

## **Chapter 9 – Recycling and Solid Waste Management Plan**



### **Introduction**

The Recycling and Solid Waste Management Plan discusses solid waste generation at the Airport and available recycling options. The section is outlined as follows:

- Waste Audit;
- Recycling Feasibility;
- Plan to Minimize Solid Waste Generation;
- Operational and Maintenance Requirements;
- Waste Management Contracts;
- Potential for Cost Savings or Revenue Generation; and
- Future Development and Recommendations.

### **Waste Audit**

A limited amount of waste is generated on site due to the size of KLS. Specific sources of on-site waste include private hangars, aircraft maintenance hangars, airport administration building, and other tenants and businesses located on the Airport. The Airport tenants are individually responsible for waste generated by their operations.

A private company, Waste Control, provides waste collection and disposal, and both on-site and off-site recycling service within the City of Kelso, including the airport and throughout the local area. The Waste Control transfer station is located in Longview, and offers conventional waste disposal, recycling drop-off and buy-back services, and hazardous waste disposal.

**WASTE DISPOSAL**

No state or federal requirements apply to the waste that is generated on the Airport. Individual tenants are responsible for disposal of their own waste and any hazardous materials, as stipulated in their leases with the City of Kelso. Waste Control provides trash removal for the Airport and tenants have individual contracts for waste and recycling hauling.

**CONSTRUCTION WASTE**

Construction waste is the responsibility of the contractor for each specific project on Airport. At KLS, the anticipated projects where the pavement may be recycled include:

- Runway Rehabilitation/Narrowing;
- Parallel Taxiway Realignment/Reconstruction;
- Parallel Taxiway Connectors Rehabilitation;
- Hangar Taxilanes Reconfiguration/Reconstruction; and
- Apron Reconfiguration/Expansion.

**Recycling Feasibility**

Waste Control’s recycling facility is located at its transfer station in Longview, WA. Table 9-1 lists the recyclable materials accepted at this facility. Waste Control offers a variety of recycling containers for commercial customers.

**TABLE 9-1: RECYCLABLE ITEMS**

WASTE CONTROL TRANSFER STATION	
<ul style="list-style-type: none"> <li>- Cardboard</li> <li>- Newspaper</li> <li>- Aluminum Cans</li> <li style="padding-left: 20px;">- Glass</li> <li>- Vehicle Batteries</li> <li style="padding-left: 20px;">- Plastic</li> </ul>	<ul style="list-style-type: none"> <li>- Washers &amp; Dryers</li> <li>- Freezers &amp; Refrigerators</li> <li>- Air Conditioners</li> <li style="padding-left: 20px;">- Wood/Brush</li> <li>- Concrete/Bricks</li> <li>- Automobile Bodies</li> </ul>

Waste items that cannot be recycled locally, but are accepted at the Waste Control transfer station, are listed in Table 9-2. Waste Control follows all applicable solid water disposal restrictions when accepting these items and ensures that they are properly packaged for transport/disposal.

**TABLE 9-2: NON-RECYCLABLE ITEMS**

WASTE CONTROL TRANSFER STATION	
<ul style="list-style-type: none"> <li>- Car Batteries</li> <li>- Dry Cell Batteries</li> <li>- Button-style Batteries</li> <li>- Alkaline Batteries</li> <li>- Engine Degreasers                             <ul style="list-style-type: none"> <li>- Brake Fluid</li> </ul> </li> <li>- Transmission Fluid                             <ul style="list-style-type: none"> <li>- Anti-freeze</li> </ul> </li> <li>- Radiator Cleaner                             <ul style="list-style-type: none"> <li>- Kerosene</li> <li>- Gasoline</li> </ul> </li> <li>- Propane Cylinders</li> </ul>	<ul style="list-style-type: none"> <li>- Aerosol Cans</li> <li>- Spot Removers</li> <li>- Photo Chemicals</li> <li>- Chemistry Sets</li> <li>- Household Cleaners                             <ul style="list-style-type: none"> <li>- Paints</li> </ul> </li> <li>- Sealers / Solvents</li> <li>- Rust Preventatives</li> <li>- Wood Preservatives</li> <li>- Insecticides / Pesticides                             <ul style="list-style-type: none"> <li>- Herbicides</li> </ul> </li> <li>- Pool Chemicals</li> </ul>

**Plan to Minimize Solid Waste Generation**

The City of Kelso utilizes the Cowlitz County Solid Waste Management Plan.<sup>1</sup> Cowlitz County encourages recycling and provides information on the county website regarding opportunities for residents to recycle their waste at the Cowlitz County Public Works, Solid Waste Division website.

**METHODS TO REDUCE SOLID WASTE**

There are limited opportunities to reduce solid waste generation at the Airport, since little waste is produced. However, the Airport should still establish a goal to reduce the amount of solid waste generated. While the Airport is not responsible for waste generated by airport tenants, informational brochures on recycling opportunities could be distributed to all tenants to encourage them to recycle their waste.

**Operational and Maintenance Requirements**

Operational and maintenance requirements at the Airport are minimal. The City of Kelso is responsible for mowing the airfield and the clippings are left in place. The County Solid Waste Management Plan does not currently recommend promotion of programs that encourage “grasscycling”, which means leaving clippings generated by mowing on-site rather than bagging the clippings for disposal or composting.

<sup>1</sup> 2011 Solid Waste Management Plan, Cowlitz County, Washington, prepared by Maul Foster & Alongi Inc.

## **Waste Management Contracts**

Hangar leases provided by the City were reviewed for information regarding waste and recycling. No hauling or landfill contracts are available. The ground leases dictate that “Tenant is responsible for removal and disposal of any waste material including oil, antifreeze or other hazardous material from the premises and Lessor will be held harmless from any leakage, spillage or the like resulting from any operations at the rented premises.” Although tenants are responsible for their own waste from the hangar, the leases do not establish tenant recycling requirements. Proceeds from airfield rents are used for general airport maintenance and cleaning services. To promote increased recycling, the airport may consider updating its leases to require tenant recycling in conjunction with their solid waste management (self-haul or on-site pick up) in addition to providing on-site recycling collection bins. The Airport’s minimum standards for tenant activities should also be reviewed to ensure that acceptable and prohibited practices are clearly stated and uniformly applied to all tenants.

## **Potential for Cost Savings or Revenue Generation**

The potential for cost savings is limited since individual tenants are responsible for costs associated with solid waste disposal and recycling.

Revenue generation is also limited due to the small amount of waste generated. Any potential for additional revenue would accrue to the individual tenants since they contract with the waste disposal and recycling provider.

## **Future Development and Recommendations**

### **FUTURE DEVELOPMENT**

Future development projects at the Airport include tenant improvements, landside and airside facility development, and rehabilitation projects. The demolition and waste associated with each of these projects would be the responsibility of the contractor performing the work. It is assumed that the demolition waste would be taken to the transfer station or landfill.

Opportunities to recycle airfield construction waste (old asphalt pavement) through grinding and compaction for use on new or replacement airfield surfaces and service roads may also be considered.

A periodic review of the Airport’s solid waste plan needs to be implemented to allow for any unforeseen future development.

## RECOMMENDATIONS

### **Immediate**

An immediate recommendation would be to continue with the existing practice of leaving airfield clippings. This practice saves money on disposal fees while preserving the aesthetics of the infield area and providing needed nutrients to the turf.

### **Short-Term**

A short-term recommendation would be to add a statement into hangar leases advising tenants of the recycling options available through Waste Control and to encourage tenants to recycle and minimize waste. Additionally, informational brochures on recycling opportunities could be distributed to all of the hangar tenants to encourage them to recycle their waste.

### **Ongoing**

An ongoing recommendation would be to reevaluate the Airport's solid waste plan, especially after development has occurred. Any increase in hangars and additional businesses at the Airport may increase the amount of waste generated.

### **Modifications to Specifications**

Language in construction contract documents could be added that encourages contractors to recycle waste at the Waste Control and to minimize waste caused by construction activities as much as practical.