SECURITY AND INSPECTION PLAN

NORLITE LLC

COHOES, NEW YORK

NYD080469935

PREPARED FOR:

NORLITE LLC

628 SOUTH SARATOGA STREET

COHOES, NEW YORK 12047

PREPARED BY:

NORLITE LLC

628 SOUTH SARATOGA STREET

COHOES, NEW YORK 12047

June 2014

SECURITY AND INSPECTION PLAN

TABLE OF CONTENTS

1.0 INTRODUCTION

This Security and Inspection Plan (SIP) was developed by Norlite LLC for the Norlite facility herafter referred to as the "Facility". This Plan provides a description of the equipment and procedures in place to prevent unknowing or unauthorized entry of persons or livestock onto active portions of the hazardous waste management areas along with inspection procedures to identify and prevent system malfunction, equipment deterioration and human error.

When changes in the facility, operations, or equipment occur, the Operations Manager or designee will revise the inspection schedules and/or criteria contained in this plan. The requirements for making changes and/or revisions to this document are provided in Condition D of Module I.

2.0 Security Procedures and Equipment

To comply with 6 NYCRR 373-2.2(f)(1), Norlite employs personnel who provide security coverage Monday through Friday from 6AM to 10PM and Saturday 6AM to 12PM at the main plant entrance (Elm Street). The main entrance is closed on Sundays and holidays. Access to the second plant entrance, at Saratoga Street, is controlled by Key Card activated security gate. Norlite personnel monitor the active portion of the facility and its operating conditions twenty four hours per day, 365 days per year.

Norlite LLC complies with the security provisions of 6 NYCRR 373-2.2(f)(2) and 373-2.2(f)(3) as outlined below.

The following paragraphs describe applicable aspects of the plant security system.

2.1 – <u>24-Hour Surveillance System</u>

Norlite operates its facility 24 hours per day, 365 days per year. During periods of normal kiln operation, at least three employees are on duty at the site at all times. Ample lighting is provided throughout Norlite's facility except for the quarry area which does not contain hazardous waste and which does not operate at night. In addition, most plant areas are connected to an internal telephone system which is also used for communications outside the plant. During periods the kilns are not

operated, at least one employee is on duty at the site at all times. Norlite employees conduct periodic inspections of the active portion of the facility.

2.2 – Barrier and Means to Control Entry

Due to the large area of the site (200 acres), a facility security fence is not practical. However, Norlite has installed a security fence to control entry to the hazardous waste storage area which includes the drum storage, bulk and loading/unloading areas. Norlite has installed a fence on the south end of the facility from the south gate to the quarry.

The kiln area will not be provided with a security fence. However, this area is continuously monitored by Norlite personnel, to prevent unauthorized access.

Fenced areas will remain locked at all times except during periods of loading and unloading. During these times, Norlite personnel will be in attendance.

Employees are provided with key cards to gain access to the facility from South Saratoga Street. Guests who arrive from South Saratoga Street must contact the office from outside the gate using the intercom system that is provided. The gate is monitored by closed circuit video so the office personnel can visually observe the traffic. Employees and Guests may enter on the south side of the facility by way of Elm Street. This gate is secured by a manned guard shack and controlled access is possible twenty-four hours per day.

2.3 – Warning Signs

Signs which are legible from a distance of 25 feet are posted at the entrance of the active portion of the Norlite facility, as well as the Low Grade Fuel (LLGF) storage tank area, drum storage area, unloading area, and the kiln area. These signs are visible from all angles of approach, and bear the legend **"DANGER - UNAUTHORIZED PERSONNEL KEEP OUT"** and **"No Smoking".**

2.4 – Waiver

The provisions of 6NYCRR Subpart §373-2.2(f)(1) authorize a waiver from the security provisions of 6NYCRR Subpart §373-2.2(f)(2) and (3) if a facility can demonstrate that unknowing or unauthorized persons or livestock would not injure themselves or cause a RCRA violation upon entering the active portion of the facility. Norlite does not request a waiver at this time.

3.0 INSPECTION

3.1 – Inspection Schedule

AREA/EQUIPMENT	SPECIFIC ITEM	TYPES OF PROBLEMS	INSPECTION FREQUENCY
Security Devices	Signs	Removed, Dirty and Knocked Down	Weekly
Operating and Structural Equipment	Dikes	Erosion, Cracks, Deterioration	Weekly
	Tank Cover (shale)	Erosion	Weekly
	Ramps	Erosion, Uneven Settlement, Wet Spots	Weekly
	Circulating Pumps	Leaks, Loss of metal thickness, Corrosion	Weekly
	Valves & Piping	Leaks, Packing, Deterioration, Corrosion	Weekly
	Concrete Pads, Holding Area	Cracks, Corrosion, Deterioration	Weekly
	Structural Supports	Corrosion, Looseness	Daily
	Macerating Pump	Leaks, Corrosion	Daily
Container Storage Area	Container Placement & Stacking	Aisle Space and Stacking	Daily
	Sealing of Open Containers	Open Lids or Bungs	Weekly
	Labeling of Container	Improper Identification, Data Missing	Weekly
	Containers	Corrosion, Leaking, Material Defects	Weekly
	Container Pad	Spills, Cracks, Uneven Settling, Wet Spots	Daily
	Dikes	Erosion, Wet Spots, Cracks, Deterioration	Weekly
	Debris & Refuse	Aesthetics, Poor Housekeeping	Weekly

	Warning Signs	Damaged, Missing	Weekly
Loading/Unloading Area	Pad	Spills, Cracks, Uneven Settling, Wet Spots	Daily
	Sealing of Open Containers	Open Lids or Bungs	Daily
	Debris and Refuse	Aesthetics, Poor Housekeeping	Daily
	Labeling of Containers	Improper Identification, Data Missing	Daily
LGF Storage Building Tanks 100 A,B,C & 200 A,B,C	Concrete Containment	Spills, Cracks, Uneven Settling, Wet Spots, Leaks	Daily
	Piping and Fittings	Corrosion, Leaks, Deterioration	Daily
	Valves	Leaks, Packing, Deterioration	Daily
EQ Tanks 101 A, B & 102 A, B	Concrete Containment	Spills, Cracks, Uneven Settling, Wet Spots, Leaks	Daily
	Piping and Fittings	Corrosion, Leaks, Deterioration	Daily
	Valves	Leaks, Packing, Deterioration	Daily
Tank Storage and Ancillary Equipment (Tanks 300, 400, 500, 600)	Containment Area	Liquid Build up Due to Tank or Pipe Break	Daily
	Shale Cover	Erosion, Wet Spots, Settling	Daily
	Piping and Fittings	Corrosion, Leaks, Deterioration	Daily
	Valves	Leaks, Packing, Deterioration	Daily
	Debris and Refuse	Aesthetics, Poor Housekeeping	Daily
	Vegetation	Growth	Daily
External Tank	Tank Shell	Integrity Testing	Annual
Interior Tank	Tank Shell	Corrosion, Welds, Leaks, Bulges, Buckles	Annual
Solids Mixing Tank Area	Concrete Containment	Spills, Cracks, Uneven Settling, Wet Spots, Leaks	Daily
	Piping and Fittings	Corrosion, Leaks, Deterioration	Daily
	Valves	Leaks, Packing, Deterioration	Daily
Process Monitoring Equipment	LGF Flow Meter	Reading Malfunction	Daily
	Gas Exit Temperature	Reading Malfunction, Electrical Failure	Daily
	Flame/Material Temperature	Reading Malfunction, Electrical Failure	Daily
	Carbon Monoxide	Reading Malfunction, Sensor/Detector Failure	Daily
	Oxygen	Reading Malfunction, Cell Failure	Daily
	Combustion Gas Velocity	Reading Malfunction	Daily
	Atomization Air Pressure Gauge	Reading Malfunction, Compressor Failure	Daily
	Venturi Water Flow	Reading Malfunction, Pump Malfunction	Daily
	Scrubber Pressure Drop	Reading Malfunction, Pump Failure, Plugging	Daily
	Combustion Air	Reading Malfunction, Fan Failure	Daily
	Kiln Pressure	Reading Malfunction, Plugging, Draft	Daily
	Blowdown Rate	Reading Malfunction, Float Sticking	Daily

3.2 – General Inspection Requirements

Permittee complies with 373-2.2 (g) and follows the general inspections outlined below.

This inspection plan is intended to provide a mechanism to identify and prevent system malfunctions, equipment deterioration, and human errors which, if allowed to continue without correction or preventive action, may lead to a release of hazardous waste constituents to the environment or create a threat to human health. The performance of periodic and effective inspection is essential if such events are to be prevented. To this end, Permittee has developed procedures for performing inspections so that substandard conditions and practices are identified, and appropriate actions are taken in a timely manner.

The inspection program is implemented by qualified individuals assigned the responsibility to detect any unsafe conditions at the facility and prevent adverse consequences. The designated individuals have the training and authority to: (1) implement the required inspections, (2) perform necessary evaluations and hazard assessments, and (3) recommend appropriate response actions.

Inspections are performed according to pre-determined schedules based on engineering knowledge and operational experience with the systems and processes involved. Each inspection item has the content and frequency necessary to alert facility personnel prior to development of a serious problem. A trained inspector assesses each item noting any potential malfunction/deterioration of equipment or operator error through regular observation of the processes and procedures. The level of response and its timing is determined by the nature and seriousness of the problem identified – with protection of personnel and the prevention of adverse environmental impact being of paramount concern.

Permittee will remedy any deterioration or malfunction discovered by an inspection as required by 6 NYCRR Part 373-2.2(g)(3). Records of inspections are kept as required by 6 NYCRR Part 373-2.2(g)(4). Specific inspection schedules for the landfill, container storage areas, tanks, and incinerators are presented in each unit's specific section.

Any deterioration or malfunction of equipment or structures detected during inspection at the facility is remedied on schedule (immediately if necessary) to ensure that the problem does not lead to environmental or human health hazards. Specifically, any leaking container discovered is immediately lifted into an oversized recovery drum and sealed, and any leaked or spilled material is immediately absorbed by vermiculite and/or speed-dry or managed in another manner acceptable to the Department.

The facility's Inspection Log, contains appropriate space for recording the date and nature of any repairs or other remedial actions taken in response to problems identified during facility inspections. Refer to the Integrated Contingency Plan (ICP) for description of responses to spills and emergency situations.

The inspection schedules for the facility and its hazardous waste management units are utilized to detect and correct malfunctions and deteriorations, operator errors, and discharges which may cause or may lead to the following:

- Release of hazardous waste constituents to the environment or,
- A threat to human health.

3.3 – Types of Problems

The schedules identify the specific types of problems to look for during the inspection (e.g., leaks, deterioration, readings out of specified range, missing items or materials, inoperative equipment, etc.).

3.4 – Frequency of Inspection

The schedules include inspection frequency that is based on the rate of possible deterioration of equipment and the probability of an environmental or human health incident if the deterioration, malfunction, or operator error goes undetected between inspections. Areas subject to spills, such as loading and unloading areas, are to be inspected daily when in use.

3.5 – Specific Process Inspection Requirements

Inspections of hazardous waste management facilities are the responsibility of the following Norlite personnel:

1. Compliance Personnel
2. Kiln Field Operator

3. Safety Manager
4. Environmental Manager
5. Fuel Farm Operator
6. Burner Operator

Each person is responsible for regular inspections of various portions of the hazardous waste management facilities and initiation of corrective action if deficiencies are noted. These reports are submitted each day to the, Safety Manager, Environmental Manager, Plant Manager, and all facility/supervisors. The Plant Manager will have overall responsibility for prevention of hazards.

3.5.1 Kiln Field Operator's Shift LLGF Inspection Report

Three times each night shift, the Kiln Field Operator on duty is required to inspect the LLGF storage area and to record results of each inspection on the "Kiln Field Operator's Shift LLGF Inspection Report" form. Information required on the inspection report includes the Kiln Field operator's name, date and time of inspection, item of inspection, problems encountered and observations. A copy of the "Kiln Field Operator's Shift LLGF Inspection Report" is attached to this part as Figure F-3. A file of "Kiln Field Operator's Shift LLGF Inspection Reports' is maintained at the facility and are part of the inspection log.

3.5.2 Fuel Farm Operator's Daily LLGF Inspection Report

Daily, the fuel farm operator on duty is required to inspect the LLGF storage area including containers and LLGF pumps and lines and to record results of each inspection on the "Fuel Farm Operator's Daily LLGF Inspection Report" forms. Information required on the inspection report includes the fuel farm operator's name, date and time of inspection, item of inspection, problems encountered and observations. A copy of the "Fuel Farm Operator's Daily LLGF Inspection Report" is attached to this part as Figure F-4. A file of "Fuel Farm Operator's Daily LLGF Inspection Reports" is maintained at the facility and is part of the inspection log.

3.5.3 Burner Operator's Shift Log

The burner operator on duty is required to inspect the LLGF portion of the rotary kiln operation and to record results of these inspections on the "Burner Shift Log" form. Due to the nature of the burner position and the need to continuously monitor fuel usage, burning zone, temperatures and overall operation of the rotary kiln (incinerator/energy recovery unit) to produce acceptable lightweight aggregate, the inspections are ongoing with operation of the kiln. Any potential problem will immediately be seen and corrective action initiated. Information required on the report includes the burner operator's name, date, day, item of inspection, type of problem encountered and observations. A copy of the "Burner Operator's Shift Log" is attached to this part as Figure F-5. A file of "Burner Operator's Shift Logs" is maintained at the facility and is a part of the inspection log.

3.5.4 Weekly Environmental (RCRA) Inspection Report

Weekly, the Compliance Section is required to make a comprehensive inspection of the LLGF storage area including containers, the LLGF pump area, the LLGF building, pipe tunnel, and the kiln burner area. The results of each inspection are recorded on the "Weekly Environmental and LLGF Inspection Report" form. Information required on the inspection report includes the Compliance Representative's name, date and time of inspection, item of inspection, problems encountered and observations. A copy of the "Weekly Environmental and LLGF Inspection Report is attached to the part as Figure F-6. Weekly Environmental and LLGF Inspection Reports are maintained at the facility and are part of the inspection log.

3.5.5 LLGF Tank Inspection Report

Annually, based upon the schedule for tank cleaning, each below ground bulk LLGF storage tank (i.e. tanks no. 300, 400, 500 and 600) is inspected and tested as described below:

1. Following the removal of tank sludges, each tank is visually inspected for structural integrity particularly noting evidence or signs of potential leaks, buckles, bulges or excessive corrosion.

2. Exposed tank appurtenances such as access ports, nozzles, joints, valves and piping are inspected for signs of excessive corrosion, plugging or leaks.

3. If a tank has not undergone integrity testing during the previous 12 months by an independent inspector utilizing the NFPA Publication Number 329 criteria, that tank will be pressure tested in accordance with the protocols outlined in Operations Plan.

4. Each tank shell is tested for thickness determination as described in the Operations Plan.

5. The results of the inspection programs are documented on the form presented in Figure F-7. A file of these reports is maintained at the facility as part of the inspection log.

On an annual basis, each below ground tank is integrity tested utilizing the NFPA Publication Number 329 criteria. The six above ground tanks (i.e. tanks no. 100A, 100B, 100C, 200A, 200B and 200C) and the four equalization tanks (T101A, T101B, T102A and T102B) will undergo integrity testing once every five years by an independent inspector since they will be inspected on a daily basis for leaks. The results of the tests are maintained at the facility and are part of the operating record.

In addition to the RCRA Subpart BB monitoring, an integrity assessment is conducted on the transfer lines from the pumps to the kilns on an annual basis. The results of the tests are maintained at the facility and are part of the operating record.

Also, on an annual basis, the cathodic protection system on the four new tanks is confirmed. The results of the tests are maintained at the facility and are part of the operating record.

On a bimonthly basis (i.e., every two months), the sources of impressed current to the cathodic protection system are tested and recorded. The results of the tests are maintained at the facility.

3.5.6 Tanks and Tank Storage Areas

The high level switches, the level indicators and the pressure gauges on the tanks are visually inspected daily and measurements are recorded in the Kiln Field Operator's Daily LLGF Inspection Report form. In addition, the secondary containment area surrounding the tank is inspected daily to detect obvious signs of leakage such as wet spots. The results are recorded in the Kiln Field Operator's

Daily LLGF Inspection Report form. Also, the aboveground portions of the tanks such as the piping, pipe fittings, and valves are inspected daily for deterioration, corrosion and leakage and the results are recorded in the Kiln Field Operator's Daily LLGF Inspection Report.

3.5.7 Tank Storage and Secondary Containment

In addition to the secondary containment provided by the liners under the Tanks 300, 400, 500 and 600, the LLGF building, used for Tanks 100A,B,C and 200A,B,C, also serves as a tertiary containment system for the outside tanks. In the event that the secondary containment system fills, liquid will overflow through a pipe to the LLGF storage building. The containment volume of this LLGF building is 33,940 gallons. This volume is sufficient to hold the entire contents of any LLGF tank that should fail.

Inspection of secondary containment facilities will be conducted as follows:

Weekly - Containment areas are inspected weekly by the Compliance Section for the items listed in Section 3.1. Details of inspection items are recorded on the "Weekly Environmental (RCRA) Inspection Report" (Figure F-6).

Daily - The secondary containment for loading/unloading areas, container sampling areas and drums stored in the unloading areas will be inspected for any spills.

3.5.8 Container and Container Storage Area

Daily, the containers and container storage area are inspected to insure proper aisle space, stacking and closed lids. Weekly, the containers are inspected for proper labeling, leaking, deterioration and corrosion, and the secondary containment system is inspected for various signs of erosion, deterioration, cracks or leakage. Drums stored in the truck unloading area are sorted on pallets to facilitate inspection for leaks. The results are recorded in the "Weekly Environmental (RCRA) Inspection Report".

3.6 – Remedial Action

If inspections reveal that non-emergency maintenance is needed, this will be completed as soon as possible to preclude further damage and reduce the need for emergency repairs. If a hazard is imminent or has already occurred, remedial action will be taken immediately. Norlite personnel will notify the appropriate authorities in accordance with the Integrated Contingency Plan and initiate remedial actions. In the event of an emergency involving the release of hazardous constituents to the environment, efforts will be directed towards containing the hazard, removing it, and subsequently decontaminating the affected area.

3.7 – Inspection Log

The Permittee records and maintains an Inspection Log containing Daily, Weekly and Monthly Inspection Log Sheets. Each log sheet includes spaces for identifying the inspector's name and title, and inspection date and time.

All inspection log forms must contain the following information:

a. the inspector's name and title;

b. date and time of the inspection;

c. items inspected;

d. inspection parameters;

e. procedures, structures, and/or equipment inspected;

f. notation of any observations and/or problems;

g. notation of any remedial or corrective actions taken or the schedule for corrective action if cannot be corrected before the next inspection; and

h. date on which the corrective action was completed.

Records Retention

In accordance with the requirements of 6 NYCRR Parts 373-2.2(g)(4) and 373-2.5(c)(2)(v), inspection records for the HWMUs are maintained in the operating record. The inspection logs contain a list of inspection parameters as well as an inspection frequency. On each logsheet, the inspector must note the following information, at a minimum:

- Inspection Date
- Inspection Time
- Inspector
- Deficiencies
- Corrective Actions Taken and Date

The inspection records are retained on site for a minimum period of three years from their last entry.

4.0 GLOSSARY

Term	Definition
6 NYCRR	Title 6 of the New York Codes, Rules and Regulations
40 CFR	Title 40 of the Code of Federal Regulations
A.C.T.	Assess, Correct, Train
EMSI	Environmental Monitoring System Inspection
EWO	Environmental Work Order
HWMU	Hazardous Waste Management Unit
ICP	Integrated Contingency Plan
NACE	National Association of Corrosion Engineers
NFPA	National Fire Protection Act
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
OSHA	Occupational Safety and Health Administration
PPE	Personal Protective Equipment
QA/QC	Quality Assurance/Quality Control
QAPP	Quality Assurance Project Plan
SIP	Security and Inspection Plan
SWCI	Surface Water Control Inspection
WCM	Warning Coordination Meteorologist