Date Prepared 05/2001 Prepared By Carla McGreevy Revised 7/2004 P. Watt 2/2009 M Ortiz 11/2014 LVivekanand

BMP Technical Services #9

TITLE: CREMATORIUM OPERATION

Regulatory Citation: 6 NYCRR Part 219-5

Applicability: Crematorium

Purpose: Proper operation of the crematorium.

Person or Department Responsible: Technical Services

Schedule: As needed

Procedures: Technical Services staff are only individuals permitted to operate the crematorium. As needed, only laboratory animals will be placed in the crematorium. The crematorium shall be operated in accordance with the unit's operating instructions. Once the unit operations are completed the ash will be removed and disposed of as solid, non-hazardous waste. (A waste analysis was performed to determine this).

According to 6 NYCRR Part 219-5 and HVCC's State Air Facility Permit #4-3817-00013/00004, the crematorium is subject to the following operating and monitoring requirements:

- Particulate emissions must remain within 0.3 lbs per hour or less. This was confirmed during stack testing in May, 2004.
- The crematorium's emission must not exceed an opacity of 20 percent for 6 consecutive minutes;
- No pathological or solid waste may be burned in the crematorium. The crematorium shall be used only for lab animal parts and associated bedding
- The exhaust stack shall be observed for visible emissions once per day when the crematorium is in operation. The observation(s) must be conducted during daylight hours except during adverse weather conditions. The results of each observation must be recorded in a bound logbook. The following data must be recorded:
 - weather condition

- was a plume observed?
- If any visible emissions* (other than steam) are observed, the operator must note this in the logbook and contact Environmental Health and Safety immediately.

*There should be no visible emissions from the stack –orthe emissions should be white with a clear gap between the top of the stack and the start of the plume. This indicates a steam plume. Steam plumes generally form after leaving the top of the stack (this is known as a detached plume). The distance between the stack and the beginning of the detached plume may vary, however, there is normally a distinctive distance between the plume and stack. Steam plumes are white in color and have a billowy consistency. Steam plumes dissipate within a short distance of the stack (the colder the air the longer the steam plume will last) and leave no dispersion trail downwind of the stack.

The standard operating procedures attached shall be followed for all crematorium operations.

Record keeping: Stack testing records, log book

Record Location: Stack test records are maintained in the Environmental Helath and Safety office; the log book is kept in the crematorium room

Contact: Director of Technical Services (629-7192) Director of Environmental, Health and Safety (629-7163)

HVCC-BMP-Tech#9-crematorium

Technical Services SOP for loading crematorium Fitzgibbons lower level

- 1. Notify the Director of Environmental Health & Safety one week in advance, or as soon as possible, of each burn cycle.
- 2. The unit will only be used for processing laboratory animal and animal parts. No other solid or pathological or biological waste will be burned in this unit.
- 3. Animal parts will be transported to the crematorium room in plastic lined, 30gallon containers and staged here for processing.
- 4. Check to ensure that all ash from previous burn has been removed.
- 5. Each bag will be removed from the container, weighed and then placed into the crematorium unit (no pre-heat of unit).
- 6. All handling of bags, loading of the crematorium and operation of the crematorium shall be done by two people.
- 7. No more than 8 bags or 250 lbs will be added to the crematorium for any one burn cycle.
- 8. The crematorium will then be set for a six hour burn cycle and the cycle started.
- 9. Technical Services staff will record the following information in the log book:
 - a. Date
 - b. Time
 - c. Weather conditions
 - d. Weight of load
 - e. Stack observations*
 - f. Signature of observer

*There should be no visible emissions from the stack –or- the emissions should be white with a clear gap between the top of the stack and the start of the plume. This indicates a steam plume. Steam plumes generally form after leaving the top of the stack (this is known as a detached plume). The distance between the stack and the beginning of the detached plume may vary, however, there is normally a distinctive distance between the plume and stack. Steam plumes are white in color and have a billowy consistency. Steam plumes dissipate within a short distance of the stack (the colder the air the longer the steam plume will last) and leave no dispersion trail downwind of the stack.

- 10. If any visible emissions (other than steam) are observed, the operator must note this in the logbook and contact Environmental Health and Safety immediately.
- 11. The log book will be kept in the crematorium room at all times except when recording visual observations.
- 12. All personnel will leave the area.
- 13. When cooled, all ash will be removed from the unit before the next burn cycle.