



APPENDIX G

AIRPORT RECYCLING, REUSE, AND WASTE REDUCTION PLAN

G. AIRPORT RECYCLING, REUSE, AND WASTE REDUCTION PLAN

The Federal Aviation Administration (FAA) issued a memorandum on September 30, 2014 to provide guidance on preparing airport recycling, reuse, and waste reduction plans as an element of a master plan, master plan update, within a sustainability document, or as a standalone document. The guidance is mandatory when preparing a master plan or update.

The purpose of this document is to review Harvey Field Airport's (S43 or Airport) recycling, reuse, and waste program and provide guidance on ways to reduce waste and improve recycling and reuse at the facility as part of the Master Plan in compliance with the FAA's memorandum. This document serves to meet that requirement and will:

- Review existing practices and solid waste sources (waste audit)
- Review the feasibility of solid waste recycling at the Airport
- Summarize operation and maintenance (O&M) requirements
- Review waste management contracts
- Identify potential cost savings or revenue generation
- Provide recommendation to minimize solid waste generation

G.1 Facility Description and Background

Harvey Field is located approximately one mile south of the City of Snohomish central business district (CBD) and is part of the Urban Growth Area (UGA). The City of Snohomish is located in Snohomish County, which is nestled in the Snohomish River Valley of the Puget Sound Region of Washington. Access to the Airport is provided via Airport Way (Avenue D north of Snohomish River) from U.S. Highway 2 from the north and State Route 9 from the north and south. Additional facility information is in Chapter 1, Inventory of the Master Plan.

Harvey Field continues to remain an important aviation component in the Puget Sound Regional Airport System and to the City of Snohomish and Snohomish County, as well as providing relief to general aviation for the congested Seattle-Tacoma aviation community. Although privately owned, S43 is open for public use without restriction and is listed in the National Plan of Integrated Airport Systems (NPIAS) as a general aviation reliever airport. Harvey Field is a destination for many aircraft in the northwest United States and beyond. This broad reach is a significant asset for the viability and economic health of Snohomish City and County as well as neighboring communities in the region.

G.1.1 Existing Waste Sources

The identification and evaluation of airport waste sources can be complicated. There are many different groups, agreements, operational styles, and collection/disposal processes that play into the overall generation of waste. Harvey Field airport management identified seven primary sources of waste at the Airport; the Hangars/Tenants, Restaurant, Flight School, Espresso Stand, Airport

Manager/Admin, Airfield and Airfield Maintenance/Operations. See **Figure 1** for each area’s location.

FIGURE 1 - SOURCES OF WASTE



Source: S43 Airport Management and Aviation, Inc.

The sources of waste can be further broken down by how much control the Airport has on the generation and disposal of waste. The three levels of control are:

Areas where the Airport has direct control of waste management (public space, office space, administrative building, airfield). These areas are controlled by the Airport and they are able to introduce recycling, reuse, and waste reduction programs directly.

Areas where the Airport has no direct control but can influence waste management (tenants). These are areas owned by the Airport; however, they are leased out to tenants. The Airport can recommend that recycling, reuse, and waste reduction programs be used and can include language in the tenant contracts, but realistically can’t control what is done.

Areas where the Airport has no control or influence over waste management. These are areas the Airport neither owns or leases (none of which are included in this chapter).

Table 1 shows the identified areas of waste generation, what waste is generated, how the waste is collected, if any reduction and/or recycling programs are in place, and the Airport’s level of control.

TABLE 1 - WASTE GENERATION AREAS

Area	Waste Generated	Current Solid Waste Collection	Current Waste Reduction/Recycling	Control
Area 1: Hangars/Tenants	Oil, sump fuel, batteries, tires, oil filters, misc. trash	Oil collection tank, fuel sump tank, contract recycling (batteries/tires), contract dumpster	Waste collection handled independent of Airport.	Influence
Area 2: Restaurant	Cardboard, food, paper, aluminum cans, glass	Waste Management collects dumpster (trash) through contract.	Cardboard	Influence

	bottles, magazines, misc. trash			
Area 3: Flight School	Cardboard, plastics, paper, bathroom trash, misc. trash	Waste Management collects dumpster (trash) through contract.	Rubatino collects cardboard/paper through contract.	Direct
Area 4: Espresso Stand	Plastic jugs, glass bottles, misc. trash	Waste Management collects plastic jugs, glass bottles, misc. trash	None	Influence
Area 5: Airport MGR/Admin	Cardboard, aluminum, tin, plastic, magazines, paper, misc. trash	Waste Management collects dumpster (trash) through contract.	Rubatino picks up cardboard/paper through contract.	Direct
Area 6: Airport Operations/Maintenance	Metal, oil, cardboard, misc. trash	Waste Management collects dumpster (trash) through contract.	Used oil, metal and cardboard recycled	Direct
Area 7: Airfield	General debris found on airfield and construction material (asphalt, concrete, wood, metal)	Collected by construction contractor and/or airport staff, unusable waste deposited into Airport Dumpsters.	None	Direct

Source: Harvey Field Airport staff and Jviation

G.2 Current Waste Management Programs

G.2.1 Snohomish County

Snohomish County provides both recycling and waste disposal facilities for its communities and residents.¹ The facilities include:

- Recycling and Transfer Stations
 - Airport Road Station
 - North County Station
 - Southwest Station
- Neighborhood Recycling and Disposal Centers
 - Dubuque Road Center
 - Granite Falls Center
 - Sultan Center
- Household Hazardous Waste Drop Station (Everett)

The Recycling and Transfer Stations and Rural Drop Box sites all have designated recycling areas that are free of charge for residential customers. Items accepted include:

- Automotive (lead acid batteries, motor oil, oil filters, antifreeze)
- Household batteries
- Cardboard, newspapers, and mixed paper
- Cooking oil

¹ Snohomish County Washington, <http://wa-snohomishcounty.civicplus.com/530/Recycling>, Accessed March 2016.

- Fluorescent tubes/bulbs
- Glass bottles and jars
- Household appliances (washers/dryers, stoves/ranges, hot water tanks, microwaves, dishwashers)
- Metal food and beverage cans
- Propane tanks
- Scrap metal
- Yard debris/clean wood

G.2.2 City of Snohomish

The City of Snohomish provides weekly and monthly solid waste, recycling, and yard waste pick-up services for its residents. The cost for the services are based on frequency of pick-up and size of dumpsters. Recyclables currently being collected by the City include²:

- Paper
 - Newspaper, inserts, magazines, catalogs, and phone books
 - Advertising mail, envelopes, mixed paper
 - Paperback books
 - Cereal and dry food boxes, clean paper cups
 - Shredded paper
 - Non-foil wrapping paper
 - Cartons, frozen food and juice boxes
 - Flattened cardboard
- Plastic
 - Milk, water, juice, and pop bottles
 - Plastic bottles (all colors)
 - Pill bottles
 - Clean plastic food tubs and cups
 - Clean plastic plant pots and 5 gal. buckets
- Glass
 - Bottles and jars
- Metal
 - Clean scrap metal
 - Clean aluminum and metal cans
 - Clean foil and foil trays

² City of Snohomish Washington, <http://ci.snohomish.wa.us/139/Garbage-Recycling-Yard-Waste>, Accessed March 2016.

G.2.3 Harvey Field Airport

The Airport, as discussed previously, strives to actively participate in a recycling program and join in local initiatives when applicable. The Airport currently provides recycling bins in the administrative office and solid waste dumpsters throughout the airport property. Both solid waste and recyclables are collected through contracts with independent companies. Recyclables being collected at the Airport include cardboard, paper, used oil, and scrap metal.

G.3 Review of Recycling Feasibility

Currently, Harvey Field participates in a basic recycling program for the administrative offices and allows tenants to participate in the recycling program if they desire. Challenges identified with the current program are:

- Harvey Field has not updated their recycling program to include plastics and bottles.
- Harvey Field does not require tenants to have recycling containers in place or to participate in airport initiatives. However, the Airport does encourage their tenants to participate as possible.

The Airport recognizes these challenges and plans to revise the types of items included in their recycling program. The Airport also plans to encourage tenants to participate in their recycling program.

G.4 Operation and Maintenance Requirements

The operations staff is currently responsible for the collection of all waste throughout the Airport and airfield. Used oil, metal, cardboard, and paper are collected for recycling. The waste and recyclables are collected at the Airport and disposed of through contracts with independent companies.

G.5 Review of Waste Management Contracts

Harvey Field currently has a contract in place with the Rubatino Trash Services to remove recyclable cardboard and paper on a monthly basis. Waste is collected on a weekly basis through a contract with Waste Management and taken to the local landfill.

Contracts with existing tenants do not require tenants to participate in any recycling programs or provide recycling bins for customers and employees. It is recommended that the Airport add language to future contracts that requires tenants to provide recycling bins in order to increase the amount of recycling.

G.6 Potential for Cost Savings or Revenue Generations

The Airport contracts with Waste Management and Rubatino for trash and recycling collection and removal. The following fees are associated with the trash and recycling collection and removal:

- Waste Management: 4 yd. dumpster/week: \$217 per month for trash dumpsters and removal.
- Rubatino: 6 yd. dumpster/month: \$45 per month for recycling dumpster and removal.

As the amount of recyclable material and waste increases, the costs associated with removal will also increase. However, increasing the types of recycling material is one way to help minimize additional costs. Without adding significant implementation costs, the Airport could encourage collection of the following materials:

- Plastics
- Glass bottles
- Food waste for compost

G.7 Plan to Minimize Solid Waste Generation

Harvey Field voluntarily participates in a recycling program however, the Airport is aware that their recycling, reuse, and waste reduction program can be improved through a few simple practices such as:

- Provide additional signage with recycling bins clearly showing type of materials accepted.
- Provide educational material to tenants and airport employees on what material should be recycled and the appropriate business contacts.
- Add recycling, reuse, and reduce waste requirements to future tenant leases.
- When feasible, purchase products made from recycled material and encourage tenants to do so as well.

The above mentioned practices are relatively basic; however, the success of implementing a long-term recycling, reuse, and waste reduction program requires management buy-in, staff commitment, planning, and follow-up. **Figure 2** outlines “10 Steps to Design and Implement an Effective Airport Recycling/Waste Minimization Program” as recommended by the FAA in their Recycling, Reuse and Waste Reduction at Airports – A Synthesis Document³. The Airport should follow these steps when implementing their recycling program.

³ FAA, Recycling, Reuse and Waste Reduction at Airport – A Synthesis Document, 2013

FIGURE 2 - 10 STEPS TO DESIGN AND IMPLEMENT RECYCLING PROGRAM



Source: FAA, Recycling, Reuse and Waste Reduction at Airport – A Synthesis Document, 2013

G.8 Conclusion

Harvey Field has a basic recycling program in place; however, with minimal effort and expense they could implement some very basic procedures to improve their program and reduce the amount of solid waste they generate. Through coordination with local entities the Airport could play a more active role in recycling, reusing, and reduce solid waste.