

21 January 2014

Mr. Anthony Hollingshead
Swan Point Cemetery
585 Blackstone Boulevard
Providence, RI 02906

Dear Mr. Hollingshead:

The Department of Environmental Management, Office of Air Resources has reviewed and approved your application for the installation of two crematories at your 585 Blackstone Boulevard, Providence location.

Enclosed is a minor source permit issued pursuant to our review (Approval Nos. 2242 & 2243).

If there are any questions concerning this permit, please contact me at 401-222-2808, extension 7415 or at stephen.stamand@dem.ri.gov.

Sincerely,

Stephen G. St. Amand
Air Quality Specialist
Office of Air Resources

cc: Ted Wetherill
Ernie Kassoff
Providence Building Official

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR RESOURCES

MINOR SOURCE PERMIT

SWAN POINT CEMETERY

APPROVAL NOs. 2242 & 2243

Pursuant to the provisions of Air Pollution Control Regulation No. 9, this minor source permit is issued to:

Swan Point Cemetery

For the following:

Installation of a Facultatieve Technologies Crematory Model FT II SE (Approval No. 2242) and the installation of a Facultatieve Technologies Crematory Model FT III SE (Approval No. 2243).

Located at: *585 Blackstone Boulevard, Providence, Rhode Island 02906*

This permit shall be effective from the date of its issuance and shall remain in effect until revoked by or surrendered to the Department. This permit does not relieve *Swan Point Cemetery* from compliance with applicable state and federal air pollution control rules and regulations. The design, construction and operation of this equipment shall be subject to the attached permit conditions and emission limitations.

**Douglas L. McVay, Chief
Office of Air Resources**

Date of issuance

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR RESOURCES

Permit Conditions and Emission Limitations

Swan Point Cemetery

Approval Nos. 2242 & 2243

A. Emission Limitations

1. Particulate Matter

The concentration of particulate matter in the exhaust flue of each crematory shall not exceed 0.08 grains per dry standard cubic foot (0.08 gr/dscf) corrected to 12% CO₂.

2. Carbon Monoxide

The concentration of carbon monoxide in the exhaust flue of each crematory shall not exceed 100 ppmv, dry basis, corrected to 7% oxygen (1-hour average).

3. Visible emissions from each crematory exhaust flue shall not exceed 10% opacity (six-minute average).

B. Operating Requirements

1. The owner/operator shall operate the crematory in such a way that the cremation rate of human remains and containers shall not exceed 200 lbs/hour in each crematory.

2. The owner/operator shall only incinerate human remains and the containers they are placed in.

3. The owner/operator shall only cremate with containers having 0.5% or less, by weight, of chlorinated plastics.

4. Each crematory shall be equipped with an interlock to prevent the primary burner from firing unless the secondary chamber temperature is at or above 1600°F.

5. The secondary chamber temperature shall be maintained at a minimum of 1600°F, and the secondary chamber volume shall be of sufficient capacity to provide a minimum residence time for combustion gases of one second at 1800°F.

6. The secondary chamber thermocouple shall be located as close to the secondary chamber exit as possible or at a location that represents a minimum of a one-second residence time at 1600°F.

7. An operator shall always be in attendance whenever the crematory is operating.
8. A crematory operating procedures manual shall be maintained on-site at all times. All personnel who operate the crematory shall be familiar with the operating procedures.

C. Continuous Monitors

1. The secondary chamber temperature shall be monitored and recorded continuously for each crematory.
2. Continuous emission monitoring equipment shall be installed, operated and maintained for opacity when each crematory is operating.

D. Stack Testing

1. Within 180 days of start up of the crematory, emissions testing shall be conducted to demonstrate compliance with the emission limitations for particulate matter and carbon monoxide.
2. An emissions testing protocol shall be submitted to the Office of Air Resources at least 60 days prior to the performance of any emissions test. The owner/operator shall provide the Office of Air Resources at least 60 days prior notice of any emissions test.
3. Emission testing shall be performed in accordance with procedures specified in 40 CFR 60, Appendix A, unless other test methods are prescribed by RIDEM.
4. The owner/operator shall install any and all test ports or platforms necessary to conduct the required emissions testing, provide safe access to any platforms and provide the necessary utilities for sampling and testing equipment.
5. All testing shall be conducted under operating conditions deemed acceptable and representative for the purpose of assessing compliance with the applicable emission limitations.
6. A final report of the results of emission testing shall be submitted to the Office of Air Resources no later than 60 days following completion of the testing.
7. All emissions testing must be observed by the Office of Resources or its authorized representatives to be considered acceptable, unless the Office of Air Resources provides authorization to the owner/operator to conduct the testing without an observer present.

E. Recordkeeping and Reporting

1. The owner/operator shall maintain the following records concerning each crematory:

- a. The daily operating hours of the crematory.
 - b. The number of cremations conducted each day.
 - c. The weight of each cremation (human remains and container) in pounds.
 - d. The operating temperature of the secondary chamber.
2. The owner/operator shall notify the Office of Air Resources, in writing, of the date of actual initial start-up of each crematory no later than fifteen days after such date.
 3. The owner/operator shall notify the Office of Air Resources of any anticipated noncompliance with the terms of this permit or any other applicable air pollution control rule or regulation.
 4. The owner/operator shall notify the Office of Air Resources, in writing, of any noncompliance with the terms of this permit within 30 calendar days of becoming aware of such occurrence and supply the Director with the following information:
 - a. The name and location of the facility;
 - b. The subject source(s) that caused the noncompliance with the permit term;
 - c. The time and date of first observation of the incident of noncompliance;
 - d. The cause and expected duration of the incident of noncompliance;
 - e. The estimated rate of emissions (expressed in lbs/hr or lbs/day) during the incident and the operating data and calculations used in estimating the emission rate.
 - f. The proposed corrective actions and schedule to correct the conditions causing the incidence of noncompliance.
 5. The owner/operator shall notify the Office of Air Resources in writing of any planned physical or operational change to any equipment that would:
 - Change the representation of the facility in the application.
 - Alter the applicability of any state or federal air pollution rules or regulations.
 - Result in the violation of any terms or conditions of this permit.
 - Qualify as a modification under APC Regulation No. 9.

Such notification shall include:

- Information describing the nature of the change.

- Information describing the effect of the change on the emission of any air contaminant.
- The scheduled completion date of the planned change.

Any such change shall be consistent with the appropriate regulation and have the prior approval of the Director.

6. All records required in this permit shall be maintained for a minimum of five years after the date of each record and shall be made available to representatives of the Office of Air Resources upon request.

F. Other Permit Conditions

1. To the extent consistent with the requirements of this permit and applicable federal and state laws, the crematory shall be designed, constructed and operated in accordance with the representation of the unit in the permit application.
2. Employees of the Office of Air Resources and its authorized representatives shall be allowed to enter the facility at all times for the purpose of inspecting any air pollution source, investigating any condition it believes may be causing air pollution or examining any records required to be maintained by the Office of Air Resources.
3. The owner/operator shall shut down the crematory in the event of a malfunction of the unit's air pollution control equipment that results in, or that could result in, emissions in excess of the permit limits. The crematory shall remain shutdown until the malfunction has been identified and corrected.
4. At all times, including periods of startup, shutdown and malfunction, the owner/operator shall, to the extent practicable, maintain and operate the crematory in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Office of Air Resources, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures and inspection of the source.