coordinators/Responders

1.3. General Facility Identification Information

a.	Facility name	Norlite, LLC
b.	Owner/operator/agent	Tradebe Environmental Services, LLC/Norlite LLC
c.	Physical address of the facility	628 South Saratoga Street, Cohoes NY 12047. Albany County. Located at 42.755332,-73.702791. Directions from Albany: Take Interstate 787 approximately 6.8 miles, Turn left onto Tibbits Ave, Take the 1st right onto NY-32 N. Norlite is located approximately 0.5 miles on the left across from a Speedway gas Station.
d.	Mailing address of the facility	Darrell Monk 628 South Saratoga Street, Cohoes, NY 12047

e.	Other identifying information	EPA ID: NYD080469935 NAICS: 327992 SIC: 3299 TRI ID: 12047NRLTC628SO
f.	Key contact(s) for plan development and maintenance	Prince Knight - Laboratory, Environmental and Compliance Manager Darrell Monk - Plant Manager
g.	Phone number(s) for key contact(s)	518-235-0401
h.	Facility phone number	518-235-0401
i.	Facility fax number	518-235-0233

Detailed information pertaining to the facility is provided in **Annex 1 - Facility and Locality Information** including:

- Description of facility operations:
 - Norlite is a lightweight aggregate facility which utilizes liquid hazardous and non-hazardous waste as a fuel source in two lightweight rotary kilns.
- Facility maps: Drawing 373-Map Revised.
- Facility drawings; refer to the following drawing which provide P&ID information of the fuel farm and kiln area, including emergency shut-off valve information.
 - NY003-1311
 - NY003-1312
 - NY003-1314
 - NY003-1315
 - NY003-1317
 - NY003-1903

- Facility description/layout, including identification of facility hazards and vulnerable resources and populations on and off the facility which may be impacted by an incident. The layout of the facility, including the entrances and roads inside the facility, evacuation routes, emergency shut-off valves, response equipment, facility topography, nearby environmentally and economically sensitive areas (e.g. schools, nursing homes, hospitals, commercial district) and muster station is included in Facility Drawing 373-Map Revised, as well as the facility drawings

Section 2 - Core Plan Elements

The Core Plan contains essential response guidance and procedures. Annexes contain more detailed supporting information on specific response functions. The core plan contains frequent references to the response critical annexes to direct response personnel to parts of the ICP that contain more detailed information on the appropriate course of action for responders to take during various stages of a response.

2.1. Discovery

The discovery actions include those initial actions taken by personnel to recognize an incident, perform a basic assessment to mitigate circumstances if appropriate, and immediately notify the proper personnel to respond to the incident including necessary state or local agencies. All facility personnel are trained to recognize an incident based upon the categories defined in **Annex 2 - Notification**.

Once an incident is recognized, employees will perform a basic assessment as described in **Annex 2 - Notification** to determine subsequent actions including but not limited to internal notifications, information gathering, evacuations and equipment shutdowns. The specific actions are detailed in the following sections of the Annex 2 (need section).

Spill prevention inspections are detailed in **Annex 7 - Prevention**. In the event of a release of hazardous materials or wastes resulting from a spill or leak from a container or tank, the procedures outlined in **Annex 3 – Response Management System** will be followed. In general, the following steps will be taken:

- Control the release. Stop the flow of material if it can be performed safely;
- Remove potential ignition sources and materials in the areas that could be affected by the releases;
- Contain the release;

- Clean up the release and all associated residues;
- Prevent incompatible waste from being treated, stored or located in the affected areas until cleanup procedures are complete;
- Properly dispose or treat all collected released material; and
- Ensure that all emergency equipment listed in this ICP is cleaned and fit for its intended use before operations are resumed.

Specifically, if a leaking container is discovered, the emergency response procedures will be followed and may include placing the leaking container in an overpack container. Contaminated soil, if any, will be removed and placed in a properly-labeled container. In the case of a leaking tank, the material will be contained in its containment dike. The standard emergency response procedures will be followed. If possible, the material will be recovered for reuse once the leak has been repaired. Absorbent materials will be utilized to soak up residual materials and then placed into properly-labeled drums or containers. The diked area may be cleaned with water, which will then be transported off-site for proper disposal or processed through the facility's wastewater treatment plant.

In addition, other inspections are conducted by personnel in order to detect any discharges that may have taken place. These include:

- Kiln Field Operator's Shift LLGF Inspection Report: conducted every 4 hours during the night shift. The Fuel Farm area is inspected for leaks as well as tank levels are recorded to verify no changes to tank levels have occurred.
- Fuel Farm Operator's Daily LLGF Inspection Report: conducted daily by personnel at the Fuel Farm.
- Burner Operator's Shift Log: Conducted by the kiln burner operators through the shift. The LLGF portion of the rotary kiln is inspected with results of the inspection being recorded on the shift log.

The facility also utilizes automated discharge detection systems in conjunction with the above-listed inspections conducted by facility personnel. These systems include:

- Lower Explosive Limit (LEL) Sensors
- Oxygen Sensors

The LEL and O₂ sensors are located wherever hazardous wastes are stored or transported via piping. LEL and O₂ sensors are found in the LLGF tank storage building, the solids processing (drum) building, the tunnel, and the EQ building located between the two kilns.

2.2 Initial Response

This Section provides the initial response actions at the Norlite facility.

2.2.1 Initial Notifications

At all times, there will be at least one employee either on the facility premises or on call (i.e. available to respond to an emergency by reaching the facility within 15 minutes of a call) with overall responsibility for incident command and emergency response measures.

All Kiln Supervisors are trained as Incident Commanders and therefore the on-site kiln Supervisor at the time must have the initial notification. The on-site Kiln Supervisors can be reached on a shared cell phone at 518-587-5737.

The on-site Kiln Supervisor must contact one of the following facility Incident Commanders:

Primary Incident Commander:

Plant Manager: Darrell Monk

Office: 235-0401 Plant Ext.: 4044

Cell Phone: 518-852-3876

Alternate:

Health & Safety Manager: Danny Messercola

Office: 235-0401 Plant Ext.: 4005

Cell Phone: 518-857-7385

Alternate:

Environmental Manager: Prince Knight

Office: 235-0401 Plant Ext.:4049

Cell Phone: 518-857-2969

Alternate:

Fuel Farm Manger: David Glover

Office: 235-0401 Plant Ext.:4028

Cell Phone: 518-857-4606

Contact to outside organizations will either by conducted by the Incident Commander or a designated person other than the Incident Commander. The following outside organizations may be contacted:

- City of Cohoes Fire Department: 518-237-1472
- Local Emergency Planning Committee: 911 or 765-2351
- West Central Environmental (518) 272-6891 (For spill control and assistance.)
- NYS 24 Hour Oil and Hazardous Materials Spill Hotline: (518) 457-7362
- Albany County Health Department: (518) 445-7835
- National Response Center (24 hours): (800) 424-8802 or (202) 426-2675
- US Coast Guard: 472-6110 or (212) 264-4860 (Immediate notification as soon as there is knowledge of an oil release that violates water quality standard or causes a sheen on navigable waters.)
- D&H Railroad Operations Control Center: 271-4414 (If situation involves or interferes with railroad activity.)
- US EPA Region II: (201) 548-8730
- St. Mary's Hospital: (518) 268-5000
- Mine Safety Health Administration: 489-0573

2.2.2 Response Management System

Response to any emergency situation will follow the structure of Incident Command-Hazardous Sector Operations, under the regulations of 30CFR Subpart ' 1910.120.

2.2.2.1 Preliminary Assessment and Initial Response Procedures.

The procedures for preliminary assessment of the situation, including an identification of incident type, hazards involved, magnitude of the problem, and resources threatened. The criteria for implementation of the ICP for any potential emergency include:

- threat to human health or the environment;
- fires/explosions; or
- unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil or surface water.

The following procedures will be followed for preliminary assessment of the situation:

Step 1: Site Management

- The ultimate goal of site management is to protect employees and secure the area of the incident
- Manage the physical layout of the incident.
- Approach releases from an uphill, upwind side.
- Ensure area is isolated and deny entry via barriers, tape, employee guarding.
- Monitor for breached containers, vapor clouds, unusual odors, or released spills.
- Determine if possible, if anyone is injured.

Step 2: Identification of hazardous Materials

- Determine if possible, without entering area or contacting material, what materials are involved and approximate amount.
- If entry into area is required to identify material, than this will only be done under the direction of the full incident command and emergency response team. No further action can be done at this time except to maintain site control and contact the Emergency Response Team.

- If a determination can be made as to the material and amount, or if the material is known, the Emergency Coordinator can make the determination for response actions or to contact the Incident Commander.
- For small spills (less than 55 gallons) with known materials, emergency response will be handled under the direction of the Emergency Coordinator. For large spills, or unknown materials, emergency response will be under the direction of the Incident Commander.
- Identification of unknown materials will be done with level A protection, under the buddy system, with back up response personnel in place. If at this time, and identification can be made, than appropriate procedures will be followed. If identification cannot be made, than outside resources will be contacted to handle the response.

Step 3: Hazard and Risk Assessment

- After specific identification of a material, hazards and risks must be determined. Labels, containers, shipping papers, Manifests, SDS, or HAZMAT response guides shall be utilized. This is necessary for determining potential risk from additional spills, fires or explosions, and a safety assessment for responders, employees, community and environment, determining PPE and response equipment.
- Assess possible hazards, both direct and indirect, to human health and environment and determine control methods. These include:
 - fire
 - wind & direction
 - explosion
 - other hazardous materials
 - toxicity
 - ignition sources
- Determine if incident can be handled by company's capabilities or if external resources are necessary.
- Assess the need for implementing the evacuation plan.

- Potential for off-site involvement
- Actual or potential threat to human health and/or extent of injuries sustained
- Establish "hot", "warm", and "cold" zones.
- Notify appropriate emergency service groups if there is threat of public health or the environment.

Step 4: Select PPE and Equipment

- PPE and equipment selection will be based on the material and hazards. If not already determined, this will be done by Equipment Officer.

Step 5: Information and Resource Coordination

- A command post shall be established, close enough to view the site, far enough to prevent contamination and be upwind.
- The command post shall be well marked.
- Representatives from other agencies should be available if needed at the command post.
- Identification of key officers is established at this time if not already done so, via vests or other identification measures.
- Checklists shall be handed out at this time (if not already done so) for each officer and their roles.

Step 6: Control and Containment

- Remove all hazards present, including flammable materials, if safe to do so.
- Spill control will be initiated before leak control measures are implemented.
- Controlling vapors and gasses is limited to shutting off the supply if safe to do so. Additional outside resources will be contacted for assistance.
- Liquids are controlled by diverting, diking, or retaining and absorption or contain or direct to sumps.
- Leak control measures will be taken after spill control has been completed. This is controlling the leak at the source or container. This can be accomplished by:

- Emptying or transferring material
- Diverting flow
- Patching or plugging

Step 7: Decontamination

- This process makes people, equipment and supplies safe by eliminating harmful substances. This is done under the direction of the Equipment Officer.
- Processes utilized will be dilution, absorption, or neutralization, or a combination of.
- All affected response personnel, equipment and facilities will be decontaminated prior to entering the "cold zone".
- Arrange for proper disposal of all contaminated materials, including insuring that incompatible wastes are not mixed with released materials.

2.3. Sustained Actions

Sustained actions which transition beyond the initial emergency stage will be handled by the Incident Commander in charge of incident. Sustained actions will most likely require assistance from outside sources such as the fire department, LEPC, or contracted response services. An example of a sustained action would be a release to a stream or significant fire.

2.4. Termination and Follow-Up Actions

Final Step: Termination

- Ensure situation is under control.
- All utilized safety equipment must be inspected to be sure it is cleaned and in a ready state.
- Investigation and documentation of the incident.
- Ensure health monitoring of response personnel if appropriate.
- Notification to proper authorities that activities have been completed.
- Determine when an "all-clear" can be given to resume normal activities.
- File report within 15 days of the emergency action.

Once any emergency is declared over, the following procedures describe how the orderly demobilization of response resources will occur.

- As part of the Contingency Plan activation notification letter due 15 days after an incident, the facility will conduct a root cause analysis to determine the cause of the incident. The final notification letter will be submitted to the Region 4 Regional Remediation Engineer.
- From the results of the root cause analysis, the company will institute corrective action measures which will help ensure a similar situation does not occur again.

During the root cause analysis, the company will evaluate the response procedures followed during the incident and implement new procedures if deemed necessary to ensure public health and environmental protection.

In the event of an incident at the facility, the following information will be documented and submitted for review upon request:

- a) incident history (time, date, location, etc.);
- b) notifications made;
- c) emergency response personnel involved (name of organizations and times on-site)
- d) agency personnel on-site (names of agencies and times on-site)
- e) description of response actions;
- f) cause(s) of the incident;
- g) types of chemical(s) released and impacted media (e.g. soil, air, water);
- h) quantity of chemicals released;
- i) resources impacted (i.e. community, natural resources, etc.);
- j) personnel/responder injuries; and
- k) corrective actions and enforcement.

ANNEXES

ANNEX 1

FACILITY AND LOCALITY INFORMATION

Annex 1: Facility and Locality Information

A1.1 Facility Location and Layout

The layout of the facility, including the entrances and roads inside the facility, evacuation routes, emergency shut-off valves, response equipment, facility topography, nearby environmentally and economically sensitive areas (e.g. schools, nursing homes, hospitals, commercial district) and muster station are included in the following figures:

- a. **Facility Map:** Drawing 373-Map revised. This drawing identifies each building on the facility, have topography information, wind row information, location of the nearest neighbors, environmental receptors, and facility entrances which are to be used as rally points dependent upon wind direction.
- b. **Facility Drawings:** refer to the following drawings which provide P&ID information of the fuel farm and kiln area, including emergency shut-off valve information.
 - NY003-1311
 - NY003-1312
 - NY003-1314
 - NY003-1315
 - NY003-1317

. The layout will be made available to the police, fire departments, State/local emergency response teams, response contractors and equipment suppliers and any other responders. Arrangements have been made to familiarize emergency responders with the facility layout and properties of the hazardous waste managed at the facility. Any change(s) in the facility layout will be communicated to the same parties in a timely manner and documentation of such communication will be maintained on-site.

A1.2 Facility Description and Process Operations

Norlite, LLC is located in both the Town of Colonie and on the southern boundary of the City of Cohoes, New York. All mining activities are located within the Town of Colonie while all Hazardous Waste Handling operations are located in the City of Cohoes. Tradebe Environmental Services, LLC is the owner of Norlite, LLC with Norlite, LLC being the operator of the facility. The facility consists of a production operation, a quarry for shale, and a Fuel Farm which houses hazardous and non-hazardous wastes for fuel in the production operation.

The overall production portion of the facility resides on approximately 40 acres located in the center of the facility east of the quarry. The two kilns are approximately in the center of this 40 acre section. The office area is directly north of the kilns and the Fuel Farm is northwest of the kiln and directly west of the office area. The finishing operation resides to the east/southeast of the kilns. The quarry itself is located on the western portion of the property in the Town of Colonie.

The Fuel Farm is located upgradient of but some distance away from the Salt Kill, a NYS Class D stream which runs through the center of the facility. The Fuel Farm is where all the hazardous and non-hazardous wastes are stored and therefore has the greatest facility hazards due to the possibility of fire. The entire Fuel Farm has a fully automated fire suppression system with Oxygen, LEL, heat and infra-red monitors located throughout the entire fuel system to detect and alert employees to a potential problem in these work areas. Should the automated fire suppression system activate, an automated phone line contacts a local security service who then dispatches the Cohoes Fire Department as well as contacts one of the Incident Coordinators for the facility. A release of liquid waste would be contained inside the containment system for the storage tanks. The tank vent system is a closes system with the tank vapors going to the kilns for incinerations. The hazardous waste tanks do contain an emergency pressure relief system should pressures in the tank build faster than the vent system can handle. This relief system will not activate until pressures in the tank reach 18.8 psi. When this system activates, the vapors from the tank are released directly to the atmosphere via a one foot stack.

The production operation consists of two dry rotary lightweight aggregate kilns, a crushing and screening finishing building, and a crushing and screening primary plant. The kiln area, which is located southeast of the Fuel Farm, is where the liquid wastes are used as fuel to make the lightweight aggregate product. Raw materials are quarried in on-site shale quarry and transported to the primary plant where the shot rock is crushed to a specified size and screened. The crushed screened rock is transported to the kilns via a conveyor system. Kiln No. 1, manufactured by Taylor is 175 feet long, whereas Kiln No. 2, manufactured by Allis-Chalmers, is 180 feet long. Both kilns have an outside diameter of 11 feet and consist of a steel shell lined with 6-inch refractory brick, for an effective inside diameter of 10 feet. The production operation is a mineral beneficiation process, and is used in the production of lightweight building materials and construction products.

The kilns operate at approximately 3000 °F near the burner zone and approximately 1000°F at the backend where the shale is introduced into the kiln. Due to the temperature of the kilns, there is an obvious risk of burns should the shell be contacted. Both kilns have an outside diameter of 11 feet and consist of a steel shell lined with 6-inch refractory brick, for an effective inside diameter of 10 feet. Both kilns have identical emission control systems which consist of both wet and dry emission control devices for the collection and removal of particulate matter, hydrogen chloride (HCl), metals, and other gaseous species. The primary hazard for the kiln area is on the burner floor. The burner floor is where control of the liquid wastes occurs before entering the burner nozzle with air pressure to atomize the liquid into fine liquid waste droplets. As the fine liquid waste droplets exit the burner nozzle, they are ignited into a main burner flame which stretches ten to fifteen feet into the kiln. A “fire eye” sensor is present to detect that a flame is present in the kiln. All the possible fuel feed systems (LLGF, off-specification used oil, specification used oil, and natural gas) have automated valves connected to a Programmable Logic Controller (PLC) which can be closed should the “fire eye” lose signal or the flame go out. This safety feature prevents liquid waste from being fed into the kiln without a flame to combust it. The kiln area is manned 24 hours a day/ 7 days a week/ 365 days a year.

The material that exits the kilns is called clinker. The clinker is transported to the finish plant operation via conveyors and frontend loaders. Once at the finish plant operation, the clinker is crushed and screened into the various product sizes which are sold to customers.

Norlite uses a mix of energy sources including industrial organic wastes (hazardous waste), specification and off-specification used oil, fuel oil, comparable fuels and natural gas for its two kilns. These materials are Liquid Low Grade Fuel (LLGF) and are fed to the kiln at the hot end of the kiln. All of the fuels except for natural gas are stored at the Fuel Farm which is located north of the kilns and east of the quarry. The various LLGF are transported to Norlite via either tanker truck or box truck carrying drums. All wastes are sampled and analyzed as per Norlite's Waste Analysis Plan (WAP) before being accepted by Norlite. Once accepted, bulk trucks are off loaded via pumps into one of nine (9) hazardous waste storage tanks. If the material being offloaded is off-specification or specification used oil, these materials will be off-loaded into either one of (4) specification used oil tanks or the one off-specification used oil tank. Norlite uses computer modeling and laboratory analysis to blend the different hazardous wastes into a mixture which will meet the requirements of the Norlite WAP for use at the kilns as a fuel. The used oils are used as a supplemental heat source when the kiln operators need it.

A list of hazardous waste and chemicals managed and utilized at this facility along with their properties can be found in the **Operations Plan and Waste Analysis Plan**. Norlite maintains profiles for all the incoming wastes which are received. Each profile calls out the major constituents of the waste. During an incident, this information would be provided to the Incident Commander to identify what chemicals are involved. Pertinent information on extinguishing fires associated with these chemicals (especially water-reactive chemicals), such as a material's Safety Data Sheets (SDS) or the Chemical Hazard Response Information System (CHRIS) manual, will also be made available to facility personnel and responders. Response procedures will differ markedly and are driven by the type and severity of the incident. A copy of this response procedure is available **ANNEX 3 Response Management System**. All chemicals will be treated with the highest regard for safety and assumed to be worst case until identified. Once identified, Safety Data Sheets and the Chemical Hazard Response Information System will be used to determine a response plan. Norlite accepts a wide range of chemicals at

the facility which makes creating a specific response plan for each scenario impossible to predict.

Property surrounding the facility is zoned as follows: residential to the north and east, light commercial directly to the south, with vacant land to the south and west of the facility. The buffer zone from the site's property lines to the operational areas varies from 500 feet to 1 mile. The population is estimated to be 5,000 within a one (1) mile radius of the facility. Within a three (3) mile radius is the city of Cohoes, with an approximate population of 18,000. The prevailing wind directions are from the west-northwest (WNW) and south-southeast (SSE).

The nearest rivers and/or streams include the Salt Kill Creek and the Mohawk and Hudson Rivers. The Salt Kill enters Norlite's property on the northern boundary, traverses the property in a northwestwardly to southeastwardly direction and exits at the mid-point of the eastern property line. The portion of the Salt Kill, which flows through the active part of the plant, was channelized in 1981 by use of culvert tiles. The culvert is comprised of two concrete pipes, each four (4) foot diameter by 200 feet long. The Hudson and Mohawk Rivers are respectively 1 mile due east of the property, and 3/4 mile northeast of the property.

ANNEX 2

NOTIFICATION

Annex 2: Notification

This annex details the process of making facility personnel, emergency responders and regulators aware of an incident (i.e., who to call, when the call must be made, and what information/data must be provided on the incident).

A2.1 Internal Notifications

MASTER TELEPHONE LIST

The Norlite LLC designated Emergency Coordinators:

Name	Title	Telephone Number
NA	On-Site Kiln Supervisor	Cell Phone: 518-587-5737
Danny Messercola	Health and Safety Manager	11 Bent Grass Dr. Mechanicville, NY 12118 Office: 518-235-0401 Ext. 4005 Cell Phone: 518-857-7385
Darrell Monk	Plant Manager	2402 Harmony Mills., Cohoes, NY 12047 Office: 518-235-0401 Ext. 4044 Cell Phone: 518-852-3876
Prince Knight	Environmental Manager	5524 Hennessey Rd. Voorheesville, NY 12186 Office: 518-235-0401 Ext. 4049 Cell Phone: 518-857-2969
David Glover	Fuel Farm Manager	1 Winnie Pl, Glenmont, NY 12077 Office: 518-235-0401 Ext. 4028 Cell Phone: 518-857-4606

There will be at least one Emergency Coordinator at the site or available on-call at all times. Emergency Coordinators are thoroughly familiar with all aspects of the facility's Integrated Contingency Plan (ICP) and have been authorized to commit the necessary resources to implement the ICP.

A2.2 Community Notifications

EMERGENCY SERVICES

Emergency Service	Address	Telephone Number
Fire Department		911
Police Department		911
Ambulance		911
Hospital/Emergency Care Facility		518-268-5697
Poison Control Center		(800) 2221222
Chemical Emergency Advice		(800) 424-9300 (CHEMTREC)

In the case of having more than one fire department or police department responding to an emergency, the primary emergency authority shall be the Cohoes Fire Department. Other authorities will provide secondary support to the primary emergency authority. This information is available in the Core Plan Section 2.1.1.

Norlite, LLC has familiarized the local hospitals with the properties of the hazardous waste managed at the facility, and the types of injuries or illness that could arise from fires, explosions or releases from the facility. Norlite, LLC has also established coordination agreements with local police and fire departments, hospitals, response contractors and state and local emergency response teams to familiarize them with the facility and actions needed in case of an emergency. A copy of the ICP has been submitted to these organizations along with all revisions. Documentation of these coordination efforts are maintained on-site at the facility. The refusal of any authorities in receiving the above information has been noted in the facility records.

A2.3 Federal, State and Local Agency Notifications

Federal/State/Local Agency	Telephone Number
NYSDEC Spill Hotline Telephone Number	518-457-7362
Albany County Dept. of Health	518-445-7835
New York State Dept. of Health – Albany	518-474-2011

The Permittee must include all agencies that must be notified of an incident in accordance with the applicable regulations.

ANNEX 3

RESPONSE MANGEMENT PLAN

Annex 3: Response Management System

The following sections provides a description of the Norlite Response Management System including specific information necessary to guide and support the actions of a response management function during a response.

A3.1 General

Norlite, LLC follows the National Interagency Incident Management System (NIIMS) Incident Command System (ICS). Norlite has approximately 20 individuals which have all received the specific training to an Incident Commander. Typically the role of Incident Commander is delegated to the Plant Manager or Health and Safety Manager.

Levels of Command, Response and Structure

1. Incident Commander - has total responsibility for all activities conducted during an emergency response event. His top priorities are the health and safety of: 1-employees, 2-public, 3-environment. Specific responsibilities include:
 - a. Identification of materials and conditions
 - b. Implement appropriate actions
 - c. Assure a safety officer is appointed and all areas are evaluated, safe, and appropriate PPE is determined
 - d. Assure a Team Leader is assigned to direct activities
 - e. Assure a Risk Assessment Officer is assigned to determine hazards
 - f. Assure an Equipment Officer is assigned to coordinate equipment use and decontamination
 - g. Limit the number of personnel at the site
 - h. Establish and maintain site control
 - I. Termination activities are appropriate
 - j. Acts as a liaison between outside agencies and internal activities
 - k. Usually remains in the "cold zone" or command post

2. Health & Safety Officer - responsible for the health and safety of response personnel and coordinating care of victims in an emergency response event. Specific responsibilities include:
 - a. Knowledge of the conditions, materials, and hazards
 - b. Determines and monitors emergency conditions, and can halt operations if unsafe or imminent danger
 - c. Performs last check of any entry PPE
 - d. Identifies and monitors signs and symptoms of contamination, exposures, heat stress
 - e. Coordinates medical response
 - f. Is found at the access control point and is in constant sight of entry operations

3. Team Leader - responsible for coordination of all operations at the emergency response site and provides exclusive direction for response measures. Specific responsibilities include:
 - a. Assures all eight steps of hazardous materials mitigation's are met and maintained in conjunction with other officers.
 1. Site management
 2. Identification of materials involved
 3. Hazard and risk assessment
 4. Select protective clothing and equipment
 5. Resource and information
 6. Control hazardous material releases
 7. Decontamination activities
 8. Termination activities
 - b. Develops answers to IC's problems
 - c. Provides direct supervision for all activities in the hazard sector, working in the "hot zone"

4. Risk Assessment Officer - responsible for determining risk assessment by assembling data about materials involved to determine hazards. Specifics include:
 - a. Determine chemical, physical and health hazards of materials.
 - b. Determine PPE, equipment and materials necessary
 - c. Determine evacuation distances and necessity
 - d. Reports information to other officers as appropriate.
 - e. Monitors for additional hazards, weather conditions, wind directions, runoff, evaluates control procedures and risk of contamination spread.
 - f. Works within the "warm zone", assisting the safety officer, Team Leader and Incident commander. Does not enter the "hot zone".

5. Equipment Officer - responsible for coordinating all supplies and equipment necessary for response, decontamination and monitors activities at the access control point to ensure proper decontamination of all that leave this zone. Specifics include:
 - a. Maintains tools and equipment
 - b. Identifies and segregates used / contaminated equipment
 - c. Determines DECON equipment and methods
 - d. Maintains "clean" and "dirty" sides
 - e. Monitors DECON of response personnel and equipment
 - f. Oversees decontamination of equipment before restoring to use, and ensuring appropriate supplies are replenished
 - g. Works with Risk Assessment Officer and Safety Officer in the "warm" zone.

6. Emergency Coordinator - responsible for initial assessment of emergency conditions. He will make the determination for initial response, and the determination for additional measures. Specific responsibilities include:
 - a. Determining type and magnitude of the situation
 - b. Securing area
 - c. Directing initial containment measures
 - d. Reporting to Incident Commander

- e. Determining if additional steps must be taken
 - f. Works with Team Leader in controlling hazard.
7. HAZMAT Technician - trained to aggressively approach the point of a release in order to patch plug or otherwise stop the release of hazardous substances. Employees, spread through all shifts, are trained in this capacity.
 8. 1st Responder Technician - trained to defensively contain releases and prevent spreading. Employees, spread through all shifts, are trained in this capacity.
 9. 1st Responder - trained to properly identify and report of emergency or potentially emergency situations. All plant employees are trained at the 1st Responder Awareness level.

The personnel designated to fulfill positions as Incident Commander, Health & Safety Officer, Equipment Officer, Team Leader, and Risk Assessment Officer have been trained and can fulfill more than one officer capacity if the situation warrants to effectively manage emergency response operations. These positions may also be combined if the situation warrants.

The Incident Commander's name and address along with alternative Incident Commanders and officers may be found in **Core Plan Section 2.2.1 Initial Notification**.

If an Incident Commander is not on-site, the Kiln Supervisor will take charge as the Emergency Coordinator until relieved by the Incident Commander. There are four kiln supervisors, providing coverage 24 hours a day, seven days a week.

A3.2 Command

The following is a list of Emergency Coordinators for the facility:

Chris DiNovo: Kiln Supervisor Shift A

Mike McNally: Kiln Supervisor Shift B

James Guerin: Kiln Supervisor Shift C

William Clairmont: Kiln Supervisor Shift D

The Emergency Coordinator's duties are as follows: responsible for initial assessment of emergency conditions. He will make the determination for initial response, and the determination for additional measures. Specific responsibilities include:

- a. Determining type and magnitude of the situation
- b. Securing area
- c. Directing initial containment measures
- d. Reporting to Incident Commander
- e. Determining if additional steps must be taken
- f. Works with Team Leader in controlling hazard.

Norlite will follow the NIIMS ICS system when responding to situations. Command posts will be determined by situations such as prevailing winds, location of incident, and material involved in the incident. When possible, command posts will be located in the office area where there is access to phones, computer systems, internet, informational databases, and historical data. When the office area is not suitable as a command post, an alternate location will be selected based on the criteria listed above.

Information will be disseminated internally using the central phone and/or radio systems which are distributed throughout the facility. Norlite will also employ the use of cell phones with walkie talkie capabilities to speak to entire groups at once. This option allows for communication should the command post be required to be offsite.

Information will be disseminated office through the Cohoes Mayor's Office. Norlite has established a direct communication to the Cohoes Mayor's office for instances when an incident has occurred which could threaten public safety. Norlite will also disseminate information directly to the professional first responders, such as fire and police, when first arriving onsite. Public notification and evacuation will be handled through the Cohoes Mayor's Office in combination with the local Fire and Police Departments.

Press Releases will be handled in conjunction with PR firm which is on retainer.

A3.2.1 Safety

The Health & Safety Officer is responsible for the health and safety of response personnel and coordinating care of victims in an emergency response event. Specific responsibilities include:

- a. Knowledge of the conditions, materials, and hazards
- b. Determines and monitors emergency conditions, and can halt operations if unsafe or imminent danger
- c. Performs last check of any entry PPE
- d. Identifies and monitors signs and symptoms of contamination, exposures, heat stress
- e. Coordinates medical response
- f. Is found at the access control point and is in constant sight of entry operations

All Norlite personnel trained for incident response have had 40 HAZ WOPER training and MSHA 24 Hour training at a minimum.

The Emergency Coordinator will, as circumstances may require, evacuate personnel from the specific plant areas. The Emergency Coordinator will account for all area personnel evacuated.

The following chart generally shows the personnel location and the number of personnel typically at each location:

Quarry	3-6
Primary	3
Burner Room (each)	1
Kiln area	4
LGF area	3
Main Office area	20
Security gate	1
I & E	5
Safety	1
Garage	5
Finish Plant	3

At any given moment, however, the actual personnel location may vary from the locations shown on the chart. These numbers reflect weekday operations and designate assigned work areas.

In the event of an uncontrolled release, fire or explosion, the Incident Commander will call for a total evacuation of the facility. Total Plant evacuation is initiated only by the Incident Commander.

The facility has a warning system with a specific alarm signal consisting of a loud horn to initiate evacuation of all plant areas. The evacuation signal will be a continuous three (3) minute blast. In addition to the alarm, the internal telephone system, as well as company cell phones will be used to notify plant personnel as to the emergency's nature and recommended action plan.

Upon signal for a site evacuation, all employees have been instructed as to necessary equipment shut down and will follow those procedures, providing it is safe to do so. All individuals on site will proceed to one of the two security gates, traveling in a cross wind direction. Employees working in the kiln area; which includes the kiln control room, the EQ Tank (101A, 101B, 102A, 102B) area, and half of the LGF tunnel closest to the kiln, will either travel east along the main plant road to Gate #2 or south along the plant road to Gate #1 depending on the wind direction. Employees working at the Fuel farm; which includes the LGF

storage building, drums processing building and half of the LGF tunnel closest to the fuel farm, will likewise travel east along the main plant road to Gate #2 or south along the plant road to Gate #1 depending on the wind direction. All visitors will stay under the direction of their escorts. Each of the security gates is at opposite sides of the facility, allowing for distinct evacuation sites.

All individuals on the property are accounted for by either: automated card access, security officer's log, or sign in book. Therefore, all individuals will be accounted for. Vehicles are not permitted at the security gates during a site evacuation to minimize congestion.

Should an evacuation of the nearby residence need to occur, this will be communicated and coordinated with the City of Cohoes Mayor's office and/or Cohoes Fire Department.

A3.2.2 Liaison - Staff Mobilization

All onsite communication will go to the Team Leader to keep the Incident Commander from becoming overloaded with information. The Team Leader will compress information and provide it to the Incident Commander who will be working with the outside agencies to protect the general public. Should the situation be a fire or explosion, external emergency response such as the Cohoes Fire Department or Local Emergency Planning Committee (LEPC) will assume command of the situation with Norlite personnel acting as a support role. All incidents in which the Integrated Contingency Plan is activated will result in an immediate communication to the Cohoes Mayor's office to inform them of the situation. As the situation progresses, communication will be made directly to either the Cohoes Mayor or Fire Department Chief by the Team Leader or Incident Commander.

A3.3 Operations

Norlite accepts many different chemicals at the facility which are usually in a mixture. All materials which are received at the facility are first profiled to determine health, environmental, handling, and reactivity concerns. Due to the varying degree of mixtures and types of chemicals present at the facility at any one time, Norlite assumes the worse-case scenario for each incident until an identification of the materials involved has been made.

The Contingency Plan **will** be implemented in the following situations:

1. Spill or Material Release
 - (a) The spill could result in release of significant quantities of flammable liquids or vapors.
 - (b) The spill or release of significant quantities of hazardous liquids or toxic fumes which could threaten human health or the environment.
 - (c) The spill contained on-site, but potential exists for ground water contamination.
 - (d) The spill cannot be contained on-site, resulting in an off-site soil contamination and/or ground or surface water contamination.

2. Fire and/or Explosions
 - (a) A fire which could threaten health or the environment.
 - (b) Contamination could result from the use of the water, or water and chemical fire suppressants.
 - (C) An imminent danger exists such that an explosion could occur.
 - (d) An explosion has occurred.

3. Floods, storms or Natural Disasters - If flooding, wind, electrical discharge or other damage occurs due to natural causes which causes an event listed above.

Situations may arise that may not initially fall into the criteria for contingency plan implementation, but could develop into these categories. Therefore, emergency response procedures will be followed, and Contingency Plan implementation will be integrated into our emergency response procedures. Any of the above criteria will result in contacting the Incident Commander and following all procedures.

Spill/discharge or Material Release Response Procedures [6NYCRR, Subpart '373-2.4(c)(1) and Subpart '373-2.4(g) and Subpart '373-2.10(d)(3)]

A. Spill Prevention

1. Spill prevention is the ultimate goal of the facility. All activities are performed to minimize the potential for spills of any hazardous materials onto the ground or into waterways. Releases should, by plant design, be contained within secondary containment areas.
2. Other spill prevention measures are accomplished by:
 - a. Established traffic patterns and traffic control, both on and off site. Primary, secondary and tertiary containment within our fuel systems
 - c. Specific procedures for handling hazardous and LGF materials
 - d. Training for all employees handling hazardous materials

B. While preventing a spill or discharge is essential to the protection of human health and the environment, spill and discharge control is the necessary and logical response expected in the event of a release whether on land, in water, or in the air.

1. Release Detection

- a. Our primary release detection is visual inspections on a scheduled basis. This includes per shift, daily and weekly visual observations with remediation as necessary.
- b. An additional release detection system involves the Atell-tale@ pipes from the secondary containment system for the outside tanks.
- c. Alarms within the Low Grade Fuel system consist of oxygen

sensors and LEL sensors. These monitor air quality emissions within the fuel system.

2. Release response

- a. For any release of LGF or other hazardous materials, the Emergency Coordinator and/or the Incident Commander will be notified. Specific steps, outlined in Attachment #2, will be followed.
- b. Any alarms (fire suppression system, air monitoring, etc.) within the LGF system requires immediate evacuation of all personnel in the area of the alarm.
- c. Release to the air involves a highly specialized area of expertise which is considered to be outside the realm of in-plant response personnel. In cases where major air releases or carbon releases have occurred which could impact on human health and/or the environment, require immediate response for evacuation and assistance from outside personnel.
- d. Small releases (less than 55 gallons) will be handled by the appropriate area personnel under the direction of their supervisor or Emergency Coordinator.
- e. Large releases (greater than 55 gallons) will be reported to the Incident Commander by the Emergency Coordinator.

The Emergency Coordinator or Incident Commander, according to availability, will immediately be contacted to assess the situation and determine appropriate response procedures to be implemented, up to and including implementing the Contingency Plan.

C. Emergency Response Determination

The Emergency Coordinator and/or the Incident Commander will follow the appropriate steps outlined in Attachment 2, to determine the nature of the situation, and evaluate for all or potential hazards that could threaten the health

and safety of employees, surrounding community or the environment. At the first available time after the Emergency Coordinator has put in motion emergency actions to provide for employee and public safety, and to stop and contain the spill, telephone notices shall be made as may be applicable by the Incident Commander or another responsible person as directed by the Incident Commander. The quantity of material spilled / discharged, where spilled/discharged, and the material discharged, dictates the reporting requirements.

D. Agency Notifications

See **Core Plan Section 2.2.1 Initial Notifications** for a list of Agency notifications to be made.

E. LGF/Discharge Control/Clean-up Procedures

1. The Incident Commander, with the assistance of the Team Leader and Emergency Coordinator must determine if the release can be handled by the company's capabilities or if appropriate external resources must be contacted.
2. Releases that do not extend outside the facility property or pose a significant health and safety risk will be handled by site employees. The following are considered typically to be within this category: Leaks from containers in the storage area; spills during container transfer or loading; spills during tank truck unloading; spills or leakage from piping systems; and/or spills and leakage from pump seals, valves or other equipment. In these cases the Incident Commander will follow procedures in **Annex 3 Attachment 1**, and will respond appropriately using trained personnel and spill response equipment under the direction of the appropriate Officers or approved procedures.

F. External Control/Cleanup Resources

In the event of a release to the air, soil or water, which could impact on human health and/or the environment outside of the facility, external resources will be immediately contacted for assistance. Entry for firefighting, spill control personnel, rescue, or other response activities is prohibited unless specifically authorized by the Incident Commander or Team Leader, and approved by the Safety Officer.

G. Petroleum Releases

1. Upon notification of a release detection of petroleum products, the Emergency Coordinator's response is the same as for other releases and will follow procedures in **Annex 3 Attachment 1**.

2. Reporting

(a) Petroleum releases must be reported to the DEC within 24 hours of discovery unless they meet all of the following criteria:

- (1) The release is known to be less than 5 gallons
- (2) The release is contained and under control.
- (3) The release has not reached the state's water or any land.
- (4) The release is cleaned up within 2 hours of discovery.

(b) File appropriate reports.

(c) For Petroleum releases which are not reportable, they will be handled appropriate under the Emergency Coordinator.

H. Chemical Releases

Upon notification of a release of hazardous chemicals, the Emergency Coordinator's response is the same for other releases and will follow procedures in **Annex 3 Attachment 1**.

**Fire/Explosion Procedures [6NYCRR, Subpart ' 373-2.4(c)(1) and Subpart ' 373-2.4(g) and
Subpart ' 373-2.10(d)(3)]**

A. Controlling fires and/or explosions

Controlling fires is first prevented by minimizing exposures of fuels to oxygen and ignition sources. This is accomplished by proper handling and procedures, good housekeeping, nitrogen blanketing of all fuel tanks and lines, and strict procedures for controlling ignition sources in any areas where fuel is present.

B. Fire/Explosion Detection

1. Oxygen, LEL, heat and infra-red monitors are located throughout the entire fuel system to detect and alert employees to a potential problem in these work areas. The Safety Manager, Emergency Coordinator, or Incident Commander, according to availability, will be immediately contacted to assess the situation and determine the appropriate response procedures to be implemented, up to and including the Contingency Plan.
2. Detection is also accomplished by routine inspections of all work areas.
3. Whenever a fire/explosion is detected the employee's supervisor will be notified and he/she will contact the Emergency Coordinator or the Incident Commander. Appropriate measures will be followed in **Annex 3 Attachment 1**.

C. Fire/Explosion Control Procedures

1. Upon the discovery of a small, manageable fire, employees are instructed and trained in the use of hand held portable fire extinguishers. These will

be used providing the employee is in a safe position to do so.

2. Our entire fuel system is protected by an automatic AFFF fire suppression system with manual activation, which is designed to handle fires in these areas. It is also designed for the fire department to hook up to, as necessary, if additional fire protection is needed.
3. When a fire could endanger personnel and/or property in a given process area, or throughout the surrounding operations, the local fire department will be contacted for controlling the fire.

A3.4 Planning

A3.4.1 Hazard Assessment

Norlite has a database containing profile information for all the wastes received at the facility. The profiles contain information such as major chemical constituents, physical characteristics, physical chemistries, compatibilities, and any special handling notes such as human health concerns, handling concerns, or environmental concerns. Included with the profile will be MSDS sheets for major constituents which are of safety concern. Coupled with the profile information is the tank offloading sheet which identifies how much of a particular wastestream was placed into a certain tank. This allows a relatively easy calculation to determine an approximate amount of a particular chemical or compound of interest during an incident.

Should an emergency arise, the first piece of information which will be used to determine the materials involved will be the tank blend sheet which will show how much of each profile was added to a certain tank. The same information would be obtained should a release occur and identification of the material released be needed. Once the identification of the materials involved has been made, MSDS sheets, and Emergency Response Guide Books can be used to determine potential hazards to the environment and public health.

Annex 3 Attachment 1 provides specific procedures to be followed for specific events such as *fires, releases, and explosions*.

A3.4.2 Protection

Norlite's primary goal is to protect the surrounding environment, public health, and its employees. As stated previously, during a fire or explosion type event, the Cohoes Fire Department will assume control of the situation with Norlite acting in a supporting role. Spills and other releases will be handles as per the outline detailed in **Annex 3 Attachment 1**.

A3.4.3 Coordination with Natural Resource Trustees

Not Applicable

A3.4.4 Waste management

Waste management will be handled by Norlite or its parent company Tradebe Environmental Services, LLC. Norlite and Tradebe specialize in waste management which respect to handling, disposal outlets, and having available equipment to handle the waste management. Tradebe employees specialized response crews trained and capable of remediating areas after an incident has occurred.

A3.4.5 Logistics

A. Medical needs of responders

Minor medial needs up to simple first aid will be managed onsite by the Health & Safety Officer. Any medical needs above minor first aid will be handled by contacting 911 for medical assistance.

B. Site security

The facility is 85% fenced with the other 15% guarded by the banks of the quarry. All entrances will be manned to control the flow of traffic entering and leaving the facility.

C. Communications (internal and external resources)

Internal and external communications had been covered in Annex 3.2

D. Transportation (air, land, water)

Transportation will occur over land by entering through manned entrances. Transportation by air will be carried out by outside assistance. Norlite does not have the capabilities for air or water transportation.

E. Personnel support (e.g., meals, housing, equipment)

The Incident Commander will limit the number of personnel onsite during an incident. Should meals, housing, or other personnel support be needed, the Incident Commander will assign the Equipment Officer the responsibility of setting system to ensure these needs are met. In most cases the use of cots and ordered food will cover the needs of the personnel onsite during the incident.

F. Equipment maintenance and support

Norlite's parent company, Tradebe Environmental Services, LLC, has emergency response equipment, remediation equipment, and resources to ensure all needed equipment is maintained and available. As stated previously, there is a high likelihood that the Cohoes Fire Department or LEPC will assume command of the incident in which case Norlite cannot attest to their equipment or support.

A3.4.6 Finance/procurement/administration

It is assumed that the Cohoes Fire Department or LEPC will assume command of the incident. Norlite maintains a basic level of response equipment such as fire extinguishers, spill kits, spill pads, booms, Tyvek suits, full & half face filter cartridge masks, and earth moving equipment. The Equipment Officer will be responsible for obtaining any specialized equipment which may be needed during an incident. In most cases the needed equipment can be obtained from Norlite's parent company.

Annex 3 – Attachment 1

Emergency Response Procedures

Attachment A – Emergency Response Procedures

STEPS TAKEN TO IMPLEMENT EMERGENCY RESPONSE PROCEDURES AND CONTINGENCY PLAN

1. SPILL PROCEDURES

The following steps shall be taken if a situation arises relating to spills, or hazardous materials release. **INITIAL RESPONSE GOALS ARE TO PROTECT HUMAN HEALTH, SAFETY AND THE ENVIRONMENT!**

Discovery of event by an individual

- Note location of the event and the problem.
- Cease work in affected areas and shut down equipment.
- Secure area, prevent unauthorized personnel from entry.
- Notify Emergency Coordinator.

Step 1: Site Management

- Manage the physical layout of the incident.
- Approach releases from an uphill, upwind side.
- Ensure area is isolated and deny entry via barriers, tape, employee guarding.
- Monitor for breached containers, vapor clouds, unusual odors, or released spills.
- Determine if possible, if anyone is injured.

Step 2: Identification of hazardous Materials

- Determine if possible, without entering area or contacting material, what materials are involved and approximate amount.

- If entry into area is required to identify material, than this will only be done under the direction of the full incident command and emergency response team. No further action can be done at this time except to maintain site control and contact the Incident Commander.
- If a determination can be made as to the material and amount, or if the material is known, the Emergency Coordinator can make the determination for response actions or to contact the Incident Commander.
- For small spills (less than 55 gallons) with known materials, emergency response will be handled under the direction of the Emergency Coordinator. For large spills, or unknown materials, emergency response will be under the direction of the Incident Commander.
- Identification of unknown materials will be done with level A protection, under the buddy system, with back up response personnel in place. If at this time, and identification can be made, than appropriate procedures will be followed. If identification cannot be made, than outside resources will be contacted to handle the response.

STEP 3: Hazard and Risk Assessment

- After specific identification of a material, hazards and risks must be determined. Labels, containers, shipping papers, Manifests, MSDS, or HAZMAT response guides shall be utilized. This is necessary for determining potential risk from additional spills, fires or explosions, and a safety assessment for responders, employees, community and environment, determining PPE and response equipment.
- Assess possible hazards, both direct and indirect, to human health and environment and determine control methods. These include:
 - fire
 - wind & direction
 - explosion
 - other hazardous materials

- toxicity
 - ignition source
- Determine if incident can be handled by company's capabilities or if external resources are necessary.
- Assess the need for implementing the evacuation plan.

STEP 4: Select PPE and Equipment

PPE and equipment selection will be based on the material and hazards. If not already determined, this will be done by Equipment Officer.

STEP 5: Information and Resource Coordination

- A command post shall be established, close enough to view the site, far enough to prevent contamination and be upwind.
- The command post shall be well marked.
- Representatives from other agencies should be available if needed at the command post.
- Identification of key officers is established at this time if not already done so, via vests or other identification measures.
- Checklists shall be handed out at this time (if not already done so) for each officer and their roles.

STEP 6: Control and Containment

- Remove all hazards present, including flammable materials, if safe to do so.
- Spill control will be initiated before leak control measures are implemented.
- Controlling vapors and gasses is limited to shutting off the supply if safe to do so. Additional outside resources will be contacted for assistance.
- Liquids are controlled by diverting, diking, or retaining and absorption or contain or direct to sumps.
- Leak control measures will be taken after spill control has been completed.

This is controlling the leak at the source or container. This can be accomplished by:

- Emptying or transferring material
- Diverting flow
- Patching or plugging

STEP 7: DECONTAMINATION

- This process makes people, equipment and supplies safe by eliminating harmful substances. This is done under the direction of the Equipment Officer.
- Processes utilized will be dilution, absorption, or neutralization, or a combination of.
- All affected response personnel, equipment and facilities will be deconned prior to entering the "cold zone".
- Arrange for proper disposal of all contaminated materials, including insuring that incompatible wastes are not mixed with released materials.

STEP 8: Termination

- Ensure situation is under control.
- All utilized safety equipment must be inspected to be sure it is cleaned and in a ready state.
- Investigation and documentation of the incident.
- Ensure health monitoring of response personnel if appropriate.
- Notification to proper authorities that activities have been completed.
- Determine when an "all-clear" can be given to resume normal activities.
- File report within 15 days of the emergency action.

2. FIRE OR EXPLOSION

Discovery of fire by the individual

- Cease work in affected areas and shut down equipment.
- If safely able to do so, use a portable fire extinguisher to attempt to extinguish fire or manually activate fire suppression system if not already in operation.
- Secure area, prevent unauthorized personnel from entry
- If one extinguisher does not extinguish fire, or the employee is unable to safely use a fire extinguisher, than the employee must immediately contact his supervisor, and notify the emergency coordinator.

STEP 1: Site Management

- Manage the physical layout of the fire.
- Approach from an uphill, upwind side.
- Ensure area is isolated and deny entry via barriers, tape, employee guarding.
- Determine approximate size and location of fire.
- Determine, if possible, if anyone is injured.
- If applicable, shut down the supply of gas/oil and/or low grade fuel (LGF).
- If applicable, any tank unloading operations will be stopped and all trucks within the affected area moved to a safe unaffected area, providing it is safe to do so.

STEP 2: Identification of materials involved

- Determine if possible, **without entering area**, what materials are involved and approximate amount.
- Entry into a fire area will only be done by the fire department.

STEP 3: Hazard and Risk Assessment

- After specific identification of materials, hazards and risks must be determined. Labels, containers, shipping papers, manifests, MSDS or HAZMAT response guides shall be utilized. This is necessary for determining the risk for potential additional spills, fires/explosions and safety assessment for responders, employees, community and environment.
- Determine if other hazardous/flammable materials are in the area.
- Establish "hot" "warm" and "cold" zones.
- Assess the need for implementing the evacuation plan
- Notify fire department and other appropriate emergency service groups if necessary. Based on materials involved, additional HAZMAT resources may be needed.

STEP 4: Select PPE and Equipment

- Since firefighting is a specialized activity, Norlite employees will not participate in actual firefighting procedures. They may, however, need to respond for clean-up after the fire is fully extinguished, and the area is determined "safe" by the Fire Chief and the Safety Officer. PPE selection will be done under the Risk Assessment Officer.

STEP 5: Information and Resource Coordination

- A command post shall be established, close enough to view the site, far enough and upwind for safety.

- The command post shall be well marked.
- Representatives from other agencies shall be available if needed at the command post.
- Identification of key officers is established at this time, if not already done so, via vests or other identification measures.
- Checklists shall be handed out at this time, if not already done so, for each officer and their roles.

STEP 6: Control and Containment

- Control and containment of fires and/or explosions will be handled by the fire department, be completed, and determined "safe" by the Fire Chief and the Safety Officer prior to additional HAZMAT response personnel entering area.
- If off-site HAZMAT response personnel are involved, they will primarily handle spill control and containment measures. Norlite employees will assist as needed, or when activities are within their capabilities.

STEP 7: Decontamination

- If activities are performed in a "hot zone" all response personnel will be decontaminated under the direction Equipment Officer.
- Processes utilized will be dilution, absorption, or neutralization, or a combination of.
- Protect clean up personnel.
- Arrange for proper disposal of all contaminated materials, including insuring that incompatible wastes are not mixed with released materials.

STEP 8: Termination

- Ensure situation is under control
- All utilized safety equipment is inspected, cleaned, and restored to a ready state.

- Investigation and documentation of the incident.
- Ensure health monitoring of response personnel, if appropriate.
- Determine when an "all-clear" can be given to resume normal activities.
- Notification to proper authorities that activities have been completed.
- File a report within 15 days of the emergency action.

ANNEX 4

INCIDENT DOCUMENTATION

Annex4. Incident Documentation

This annex provides Norlite’s procedures for conducting a follow-up investigation of the cause of the accident, including coordination with federal, state and local officials.

A4.1 Post-Accident Investigation

Post-accident investigation Norlite has recorded information such as temperature data, pressure data, and operational records in which tank levels are recorded, and electronic operational data which can be used during the post-incident investigation to determine a root cause. After termination of an incident has occurred, the Norlite management team will meet to create a timeline with any known facts from the incident. The Incident Coordinator will then conduct a root cause investigation/evaluation with the management team to determine the ultimate cause of the incident. From the root cause analysis, specific corrective actions will be established to address the causes which were identified.

A4.2 Incident History

The incident history is summarized as follows in Table 1 below:

Date	Spill/Incident Type	Description
July 31, 2013	Release to the atmosphere	A tank containing high concentrations of methyl methacrylate reacted which ultimately resulted in approximately 158 pounds of methyl methacrylate being released to the atmosphere. The release caused a strong odor to persist over the Cohoes area for approximately an hour which generated over one hundred 911 calls. No known direct injuries were reported from the incident. Norlite has notified the generator of this wastestream that it will no longer be accepted at the facility to ensure this type of event does not occur again.

ANNEX 5

TRAINING AND EXERCISE DRILLS

Annex 5. Training/Exercises/Drills and Records

This section describes how the facility complies with the USEPA and NYSDEC training and exercise/drills as required by:

1. All employees working within the plant will undergo initial, specialized, specific and annual training programs, depending upon their job positions. This will be accomplished via classroom, hands-on, and specific on-the-job training, to ensure compliance with 373-2.2 (h) (1) (i), as it is relevant to their positions. Supervisors and managers will attend training sessions on proper handling and management of hazardous waste materials. A qualified instructor, as per 373-2.2 (h) (1) (ii) will conduct all training programs. Training sessions are designed to cover safety, compliance and health procedures related to activities and procedures at this facility, and follow the requirements of 29CFR, 30CFR, 40CFR, 49CFR, and 373-2.2 (h) (1) (iii), as they apply to the Norlite facility.
2. All plant employees, supervisors, and managers will attend 24-Hour Initial Training within 6 months of their hire date as per 373-2.2 (h) (2). Until training is completed, the employee will not work unsupervised. All plant employees will participate in annual 8-hour refresher training. This is updated annually to cover new regulations, procedures, and other relevant information and to provide new ways to present materials in accordance with 373-2.2 (h) (3).
3. Each department will conduct job specific training for each employee. Each employee will go through job specific training under direction of their supervisor and/or an experienced employee. This is documented on individual training outlines, meeting the requirements of 373-2.2 (h) (4) (iv).

Norlite's training outline and description in accordance with 373-2.2 (h) (4) (iii) is included. Records that training has been completed will be maintained on file in the training records for at least three years after termination of the employee, in accordance with 373-2.2 (h) (5).

The facility has a training logs and files to monitor and retain each employee's training record. This system is used to maintain the name of each employee assigned to an area along with his/her job title and the types of training received. Upon completion of each training course, the employee receives a certification of training indicating the course name and date of completion. Copies of these course completion forms are maintained on-site in the training files. Retention of these records will be maintained until the facility is closed or for three years following termination of the employee's service.

To comply with the hazardous waste regulations, the facility maintains the following documents and records at the facility:

Records, including job title, name, position, job description, education, qualifications, and duties will be maintained at the facility. Job titles and job duties and are included.

CURRENT TRAINING CURRICULUM

DESCRIPTION OF TRAINING

<u><i>Orientation</i></u>	A 20-minute video overview of basic plant operations and safety regulations. Completed during the first day of employment. A requirement for all individuals working at the facility.
<u><i>24-Hour Initial</i></u>	Classroom and practical training covering safety and regulatory requirements for working within a mining and a TSD/RCRA facility. This is conducted prior to working without direct supervision and is a conducted only upon initial employment.

Initial

Supervisory

Classroom and practical training to be given after 24-hour initial training. It is designed for supervisory personnel to ensure compliance with RCRA regulations, including compliance, emergency response, and review of the contingency plan.

Emergency

Response

Classroom and practical training designed to prepare individuals to properly report and handle releases of hazardous materials. A refresher is completed annually.

Standard

Operating

Procedures

Classroom and practical training covering standard operating procedures (SOP's) relevant to the job titles and duties. This is conducted during initial training and will be updated as needed.

CPR/First- Aid

Classroom and practical training covering CPR and first aid for personnel responding to a medical emergency. Refresher training is conducted every two years or as required.

8-Hour Refresher

8-hour classroom and practical training serving as a "refresher" to 24-hour initial training. Basic safety procedures are reviewed in addition to covering any new regulations or procedures. This is completed annually.

DOT

Classroom training covering proper labeling, handling, shipping, and transportation of hazardous materials. Refresher training is given annually.

JOB TITLES AND DUTIES

The job descriptions and related information as outlined below pertain only to the use and handling of LLGF. Each position requires the performance of additional duties not related to the use and handling of LLGF. These additional duties are not covered in the following job descriptions.

Records of the requisite skill, education, and qualifications of the person(s) filling the position are maintained at Norlite's office.

I. Plant Manager

A. Job Description

1. Responsible for all of Norlite's Operations
2. Supervises the development and technical support of the LLGF Program
3. Supervises Section Managers
4. Interact with regulatory agencies and technical consultants
5. Member of Safety and BMP Committees
6. Keep abreast of regulatory changes
7. Emergency Coordinator

- B. Training Requirements: Orientation, 24-Hour Initial, Initial Supervisory, Emergency Response, SOP's, CPR/First-Aid, Refresher Training, DOT, On-the-job training.

II. Plant Engineer

A. Job Description

1. Supervises or performs professional engineering for the LLGF Program
2. Researches and provides specifications for replacement and new facility equipment
3. Writes and/or reviews technical engineering reports

4. Interprets and applies federal, state, and local laws when applying professional engineering principles and practices.
5. Emergency Coordinator

- B. Training Requirements: Orientation, 24-Hour Initial, Initial Supervisory, Emergency Response, SOP's, CPR/First-Aid, Refresher, DOT, On-the-job training.

III. Environmental Manager

A. Job Description

1. Coordinate all environmental compliance activities
2. Keep abreast of regulatory changes
3. Member of Safety and BMP Committees
4. Interacts with regulatory agencies and technical consultants
5. Assists with safety and regulatory training
6. Emergency Coordinator

- B. Training Requirements: Orientation, 24-Hour Initial, Initial Supervisory, Emergency Response, SOP's, CPR/First-Aid, DOT, On-the-job training.

IV. Safety Manager

A. Job Description

1. Coordinates and maintains overall facility safety programs
2. Coordinates training of all personnel with regards to hazardous waste operations
3. Maintains personnel training records
4. Coordinates medical surveillance program
5. Member of Safety and BMP Committees
6. Emergency Coordinator

- B. Training Requirements: Orientation, 24-Hour Initial, Initial Supervisory, Emergency Response, SOP's, CPR/First-Aid, Refresher, DOT, On-the-job training.

V. Maintenance Manager

A. Job Description

1. Develop and implement a preventative maintenance plan
2. Planning, organizing, and directing plant maintenance and repair work
3. Supervise plant technicians
4. Inspects and evaluates mechanical and electrical components of facility

B. Training Requirements: Orientation, 24-Hour Initial, Initial Supervisory, Emergency Response, SOP's, CPR/First-Aid, Refresher, On-the-job training.

VI. Kiln Supervisor

A. Job Description

1. Supervise Kiln Field Operators, Burner Operators, Wastewater Treatment Plant Operator, and Mechanics
2. Member of Safety and BMP Committees
3. Conducts daily inspections of Fuel Farm and Kiln areas
4. Completes security checks of facility
5. Designated Emergency Contact

B. Training Requirements: Orientation, 24-Hour Initial, Initial Supervisory, Emergency Response, SOP's, CPR/First-Aid, Refresher, DOT, On-the-job training.

VII. Lab Manager

A. Job Description

1. Responsible for all laboratory operations
2. Communicates with all departments within the facility and scheduling of laboratory responsibilities
3. Supervises Lab Technicians
4. Member of Safety and BMP Committees

- B. Training Requirements: Orientation, 24-Hour Initial, Initial Supervisory, Emergency Response, SOP's, CPR/First-Aid, Refresher, DOT, On-the-job training.

VIII. Lab Technician

- A. Job Description
 - 1. Provides all analytical support for the lab
 - 2. Daily maintenance and cleaning of lab instrumentation
- B. Training Requirements: Orientation, 24-Hour Initial, Emergency response, SOP's, Refresher, DOT, On-the-job training.

IX. Fuel Farm Manager

- A. Job Description
 - 1. Supervises LLGF unloading/transfer operations
 - 2. Coordinates drum processing activities
 - 3. Responsible for overall housekeeping activities in Fuel Farm area
- B. Training Requirements: Orientation, 24-Hour Initial, Initial Supervisory, Emergency Response, SOP's, CPR/First-Aid, Refresher, On-the-job training.

X. Fuel Farm Technician

- A. Job Description
 - 1. Responsible for collecting samples of LLGF for lab analysis
 - 2. Conducts LLGF unloading and transfer operations
- B. Training Requirements: Orientation, 24-Hour Initial, Emergency Response, SOP's, Refresher, DOT, On-the-job training.

XI. Kiln Field Operator

- A. Job Description
 - 1. Assist Burner Operator with kiln operations
 - 2. Daily maintenance of kiln equipment

- B. Training Requirements: Orientation, 24-Hour Initial, Emergency Response, SOP's, Refresher, DOT.

XII. Burner Operator

A. Job Description

1. Responsible for kiln operating within all parameters of Automatic Waste Feed Cut Off System (AWFCO)
2. Responsible for production of lightweight aggregate

- B. Training Requirements: Orientation, 24-Hour Initial, Emergency response, SOP's, Refresher, DOT, On-the-job training.

XIII. Wastewater Treatment Plant Operator

A. Job Description

1. Monitors and operates the Wastewater Treatment Facility
2. Performs repairs to related piping and pumping systems
3. Conducts routine chemical analysis of wastewater

- B. Training Requirements: Orientation, 24-Hour Initial, Emergency Response, SOP's, Refresher, DOT, On-the-job training.

XIV. Mechanic

A. Job Description

1. Maintain, repair, and overhaul facility equipment.

- B. Training Requirements: Orientation, 24-Hour Initial, Emergency Response, SOP's, Refresher, On-the-job training.

ANNEX 6

RESPONSE

CRITIQUE/REVIEW/MODIFICATION

Annex 6: Response Critique and Plan Review and Modification Process

The ICP may be modified under four general mechanisms:

- Upon agency (NYSDEC, US EPA) request
- As indicated by an incident response critique or plan review
- As a result of facility changes
- As a result of significant release.

The plan will be reviewed on an annual basis by March 31st to identify any changes which are needed. Any identified changed will be made in the plan and implemented in the facility by May 1st of the same year.

In addition, the plan will be reviewed, and immediately revised, if necessary, whenever:

1. The plan fails in an emergency;
2. Changes in facility design, construction, operation, maintenance or other circumstances which materially increase the potential for fires, explosions or releases of hazardous waste or hazardous waste constituents or cause changes in necessary emergency response;
3. The list of Emergency Coordinators changes;
4. The list of emergency equipment changes; or
5. Applicable regulations are revised.

Date	Actions Identified	Review Frequency	Revision Due Within

A list of plan amendments is listed in Table 2

Date	Representative Name and Title	Signature	Sections Reviewed	Plan Amended {Yes/No}	Date Amended	Certification Required? {Yes/No}	Certification Date

ANNEX 7

PREVENTION

Annex 7. Prevention

Any recommended corrective actions generated as a result of an inspection will be implemented immediately if risk of environmental impacts to surface water, groundwater, or soil is evident. If not immediately corrected (and not an imminent threat to surface water, groundwater or soil), a maintenance work order will be issued for repair.

Some of the inspections carried out by facility personnel and a brief description of the inspection, such as inspection frequency, inspection details and contingency actions, are provided below and summarized in the table below:

- a) Tank/Container/Containment Inspection -
- b) Piping Inspection -
- c) Secondary Containment Storm Water Inspection -
- d) Emergency Response Equipment Inspection -
- e) Leak Detection and Repair Inspection -

Procedure	Description/Applicability	Frequency	Location of Records	Record Retention Period
Burner Shift Safety Inspection	Safety inspection of Kiln burner control room and burner floor and safety devices	Twice per day	Data storage room	3 years on-site, life of facility off-site
Fuel Farm Operator's Pre-Shift & Daily Inspection Report	Visual Inspection of Fuel Farm Area including tanks, safety devices, containment areas, pumps, and signs of leaks or malfunctioning equipment	1 per day during normal Fuel Farm operating hours	Data Storage Room	3 years on-site, life of facility off-site
Fuel Farm Shift Report	Visual inspection of tanks and recording of tank levels	Once every 4 hour per kiln shift during non-Fuel Farm operating hours	Data Storage Room	3 years on-site, life of facility off-site
Kiln Dust Level Inspection Log	Kiln Baghouse systems, rotary valves, drums in EQ building	Once per kiln shift	Data Storage Room	3 years on-site, life of facility off-site
Kiln Field Operators Shift Report	Visual inspection of kiln area and kiln components including air pollution control systems.	Once per kiln shift	Data Storage Room	3 years on-site, life of facility off-site
Weekly RCRA Inspection Report	Visual inspection of entire facility for all regulatory programs. Tanks, pumps, APC systems, kiln operations, primary crushing operations, finish plant operations, storm water runoff, etc. are inspected and noted	Once per week	Data Storage Room	3 years on-site, life of facility off-site

Physical Prevention Methods (PPMs) are employed to prevent any significant discharge of pollutants to the environment. These methods are listed and defined in the table below:

Item	Prevention Method(s)
Underground Storage Tanks	There are no Underground Storage Tanks (UST) at Norlite. The last USTs were removed in the early 1990s.
Aboveground Storage Tanks	All Aboveground Storage Tanks (AST) are in containment that have excess of 110% capacity of the largest tanks and are sufficiently impervious to contain spilled material.
Liquid Low Grade Storage Tanks	All tanks which hold hazardous waste are equipped with a closed vent system which sends vapors to the kilns for incineration. All hazardous waste tanks are equipped with rupture disks to prevent failure of the tank. Also, all hazardous waste storage tanks have a nitrogen blanket. The six vertical hazardous waste tanks are equipped with tank high level shutoffs, temperature probes, vent pressure readings. The four horizontal hazardous waste tanks are equipped with tank high level shutoffs.
Off-Specification Used Oil tanks	This tank is double walled with a leak detection monitor in the interstitial space to detect leaks
Kiln Rear Chamber System	This system is a double seal system with a vacated interstitial space to capture an emission which could escape the back of the kiln during combustion chamber pressure upset. Any captured vapors are fed back into the front of the kiln as makeup air for the burner.
Flood Plain	None of the kiln operation or waste handling activities reside in a 100 year flood plain. Norlite has installed stormwater handling features capable of handling up to a 100 year storm event without runoff occurring.

ANNEX 8

REGULATORY COMPLIANCE

Annex 8. Regulatory Compliance and Cross-Reference Matrices

Signature of the permit will convey acceptance of this Integrated Contingency Plan. Any updates which occur after this main document will be signed off on at the time of revision.