

*Insert Facility/Institute Logo Here*

**STANDARD OPERATING PROCEDURE (SOP) *TEMPLATE***

|  |
| --- |
|  |
| Facility: *Insert Institute/Facility Name* |
| SOP Title: *Incinerator Operation SOP* |
| Document Number: *4-002-00X* | Version Number: *00*Effective Date: *MM-DD-YYYY* |
| Other documents cross-referenced in this SOP (i.e., manuals, SOPs, forms, records):* Biorisk Management Manual (Chapter XIX, Waste Handling and Disposal)
* *Infectious Waste Management SOP*
 |

|  |
| --- |
|  |
| Revision Number | Sections Changed | Description of Change | Date | Approved By |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

INSTRUCTIONS: The Biorisk Management Manual and supporting Standard Operating Procedure (SOP) templates provide a general overview of common considerations and information that should be addressed within a biorisk management system and program. These templates are not exhaustive and facilities must customize each document to ensure it is locally applicable and relevant.

* **Black text** can be considered generic text which may be appropriate for inclusion in a facility’s biorisk management manual and SOPs.
* ***Red text*** should be considered guidance or examples and must be reviewed and replaced with facility-specific information.
1. Purpose

The purpose of this document is to establish procedures for the proper use and maintenance of the incinerator used by *Insert Institute/Facility Name.* Adherence to this procedure allows the incinerator to function as designed in order to provide the appropriate level of sterilization and decontamination of infectious waste.

1. Scope

This document applies to all facility personnel and visiting personnel approved to operate the incinerator. The incinerator is used for the sterilization and decontamination of infectious waste and pathological waste. The incinerator must not be used for the disposal of radioactive wastes, toxic metals, unused chemicals or chemical waste generated by *Insert Institute/Facility Name.*

1. Responsibilities
* **Process Leader** ensures that incinerators are properly selected, located, operated and maintained. This individual is also responsible for training users in this procedure, qualifying users, supervising the use of the incinerator, and maintaining records of user training/qualification, incinerator use and maintenance.
* **Facility personnel** who use the incinerator complete training in the operation of the incinerator, follow this SOP, and report any problems to the *Process Leader.*
* ***Facilities Management Office*** ensures that the incinerator is installed, serviced, calibrated and validated properly.
1. Preparation *(Anything that needs to be in place prior to commencing the procedure )*
	1. Materials
* Biohazardous wastes in bags or containers
* *Personal protective equipment* (PPE) as determined by the risk assessment *[minimum PPE for operation of the incinerator would likely consist of eye/face protection, heavy-duty gloves and apron]*
* Ash shovel
* Ash disposal container
* *Fuel source for incinerator*
	1. Equipment
		+ Incinerator, *type, model*
	2. Records and Forms
		+ Personnel training and qualification form
		+ Incinerator usage and maintenance log
1. Procedure

*[Operation and maintenance procedures for the incinerator will depend on the type, make, and model of the incinerator. The manufacture’s operations manual should be consulted for how to fuel, operate, and maintain the incinerator in order to complete this SOP. Local or national regulations or guidance pertaining to incinerator operation or environmental discharge when operating and maintaining the incinerator should be followed. The procedures below are generic considerations for incinerator operation.]*

1. Personnel Training and Qualifications
	1. Only trained personnel will operate or maintain the incinerator.
	2. Training is provided by the *Process Leader* and will be documented using the Personnel Training and Qualification Form. Training will consist of:
		1. The contents of this SOP
		2. Review of the manufacturer’s operation manual
		3. Observation of operation by a qualified operator
		4. Performance of operation under the supervision of the *Process Leader*  until proficient to operate the incinerator independently

1. Waste Segregation and Handling

*(This section should be modified to address the types of wastes that will be incinerated. Will the incinerator be used for all wastes at the facility? Only for wastes generated by medical or laboratory facilities? Will pathological wastes be incinerated? Where will waste for incineration be stored until incineration? How will wastes be transported to the incinerator? Who is responsible for placing wastes into storage location? Who is responsible for transporting wastes to the incinerator? Is additional containment required during transport?)*

* 1. Biohazardous waste to be incinerated must be segregated and placed in designated containers or bags at the point of generation according to *Infectious Waste Management* *SOP*. Under no circumstances will waste be sorted or segregated at the incinerator because of the risk of exposure to operators.
	2. Chemicals, chemical waste, radioactive wastes, and waste containing toxic metal will not be disposed of by incineration.
	3. Waste for incineration is transported *[how will this be done]* to the incinerator location by *designated personnel* wearing the following PPE as determined by the risk assessment:
		1. *List PPE required for handling and transportation of wastes*
1. Routine Operations *(This section will be highly dependent on the make/model of the incinerator)*
	1. Fueling of incinerator
		1. *(Describe steps to perform this activity and any safety precautions, PPE and safety equipment required based on risk assessment)*
	2. Loading of incinerator
		1. *(Describe steps to perform this activity and any safety precautions, PPE and safety equipment required based on risk assessment. Also indicate the maximum amount of waste to be loaded; ratio of plastics to other wastes to minimize quantities of toxic air contaminants generated during burning. Is there a need to preheat the incinerator prior to loading of waste?)*
	3. Operation of the incinerator cycle
		1. *(Describe steps to perform this activity and any safety precautions, PPE and safety equipment required based on risk assessment. Is additional waste added to the incinerator during the cycle? At what frequency is this done? Does the operator need to monitor the incinerator continuously during the cycle? How is the incinerator temperature monitored? How the proper function of the incinerator determined (e.g. observation of the color of smoke generated to indicate efficient combustion, temperature indicators/recording, and visual observation of residual ash following cycle). How is this documented? Who to notify if any problems are noted? How long does ash need to cool prior to removal? What procedures and precautions are followed to remove ash and where is it disposed of?)*
	4. Scheduled Maintenance
		1. *(Describe steps to perform this activity and any safety precautions, PPE and safety equipment required based on risk assessment. Who performs this maintenance – operator, process leader, outside contractor? How is maintenance documented?)*
	5. Unscheduled Maintenance
		1. *(Describe steps to perform this activity and any safety precautions, PPE and safety equipment required based on risk assessment. Who performs this maintenance – operator, process leader, outside contractor? How is maintenance documented?)*

1. References
	1. Manufacturer’s Operation Manual

*(Include any local or national regulations or guidance pertaining to incinerator operation or environmental discharge when operating and maintaining the incinerator)*

1. Attachments
	1. *Personnel training and qualification form*
	2. *Incinerator usage and maintenance log*