

## PATHOLOGICAL INCINERATOR OPERATOR ENVIRONMENTAL COMPLIANCE RESPONSIBILITIES

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This Safe Operating Procedure (SOP) provides a summary of the environmental compliance responsibilities for East Campus incinerator operators. Refer to the EHS SOP, ***Pathological Waste Incinerators - Operating Permit Requirements*** for additional information regarding air quality regulatory requirements and permit conditions.

To ensure maximum waste combustion efficiency, air quality operating permits require that incinerators be installed, operated, and maintained in good working condition and in accordance with the manufacturer's specifications. Additional limitations, such as restrictions on types of wastes to be incinerated and opacity/visible emissions (VE) are imposed in the permits. To ensure the incinerators are maintained in good operating condition and that permit conditions are met, incinerator operators are required to:

- Evaluate the acceptability and quantity of waste types to be incinerated.
  - Permit conditions limit the waste types to 90% or more pathological (type 4) wastes based on each calendar quarter. Do not incinerate anything that is not a type 4 waste without prior express approval from EHS since the permit requires approval by the permitting authority.
  - The manufacturer's specified waste charge loading limits must not be exceeded at any time.
- Start, load, and adjust equipment settings as specified by the manufacturer to ensure effective and efficient incineration of materials.
- Conduct and document monthly VE surveys or Method 9 opacity readings. Under the terms of the most recently issued permit, the operating records must also indicate those months when no VE survey was conducted because the incinerator was not operated. Operators are required to conduct a 6-minute VE survey at least monthly. If visible emissions are detected for 5% or more (18 seconds) of the survey time the operator must take necessary corrective action to eliminate the visible emissions within one hour, followed by another 6 minute survey that is satisfactory (e.g., VEs detected for less than 5% of the survey time). Alternatively, a Method 9 survey may be conducted. However, only persons currently EPA certified by attending and passing a smoke school within the previous 6 months are authorized to conduct Method 9. If not currently certified to conduct Method 9 and corrective action was not successful in meeting method 22 criteria, immediately notify EHS and refrain from further operation until authorized by EHS. EHS files notifications with LLCHD of opacity violations as appropriate.
- Adhere to specified secondary burner pre-heat and post-incineration burn-down times.



- Complete all data on the **Monthly Incineration Record** form as presented in the EHS SOP, **Pathological Waste Incinerators –Operating Permit Requirements**. Submit these log forms to EHS by the 15<sup>th</sup> of each month, along with the secondary chamber (afterburner) temperature recording charts. See EHS SOPs, **Pathological Waste Incinerators –Operating Permit Requirements** and **Opacity of Emissions from Combustion Sources and Operating Log Records**.
- Monitor automated incinerator operating systems, coordinate a response to system failures, and document corrective actions. Examples include: burners failing to operate at appropriate temperatures or for appropriate time cycles, stack fan failures, continuous secondary chamber temperature monitoring or recording device failures, etc.
- Perform minor equipment maintenance such as cleaning around burner nozzles, ensuring that the continuous afterburner temperature recorder is working correctly, making minor adjustments to valves, instruments, burners, or other components, as needed.
- Coordinate, direct, and document the work of journey-level personnel in the repair and maintenance of incinerator components and systems.
- Handle and dispose of ash and other residual material from incineration in accordance with EHS procedures.
  - Clean ash and bone out of the primary burn chamber after completing each daily burn event.
  - Periodically clean ash out of the secondary burn chambers.
  - Once ash is cool, transfer to EHS provided 55 gallon open top metal drum. Make sure the lid is securely closed after adding ash.
  - Contact EHS for pick-up when the 55 gallon drum is full.
- Maintain cleanliness in areas surrounding the incinerator.
- Notify EHS as soon as possible of incinerator malfunctions, instances where the maximum opacity readings are exceeded, problems with fugitive emissions, or other deviations from permit requirements.
- Incinerator operators must complete training prior to operating an incinerator. Operators must:
  - Be trained to conduct and document Method 22 visible emissions (VE) surveys.
  - Read the manufacturer's operators manual and/or other available technical instructions and the East Campus Operating Permit.