Appendix 29
Office/Workplace Recycling Toolkit

- **Colorado Springs Airport (COS) Environmental Guidelines and Standard Operating Procedure: Waste Management and Recycling**
- **Colorado Springs Airport (COS) Example Training Materials**
- **Wayne County Airport Authority Workplace Recycling Policy (including Detroit Metropolitan Airport, DTW)**
- **Port of Portland Port-Wide Waste Management and Minimization Procedure (including Portland International Airport, PDX)**
- **Sacramento County Airport System Airport Operating Procedures Airports' Recycling Program (including Sacramento International Airport, SMF)**
- **Sacramento International Airport (SMF) Example Employee Training Presentation**

ENVIRONMENTAL GUIDELINES AND STANDARD OPERATING PROCEDURE
Waste Management and Recycling

WASTE MANAGEMENT AND RECYCLING PROCEDURE

Procedure Created/Revised: 5/2017

Procedure Administrator: Airport Environmental/Kris Andrews

PURPOSE/DESCRIPTION: The purpose of this waste management procedure is to reduce the potential of inappropriate disposal of waste and potential stormwater pollution by implementing proper waste handling and disposal practices. These practices include regular inspection of waste disposal areas, using proper waste disposal containers, and ensuring waste container lids are properly labeled and secured.

EMERGENCY NOTIFICATION

The Airport Communications Center needs to be notified immediately of any spills or leaks from any hazardous waste, universal waste or special waste.

WASTE DISPOSAL PROCEDURE/REQUIREMENTS

Solid Waste

Per the Colorado Solid Waste regulations, solid waste is defined as discarded material including solid, liquid, semisolid, or contained gaseous material resulting from industrial operations, commercial operations or community activities. "Solid waste" does not include any solid or dissolved materials in domestic sewage, or agricultural wastes, or solid or dissolved materials in irrigation return flows, or industrial discharges that are point sources subject to permits under the provisions of the Colorado Water Quality Control Act. All non-hazardous solid waste can be disposed in the trash.

Hazardous Waste

Hazardous waste requires proper off-site disposal. Hazardous waste may include unused chemicals or specific chemical spills that are known to be hazardous as defined in the Colorado Hazardous Waste regulations. Please contact the Airport Environmental Specialist if you suspect you have hazardous waste that requires disposal.

Universal Waste

Universal waste is waste that can be recycled instead of being managed as a hazardous waste. Universal waste includes electronic waste (electronic devices and components); mercury-containing lighting (fluorescent lamps) and mercury-containing devices (thermostats); waste batteries, aerosol cans containing hazardous waste; and specific pesticides. Universal waste lamps for recycling are located in the double-doored ramp level offices between gates 5 and 7.

Special Waste

Special waste consists of waste such as used absorbent from spills that is usually considered non-hazardous. Special waste is typically disposed to a landfill with the completion and approval of a waste profile via Waste

Management. Containers with special waste must be properly labeled including drums that are empty. Please contact the Airport Environmental Specialist for profile approval and waste manifests.

RECYCLING REQUIREMENTS

Recyclable Materials

The Airport, as part of the City of Colorado Springs contract with Waste Management, offers a single-stream recycling program where all recyclables can be commingled into one container and do not need to be separated. The following materials are recyclable: plastic bottles (#'s 1-7), aluminum cans, aluminum foil and bakeware (with no food residue), steel and tin cans (soup can, veggie cans, coffee cans, etc.), corrugated cardboard, paperboard, office paper, magazines, newspaper, glass bottles and jars. Please ensure recyclables are not kept in plastic bags as the bags can become entangled in the recycling equipment. Also, the following items need to be kept out of the recycling bins as they can contaminant the bin: trash items including food waste, foam containers, used paper product (plates, cups, paper towels, etc.)

Recycled materials in the blue recycling containers located in the passenger areas or in the blue recycling bins in offices, break rooms, etc. need to be disposed of in the green recycling dumpsters. There are recycling dumpsters located on the west ramp north of gate 3 and along the concrete wall on the west loading dock area.

Please contact the Airport Environmental Specialist with any questions on what can be recycled.

DOCUMENTATION

- Waste logs
- Waste manifests

TRAINING

- Annual Environmental Procedures training includes waste management and recycling procedures

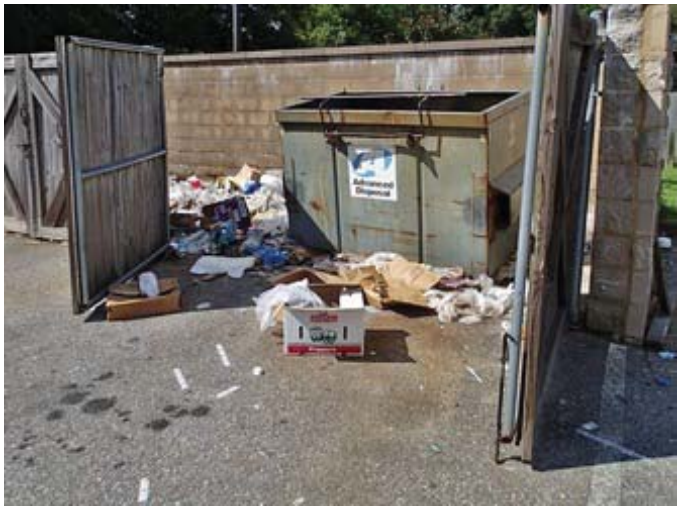
REGULATIONS

- 6 CCR 1007-2 CO Solid Waste Regulations
- Guide to Generator Requirements of the Colorado Hazardous Waste Regulations
- Colorado Hazardous Waste Regulations under 6 CCR 1007-3
- 6 CCR 1007-3, Part 261 State RCRA Regulations
- 49 CFR 100 – 185 DOT Regulations

Environmental Procedures Training

Solid Waste Management

- Proper waste management
- May come across items that require special disposal and cannot be tossed in the trash



Solid Waste or Special Waste?

- Special waste may be hazardous or non-hazardous and requires special disposal
  - Vendor pickup
    - Universal waste
    - Sand/grease trap waste
    - Oil/water separator waste
  - Profiled and taken to landfill (coordination required) – contact Kris
- Please make sure to forward all waste manifests

What's Recyclable?

Recyclable

- Glass
- Plastic
- Aluminum
- Tin
- Cardboard
- Office Paper including coated paper
- Magazines/books
- Junk mail
- Envelopes
- Brochures
- Manuals with glue bindings
- File folders

Trash These

- Plastic bags
- Styrofoam
- Candy wrappers
- Used paper products – paper plates, cups, paper towels, etc.
- Wax paper
- Food waste

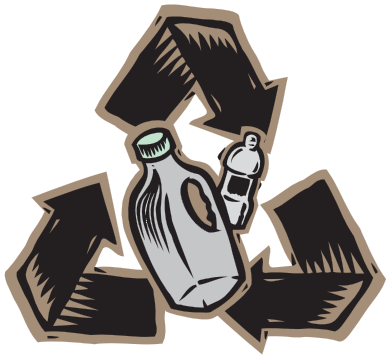
Waste Management Facts

- In a lifetime the average American will throw away 600 times the amount of his or her adult weight in garbage. For example, a 150 pound adult will leave a trash legacy of 90,000 pounds.

Source: https://www.wm.com/location/california/sacramento-valley/winters/facts/index.jsp

Recycling Fact

- A recycled soda bottle can be made into a detergent bottle, egg carton, paint brush, etc., but cannot be remade into another soda bottle.
- Only about 1% of all plastics are currently recycled



http://earth911.com/for-students/we-can-waste-wise/

Waste Disposal Fact

- North Americans throw away 2.5 million plastic bottles every hour

http://www.green-networld.com/facts/waste.htm

REVIEW – Trivia 3

- How many plastic bottles are thrown in the trash each day?

A. 250,000
B. 500,000
C. 5 million
D. 10 million
E. 60 million

Quiz – Question 14

- **What item cannot be placed in the recycling roll off containers on the east or west compactor areas?**

A. Tin cans
B. Plastic bags
C. Colored paper
D. Cardboard
E. All of the items are acceptable

Trivia: The average American office worker goes through around 500 disposable cups every year.

REVIEW – Question 14

- **What item cannot be placed in the recycling roll off containers on the east or west compactor areas?**

A. Tin cans
B. Plastic bags
C. Colored paper
D. Cardboard
E. All of the items are acceptable

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WAYNE COUNTY AIRPORT AUTHORITY

Wayne County Airport Authority
Workplace Recycling Policy – December 2015

I. Purpose

The Wayne County Airport Authority expects its employees to recycle paper, plastics, and other materials whenever possible and provides containers for this purpose. This document describes the various materials that can be recycled, where the appropriate containers are located within various WCAA facilities, and the reporting that will be provided to WCAA employees to document the quantities of material recycled. This program seeks to reduce waste and to help conserve natural resources.

II. Materials That Should Be Recycled

- Office Paper, Newspaper & Magazines
- Cardboard
- Plastic Bottles
- Batteries
- Toner Cartridges
- Scrap Metal

III. Location of Recycling Program Collection Containers

The attached map displays the Smith Building locations of the containers to be used to recycle the above materials. If you would like an additional container(s), or you would like to move a container to a new location, please contact Denise Quiroz: 942-3674.

IV. Program Specifics

- **Office Paper, Newspaper & Magazines:**
  - **a.** All office paper (white, colored, glossy, etc.) newspapers and magazines can be recycled together.
  - **b.** Confidential documents placed in locked recycling bins will be shredded. Keys to unlock bins (to facilitate recycle of large, bulky documents) are available in the Procurement, Payroll, Human Resources, and E&S Offices.
  - **c.** Employees may use small blue recycling bins at their desk or nearby work spaces for paper recycling. It is the employee's responsibility to transfer contents of these small bins into the proper larger recycling bins. Staples should be removed if possible.
  - **d.** No paper food wrappers should be included in the recyclables. All recycled paper items should be free of food debris.
- **Cardboard:**
  - **a.** Cardboard to be recycled should be placed in the large cardboard receptacles in the Ticket Lobby Level of the Smith Building (near the freight elevator). Alternately, cardboard boxes can be broken down and stacked by the freight elevator doors on the Mezzanine and Third Floor levels of the Smith Building; janitorial staff will take them to the Lobby Level recycling area.
  - **b.** Cardboard boxes generated at other WCAA buildings should be broken down and stacked next to the Paper Recycling bins in these buildings.
  - **c.** All cardboard should be free of food debris. Cardboard food containers, such as pizza boxes, should not be included in the recyclables.

- **Plastic Bottles:**
  a. Plastic bottles with the numbers 1, 2, 5, and 7 can be recycled. Recyclable plastics have a stamp with the triangular recycling symbol that encloses one of the above numbers. Examples of the various types of recyclable plastic bottles are shown below:

Number	Material Name	Example
1	Polyethylene, PET, PETE	Water bottle, soft drink bottle
2	HDPE, high density polyethylene	Milk jugs, detergent bottles
5	Polypropylene	Ketchup, syrup bottles
7	Other mixed plastics	Squeeze bottle

  b. All recyclable plastic bottles should be rinsed (if not water bottles), free of debris, and placed into the recycle bins labeled "Plastic Bottles". All of the above types of plastic bottles can be mixed together.

- **Toner Cartridges:**
  a. Toner cartridges in copy machines that are serviced by Priority Systems, Inc. are recycled by that firm.
  b. For other copy machines, spent toner cartridges purchased through Staples should be returned for recycle using free shipping boxes that are available from the Staples catalog.

- **Batteries:**
  a. A container for depleted alkaline batteries are located in the Smith Building Mail Room, on the Mezzanine Level.
  b. When a battery container is full, put a Work Order in to the Maintenance Department and the batteries will be taken to a central battery recycling collection point in Building 703. A vendor removes and recycles the batteries collected at Building 703.
  c. A container for recycling radio batteries, rechargeable batteries, and cellphones is located in Technology Services on the Ticket Lobby Level of the Smith Building. Technology Services is responsible for the recycling of these batteries.

- **Metal:**
  If you have a significant quantity of metal that needs to be recycled, please contact Sara Kaplan, WCAA Sustainability Administrator at (734) 942-2269.

V. Reporting

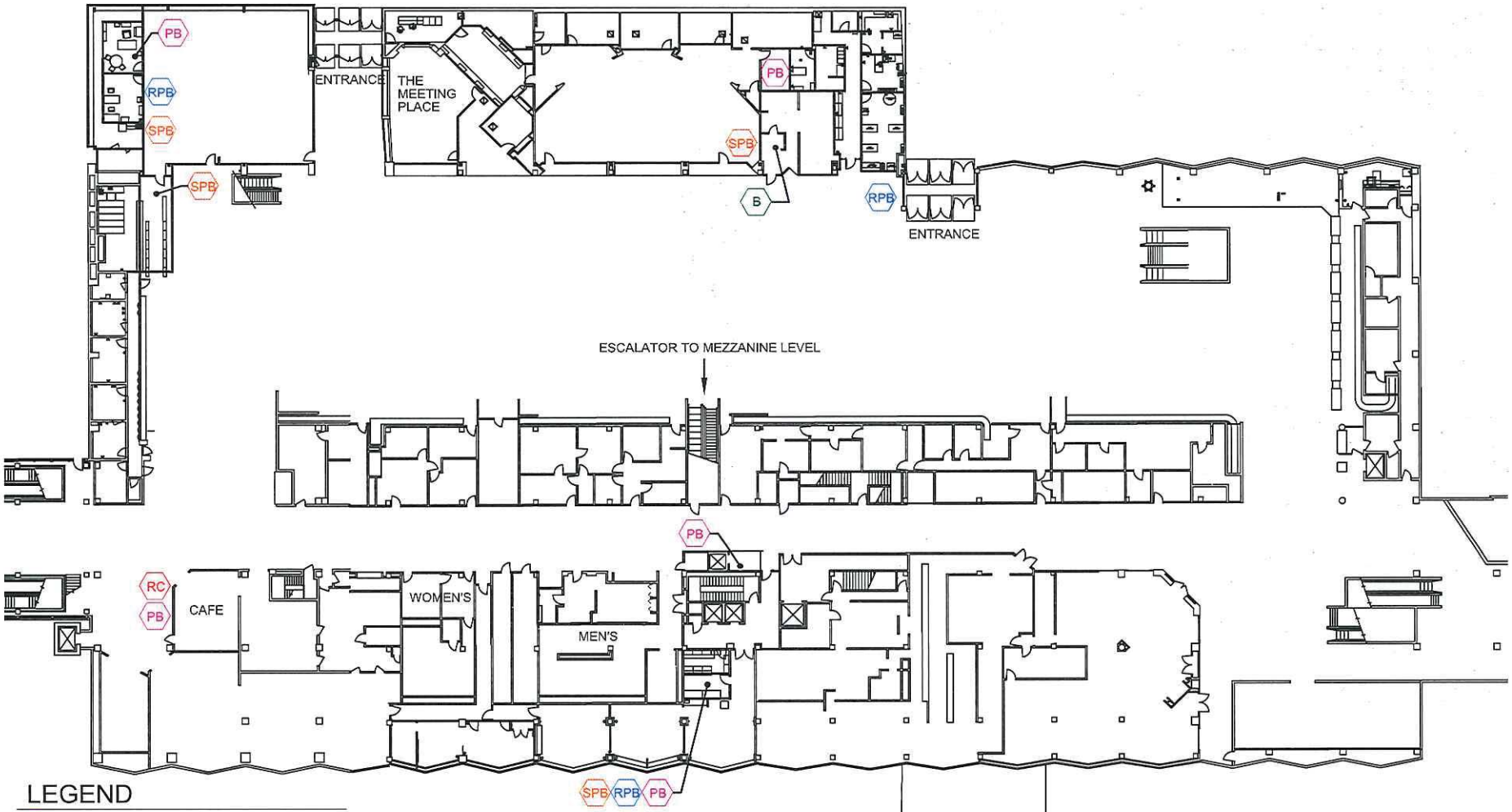
The WCAA Department of Environment & Sustainability (E&S) will provide quarterly reports to WCAA staff documenting the quantities of all the above materials that were recycled the previous quarter.

VI. Miscellaneous

- All Wayne County Airport Authority employees are expected to comply with this recycling program and to maximize opportunities to recycle whenever possible.
- All recycling bins are labeled indicating the materials that should be placed in them. Please follow these recycling program guidelines carefully and put the correct materials in the proper recycling containers because when recycled material is contaminated, it is no longer able to be recycled and must be disposed of as regular trash.

  Please avoid placing refundable bottles and cans in the trash, there is a box for returnable bottles and cans in the Administration kitchen area.

This policy may be amended and additional materials may be added in the future.



LEGEND

- RPB ROLLING PAPER BIN
- SPB STATIONARY PAPER BIN
- PB PLASTIC BOTTLES
- RC REFUNDABLE CANS
- B BATTERIES

LC SMITH BUILDING - MAIN LEVEL

SCALE: 1/32" = 1'-0"

North Arrow / Graphic Scale	Airport Information	BY	DATE	REVISION
N 0 32 64 GRAPHIC SCALE IN FEET	FAA Identifier: DTW Existing Airport Reference Point LAT 42° 12' 44.751" LON 83° 21' 12.216" Airport Elevation : 646.0' MSL			

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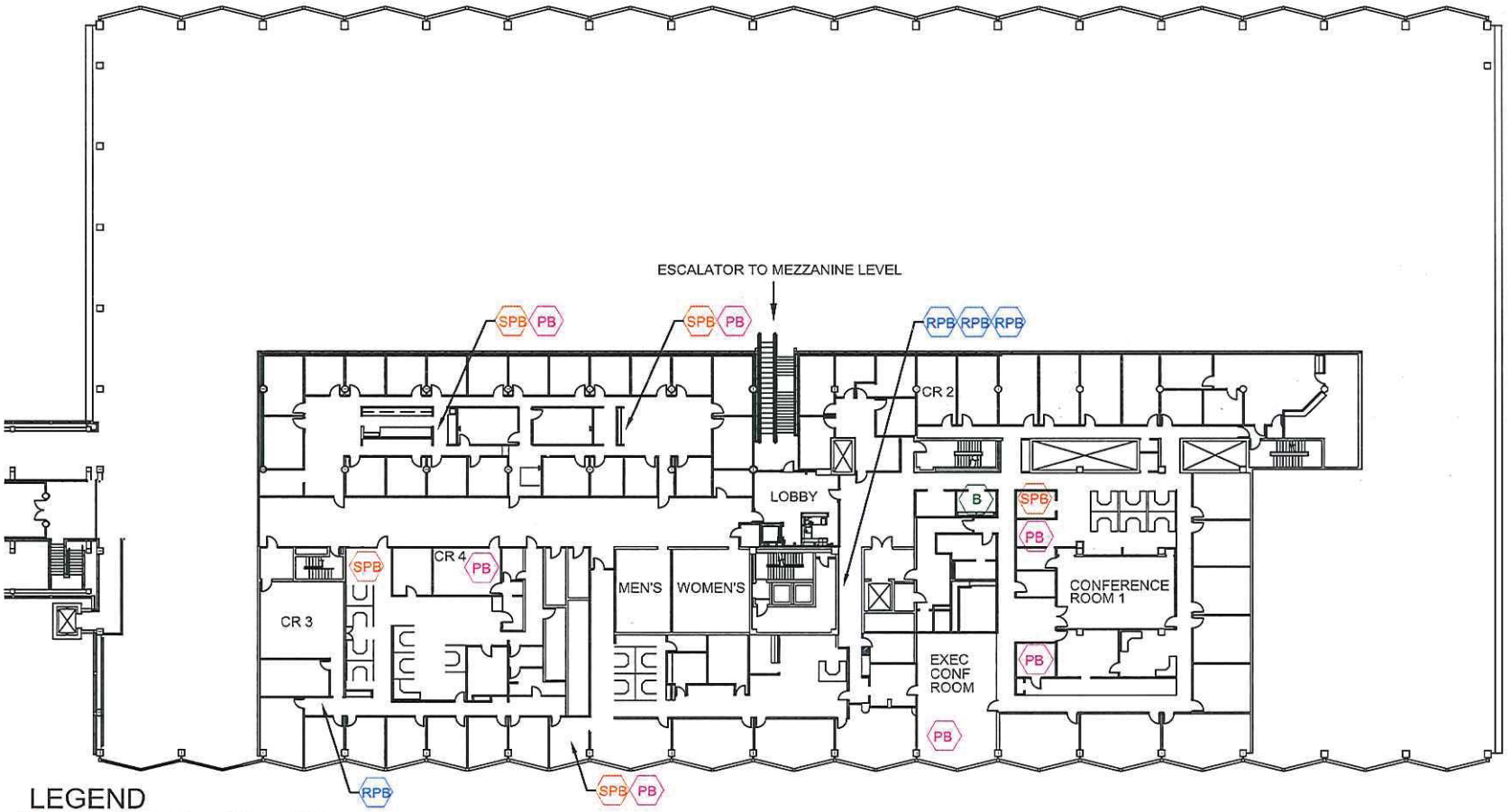
L.C. SMITH BUILDING
RECYCLE BIN LOCATIONS

1/3

Drawn By: ____ Date: 12-16-15
Approved By: ____ Job No: ____



LEGEND

- RPB ROLLING PAPER BIN
- SPB STATIONARY PAPER BIN
- PB PLASTIC BOTTLES
- RC REFUNDABLE CANS
- B BATTERIES

LC SMITH BUILDING - MEZZANINE LEVEL

SCALE: 1/32" = 1'-0"

North Arrow / Graphic Scale	Airport Information	BY	DATE	REVISION
N; 0 32 64 GRAPHIC SCALE IN FEET	FAA Identifier: DTW Existing Airport Reference Point LAT 42° 12' 44.751" LON 83° 21' 12.216" Airport Elevation : 646.0' MSL			

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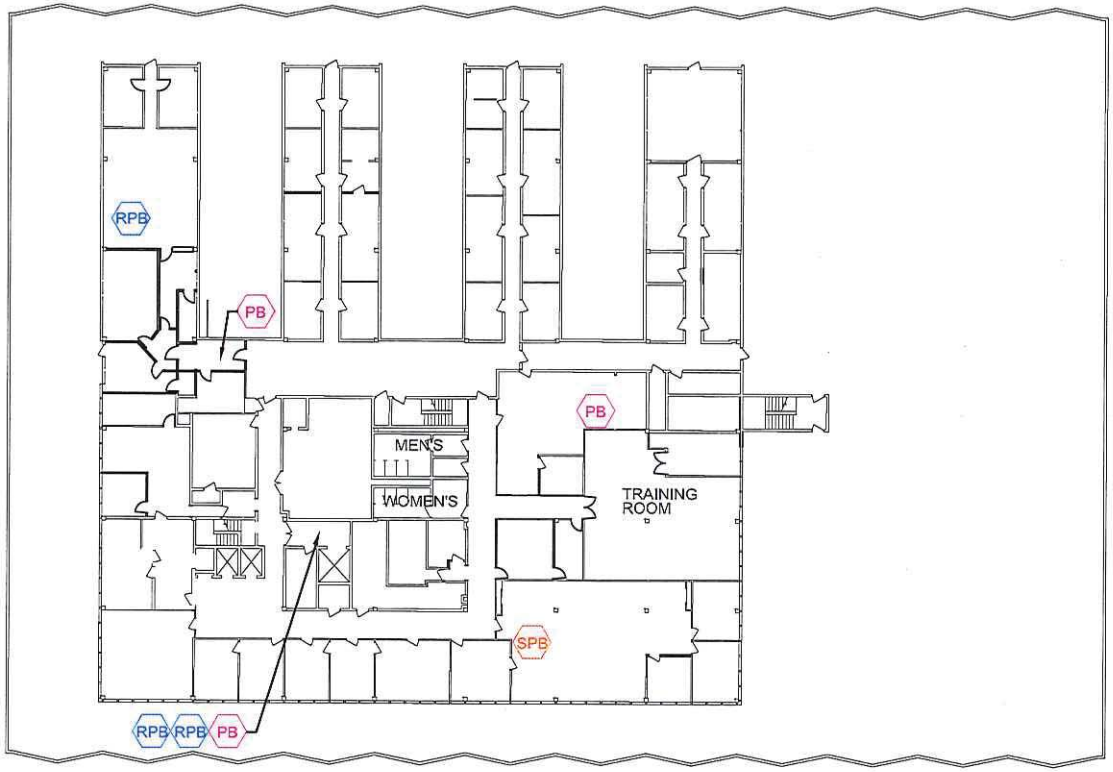
L.C. SMITH BUILDING
RECYCLE BIN LOCATIONS

2/3

Drawn By : ____ Date : 12-16-15
Approved By: ____ Job No: ____



LEGEND

- RPB ROLLING PAPER BIN
- SPB STATIONARY PAPER BIN
- PB PLASTIC BOTTLES
- RC REFUNDABLE CANS
- B BATTERIES

LC SMITH BUILDING - THIRD FLOOR

SCALE: 1/32" = 1'-0"

North Arrow / Graphic Scale	Airport Information	BY	DATE	REVISION
N 0 32 64 GRAPHIC SCALE IN FEET	FAA Identifier: DTW Existing Airport Reference Point: LAT 42° 12' 44.751" LON 83° 21' 12.216" Airport Elevation : 646.0' MSL			

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L.C. SMITH BUILDING
RECYCLE BIN LOCATIONS

3 / 3

Drawn By: _____ Date: 12-14-15
Approved By: _____ Job No: _____

PROCEDURE PORT-WIDE WASTE MANAGEMENT AND MINIMIZATION	Procedure No.: PR-POR-WST-002
	Original Date: March 19, 2014
	Revision Date: September 01, 2015
	Page: 1 of 10
	Owner: Land Quality Environmental Manager

1. PURPOSE

The purpose of this procedure is to ensure solid and hazardous waste, recycling and reuse streams are efficiently managed Port-wide in a manner that is in compliance with all legal and regulatory requirements, striving for waste minimization and moving toward zero waste in alignment with Port policy.

2. SCOPE

This procedure covers all waste & recycling streams and surplus for which the Port is responsible generated at Port of Portland facilities and operations, as well as construction waste, illicit dumping and/or abandoned waste left for the Port to manage or coordinate proper disposal. This procedure also includes waste managed by the Port on behalf the public and tenants as part of lease agreements.

Attachments to this procedure address site/operation-specific waste stream handling guidance. Activity-specific work instructions may also exist for specific activities – see cross references at the end of this document and/or access related documents in the Environmental Library on Navigator.

The Port also has a waste minimization outreach team and a program for tenants and customers for which the Port does not manage waste. This team encourages solid and hazardous waste minimization practices with a goal of moving toward zero waste.

3. DEFINITIONS

The following definitions shall apply.

3.1 CES

Community Environmental Services – a team of PSU college interns hired by the Port to coordinate and track and promote various aspects of the Port's Waste Minimization Program; a key component of the Port's Waste Minimization Team.

3.2 Hazardous Waste

- Listed waste: contains constituents from any of four waste lists in the federal regulations: non-specific sources ("F" wastes), specific sources ("K" wastes), acutely hazardous wastes ("P" wastes), or discarded commercial chemical products ("U" wastes). States can define additional state-specific hazardous wastes.
- Characteristic waste: exhibits one or more of four hazardous waste characteristics: ignitable, corrosive, reactive, or toxic.

3.3 MFM

MFM means Marine Facility Maintenance.

3.4 MX

MX means Aviation Maintenance (PDX, HIO, TTD).

3.5 OSHA

OSHA means Occupational Health and Safety Administration.

3.6 PCB

PCB means polychlorinated biphenyl.

3.7 Property Maintenance

Property Maintenance – also referred to as Landscape Facility Maintenance or LFM.

3.8 RCRA

RCRA means Resource Conservation and Recovery Act – Federal waste management regulations.

3.9 Solid Waste

Solid waste means any discarded material, abandoned, recycled, or considered inherently waste-like. Further details and exclusions are defined under 40 CFR 260.2.

3.10 Universal Waste

Universal waste means specified common waste streams that may otherwise be considered hazardous, that have different management standards in order to improve recycling and recovery and reduce regulatory burden on businesses that generate these wastes (batteries, PCB-containing light ballasts, agricultural pesticides, fluorescent and high intensity discharge lamps, thermostats, etc.)

3.11 Zero Waste

Zero waste is defined by EPA as 90% or greater landfill waste diversion.

Additional and expanded definitions are available in the Appendix of the EMS Manual.

4. RESPONSIBILITY

4.1 Environmental Affairs and EMS Program Manager is responsible for working with the Land Quality Environmental Manager to perform a periodic review of the contents and implementation of this work instruction and implement updates or corrective actions when needed.

4.2 Foreman and supervisors – designate waste & recycling handling instructions on work orders, preventative maintenance (PMs), or like documents that initiate work by maintenance staff, and consider waste management implications when specifying products and/or making purchasing decisions. Contact Environmental Operations for specific guidance or assistance with waste management and minimization requirements.

4.3 Land Quality Environmental Manager and staff (including onsite contractors such as the CES team) is responsible for providing expertise and guidance regarding waste management and minimization; coordinating management and facilitating the testing and disposal of potentially hazardous, special and universal wastes; coordinating management of solid waste streams; and tracking waste stream management costs and volumes by weight.

4.4 Maintenance, Janitorial, Distribution and Facilities Management Staff - includes PDX Maintenance, GA Maintenance, Marine Facility Maintenance (MFM), Property Maintenance (LFM), HQ Distribution and Facilities Management and Electrical Shop staff - are responsible for:

4.4.2 Managing waste & recycling streams based on the location where the waste is generated in the manner compliant with regulations and Port policy/procedures, facilitated by Environmental Operations staff.

4.4.3 Ensuring equipment (such as equipment containing oil or ozone depleting

substances) is tested and appropriately serviced before being transferred, disposed of, or put into the surplus pool, and

4.4.4 Working with the Land Quality Environmental Manager on recycling, reuse or disposal of materials with no saleable value.

4.5 Port Managers and Staff – manage waste with a goal of eliminating hazardous waste, landfill diversion and waste minimization; consider waste implications in specifications and purchasing.

4.6 Waste Minimization Team – are responsible for delivering waste management and minimization outreach as well as waste audits, tracking and reporting.

5. PROCEDURE

5.1 **All wastes and recyclables generated by Port operations** will be managed at locations established by the Port of Portland under the oversight of the Land Quality Environmental Manager and staff in alignment with the Port's Waste Minimization Policy.

- Identify, quantify, characterize and document each waste stream to determine if it is a hazardous waste, special waste, or non-hazardous waste;
- Work to reduce waste at the source through sustainable procurement and minimize waste through reduction, reuse and recycling;
- Find markets for solid waste streams that cannot be reduced;
- Ensure appropriate labeling, storage and timely management;
- Ensure all wastes are handled in a safe and legal manner and are recycled or disposed of properly.
- Promote the purchase of recycled and reused materials when making purchasing decisions.

5.1.1 For assistance with understanding hazards, handling, storage, labeling and/or disposal requirements, contact Environmental Operations or the Waste Minimization Team (CES).

5.1.2 The foreman and supervisors will designate waste handling instructions on work orders, preventative maintenance (PMs), or like documents that initiate work by maintenance staff as well as consider waste management implications when specifying products or making purchasing decisions.

5.2 **General Waste Handling Guidance by Waste Type:**

5.2.2 **Non-hazardous wastes(s):** Wherever feasible, we encourage waste minimization and landfill diversion by reducing waste at the source, product take-back agreements, and identifying opportunities for reuse and recycling. Periodically, the Port's Waste Minimization Team conducts waste audits in an effort to identify opportunities and track improvements over time.

5.2.3 **Special wastes**: some solid wastes, while not considered hazardous under RCRA, still require special handling, permits, shipping manifests, and recordkeeping. Examples include: used oil, bead blast that isn't hazardous,

e-waste, storm sewer or trench cleanout, sweepings collection or the solids from runway rubber removal and some off-spec commercial chemical products.

5.2.4 **Hazardous and unknown materials:** require special handling, labeling, permitting, storage, and timely disposal. References to determine if a waste is hazardous (listed or characteristic) include Safety Data Sheets (SDS), Technical Data Sheets, Niosh Pocket Guide to Chemical Hazards, and/or the Emergency Guidebook to understand hazardous materials and associated labeling, storage, handling and disposal requirements as well as incompatibility considerations.

- o Ensure the container compatible with the intended contents and is properly labeled. An accumulation start date should be included on the label when the first waste is deposited into the container.
- o Ensure the lid is securely closed except when adding or removing waste.
- o Ensure incompatible wastes are managed and stored separately.
- o Arrange for proper disposal in a timely manner. Frequency of hazardous waste disposal is regulated by generator status. Specific training is required for staff completing shipping manifests for hazardous waste. Manifests must be tracked to ensure the specified disposal site received the waste and actions taken if a signed copy of the manifest indicating receipt of the shipment is not returned in a timely manner.
- o The Port tracks all hazardous waste disposal to demonstrate generator status and to identify opportunities for improved management and minimization. Generator status dictates the frequency at which hazardous waste must be disposed, documentation, training, and other requirements.
- o For assistance with managing hazardous wastes or unknown materials that may be hazardous, and arranging for pick-up and disposal contact Environmental Operations.

5.2.5 **Universal waste:** similar to hazardous wastes, universal wastes must be managed in containers, compatible with the waste, labeled with “Universal Waste” and the contents and dated when the first waste materials were deposited, with lids securely closed except when adding or removing materials. The waste must be managed in specific accumulation area. Waste volumes by weight are tracked by the Waste Minimization Team. Procedures pertaining to specific waste stream handling – such as batteries, are outlined in operations-specific work instructions and/or the operations area summaries associated with this procedure.

5.3 **Common Specific Waste Stream Management:**

5.3.2 **Abandoned waste and illicit dumping**: Work with Metro’s Regional Illegal Dumping (RID) Patrol team to address abandoned waste and illicit dumping on Port properties, adjacent properties/roadways or properties maintained by the Port. For areas outside of the Metro service area, contact Environmental Operations.

5.3.3 **Aerosol cans and puncturing units:** Un-punctured aerosol cans are

handled as hazardous waste. When cans have been properly punctured and the residues drained, they can be placed in the appropriate scrap metal recycling bin. The drained liquids must be contained and managed as hazardous waste. (Responsibility: Maintenance Staff). Designated Environmental Operations staff checks the satellite collection station periodically (frequency depends on location) for added contents (weight), and, when full, coordinates testing, staging and disposal. Ensure the puncture station filter is maintained and changed as needed. When changing the filter, evaluate for hazardous characteristics prior to disposal.

5.3.4 **Asbestos:** historically, asbestos was commonly used in a variety of construction products including insulation, pipe lagging, ceiling tiles, floor coverings, and other materials. It is a known carcinogen and requires special handling and disposal. Specific OSHA regulations and training requirements exist for workers involved in asbestos projects or that have the potential for asbestos exposure. Generally, the Port hires third-party contractors to identify, manage and remove asbestos containing materials. Asbestos-containing materials are more commonly found in structures and equipment predating 1980. If work is planned on a structure or equipment that may have asbestos containing materials, contact Environmental Operations (Land Quality Environmental Manager).

5.3.5 **Batteries**: Batteries contain hazardous materials and are handled in accordance with Universal Waste rules. Segregate and store spent batteries by type in properly labeled (including accumulation start date), lidded containers. In general, the Port collects and recycles all batteries. The Port handles lead-acid batteries in accordance with 40 CFR 266.8 (Subpart G) which makes them exempt from the hazardous waste regulations if they are reclaimed. See area specific guidance (attached to this document) for details on collection areas and practices specific to the types of batteries collected for recycling and the associated collection areas.

Alkaline batteries may be disposed of in general trash, however the Port generally prefers to collect and recycle alkaline with the general battery collection.

5.3.6 **Bulbs and Lamps:** Fluorescent tubes, HIDs, LEDs, etc. Taken to designated collection areas (see attachments for details pertaining to Port operating areas) for recycling by approved vendor. Incandescent, halogen, and LED lamps do not contain mercury and may be disposed as normal trash, however the Port typically recycles these with other lamps. Bulbs are staged in approved, labeled (including accumulation start date) containers for recycling with the lids maintained securely closed except when adding lamps. Pick-up coordinated by Environmental Operations staff.

5.3.7 **Cardboard and Paper:** Recycle all cardboard and paper products where feasible.

5.3.8 **Construction Debris**: By law, construction projects that meet a threshold cost are required to recycle materials. This is incorporated into the contractor agreement and includes monthly waste management reporting as well as a summary of waste generation and recycling at the end of the Port project. Materials that test as hazardous must be managed accordingly.

5.3.9 **Empty Drums:** all original labels should be marked through and the drums should be marked with an "Empty" or "MT" label and moved to an empty drum collection area. It is best practice to also label the empty drum collection area. Drums damaged or worn beyond reusability should be removed from service and properly recycled or disposed of.

5.3.10 **Emergency and spill cleanup materials**: Any leaks and spills shall be reported to Environmental Operations and cleaned up per the relevant operations Spill Prevention, Control and Countermeasure Plan (SPCC) and the Spill Response Plan. Handling and disposal requirements may vary based on the materials, contact Environmental Operations (Land Quality Environmental Manager) for assistance.

5.3.11 **E-Waste:** E-waste is comprised of unwanted electronic equipment including computers, mobile phones, printers, office electronic devices, televisions and cathode ray tube (CRT) monitors. E-waste is managed as potentially hazardous waste due to the common presence of heavy metals such as lead, cadmium, and mercury. Generally, e-waste is managed and tracked through the Port's IT department. Port Distribution coordinates recycling with the designated vendor. E-waste is also collected at the Hazardous Materials Building for recycling and appropriate disposal through contracted vendors. Periodically, Environmental Operations will coordinate a special collection event to manage tenant e-waste and other recycling.

5.3.12 **Food Waste**: food waste should be disposed of in designated compost bins (where available) or in disposal bins that are on a regular (weekly) pick up schedule. Ensure lids remained closed except when adding or removing materials.

5.3.13 **General Refuse:** the Port has a goal of zero waste (90% or greater landfill waste diversion) Port-wide. To ensure the Port achieves and maintains this goal, ensure only non-recyclable, non-hazardous and/or other wastes with no special management requirements (universal/special wastes) end up in the general refuse. Recycle and manage these other items as designated in this procedure. Ensure dumpster lids remained closed except when adding or removing materials. For assistance, contact Environmental Operations.

5.3.14 **Materials past useful life:** damaged or worn materials - beyond reusability should be properly recycled or disposed of.

5.3.15 **Metals/Scrap:** Collect all metals for recycling. When feasible, segregate non-ferrous metal waste streams to improve revenue/cost recovery. Aerosol cans that have been properly punctured and drained can be included in the scrap metal recycling stream. Ensure dumpster lids remained closed except when adding or removing materials or the bins are covered in order to protect stormwater.

5.3.16 **Painted surfaces, paint chips and paint containing heavy metals:** generally, the Port hires third-party contractors to identify, manage and remove paint containing heavy metals (such as lead based paint). Because the management threshold for lead-based paint is low and the Port owns and operates a variety of older facilities and equipment, our standard practice is to treat all painted surfaces as if paint containing heavy metals is present. If work is planned on a structure or equipment, contact Environmental

Operations (Land Quality Environmental Manager).

5.3.17 **PCB wastes:** Older electrical equipment, such as transformers, capacitors, electric motors, and light ballasts may contain PCBs. All PCB-containing equipment should be labeled as such, but any equipment older than 1980 should be tested prior to disposition or treated as hazardous waste. Any light ballasts not specifically labeled as "No PCBs" should be handled as PBC containing materials and managed as hazardous waste.

5.3.18 **Plastics:** Collect all plastics that are accepted for recycling. When feasible, segregate plastics waste streams to improve recycling opportunities/ costs/ recovery for these waste streams.

5.3.19 **Scrap Metal:** Collect all metals for recycling. When feasible, segregate non-ferrous metal waste streams to improve revenue/cost recovery. Aerosol cans that have been properly punctured and drained can be included in the scrap metal recycling stream. Ensure dumpster lids remained closed except when adding or removing materials or the bins are covered in order to protect stormwater.

5.3.20 **Shop Rags/Wipes:** Rags are centrally collected and managed based on generator knowledge at each site. Used rags are generally collected in 55-gallon metal drums at the site of use, and then full drums are delivered by maintenance to the Hazardous Materials (HazMat) Building for any necessary testing and coordination of disposal. Used shop rags are currently disposed at an approved landfill under permit as special waste. We will continue to evaluate opportunities to minimize this waste stream through procedures or laundering services that meet the Port's needs.

5.3.21 **Styrofoam:** look for opportunities to recycle and reuse Styrofoam where feasible. Vendors periodically accept block Styrofoam, depending on the market. Styrofoam peanuts are often accepted for reuse at post-office-box and mailing retail stores such as UPS. Contact the Waste Minimization Team for assistance.

5.3.22 **Tires:** transfer used tires to recycling staging areas (designated in operations area attachments to this procedure). Ensure tires are properly stored, covered and protected from stormwater. A facility that stores more than 99 tires onsite must have a storage site permit, unless granted a beneficial use permit by DEQ. Generators are allowed to haul scrap tires generated at their facility without a permit, but they must maintain documentation of their disposal. As a best practice, label the area where used tires are collected. Maintenance Staff or Environmental Operations Staff coordinates recycling of used tires.

5.3.23 **Used oil and oil containing equipment:** generally, the Port collects used oil for recycling (energy recovery) through a licensed vendor or as onsite fuel space heating (heat recovery). Some Port maintenance shops have used oil burners used for heating. All used oil should be tested for likely hazardous contaminants (such as chlorinated solvents and heavy metals) prior to transfer for recycling, disposal or use in shop heaters. Records of the tests should be maintained for at least three years. Used oil that tests as hazardous, should be managed as a hazardous waste. Used oil volumes should also be tracked by their final disposition (recycling, heat recovery,

disposal). Ensure all used oil collection containers, including catch pans that contain oil overnight, are labeled "used oil."

To maintain used oil transporter status – for transfer of used oil to maintenance shops for heating – the Port must submit an Annual Hazard Waste Report to Oregon DEQ (due March 1 of each year). This is required to maintain transporter registration – regardless of generator status.

When the Port divests of equipment that it no longer needs through the government surplus system or, when there is limited or no value, through donation or recycling, any oil containing electrical equipment should be tested for PCBs prior to transfer/disposal. For all surplus or salvage equipment or materials see the Port Surplus and Salvage Materials procedure (PR-POR-WST-001).

5.4 **Satellite accumulation** for hazardous wastes is allowed near the workstation where the waste is being generated and in control of staff aware of proper spill response actions. The container must be labeled and securely closed except when adding or removing wastes. No more than 55 gallons can be accumulated, and once the 55 gallon limit is reached, the drum must be moved to the hazardous waste storage area within three days.

5.5 **Storage:** Generally, it is good to segregate wastes and recycling whenever possible to improve opportunities for recycling and cost recovery. In addition, all wastes should be stored in doors, under cover or in covered containers. Hazardous wastes and universal wastes have more specific requirements for storage and disposal:

- Wastes must be stored in tanks or containers with the lids securely closed unless adding or removing waste;
- Dumpsters should be maintained under cover or with the lids closed unless adding or removing waste.
- Containers must be in good condition and compatible with the wastes
- Containers must be managed to prevent rupture or damage
- Drums must be appropriately labeled indicating contents
- Incompatibles must be separated
- Drums cannot be stacked over 2 drums high
- Aisle space must be adequate to allow full inspection of each container with documented weekly inspections
- Containers must be labeled "Hazardous Waste" or "Universal Waste" as applicable to the contents and the date waste was first placed in the container and visible as well as readable.
- "No Smoking" signs must be posted if ignitable or reactive wastes are being stored.

5.6 **Shipping:** Wastes, such as hazardous, universal, or special wastes, that require manifests or special shipping papers must be prepared and signed by staff with

appropriate training. Generally Environmental Operations Staff fulfill this role.

5.7 **Record Keeping:** provide an original or a legible copy of all shipping papers (weight tickets, manifests, bills of lading, certificates of recycling or other) to the Environmental Operations Staff for waste/recycling tracking for any wastes shipped or taken offsite. This information is used to demonstrate compliance as well as to identify opportunities for improved management and reduced waste. Records should be maintained at the facility where the waste was generated.

5.8 **Training:** from a regulatory perspective, training requirements are dictated by generator status and the material being managed. Port hazardous waste operations are generally classified as conditionally exempt small quantity generators (CESQG). Depending on the employee's duties, job-specific training may be required to comply with EPA, DEQ, DOT, and OSHA regulations with respect to handling, storing, and transporting hazardous materials and wastes. In order to maintain awareness and implement best practices, the Port also strives to reach all employees with communications related to waste management and minimization as well as providing periodic training and outreach.

5.9 Additional detail and guidance related to typical waste streams generated by specific Port operations is provided in attachments to this procedure and/or in operations/activity-specific work instructions.

5.10 **Any questions regarding handling, storage and disposition of waste or recyclable material** should be directed to the Environmental Operations Department, Land Quality Environmental Manager, Waste Minimization Team (CES) or staff with waste management and minimization responsibilities.

6. VERIFICATION AND CORRECTIVE ACTION

6.1 This work instruction is to be reviewed at a minimum every two years by the Land Quality Environmental Manager and EMS Program Manager to verify the purpose and scope is applicable to Port needs and the steps within adequately support the purpose and scope. If deficiencies are discovered, corrective action will be taken.

6.2 Port conformance with this procedure will reviewed on a periodic basis as part of the environmental audit process. If nonconformance is discovered, corrective action will be taken.

7. RELATED POLICIES, PROCEDURES, AND GUIDELINES

7.1 Policy 6.1.11, *Environmental Policy*

7.2 Policy 7.4.12, *Waste Minimization*

7.3 Policy 7.2.16, *Sustainable Procurement*

7.4 Abandoned Compressed Gas Cylinder Handling Work Instruction (WI-AVI-WST-005)

7.5 Decant and Solids Collection Box Management: Wastewater Batch Discharge and Solids Management Work Instruction (WI-MID-WTR-002)

7.6 Disposal of Chlorinated Water: Hydrant & Water Line Flushing Work Instruction (WI-POR-WTR-010)

7.7 Managing Ozone Depleting Substances Work Instruction (WI-POR-AIR-004)

7.8 Runway Rubber Removal Work Instruction (WI-AVI-WTR-004)

7.9 Port Surplus and Salvage Materials Procedure (WI-POR-WST-001)

7.10 Used Oil Management (Aviation) Work Instruction (WI-AVI-WST-004)

8. ATTACHMENTS

8.1 Waste Management at Aviation Operations and HQ: Portland International Airport (PDX), MX Operations, Central Utility Plant (CUP), and Building MX Shop, Troutdale (TTD) MX, Hillsboro (HIO) MX, and Port Headquarters (HQ).

8.2 Waste Management at Navigation Base and Dredge Operations

8.3 Waste Management for Marine and Industrial Development Operations and T6 ICTSI Leasehold and Electric Shop.

8.4 Waste Management – Tenants, Properties, Construction Waste, and Contaminated Sites

9. REVISION HISTORY

Procedure No. PR-POR-WST-002: Port-Wide Waste Management And Minimization	
Date	**Description of Modification**
Various: 2000 through 2013	Specific waste handling work instructions were developed for each waste stream and sometimes customized by location or facility.
03/19/2014	01/28/2014: this procedure updates and consolidates previous waste management work instructions by providing a Port-wide Procedure and general guidance that addresses waste management at the operational area or waste stream level. It also reflects changes in roles, responsibilities and titles as part of organizational changes. This replaces the following work instructions: • MID Waste Management Work Instruction WI-MID-WST-002 • T6 Electrical Shop Waste Management Work Instruction WI-MID-WST-003 • MID Hazardous Waste Management Work Instruction WI-MID-WST-004 This Port-wide procedure was reviewed and approved by the Environmental Core Team on March 19, 2014.
09/01/2015	Updated specific waste management guidance per recommendations from internal audit.

AIRPORT OPERATING PROCEDURES
Airports' Recycling Program

AOP NO: 50-06 Original Date: September12, 2014
SMF ☒
MHR ☒
SAC ☒

PURPOSE:

This Airport Operating Procedure (AOP) clarifies and standardizes the requirements and procedures for recycling for the Department of Airports ("Airports"), tenants, and on-site contractor operations.

POLICY STATEMENT:

In order to reduce waste disposal costs, conserve natural resources, and comply with the State laws and County ordinances, all staff with Airports, tenants, and on-site contractors are required to participate in the Airports Recycling Program. In addition to recycling, Airports staff, tenants, and on-site contractors are encouraged to reuse materials when possible to further reduce disposal costs, purchasing costs, and conserve natural resources.

PROCEDURES:

The protocols for recycling various types of materials are detailed here.

1) **Mixed Recyclables:** The Airports Recycling Program includes the following main categories of materials that can be mixed together in the recycling containers:
   - Paper: White, colored, copy, fax, newspaper, magazines, envelopes.
   - Cardboard and Paperboard.
   - Metals: Aluminum, steel, and bi-metal cans.
   - Glass: All colors of bottles and jars.
   - Plastic: All numbers 1-7 (see Attachment 1)

   Instructions for Mixed Recyclables:
   a) Refer to the Airports Recycling Program poster (Attachment 2) for a detailed listing of which materials can and cannot be placed in the mixed recycling containers.
   b) Empty liquids from recyclable containers before placing into recycling containers when possible.
   c) Rinse off food from recyclable metal, glass, and plastic containers before placing into recycling containers.
   d) Caps, lids and labels do not need to be removed from recyclable metal, glass, and plastic containers before being placed in recycling containers.

e) Staples, paper clips, binder clips, tape, rubber bands, sticky notes and tabs, and spiral binding do not need to be removed from paper items before being placed in recycling containers.
f) Recycling containers for mixed recyclables are located throughout the public and tenant spaces at SMF. A recycling container is located in the terminal lobby at SAC.
g) Recycling compactors and dumpsters are made available to tenants who subscribe to Airports recycling service.
h) All mixed recyclables shall be placed in a recycling container, collected and placed into a recycling compactor or dumpster.
i) Lids on all recycling dumpsters must be kept closed except while in use.
j) Do not overfill dumpsters. Contact the Maintenance Call Center at 874-0311 to report an overfilled dumpster.
k) Scavenging of recyclables is prohibited. In accordance with County code, it is unlawful (and unsafe) to collect or remove any salvageable materials from a recycling or trash collection container.
l) Do not place trash or other prohibited items (examples: appliances, batteries, biohazardous waste, construction and demolition debris, electronics, fluorescent tubes and bulbs, green waste, hazardous waste, ink and toner cartridges, non-empty aerosol cans, scrap metal, used antifreeze/coolant, used oil and oil filters, and used tires) into the containers, compactors, or dumpsters for mixed recyclables. These materials are collected through separate programs.

2) **Cooking grease:** Cooking grease collection containers are available to restaurant tenants in Terminal A, Terminal B, and Concourse B at SMF. Tenants not in SMF Terminal A, Terminal B, or Concourse B at SMF and at SAC are responsible for obtaining their own grease collection containers and service. It is required that fats, oils, and grease (known as FOG) are collected and not put down the drain.

3) **Green Waste:** Green waste includes grass, leaves, and tree and shrub trimmings. Grass clippings and leaves on turf shall be mowed using mulch mowers, leaving clippings on site as mulch, and not bagged or discarded. Suitable tree branches and shrub trimmings shall be chipped with wood chipper and recycled back as mulch for tree groves and other landscaped areas.

4) **Scrap metal:** Scrap metal consists of recyclable and non-recyclable materials left over from replacement parts of equipment or vehicles, building supplies, surplus materials or other non-usable metals. Scrap metal for recycling generated by Airports shall be stored in a designated area and container in Area 13 at SMF. Scrap metal generated by MHR, SAC, F72, and MCC may be transported to SMF's designated area. The proper storage and recycling of scrap metal generated by tenants shall be the responsibility of each tenant. Under no circumstance shall scrap metal be disposed of in the trash or recycling compactors or dumpsters.

5) **Used Tires:** Used tires are also known as waste tires, scrap tires, and junk tires. Used tires for recycling that are generated by Airports are stored in a designated area

in Area 13 at SMF. Used tires for retreading/recapping that are generated by Airports are stored in a designated location by the Airports Equipment Maintenance Shop at SMF. Used tires generated at MHR, SAC, F72, and MCC may be transported in an Airports vehicle to SMF. Up to nine (9) used tires may be transported in one vehicle at a time without registering as a Waste Tire Hauler. The storage and recycling of used tires generated by Airports tenants are the responsibility of each tenant. Used tires must be stored in a manner to prevent mosquito breeding. Refer to the Used Tire Storage poster for additional details.

6) **Construction and Demolition (C&D) Debris:** Commonly generated C&D debris includes, but is not limited to, asphalt, concrete, brick, wood, metal, wallboard, and roofing material. All C&D debris generated by any Airports project must be recycled. This includes C&D generated by Airports staff, tenants, and construction contractors.

7) **Universal Waste:** Commonly generated Universal Wastes generated by Airports include, but are not limited to, dry-cell batteries, non-empty aerosol cans, electronics, and mercury containing tubes and light bulbs.
   - **Batteries:** Battery collection procedures are detailed in AOP 10-09.
   - **Non-empty Aerosol Cans**
   - **Electronic Waste:** Commonly generated electronic wastes include, but are not limited to, computer equipment, cell phones, TVs, and DVD players. Electronic waste generated by Airports must be sent to County Surplus. Tenants are responsible for the proper disposal of electronic waste that they generate. Information on the most current local and free electronic waste recycling sites is available from Airports Planning and Environment Section.
   - **Mercury-Containing tubes and light bulbs**

8) **Hazardous Waste:** Some hazardous wastes are recyclable, such as used oil, used oil filters, used anti-freeze/coolant, and wet-cell lead-acid and sulfuric-acid batteries. These recyclable hazardous wastes generated by Airports are to be stored in their designated locations. Proper storage and disposal of all hazardous waste generated by tenants is the responsibility of each tenant.

RESPONSIBILITY:

It is Airports' responsibility to provide and maintain recycling infrastructure such as compactors, towable bins and other receptacles as required. It is the responsibility of all Airports, tenant, and contractor employees to comply with the collection procedures of recyclable materials.

It is the responsibility of the Planning and Environment Section to maintain the poster on mixed recyclable materials. Project Managers in Design and Development will incorporate these guidelines into construction plans and specifications. The Properties Section will incorporate these guidelines into lease and concession agreements. Facilities will incorporate these guidelines into the appropriate maintenance and operations agreements.

Airports tenants who subscribe to their own trash service with four (4) cubic yards or greater of garbage collection service per week are required to have a recycling program in accordance with the local ordinance. The ordinance allows businesses to either arrange for their trash hauler to also take their recyclables or self-haul their recyclables to a recycling facility. Tenants, who subscribe to their own trash/recycling service, are responsible to provide Airports with waste generation and recycling figures for each calendar year starting January 1, 2015.

It is the responsibility of Airport Concessionaires to comply with the procedures of this document as stated in Article 3, General Conditions, Trash and Garbage section of their agreement.

Concessionaires are responsible to take appropriate action in handling waste and recyclable materials for proper transportation and disposal away from Airport resulting from, or associated with, Concessionaire's use of their Leased Premises.

It is the responsibility of construction contractors to provide Airports with waste generation and recycling figures for each project starting January 1, 2015.

All tenants and on-site contractors are responsible for their own proper handling, storage, and disposal of prohibited materials.

_____ _____

Date John Wheat
Director of Airports

Author: Waste Management Working Group

Attachments: A (Plastics 1-7)
B (Airports Recycling Program poster)

Attachment A

Plastics 1-7

SMF Recycling Training

County Department of Airports:

Bree Taylor

Tiffany Pham

Why Recycle?

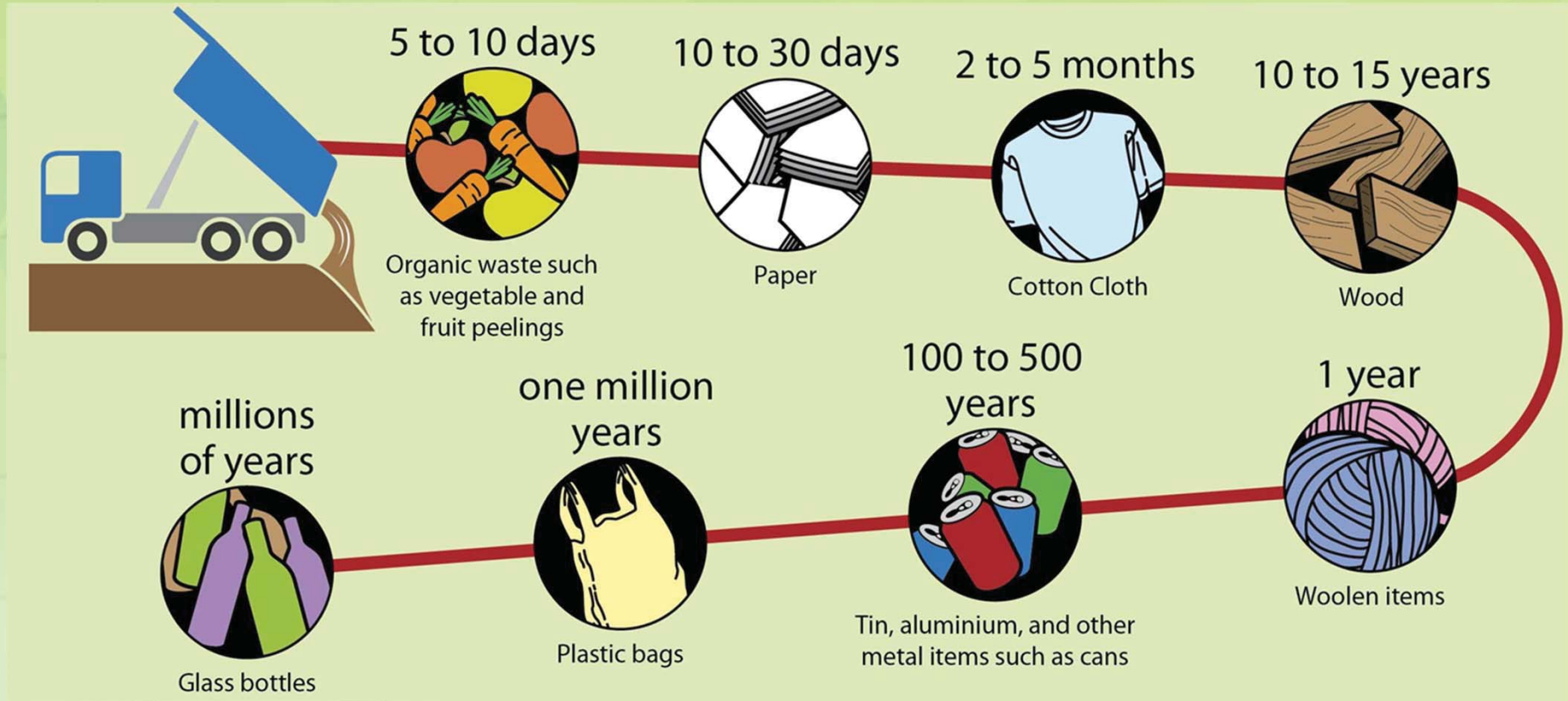
It's the LAW!

- AB 341 (Chesbro, 2011) – large venue (e.g. airports) with more than 4 cubic yards must have recycling program
- AB 1826 (organics recycling, 2016) – entities with 8 cubic yards or more must have organics recycling

Yolo County Landfill

Methane gas

How long does it take to break down in the landfill?



Place material in grey bin

Custodial/PRIDE takes material to compactor, where it is ready for shipment to the Yolo County Landfill

Trash is thrown into the landfill. The amount of time it takes to break down depends on the material. Plastic, glass, and aluminum take 100+ years to degrade.

Place recyclable material in blue bin

Custodial/PRIDE takes recyclable material to compactor, where it is ready for shipment to the Material Recovery Facility

Waste is sorted based on material at MRF. Unacceptable waste is sent to the landfill.

Sorted material is compacted and prepared for shipment to the proper processing facility

Material is pelletized, sanitized, and processed. The ground up material is made into new products and containers.

The recycled material is used for various products and resold in stores.

1. Reduce
2. Reuse
3. Recycle

3 types of waste disposal at SMF

- ✓recyclables – blue bin,
- ✓landfill (trash) – gray/black bin, black bag
- ✓food waste- yellow bin


Recyclables
Office Paper
Plastic Containers #1-7
Cardboard
Soda Bottles
Newspaper
Glass Bottles
RECYCLE
1 PETE
2 HDPE
3 PVC
4 LDPE
5 PP
7 OTHER
Aluminum, Steel and Tin Cans
Printed on recycled paper

Plastics 1-7