

ES-301-2.01 Incinerator Operations	
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1) Activity Description: Incinerator Operations

The Department of Aviation operates two natural gas-fired, batch incinerators in Building B of the airport's Maintenance Support Center, located at 27500 E. 80th Avenue. The incinerators are located in a locked room commonly known as "the burnhouse." The incinerators are operated by the airport's Facilities Maintenance HVAC staff.

2) Potential Environmental Risks

- A. The following environmental concerns are associated with these activities:
 - i) Air pollution
 - ii) Incineration of unapproved wastes
 - iii) Improper management of incinerator wastes
 - iv) Improper operation of the incineration facility

- B. Potential consequences from performing the activity incorrectly:
 - i) Property damage, personal injury or damage to the environment
 - ii) Regulatory and judicial enforcement actions and related [financial & non-financial] penalties

3) Critical Operating Requirements

- A. Prohibited Activities
 - i) The airport's environmental permits prohibit incineration of any materials except international flight waste and contraband or prohibited goods.
 - ii) Conducting activities that are not in compliance with the DEN Air Permit or the Certificate of Designation for the facility.
 - iii) Delivering waste to the burnhouse without first making an appointment is prohibited. Waste materials should never be abandoned at or near the incineration facility.

- B. General Considerations
 - i) Each airport tenant, contractor, and operator conducting incineration operations is responsible for understanding the applicable regulations and managing their activities accordingly; this Environmental Guideline is meant as guidance and does not supersede any regulations.
 - ii) All incinerators in the State of Colorado must have an air quality permit.
 - iii) All incinerators owned by a local government must have a solid waste certificate of designation.
 - iv) The Department of Aviation is authorized to burn two kinds of waste in the incinerators: international flight waste and contraband or prohibited goods. Federal pest control regulations require that waste deplaned from international flights arriving in the United States be sent "to an approved facility for incineration, sterilization, or grinding into an approved sewage system." The Department of Aviation chooses to comply with these

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regulations by offering incineration services to airport tenants, which are the primary source of international flight waste. Law enforcement agencies are the source of contraband drugs. In this document, airport tenants and law enforcement agencies are collectively referred to as “incinerator users.”

- v) All companies utilizing the DEN incinerators for destruction of international flight waste must obtain a permit from the USDA Incinerator Compliance Agreement.

C. **Training Requirements**

- i) Environmental Services and Facilities Maintenance personnel will conduct annual incinerator training in accordance with the state air quality Operating and Maintenance (O&M) Plan, the solid waste certificate of designation (CD), and the compliance agreement with USDA.

D. **Storage and Materials Management Requirements**

- i) Facilities Maintenance will manage incinerator ash in accordance with the state air quality O&M Plan and the solid waste CD.

4) Planning Requirements

- A. Prior to delivering waste to the burnhouse for incineration, an incinerator user must make an appointment through the DEN Maintenance Control Center (MCC) at 303-342-2800.

5) Critical Tasks

- A. Facilities Maintenance will conduct waste receiving (delivery and manifesting), incinerator operations, and incinerator monitoring and recordkeeping in accordance with the state air quality O&M Plan and the solid waste CD.

6) Emergency Response

- A. In the event of a malfunction of the incinerators, the incinerator thermocouples, the incinerator Honeywell controllers, the incinerator Yokogawa recorders, or the incinerator strip charts, the HVAC operator must:
 - i) Call the HVAC Supervisor and the MCC immediately. MCC will then notify the Director of Environmental Programs.
 - ii) Lock out the incinerator from use until the malfunction is corrected.

7) Inspection and Maintenance Requirements

- A. Facilities Maintenance will conduct incinerator inspections and maintenance in accordance with the state air quality O&M Plan and the solid waste CD.

8) Expected Records and Outputs

- A. Incinerator Waste Manifest (Revised Dec. 2002)
 - i) This form is required to burn any wastes at the incinerator facility and is available at the burnhouse. Completed forms are retained at the burnhouse.

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- B. Burnhouse Maintenance Records
 - i) These records are maintained by Facilities Maintenance.
- C. Incinerator Waste Tracking Sheet
 - i) Completed forms are submitted to Finance, with a copy submitted to Environmental Services and a second copy retained by Facilities Maintenance.
- D. Training records
 - i) These records are maintained by Environmental Services.
- E. Temperature strip charts
 - i) These records are maintained by Environmental Services.
- F. Incinerator user invoices
 - i) These records are maintained by Finance.
- G. Incinerator user payment records
 - i) These records are maintained by Finance.
- H. Ash profiles
 - i) These records are maintained by Environmental Services.
- I. Calculation of CDPHE Annual User Fees [for the CD facility (incinerator)] based on waste disposed in calendar year
 - i) User fees are calculated by DEN ES and reported and paid to CDPHE SWD on Division-supplied forms. Copies of the submittals are maintained in ES file09.23.01.02.03.02. Waste calculations are in the ES Data Files under Waste /DEN Incinerator Annual Solid Waste User Fees in the EMS portal.
- J. Emissions calculations
 - i) These records are maintained by Environmental Services (ES data files in the EMS portal)

9) **References**

- A. Phone Numbers
 - i) DEN Communications Center (for spill reporting) (303) 342-4200
 - ii) DEN Maintenance Control Center (for appointments and malfunctions)(303) 342-2800
 - iii) DEN Environmental Services (Main Line) (303) 342-2730
 - iv) Jeff Arneson (DEN Environmental Services) (303) 342-2630
- B. Guidance Materials (list is not limited to the following)
 - i) Manufacturer's operating and maintenance (O&M) manual for the incinerators
 - ii) Manufacturer's operating and maintenance (O&M) manual for the Honeywell controllers
 - iii) Manufacturer's operating and maintenance (O&M) manual for the Yokogawa recorders
- C. Training Materials (list is not limited to the following)

- i) ES-303-1.03: Microsoft PowerPoint presentation provided by Environmental Services – EMS Data Files – Training Presentations – International Incinerator Operator Training Module - DVD
- D. Related Environmental Documents (list is not limited to the following)
- i) ES-301-5.02 Spill Response
 - ii) ES-301-6.01 General Waste Management
 - iii) ES-308-01.03: Incinerator Invoicing and Rates Work Instruction
 - iv) ES Data Files/Waste – USDA Incinerator Compliance Agreement
- E. Applicable Regulations (list is not limited to the following)
- i) State air quality regulations (5 CCR 1001-2, -3, -5, and -8)
 - ii) State air quality permit (Permit No. 99DE0142)
 - iii) State air quality Operating and Maintenance (O&M) Plan
 - iv) Local air quality regulations (D.R.M.C. Title II, Chapter 4, Article III)
 - v) State solid waste use fee statute (C.R.S. 25-16-104.5)
 - vi) State solid waste regulations (6 CCR 1007-2)
 - vii) State solid waste regulations (6 CCR 1007-1.7.2)
 - viii) Local solid waste regulations (D.R.M.C. Title II, Chapter 48, Article VII)
 - ix) Local solid waste Certificate of Designation (City and County of Denver Ordinance No. 696, Series of 2000)
 - x) Local solid waste Facility Operating Plan
 - xi) Local solid waste Facility Screening and Ash Sampling Plan
 - xii) Federal pest control regulations APHIS –USDA (7 CFR 330.400 and 9 CFR 94.5)
- F. Other Documents (list is not limited to the following)
- i) DEN Drug Burning Procedures
 - ii) Forms required by the state air quality O&M Plan
 - o Incinerator Waste Manifest (Revised Dec. 2002)
 - o Burnhouse Record
 - o Incinerator Waste Tracking Sheet

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