



Title	ES-301-1.04 Management of Aircraft Lavatory Water and Waste
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1) Activity Description:

The following guideline outlines the management of “blue water” and “blue water” waste from aircraft lavatory servicing activities (i.e.. sanitary sewage collection/disposal and associated rinse water produced during servicing).

2) Potential Environmental Risks

- A. The following environmental concerns are associated with these activities:
 - i) Odors
 - ii) Sanitary System Spills
 - iii) Improper or inappropriate disposal of aircraft lavatory wastes

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

3) Critical Operating Requirements

- A. Prohibited Activities
 - i) Do not discharge lavatory waste to sanitary sewer connections other than at triturator (pulverizing) facilities.
 - ii) Do not perform lavatory truck clean out/backflushing at any location other than at triturator facilities.
 - iii) Do not wash lavatory waste into the trench drains. (See Emergency Response Section below.)
 - iv) Do not dispose of used absorbent in the triturator facilities. (See Emergency Response Section below.)

- 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) Practice good housekeeping techniques and follow company lavatory service and triturator use procedures.
 - iii) Keep the equipment in good working order through preventative maintenance; replace worn equipment before leaks develop.
 - iv) Each operator or tenant conducting aircraft lavatory servicing must have spill response equipment readily available in proximity of the activity.
 - v) MSDSs for surfactant/disinfectant solutions shall be available for all personnel conducting these activities.

- C. Training Requirements
 - i) Employee training programs shall inform personnel at all levels of responsibility who are involved in industrial activities that may impact stormwater runoff. Stormwater training

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shall address topics such as spill response, good housekeeping, and material management practices. Contractor or temporary personnel shall be informed of plant operation and design features in order to prevent discharges or spills from occurring.

- ii) Employees should be trained in company lavatory service and triturator use procedures as well as in spill response, which may include on-the-job training.

D. Storage and Materials Management Requirements

- i) Lavatory service equipment should be emptied of waste prior to parking for any extended period of time.
- ii) Use of drip pans is encouraged in case leaks develop while equipment is parked for an extended period of time.
- iii) Perform surfactant/disinfectant mixing and transfers in the triturator area. This will allow the residues generated from such activities to enter the sanitary sewer system.

4) Planning Requirements

- A. Complete the DEN Stormwater Management Plan (SWMP) Industrial Activities Survey/Matrix to assist in determining other potentially relevant environmental guidelines and whether a SWMP is required.
 - i) This document is available at on line at www.flydenver.com/environmental.
 - ii) If applicable, the operator will need to decide whether to use the DEN SWMP or generate their own for approval by DEN ES.
- B. Maintain absorbent, drip pans, and other spill response equipment with the lavatory service equipment.

5) Critical Tasks

- A. Follow company lavatory service and triturator use procedures.
- B. Drain the aircraft connecting hose as completely as possible into the storage tank after servicing an aircraft. Properly secure all hoses, valves, and equipment when transporting or transferring wastes to eliminate leakage or spills.

6) Emergency Response

- A. If a spill occurs, call DEN Communications Center immediately at 303-342-4200 regardless of whether a drain is reached or any media (e.g., soil, water) was impacted.
 - i) See Environmental Guideline ES-301-5.02 Spill Response
- B. Lavatory spills should be contained and cleaned up as soon as possible using either manual (e.g, absorbents, shovel) or mechanical (e.g., vacuum, sweeper) means to minimize potential stormwater impacts and biological hazards.
- C. Care must be taken to prevent wastes from reaching any drains at any location other than triturator facilities.
- D. Solids and liquids, to the extent possible, should be collected, returned to the lavatory truck, and transported to the DEN tritulators for disposal. Small amounts of absorbent materials (approximately 5 gallons or less) used for containment and cleanup of any residual liquids can be placed in the commercial compactor or dumpsters for disposal at the municipal solid waste landfill. Large volumes of lavatory waste spill cleanup materials (greater than

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approximately 5 gallons) are classified as special waste and must be segregated, profiled, and manifested for disposal. The generator of the waste is responsible for completing this paperwork and arranging for the disposal.

- E. Disinfectants can be used to treat the affected pavement/worker work area. If disinfectants are used, the MSDS must be provided to DEN ES for review and approval for compliance with Metro Wastewater Rules and Regulations. In addition, the residual materials should be cleaned up with a sweeper and the disposed in the triturator rooms or other interior sanitary sewer drain.

7) Inspection and Maintenance Requirements

- A. Perform routine preventative maintenance of equipment, including hoses and fittings used for transferring lavatory waste, as necessary.
- B. Lavatory service equipment should be inspected daily for evidence of leaking fluids. Where evidence of a leak is observed, use a drip pan, report to supervisor, and repair the equipment as soon as practical.

8) Expected Records and Outputs

- A. Spill and release records for any spills
 - i) Responsible party (for the spill) notifies DEN Communications Center.
- B. Evidence of training
 - i) While formal certifications are not always necessary, some “proof of training” (such as sign-in sheets and handouts) is expected and should be maintained on file by the operator.
- C. Completed SWMP Survey/Matrix
 - i) Obtain a copy of this document on line at www.flydenver.com/environmental
- D. MSDSs
 - i) Manufacturers of products will supply these documents on demand. MSDSs for products should be made available to employees engaged in lavatory servicing activities and maintained on file by the Operator at the facility.

9) References

- A. Phone Numbers
 - i) DEN Communications Center (for spill reporting) (303) 342-4200
 - ii) Craig Schillinger (DEN Environmental Services) (303) 342-2834
- B. Guidance Materials (list is not limited to the following)
 - i) Metro Wastewater Contribution Permit
 - ii) DEN Industrial Stormwater Permit
 - iii) DEN Stormwater Management Plan (SWMP), including SWMP Industrial Activities Survey/Matrix and Instructions

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- iv) DEN Materials Management Plan
- C. Training Materials (list is not limited to the following)
 - i) Company Standard Operating Procedures and/or On-the-Job Training materials
 - ii) Stormwater Pollution Prevention Training (DEN SWMP)
- D. Related Environmental Documents (list is not limited to the following)
 - i) ES-301-5.02 Spill Response
 - ii) ES-301-6.06 Management of Special Wastes
- E. Applicable Regulations (list is not limited to the following)
 - i) Metro Wastewater Reclamation District Rules and Regulations, Sections 6.17-6.18
 - ii) Denver Wastewater Management Division Rules and Regulations, Chapter 7
 - iii) Denver Revised Municipal Code, Section 56-102
 - iv) State Water Quality Regulations (Regulations 38, 61, and 65)
 - v) DEN Rules and Regulations, Section 180
 - vi) State Solid Waste Regulations (6 CCR 1007-2)
- F. Other Documents (list is not limited to the following)
 - i) N/A