

SECTION III

**Operating
Conditions**

Green Globe, LLC

**CGS Section 22a-454 Permit to Treat Connecticut Regulated and Hazardous
Wastes
Mobile Treatment
Units**

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SECTION III. OPERATING CONDITIONS

A. SITE MANAGEMENT

The Permittee shall only Stabilize/Solidify Polluted soil in accordance with the terms and conditions of this Permit.

1. Identifying Area of Contamination: Prior to setting up Stabilization/Solidification operations, the Permittee shall identify area(s) of contamination at the Project Site. The area(s) of contamination shall be described in detail and delineated on a map or diagram of the property. The Permittee shall obtain the concurrence of the Generator or property owner on such description and location of the area(s) of contamination at the Project Site. The Permittee shall maintain in the operating record a written description and a site map clearly identifying the area(s) of contamination at the Project Site as approved by the Generator or property owner.
2. Excavation of Contaminated Media
 - a. Excavation of Polluted Soil (Ex-Situ Treatment). Prior to Stabilization/Solidification, Polluted Soil shall be excavated by the Permittee or its designee. Such excavated Polluted Soil shall be placed in a Staging Pile(s) or placed directly into the Stabilization/Solidification equipment.
 - b. Excavation of Contaminated Sediments (Ex-Situ Treatment). Prior to Stabilization/Solidification, Contaminated sediments shall be excavated by the Generator, Permittee or its designee. Such excavated Sediments shall be placed in a staging lagoon(s), dewatering tubes or placed directly into the Stabilization/Solidification equipment.
 - c. Excavation of Polluted soil (In-Situ Treatment). Material handled or treated in-situ shall be excavated post treatment by the Permittee or its designee and placed in a Staging Pile(s) or a Container (roll-off).

All excavation of Contaminated Media shall be performed in accordance with applicable Best Management Practices and all federal, state, and local requirements. Any discharge of wastewater shall conform to all applicable Best Management Practices. All necessary permits pursuant to CGS Sections 22a-430 et seq. for the discharge of wastewater shall be obtained by the Permittee or its designee.

3. Storage of Contaminated Media and Stabilized/Solidified Material
 - a. Contaminated Media shall be placed in Staging Pile(s). Flowable Contaminated Media shall be placed in dewatering tubes, tanks or lagoons with enough freeboard at the perimeter barrier to ensure that all Contaminated Media remain contained within the bermed area(s). The slope of the Staging Pile(s) shall not exceed a grade of one vertical to two horizontal or the angles of repose, whichever is less, unless otherwise authorized in writing by the Commissioner. The Staging Pile(s) shall be placed such that wind erosion and Soil/Sediment transport out of the bermed area(s) is minimized. The containment area shall be inspected and maintained during storage to ensure that there are

no releases to the environment of any Contaminated Media or treated materials.

- b. When not in use, Staging Pile(s) shall be securely covered with an impervious material, such as a tarp, to control and minimize stormwater run-on and run-off. The active area at the Project Site shall be managed to minimize any nuisance dust migration. In addition, such Staging Pile(s) shall be tarped at the end of the operating day or when unattended by the Permittee.
 - c.
 - i. All Stabilized/Solidified material meeting the definition of a Hazardous Waste when exiting the pugmill as demonstrated in the bench tests shall be placed in containers as defined in 40 CFR 260.10, as modified by 22a-449(c)-100, until such material is no longer characteristically hazardous waste pursuant to 40 CFR 261.24 and is verified as such by the appropriate analytical tests
 - ii. All Containers shall be securely covered when not in use with an impervious material to control wind erosion and minimize stormwater run-on and run-off, except during material transfer into or out of the container(s).
 - iii. All Containers that contain Stabilized/Solidified material shall remain in the containment area or shall be placed in an on-site container storage area that meets the requirements listed in 40 CFR 264.175(c).
 - d. The Permittee shall ensure that waste stored in roll-offs contains no free draining liquids except for trapped liquids incidental to waste settling.
 - e. The Permittee shall inspect roll-off Containers in accordance with the Site Inspection Plan included as Attachment B of this Permit, as may be modified herein.
 - f. The roll-offs shall be located on a base that has sufficient structural strength to withstand the weight of the roll-off and its contents.
 - g. To prevent further contamination of the property, Polluted soil shall not be moved from the area(s) of contamination unless such Polluted soil is being transported from the Project Site to a facility authorized to receive such Polluted soil.
4. Maintenance of an Impervious Base within the Containment Area. The Permittee shall comply with the following requirements, in advance of Contaminated Media entering the containment area(s), during the Polluted soil Stabilization/Solidification Process, and until the Stabilization/Solidification equipment has been decontaminated:
- a. Stabilization/Solidification equipment shall be located on an impervious base;
 - b. If a polyethylene liner is used as the impervious base, the Permittee shall ensure that Stabilization/Solidification proceeds in a manner so as to protect the liner from damage and appropriate measures shall be taken to prevent damaging the liner with heavy equipment; and
 - c. Should the impervious base be damaged, the Permittee shall cease operations and repair the base. The Permittee shall assess the amount of contamination, which has breached the containment area, and decontaminate the area affected by the release of contaminants.

B. MATERIALS PROCESSING EQUIPMENT

1. The Permittee shall ensure that any equipment used to transfer, meter, or otherwise contain Stabilization/Solidification chemicals or any other hazardous materials which may be present at the Project Site is in good condition and used in accordance with manufacturers' instructions and best management/engineering practices. The Permittee shall ensure that use of such equipment does not adversely affect human health or the environment. All engines and generators supplying power to the equipment shall burn only fuel with a sulfur content that does not exceed 0.05% by weight. For this Permit, 'equipment' includes, but may not be limited to, any containers (eg., portable bulk silos, mini-bulk 1 ton bags, hoppers, etc.) used in the Stabilization/Solidification Process and earth moving equipment including, conveyors, front-end loaders, excavators, roll-offs trucks and dump trucks.
2. The Permittee shall ensure that the mobile Pugmills used in the Treatment of Contaminated Media meet the following requirements:
 - a. The mobile pugmills shall have, at a minimum, an audible emergency alarm to notify the operator of any malfunction in the Treatment Process;
 - b. The mobile pugmills shall have, an emergency stop which is readily accessible to the operator;
 - c. The mobile pugmills shall have, at a minimum, two fluorine-free fire extinguishers with mounting stations installed. The fire extinguishers shall be designed to handle any potential fire during the Treatment Process and the suppressant(s) shall be free of per- and polyfluoroalkyl substances;
 - d. The mobile pugmills shall have a computerized system to monitor:
 - i. The feed of the Polluted soils into the Treatment Process(s); and
 - ii. The chemical additives' levels and the delivery rate;
 - e. The mobile Pugmills shall have a computerized scale on a section of the conveyor belt to help meter the Polluted soil into the Pugmills for Treatment and to ensure the proper feed rates;
 - f. When using Asphalt Emulsions, the mobile Pugmills shall have an asphalt spray bar positioned to increase mixing time for poorly graded materials that need additional mixing;
 - g. When using Asphalt Emulsions, the mobile Pugmills shall have a heated asphalt pump to help maintain the appropriate emulsion temperature and viscosity during cold weather operations;
 - h. The mobile Pugmills shall have safety lights to meet DOT specifications for transportation to and from the Project Site;
 - i. The mobile Pugmills Treating volatile organic compounds shall have enclosed pretreatment conveyors under negative air designed to remove fugitive dusts and volatile organic compounds;

- j. When the mobile Pugmills require external portable power, the Permittee shall employ an audio isolated mobile electrical generator to power the Treatment unit; and
 - k. The mobile Pugmills shall have water spray nozzles to eliminate any fugitive dusts that may occur while loading Contaminated Media.
3. The Permittee may employ additional miscellaneous earth-moving equipment such as front-end loaders, conveyors, sprayers, spreaders, dump trucks, roll-off trucks and excavators.

C. DESIGN OF STAGING PILES AND CONTAINMENT AREAS

1. The Permittee shall design and maintain all chemical Stabilization/Solidification Process configurations, including all Staging Pile(s) of Polluted Soil, Staging Pile(s) of treated materials, containment area(s), and all Stabilization/Solidification equipment, such that the configuration is protected from contact with stormwater run-on. At a minimum, the Permittee shall comply with the following design criteria:
 - a. The Permittee shall determine the most appropriate location at the Project Site to position the Stabilization/Solidification equipment:
 - i. All activities shall be confined to the area(s) of contamination to prevent further contamination of the Project Site; and
 - ii. The Staging Pile(s) and containment area(s) shall be located as close to each other as practicable within the contaminated area(s) at the Project Site(s).
 - b. Once provided access to the Project Site, the Permittee shall locate Staging Pile(s) and containment area(s) on an impervious base, such as an asphalt or concrete pad, or an impermeable polyethylene liner ("liner"), with a thickness of at least 6-mil. The base shall be impervious to Contaminated Media, stormwater, and any chemical additives used in the Stabilization/Solidification Processes at the Project Site.
 - c. The Permittee shall construct all Staging Pile(s) and containment area(s) such that the potential for stormwater run-on and run-off is minimized and all Contaminated Media, treated material, and collected stormwater are contained within the perimeter walls. The Permittee shall comply with the following stormwater run-on and run-off controls:
 - i. The Permittee shall place erosion control booms, hay bales, or equivalent barriers, as a perimeter wall to surround all Staging Pile(s) and the containment area(s). Any liner shall be draped over the hay bales or equivalent barriers so as to create an impermeable barrier;
 - ii. An entryway shall be constructed to allow for movement of equipment during the management of Contaminated Media or treated material, after which the entranceway shall be bermed and tarped at the end of each day or when the Project Site is unattended;
 - iii. The Permittee shall ensure the liner is protected from damage; and
 - iv. The Permittee shall maintain enough Freeboard at the perimeter wall to adequately contain all Polluted soils or treated material within the Staging Piles and containment area(s).

- d. The Permittee shall employ the following stormwater management practices at the Project Site:
 - i. The Permittee shall completely cover the Staging Pile(s) of Polluted Soil, Contaminated Sediments and roll-offs containing treated material whenever the Staging Pile(s) and roll-offs are not in use;
 - ii. In addition to the requirements of Section III. A.3.b. of this Permit, to prevent rainwater infiltration, the Permittee shall cover the Staging Pile(s) during any precipitation event where run-on and run-off may occur;
 - iii. The Permittee shall contain storm water run-off through the use of berms and ensure that any stormwater or silt collected from the Staging Pile(s) or the containment area(s), and all run-off from the equipment is used in the Stabilization/Solidification Process, or is otherwise managed in accordance with all federal, state and local requirements;
 - iv. The Permittee shall inspect the Project Site during storm events to ensure that any visible sheen present beyond the bermed area is mitigated through the use of sorptive materials; and
 - v. Containment area(s), Contaminated Media and/or treated material located within 100 feet of any watercourses, stormwater drainage systems, or delineated wetlands areas shall have the flow path to these features protected by silt controls installed in accordance with *2002 Connecticut Guidelines For Soil Erosion and Sediment Control* unless superseded, in which case, such controls shall be in accordance with then current erosion control guidelines.
- e. The Permittee shall minimize wind erosion and dust transport from the Staging Pile(s) and containment area(s) utilizing tarps, dust suppressants, or other means as approved in writing by the Commissioner.
- f. The Permittee shall operate the Stabilization/Solidification Treatment Processes at all Project Sites so as to minimize dragout of Contaminated Media by equipment.

D. STABILIZATION/SOLIDIFICATION PROCEDURES AND REQUIREMENTS

The Permittee shall comply with the following requirements when Stabilizing/Solidifying Contaminated Media.

1. When managing Polluted soil that is RCRA Hazardous Waste, the Permittee shall be considered the Generator or co-Generator of the waste pursuant to 40 CFR 260.10 as modified by RCSA Section 22a-449(c)-100.
2. a. The Permittee shall comply with the accumulation requirements of 40 CFR 262.34, as modified by RCSA Section 22a-449(c)-102. The Permittee shall complete Stabilization/Solidification of Polluted soil within ninety (90) days of any RCRA Hazardous Waste having been excavated and placed in a Staging Pile(s) or when knowledge of the RCRA hazardous characteristic(s) of the Polluted soil is reported to the Generator or the Permittee, whichever is later. The Permittee shall ensure that all

Contaminated Media are tested promptly.

- b. At any Project Site where remedial activities are conducted as part of remediation pursuant to a state or federal remedial program, the Commissioner or the Commissioner's designee may authorize the Permittee to perform remedial actions at any such Project Site where the accumulation requirements of 40 CFR 262.34, as modified by RCSA Section 22a-449(c)-102, and 40 CFR 264, Subpart I (Use and Management of Containers) may have been exceeded by the Generator of the RCRA characteristically hazardous Polluted soil. This Permit is issued pursuant to CGS 22a-454 and shall not be construed to be a RCRA permit issued pursuant to 40 CFR 270, as modified by RCSA Section 22a-449(c)-110.
 - c. After the Polluted soil has been Stabilized/Solidified, such Treated material which no longer exhibit any characteristic of a RCRA Hazardous Waste pursuant to 40 CFR 261, Subpart C, shall either be reused onsite or removed from the Project Site for disposal/reuse as approved by the Commissioner or the Commissioner's designee. Treated material that exhibits any characteristic of RCRA Hazardous Waste after Treatment shall be retreated or removed from the Project Site within 90 days of whichever date identified in the paragraph above is later. This Permit shall not be construed to certify that any of the treated materials are non-hazardous wastes.
3. As Generator or co-Generator of a RCRA Hazardous Waste, the Permittee shall comply with all applicable 40 CFR 262 requirements regarding the management of RCRA Hazardous Waste and shall comply with this Permit when determining that Treated materials have been rendered non-RCRA hazardous pursuant to 40 CFR 261.24.
 4. Ex-situ Treatment operations shall be conducted such that the entire Treatment Process line (i.e., screener, Pugmill unit, and conveying equipment between units and air pollution control equipment) shall be considered a "container" as defined in 40 CFR 260.10.
 5. All bench tests showing a prolonged curing period will require the treated media to be placed into Containers after Treatment. Such treated material shall be stored in a Container, except for In-Situ Treatment where the curing takes place at the place of treatment. Such Container(s) shall be securely covered with an impervious material, immediately upon completion of loading the Container and at all times when unattended by the Permittee's trained personnel, to control wind erosion and minimize storm water run-on and run-off. The Container shall remain covered except during material transfer into or from the Container. Containers shall be clearly marked with the words "Hazardous Waste", additional words that identify the contents of the Containers, and the date treated material was first placed in the Container. Containers shall be marked immediately following the placement of treated material into such Containers.
 6. The Permittee shall comply as required with 40 CFR 264, Subpart CC, ("Air Emission for Tanks and Containers").
 7. The Permittee shall manage treated materials from Polluted Soil or Contaminated Sediment in accordance with the rules and regulations of the State of Connecticut Department of Energy and Environmental Protection.
 8. All Stabilized/Solidified Contaminated Media shall be sampled, analyzed, and the results known before:

- a. Relocating the treated media to the final Stabilized/Solidified materials storage area(s). Treated media shall only be relocated to the final Stabilized/Solidified materials storage area if the results of said sampling indicate that the sampled media does not contain any substances at concentrations that exceed the numeric criteria for soil identified in Table II-5, *Verification of Stabilized/Solidified Material*, of this Permit.
 - b. Sampling of treated media shall be in accordance with the numerical standards in Table II-5 of this Permit and the requirements of any written authorization issued by the Commissioner to the Permittee, pursuant to Section 22a-209f of the CGS.
9. Treated materials may be reused as follows:
- a. In accordance with the requirements of any written authorization issued by the Commissioner to the Permittee pursuant to section 22a-209f of the CGS; and
 - b. In accordance with RCSA Section 22a-133k-2(h) (Use of Polluted Soil and Reuse of Treated Soil) of the Connecticut Remediation Standard Regulations (RCSA 22a-133k-1 through 22a-133k-3). Such reuse shall be allowed provided the Permittee ensures that such reuse is consistent with each of the conditions set forth in either RCSA 22a-133k-2(h)(3) (regarding reuse of treated soil as polluted soil) or RCSA 22a-133k-2(h)(4) (regarding reuse of treated soil as natural soil) and is also consistent with all other provisions of RCSA Sections 22a-133k-1 through 22a-133k-3, inclusive.

E. LAND DISPOSAL REQUIREMENTS

1. All Soils and/or Sediments and treated material from Polluted Soil containing Hazardous Wastes shall comply with the applicable Land Disposal Restriction (“LDR”) requirements pursuant to RCSA Section 22a-449(c)-108, incorporating 40 CFR 268 with specified changes, and the notification and the certification requirements thereunder. In particular, the Permittee shall ensure that any hazardous Polluted Soil meets the relevant Land Disposal Restrictions numerical standards as specified in 40 CFR 268 (LDR), prior to being placed on the land.
2. A mixture of any Polluted Soil, that is subject to the LDR (restricted waste), with any non-restricted waste is a restricted waste pursuant to 40 CFR 268.1.
3. The Permittee shall not in any way dilute a restricted waste or the residual from Treatment of a restricted waste as a substitute for adequate Treatment to achieve compliance with the Treatment standards in 40 CFR 268, subpart D, to circumvent the effective date of a prohibition in 40 CFR 268 subpart. C, to otherwise avoid compliance with a prohibition in 40 CFR 268 Subpart C, or to circumvent a land disposal prohibition imposed by Section 3004 of RCRA.

F. DISPOSAL OF STABILIZED/SOLIDIFIED MATERIALS

The Permittee shall comply with the following requirements:

1. The Permittee shall verify the effectiveness of the Treatment Process in Stabilizing/Solidifying constituents of concern and that the disposal of the treated material complies with the terms of this Permit as well as federal and state laws and regulations.

2. The Permittee shall conduct sampling and analyses of samples of treated material for each day or partial day of production. The Permittee shall analyze representative samples of the treated material to confirm the Stabilization/Solidification of constituents of concern has been effective and meet the treated materials meet the applicable and appropriate requirements for reuse or disposal including, but not limited, any written authorizations issued by the Commissioner. Samples of treated material shall be analyzed by an independent certified laboratory. The analyses shall be limited to the Project Site-specific contaminants of concern.

G. SPECIAL WASTE DISPOSAL AUTHORIZATION

1. Disposal of treated material at a Connecticut authorized landfill shall be conducted only in accordance with a written special waste disposal authorization pursuant to RCSA Section 22a-209-8 issued by the Commissioner to the Permittee, the Generator and/or the property owner. Approval to use the treated material as daily or final cover shall also be obtained from the authorized landfill owner/operator.
2. A special waste disposal authorization request pursuant to RCSA Section 22a-209-8 for any treated material under the provisions of this Permit shall identify the waste as being treated by the Permittee pursuant to this Permit. A *Special Waste Disposal Authorization* application shall be submitted for the disposal of treated materials on a per-Site basis. The special waste disposal authorization application shall also provide a list of all identified contaminants of concern in the Project Site generated Polluted Soil prior to its Treatment.

H. RETREATMENT OF STABILIZED/SOLIDIFIED MATERIALS

When retreatment is necessary for the Stabilized/Solidified material to meet disposal criteria specified in this Permit, the Permittee shall:

1. Identify the problem and determine whether the problem was a malfunction of the equipment or due to chemical interferences occurring in the Treatment Process; and
2. Document what was done to correct the problem. The Permittee shall prepare a report and include it as part of the Project Site operating record and the corporate operating record of this Permit.

I. DISPOSAL OF DEBRIS

1. The Permittee shall determine whether debris, such as tattered polyethylene sheeting, wood, or metal that is separated from the soils during the screening Process, is a RCRA Hazardous Waste. If such debris is not a RCRA Hazardous Waste, it shall be managed as a “special waste” pursuant to 22a-209-8.
2. The Permittee shall determine whether rock debris, oversized rocks which are not crushed and used in the Process, are RCRA Hazardous Wastes. If such rock debris is not a RCRA Hazardous Waste, it shall be managed as:
 - a. “Special Waste” as defined under RCSA 22a-208a-1;
 - b. “Clean Fill” as defined under RCSA 22a-209-1 if such rocks do not exceed the applicable pollutant mobility criteria and direct exposure criteria established in RCSA Sections 22a-

- 133k-1 through 22a-133k-3;
- c. "Solid Waste" if such rocks are to be beneficially reused in accordance with CGS Section 22a-209f, or as may be approved by the Commissioner, or
 - d. "Natural Soil" as defined under RCSA Section 22a-209-1, if such rocks after Treatment meet the definition of "natural soil."

J. SPILL REPORTING

1. Any release that the Permittee has reported to the National Response Center pursuant to 40 CFR 302, shall also be reported separately to the Commissioner using the 24-hour Emergency Response and Spill Prevention telephone number (860) 424-3338 or Toll Free number 1-866-337-7745. Nothing in this section shall affect or relieve the Permittee of its obligation under CGS 22a-450 or any other applicable reporting requirement.
2. Any spill report filed by the Permittee with the DEEP's Emergency Response and Spill Prevention Division shall also simultaneously be submitted to the Waste Engineering and Enforcement Division or its successor. Within fourteen (14) days of providing the spill report noted above, the Permittee shall submit a written report containing the following information to the Department's Waste Engineering and Enforcement Division or its successor:
 - a. Likely route of migration of the release;
 - b. Characteristics of the surrounding soil (soil composition, geology, hydrogeology, climate);
 - c. Results of any monitoring or sampling conducted concerning the release (if available). If sampling or monitoring data relating to the release are not available within fourteen (14) days, these data shall be submitted to the Commissioner as soon as they become available;
 - d. Proximity to down gradient drinking water, surface water populated areas, wetlands or other environmentally sensitive areas, endangered or threatened species; and
 - e. Description of response actions taken or planned.

The Permittee shall maintain all spill reports and all subsequent reports filed with the Department regarding each such spill in the operating record. In addition, to the spill reporting requirements above and in Section I.D.10., the Permittee shall completely fill out the Spill Report Form whenever there is a discharge, spillage or release to the Environment.

Waste Tracking Form

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SECTION
IV
General
Conditions

Green Globe, LLC

**CGS Section 22a-454 Permit to Treat Connecticut Regulated and
Hazardous Wastes
Mobile
Treatment
Units
Permit No.**

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**SECTION IV.
GENERAL CONDITIONS**

A. REQUIRED TRANSFER NOTICE

In addition to complying with the requirements of Section I.D.12. before transferring ownership or operation of its regulated activity the Permittee shall notify the new owner or operator in writing of the requirements of this Permit and shall provide such new owner with a copy thereof.

B. WASTE ANALYSIS PLAN

The Permittee shall comply with Section II.G. *Waste Analysis Plan And Acceptance Protocol*, of this Permit and shall follow the protocols described in the Waste Analysis Plan, included as Attachment A of this Permit.

C. SECURITY

1. The Permittee shall prevent the unknowing and unauthorized entry of persons or livestock, or vehicular traffic into the project Site.
2. The Permittee shall coordinate its activities with the security representatives at each Project Site so that proper procedures shall be implemented to address unknowing or unauthorized access to the area should such occur
3. The Permittee shall:
 - a. Control entry at all times to all active Treatment area(s) at all Sites. At a minimum, such entry control shall include the following:
 - i. All trucks initially entering the active Treatment area at a Site shall be required to stop at the mobile office; and
 - ii. All visitors shall park outside the active Treatment area and shall sign the visitor log book at the mobile office area. Any visitors wishing to tour the Stabilization/Solidification Treatment area shall be accompanied by an employee of the Permittee.
 - iii. All entrances to the Site are secured at all times unless authorized Personnel are present;
 - iv. Access to the Site is limited to the emergency coordinators, security Personnel or other authorized Personnel who have received training in accordance with this Permit and all other applicable law; and
 - v. Signs bearing the legend “Danger—Unauthorized Personnel Keep Out” shall remain posted at each entrance to the Facility and at other locations in sufficient numbers to be seen from any approach to the Facility’s entrances. The legend shall be written in English and shall be legible from a distance of at least twenty-five (25) feet.
 - b. Ensure a twenty four (24) hour surveillance system or artificial or natural barriers surrounding the Site is established. If a Site or Active Treatment area(s) is located such that access cannot be controlled by physical measures, the Permittee shall provide barrier tape or barrier fencing or other appropriate measures to prevent unauthorized entry.

- c. Provide warning signs at all access points to the Site, or portion thereof, where pedestrians or vehicles may gain access to Active Treatment area(s). The signs, at a minimum, shall read:
 - i. Area of Personnel Entry: “NO SMOKING”, “DANGER – UNAUTHORIZED PERSONNEL KEEP OUT”, and “VISITORS MUST REPORT TO OFFICE”;
 - and
 - ii. Area of Truck Entry: “DANGER – UNAUTHORIZED PERSONNEL KEEP OUT” and “NO SMOKING.” Such signs shall be written in English and shall be legible from a distance of at least twenty-five (25) feet from any approach to the Site, or portion thereof where Stabilization/Solidification is being conducted.
- d. All equipment used in the Stabilization/Solidification Processes, shall be locked when not in operation to minimize any equipment tampering.

D. GENERAL INSPECTION REQUIREMENTS

In addition to any other inspection requirements specified in this Permit, the Permittee shall:

1. Conduct visual inspections of the Site, or portion thereof where Stabilization/Solidification is being conducted, each operating day including, at a minimum: required signage, all Staging pile(s), containment areas, storage areas, safety equipment, operating and structural equipment (i.e., containment systems), mobile Pugmill Stabilization/Solidification units, Containers, air pollution control devices, and all ancillary equipment. The Permittee shall visually inspect the Site, or portion thereof where Stabilization/Solidification is being conducted, for releases, malfunctions and deterioration, operator errors and unauthorized activities prior to commencing any permitted Treatment activity, completing any permitted Treatment activity. Decontamination, de-commissioning and de-mobilization of Treatment equipment at a Site when Stabilization/Solidification activities are terminated shall be considered active operations;
2. Correct any problems found during the inspection as soon as possible, however, in no event shall such a correction be later than twenty-four (24) hours after the discovery of a problem. Should there be a malfunction in the air pollution control devices, the Permittee shall cease Stabilization/Solidification operations until such time that the cause of the malfunction has been determined and the correction implemented. If the malfunction cannot be corrected, the Permittee will take all necessary measures to prevent further contamination of the Project Site; and
3. Complete and maintain daily inspection logs incorporated herein within Attachment B, as may be modified herein. The Permittee shall record the inspections in the inspection log, including descriptions of any problems which may occur, all remedial actions taken, the date and time of the inspection and the name of the person conducting the inspection. All inspection logs shall be maintained on-Site in the Permittee’s Site operating record and the Permittee’s corporate operating record. These records shall be maintained in accordance with Section IV.I. and J. of this Permit.
4. Ensure that the information and forms prescribed in the *Facility Inspection Schedule*, incorporated as Attachment B of this Permit are maintained. The records pertaining to inspections, and corrective actions and repairs resulting from such inspections, shall be kept for at least for the term of this Permit plus three (3) years thereafter.

E. PERSONNEL TRAINING

1. The Permittee shall conduct Personnel training in all of the elements outlined in the *Personnel Training Plan*, incorporated as Attachment C of this Permit. The Permittee shall train all Personnel to ensure that the performance of their duties results in the Permittee maintaining compliance with the requirements of this Permit and all applicable regulations.

The Permittee shall maintain a written description of the personnel training program provided to personnel and shall at a minimum describe both the baseline training given to personnel and the annual review of such training. The written description of the personnel training program shall be kept at the Permittee's place of business in accordance with Section IV.I. and J. of this Permit.

2. The Permittee shall prepare and comply with a Site Safety and Health Plan for each Site. Such plan shall include similar topics as described in the example plan which is incorporated herein as Attachment D of this Permit. All employees of the Permittee who are engaged in on-site operations treating Hazardous Waste shall have completed their 40-Hour Hazardous Materials Incident Response Operations Training Course in accordance with 29 CFR 1910.120 prior to commencing work at a Site. Each employee shall have a current training certificate, including the annual site worker (8-hour) refresher and other training updates as required. Copies of training certifications shall be kept on Site during active operations.
3. All supervisory personnel shall also complete the eight (8) hour Health and Safety Training Course in accordance with 29 CFR 1910.120 for Site Supervisors/Managers prior to commencing work at the Site.
4. The Permittee shall ensure that the Personnel Training Plan includes, at a minimum, the following:
 - a. Description of all positions in the company that includes the operational responsibilities for each such position and required training for each position;
 - b. Procedures for using, inspecting, testing, and replacing emergency, spill control and safety monitoring equipment;
 - c. Contents and appropriate implementation of the Emergency and Preparedness Plan, entitled "Emergency and Preparedness Plan" (see Attachment D);
 - d. Any communications or alarm systems to be implemented by the Permittee at Treatment Sites;
 - e. The hazards associated with and the safe handling practices for all of the wastes authorized by this Permit to be treated;
 - f. Sampling methods, and sample handling procedures required to comply with the terms of this Permit;
 - g. The activities authorized and prohibited by this Permit;
 - h. Treatment operations and maintenance (at a minimum, start-up and shut-down of operations);
 - i. Record keeping and reporting (at a minimum document tracking and preparation);
 - j. Proper waste characterization procedures and techniques including at a minimum, sampling procedures and material handling;
 - k. Safety measures (at a minimum the procedures for maintaining site security);

- l. The selection and use of proper personnel protection equipment and emergency equipment and specific duties and responsibilities associated with each job description for the Permittee's employees;
 - m. Requirements regarding the management of hazardous and non-hazardous wastes;
 - n. Procedures for preventing fire, spills and explosions; and
 - o. The use of high level and other alarms systems for the treatment equipment.
2. The Permittee shall ensure that all new employees successfully complete the training described in the *Personnel Training Plan* incorporated as Attachment C and as required by Section IV.D.4 of this Permit. Such training shall be completed by new employees within six (6) months after the effective date of their employment or assignment to a new position or responsibilities. Personnel shall not work unsupervised until they have successfully completed the training required by this Permit.
 3. The Permittee shall ensure that all Personnel receive and successfully complete annual review training within 30 days of the initial training anniversary date.
 4. The Permittee shall maintain in its Operating Record documentation pertaining to the training or job experience as specified in the *Personnel Training Plan* incorporated as Attachment C and as required by Section IV.D.4 of this Permit, has been successfully completed by Personnel.
 5. The Permittee shall maintain training records on all Personnel for at least three years from when the employee last worked for the Permittee. Training records for existing employees shall be maintained for three years after the expiration of this Permit. Personnel training records may accompany Personnel transferred within the same company.

F. PREPAREDNESS AND PREVENTION

1. The Permittee shall conduct a daily safety meeting and complete the Daily Safety Meeting Checklist prior to initiating treatment operations at a Site each operating day.
2. The Permittee shall maintain any Stabilization/Solidification equipment and ancillary equipment in accordance with manufacturers' recommendations but at a minimum Permittee shall maintain all equipment annually. The Permittee shall operate such equipment so as to prevent a fire, explosion, or any unplanned, sudden or non-sudden release of any waste or treatment materials from the Stabilization/Solidification activities to the air, soil, surface water or groundwater.
3. The Permittee shall ensure that all mobile Stabilization/Solidification equipment for treatment, communications, fire protection, emergency response, spill control, and decontamination are immediately accessible at the Site and are operational at all times.
4. The Permittee shall maintain a contract with an emergency response contractor to provide emergency response services in case of a release requiring such services. The Permittee shall provide a copy of the approved Emergency and Preparedness Plan (Emergency and Preparedness Plan), Attachment D of this Permit.

5. The Permittee shall ensure that whenever Treatment activities or associated activities are conducted at the Site, all personnel engaged in such activities have access to a method of communication to immediately and effectively communicate with other employee(s) of the Permittee, on-site competent person(s) or emergency responders. Such means of communications shall be immediately available at the Treatment Site.

G. EMERGENCY AND PREPAREDNESS PLAN/CONTINGENCY PLAN

1. The Permittee shall comply with the Emergency and Preparedness Plan incorporated herein as Attachment D of this Permit, when responding to fires, explosions, or any unplanned sudden or non-sudden release of Petroleum or inorganic substance/RCRA metal pollutants or process chemical agents to the air, soil or waters of the state or any other emergency occurs while Stabilizing/Solidifying Polluted Soils.
2. The Permittee may append the Emergency and Preparedness Plan to address specific conditions which may be present at the different Sites throughout the state of Connecticut. Such an addendum shall address conditions that are Project Site-specific and may cause or contribute to emergency situations which could not be foreseen in the preparation of the approved Emergency and Preparedness Plan incorporated as Attachment D of this Permit.
3. The Permittee shall at all times, maintain the approved Emergency and Preparedness Plan any Project Site-specific addendum at the Project Site. The Permittee shall ensure that the emergency coordinator, alternate emergency coordinator(s), and any other personnel involved in the implementation of the Emergency and Preparedness Plan receive copies of such plan and Project Site-specific addenda prior to Treatment activities being initiated at the Site.
4. The Permittee shall immediately modify the Emergency and Preparedness Plan in accordance with the permit modification procedures specified in Section I.B.1. whenever:
 - a. The Emergency and Preparedness Plan fails in an emergency;
 - b. The Permittee changes its mobile treatment unit(s) design, construction, operation, or maintenance or changes the response measures that must be taken in an emergency;
 - c. A modification to the list of emergency coordinators is necessary.

The Emergency and Preparedness Plan changes specified in Section IV.F.2. of this Permit are mandatory however, the Permittee may submit to the Department, in writing, a request to make any other changes to the Emergency and Preparedness Plan. Any such proposed amendment shall be submitted in accordance with Section I.B.5 of this Permit.

5. The Permittee shall ensure that twenty-four (24) hours-a-day, seven (7) days-a-week, the primary or an alternate Emergency Coordinator is able to be contacted and is able to reach the Project Site within a reasonable timeframe in response to an emergency that involves or may involve the treatment area(s) at the Project Site. The Permittee shall ensure that up-to-date waste characterization data and/or shipping papers, are readily available to the Emergency Coordinator and emergency responders.
6. Whenever there is an imminent or actual emergency, the Emergency Coordinator shall immediately implement the Emergency and Preparedness Plan.
7. For any spill amounting to a reportable quantity, the Emergency Coordinator shall contact the

Emergency Response and Spill Prevention Division of the Department using 860-424-3338 or 866-337-7745 immediately.

8. The Emergency Coordinator shall ensure that, after an emergency has been addressed, within the affected area(s) of the Treatment area(s) at the Site:
 - a. Any incompatible recovered wastes or materials, contaminated soil, surface water or any other material that results from a release and the response thereto, are stored and disposed of appropriately;
 - b. Any wastes resulting from a spill or emergency incident and the response thereto that is the responsibility of the Permittee, shall be managed in accordance with the requirements of the Waste Analysis Plan and all applicable state and federal statutes and regulations; and
 - c. All emergency equipment listed in the Emergency and Preparedness Plan that was used in the response, is resupplied or cleaned and fit for its intended use before Treatment operations are resumed.
9. The Permittee shall note in the Site operating record the time, date and details of any incident that requires implementation of the Emergency and Preparedness Plan. Within fifteen (15) calendar days after an incident, a written report on the incident shall be submitted to the Commissioner. The report shall include:
 - a. Name, address, and telephone number of the Permittee;
 - b. Name, address, and telephone number for the Site;
 - c. Date, time, and type of incident (e.g., fire, explosion, release);
 - d. Description of the emergency event and its cause;
 - e. Identification and quantity of the waste or constituent(s) thereof involved;
 - f. The extent of injuries, if any;
 - g. An assessment of actual or potential hazards to human health or the environment;
 - h. Estimated quantity and disposition of recovered material that resulted from the incident and all response actions taken or to be taken;
 - i. All corrective measures taken or to be taken in response to the incident; and
 - j. All corrective measures taken or to be taken to ensure that the incident does not recur.
10. The Permittee must notify the Commissioner, in addition to state and local authorities involved in responding to an emergency, that Section No. IV.F.8. has been completed before resuming operations of the mobile treatment unit(s) at the Site.
11. The Permittee shall maintain an up-to-date inventory of all wastes and materials at the Site. The inventory shall identify all wastes and other materials in each waste management area.

H. TRANSPORTATION

All Polluted Soils or treated material transported from a Site shall be transported by appropriately licensed transporters using manifests or bills of lading as appropriate.

I. OPERATING RECORDS

1. The Permittee shall keep a Site operating record at each Project Site for the duration of the permitted activities at the Site until the decommissioning and de-mobilization of all equipment associated with the Treatment of Contaminated Media at the Site have been

completed. The Permittee shall keep in the corporate operating record all the information required by this Permit and by any applicable law including, but not be limited to:

- a. Records regarding Stabilization/Solidification of Soil/Sediment (Generator Soil/Sediment data information and analytical analysis, bench treatment analytical results and after treatment analytical results);
 - b. Manifests and manifest logs or equivalent shipping documents;
 - c. Documentation of compliance with Land Disposal Restrictions (LDR), including but not limited to LDR Notifications;
 - d. Training documentation and records as specified in Section. IV.E.7.;
 - e. Records of inspections required by this Permit and the Site Inspection Plan;
 - f. Summary reports and details of all incidents that require implementation of the Emergency and Preparedness Plan as specified in Section IV.G.6.;
 - g. All closure documentation as specified in Sections IV.K.1. and 2;
 - h. All closure cost estimates consistent with the requirements of RCSA Section 22a-449(c)-104(a)(1), incorporating 40 CFR 264.142, and RCSA Section 22a-449(c)-104(b); and
 - i. Any other information required by this Permit or any applicable law, to be maintained in the Permittee's corporate operating record.
2. The Permittee shall maintain in the operating record copies of any spill report regarding the Stabilization/Solidification activities, which have been filed with any federal, state or local governmental entity or which have been noted on an inspection log.
 3. The Permittee shall maintain copies of pertinent records for each specific Stabilization/Solidification treatment activity at a Site for the duration of active operations at such Site.
 4. The Permittee shall maintain all original paper and/or electronic operating records at the Permittee's corporate office for one year, thereafter operating records shall be stored for two (2) additional years.

J. AVAILABILITY, RETENTION, AND DISPOSITION OF RECORDS

1. The Permittee shall ensure that all records required by law or this Permit, including all plans, are furnished upon request, and made available at all reasonable times for inspection to any officer, employee, or representative of the Department.
2. The retention period for all records required by law or this Permit to be maintained by the Permittee shall automatically be extended during the course of any unresolved enforcement action regarding the Stabilization/Solidification Treatment and associated regulated activities until such enforcement action is fully resolved or for any reasonable period of time as may be requested by the Commissioner. Any exemption from this requirement shall require the written approval of the Commissioner.

K. CLOSURE

1. The Permittee shall finalize the Treatment activities at each Project Site to the extent required in the contract with the Project Site owner. In addition, the Permittee shall close the mobile

treatment units in accordance with the Closure Plan incorporated herein as Attachment . At a minimum, the mobile treatment units shall be closed in a manner that:

- a. Minimizes the need for further maintenance;
 - b. Controls, minimizes, or eliminates, to the extent necessary to protect human health and the environment, the escape of Polluted Soils or Contaminated Sediments, Contaminants of Concern, or other hazardous constituents, leachate, contaminated run-off, or Hazardous Waste decomposition products to soils, groundwater, surface water and to the atmosphere; and
 - c. Ensures each piece of Stabilization/Solidification equipment and each containment area, meets the closure requirements specified in 40 CFR 265.111, 265.113(a) – (c), and 265.114.
2. The Permittee shall amend the Closure Plan whenever:
- a. A change in operating plans or mobile treatment unit(s) design affects the Closure Plan;
 - b. More than two mobile treatment unit(s) are operated by the Permittee;
 - c. In conducting Closure activities, unexpected events require a modification of the approved Closure Plan; or
 - d. New or additional information becomes known which requires a modification of the Closure Plan.

The Permittee shall amend the Closure Plan at least sixty (60) calendar days prior to the change in operating plans or mobile treatment unit(s) design or number, or no later than sixty (60) calendar days after an unexpected event has occurred which was not anticipated in the Closure Plan. This requirement to amend the Closure Plan is in addition to and shall not relieve the Permittee of its obligation to comply with the permit modification procedures specified in Section I.B.1. regarding any changes in an operating plan for or design of the mobile treatment unit(s). If an unexpected event occurs during the Closure the Permittee shall submit a proposed amendment to the Closure Plan to the Commissioner no later than thirty (30) calendar days after the unexpected event. Any such proposed amendment shall constitute and be processed as a modification this Permit.

L. FINANCIAL RESPONSIBILITY

1. The Permittee shall establish and maintain an acceptable financial assurance instrument for the cost of decommissioning, decontaminating and de-mobilizing of each treatment unit(s) and the removal and appropriate disposal of all treated material from the Site, in accordance with Section V of this Permit. Such instrument shall comply with the requirements for financial assurance instrument as specified in 40 CFR 264.141 to 264.143 inclusive and 264.151. The Permittee shall ensure that the financial assurance instrument is established in a format specified by the Commissioner for Closure and in the amount approved in writing by the Commissioner. The financial assurance instrument shall be maintained in the Permittee's corporate operating record for the life of this Permit. The financial assurance instrument amount shall include the costs for cleaning and decommissioning each mobile treatment unit and all ancillary equipment to a level so as to not require further maintenance and/or controls after all such equipment is de-mobilized from each site.
2. The Permittee shall adjust the closure cost estimate for inflation in accordance with

the procedure specified in 40 CFR 264.142(b).

3. The Permittee shall revise the closure cost estimate whenever a change in its Closure Plan increases the cost of Closure.

M. AIR EMISSIONS

1. The Permittee shall comply with the following requirements relative to potential air emissions:
 - a. All Stabilization/Solidification equipment, Staging Pile(s) and stockpile(s) of treated material shall be located at least fifty (50) feet from the nearest property line;
 - b. The activities shall not cause or contribute to an objectionable odor beyond the property boundary of the Project Site pursuant to RCSA Section 22a-174-23;
 - c. The Permittee shall ensure that Stabilization/Solidification activities do not produce fugitive dust emissions and shall take all applicable measures to prevent fugitive dust emissions including but not limited to those described in RCSA Section 22a-174-18(b)(1);
 - d. The Permittee shall maintain an air handling system connected to the mobile treatment unit(s) as required by law. The system shall exhaust through appropriately sized air pollution control equipment, connected in series, which are designed to control particulate matter and volatile organic compounds as they may be emitted from the Stabilization/Solidification process;
 - e. The Permittee shall comply with RCSA Section 22a-174-18(b)(1), 18(b)(2), and 18(b)(4);
 - f. The Permittee shall comply with Section 22a-174-29 of RCSA and take all applicable measures to prevent emissions of hazardous air pollutants;
 - g. Prior to commencing Stabilization/Solidification activities, the Permittee shall comply with Section 22a-174-3 of RCSA and determine whether an air permit for each Site is necessary;
 - h. The Permittee shall comply with all other applicable requirements of the Department's Regulations of the Abatement of Air Pollution in Section 22a-174 of RCSA; and
 - i. Upon startup of each day's operation, the Permittee shall conduct inspection and monitoring of all air pollution control devices to ensure their proper operation. The baghouse and carbon adsorption unit monitoring results shall be recorded on the daily inspection log.

N. APPLICABLE LAWS

1. Nothing in this Permit shall relieve the Permittee of obligations under applicable federal, state and local laws.