Appendix C – Solid Waste and Recycling Plan

DRAFT

Solid Waste and Recycling Report

March Inland Port Airport Authority

Riverside County, California
FAA AIP No.: 3-06-0201-015-2021

Prepared by: C&S Companies, Inc.

June 2023

[This page has intentionally been left blank]

Table of Contents

Figures

(Click the header at any point to return to the Table of Contents)

[This page has intentionally been left blank]

1 Introduction

The management and disposal of solid waste has considerable impacts on an airport's finances, operations, environmental well-being, and relationship with the community. Its significance has been identified by the Federal Aviation Administration (FAA) and incorporated into regulations. Section 133 of the FAA *Modernization and Reform Act of 2012* requires airports with a master plan to complete a recycling plan that includes/addresses[1]:

- A solid waste audit.
- Feasibility of solid waste recycling.
- Minimization of solid waste generation.
- Operation and maintenance requirements.
- Review of waste management contracts.
- The potential for cost savings or the generation of airport revenue.

To assist airports in developing recycling programs, the FAA prepared the *Recycling, Reuse and Waste Reduction at Airports: A Synthesis Document*[2]. This document outlines types and sources of airport waste and provides guidance to establish a comprehensive waste reduction and recycling program. On September 30, 2014, the FAA issued *Guidance on Airport Recycling, Reuse, and Waste Reduction Plans*[3], which provides official guidance for preparing waste and recycling plans as part of an airport master plan, within a sustainability plan, or as a stand-alone document. This FAA document was used to develop the recycling, reuse, and waste reduction plan for March Inland Port Airport (Airport).

Given the existing recycling program in place at the Airport, a waste audit will not be conducted. The civil operations area is limited and the available information from existing tenants was minimal, current practices were documented, when available, to identify opportunities to minimize the generation of solid waste, increase the diversion rate of materials from landfills, reduce operations and maintenance needs, and minimize costs and/or generate revenue via waste recovery practices. Potential opportunities were assessed based on their benefits and feasibility to determine recommendations for the Airport.

As documented in the Airport Master Plan Update, general airport facility information regarding the Airport's operations, layout, governance, and other background information can be found in Section 2.

[1]Federal Aviation Administration (FAA). FAA *Modernization and Reform Act of 2012.*
[2] FAA. Recycling, Reuse, and Waste Reduction at Airports. A Synthesis Document. Accessible at: https://www.faa.gov/sites/faa.gov/files/airports/resources/publications/reports/RecyclingSynthesis2013.pdf
[3] FAA/ September 30, 2014. *Guidance on Airport Recycling, Reuse, and Waste Reduction Plans*. Accessible at: https://www.faa.gov/sites/faa.gov/files/airports/environmental/airport_recycling/airport-recycling-reuse-waste-reduction-plans-guidance.pdf

2 Baseline Assessment

Various factors can influence the feasibility of solid waste recycling at an airport, as identified in FAA's *Guidance on Airport Recycling, Reuse, and Waste Reduction Plans*, including the following:

- The availability of local markets for recyclable commodities
- Cost of transport and processing
- Local recycling infrastructure available
- The willingness of an airport and its tenants to implement recycling programs
- The composition of an airport's waste stream and levels of contamination
- Competition between recycling and landfilling firms
- Airport layout and space constraints for equipment and collection process

Further review of the airport layout, contracts with haulers, and tenant waste management activities would be beneficial to identify more specific logistical, technical, financial, or contractual matters that may need improvement. This section considers state, regional, and local recycling programs and policies in place that may affect RIV's waste management program.

2.1 Current Waste Management Practices

The Airport has a number of potential waste sources[4], including:

- Municipal solid waste
- Construction and demolition waste
- Green waste
- Food waste
- Deplaned waste
- Lavatory waste
- Spill cleanup and remediation waste
- Hazardous waste

The Airport is operated by the March Joint Powers Authority (MJPA) and is located in the Cities of Perris, Riverside, and Moreno Valley in Riverside County, California. There is currently a recycling program at the Airport and the following sections identify the requirements identified in the MJPA General Plan, Development Code, and Airport Rules and Regulations. Waste Management of the Inland Empire services the area containing the Airport.

[4] FAA. Recycling, Reuse and Waste Reduction at Airports A Synthesis Document. Accessible at: https://www.faa.gov/sites/faa.gov/files/airports/resources/publications/reports/RecyclingSynthesis2013.pdf

2.1.1 General Plan of the MJPA

MPJA has implemented a General Plan[5] that includes a comprehensive approach to solid waste disposal and management, including at the Airport area. The plan has set goals and policies to ensure that various aspects of solid waste management are being handled at the Airport.

Solid Waste Disposal was mentioned in the MJPA General Plan as part of the Land Use and Resource Management Elements. The primary goal is to maintain consistency in solid waste collection, transfer and/or disposal facility construction, operation of waste reduction and recycling programs, and household hazardous waste disposal programs and education. To achieve this, policies are put in place to ensure that hazardous materials are stored, treated, and disposed of in accordance with the state and federal laws. Additionally, supporting programs that promote greater awareness and involvement can also benefit efforts related to waste reduction and recycling.

The Airport has also aimed to provide an effective and efficient waste management system for solid and hazardous waste that is both financially and environmentally responsible. To achieve this goal, polices are implemented, such as the development and adoption of a source reduction and recycling element by the County of Riverside Waste Management District. The MJPA General Plan also includes programs to promote the recycling and recovery of materials from demolition and construction projects, as well as initiatives to minimize the volume and impact of solid waste generated. It is also beneficial to coordinate with regulated agencies in assuring that future development follows applicable regulations for handling and disposing hazardous materials.

2.1.2 Development Code

The MJPA Development Code are the standards, guidelines, and procedures established to implement the goals, objectives, policies, and programs of the General Plan. The Code dictates hazardous waste storage and disposal shall meet all applicable State and local health regulations.

2.1.3 Airport Rules and Regulations

The Airport has implemented a range of best practices to ensure effective solid waste and recycling management. These practices include incorporating good housekeeping measures, minimizing exposure of stormwater to pollutants, implementing preventative maintenance procedures, establishing spill prevention and response protocol, conducting routine facility

[5] March Joint Powers Authority. General Plan of the March Joint Powers Authority. Accessible at: https://marchjpa.com/wp-content/uploads/2023/03/General-Plan_03-07-2023.pdf

inspections, providing comprehensive employee and contractor training, managing stormwater runoff effectively, and maintaining detailed records and reporting.

2.2 Tenant Waste Management

2.2.1 Alvest Equipment Services (AES)

AES complies with local regulations by assuming responsibility for their waste management. Within their shop, AES has designated bins for both trash and recycling. Within their shop is a gray trash can that has a label that reads, "Trash Only", while two larger black recycling bins are labeled as "Please Recycle". AES ensures that their bins outside their shop are not overfilled, and do not allow others to add trash to their bins without their permission. AES transports their recyclables to a nearby recycling center. Additionally, AES utilizes a green Waste Management (WM) dumpster located at right outside the shop, which picks up their trash.

Figure 2.1 – AES Waste & Recycling Containers

Source: AES

2.2.2 Atlas Air

Atlas Air began operating at the Airport in 2011, providing essential support to Amazon Prime Air flights. Atlas Air utilizes a green Waste Management (WM) dumpster which is located near the tenant's trailer with scheduled pickups occurring every Tuesday. During these trash collection visits, Atlas Air staff escorts the WM team to the AOA to empty their trash. Additionally, the WM truck also stops by the AES and Million Air mechanic shed to empty their trash.

Figure 2.2 - Atlas Air Waste Management Container

Source: Atlas Air

2.2.3 Metrea Strategic Mobility

Metrea Strategic Mobility is contracted with the Department of Defense to provide air-to-air refueling services. Regarding waste and recycling, Metrea has implemented clear procedures and has well-placarded designated collection points. They strictly adhere to regulations set at a local, state, and federal standard when it comes to disposal of waste.

Metrea has a green WM dumpster outside their shop for regular trash disposal as well as while recycling containers located throughout the shop. Within the shop, gray bins contain regular trash, blue bins are labeled "cans" and "plastic" along with a "Please Recycle Cans and Plastic Bottles" sign attached above.

Figure 2.3 - Metrea Waste & Recycling Containers

Source: Metrea

Containers used for hazardous waste disposal are properly marked and comply with federal, state, and local regulations. There are waste containers specifically allocated for batteries, solid waste saturated with fuel or oil, absorbents, and used filters. Waste cans are diligently cleaned.

Figure 2.4 - Metrea Hazardous Waste Containers

Source: Metrea

2.3 Regional Context

2.3.1 State of California

California's Department of Resources Recycling and Recovery (CalRecycle) administers all of California's state-managed solid waste and recycling programs and serves as a foundation for protecting the State of California's environment and climate for the health and prosperity of future generations through reduction, reuse, and recycling of California resources. In 2011, the State set a goal of 75 percent recycling, composting, or source reduction of solid waste by 2020.

The State of California has passed the following regulations related to commercial recycling:

AB 341 – Mandatory Commercial Recycling – requires recycling by businesses and schools with waste containers of four or more cubic yards.

AB 939 – State Solid Waste Reduction Act - regulates the disposal of solid waste. This bill enacts the California Integrated Solid Waste Management Act of 1989. The purpose of AB 939 is to reduce waste, promote recycling and waste diversion goals for cities and counties in

California, requiring them to adopt and implement solid waste management plans to achieve projects. Under AB 939, local jurisdictions are required to develop programs to reduce the amount of solid waste sent to landfills through recycling, composting, and other waste diversion methods. The act encourages the development of recycling infrastructure, the establishment of recycling programs, and the promotion of public education and awareness regarding waste management.

AB 1826 – Commercial Organics Recycling – requires participation in organics recycling program, depending on type of business and how much waste is generated.

SB 1383 – **Organic Waste Collection** – adopted in 2016; requires further reduction of organics sent to landfills with targets set to reduce organic waste by 75 percent by 2025 and to send at least 20 percent of disposed surplus food to Californians in need by 2025.

California allows businesses and public entities that generate recycling and waste to use one of, or a combination of, the following methods to reuse, recycle, compost, or divert solid waste through CalRecycle:

- Self-haul
- Subscribe to hauler(s)
- Arrange for the pickup of recyclable materials
- Subscribe to a recycling service that may include mixed waste processing that yields diversion results comparable to source separation

2.3.2 Riverside County

Riverside County Department of Waste Resources handles all their waste resources, as they "provide protection of the general health and welfare of the County through the provision of facilities and programs which meet or exceed all applicable local, State, Federal and land use regulations; utilization of up-to-date technological improvements; development and maintenance of a system that is balanced economically, socially and politically; and economically feasible recovery of waste materials"[6]. Riverside County has implemented comprehensive strategies to address their community's solid waste and recycling by recognizing the importance of proper waste disposal. The County also promotes engagement in food waste reduction through educational classes and aims to guide the community towards resources for organic waste management, emphasizing the importance of responsible disposal and green waste practices. Strategies used by the County include establishing an extensive network of waste management facilities and recycling centers, promoting composting, and conducting volunteer opportunities to ensure a healthier and more sustainable environment for generations to come.

[6] Riverside County. Waste Resources. Accessible at: https://rcwaste.org/

2.3.3 City of Riverside

The City of Riverside Public Works Department provides high-quality waste and recycling services for business and residential customers across the City. To ensure proper disposal, the City provides color-coded bins specifically designed for different types of waste. Blue barrels/lids are designated for recyclables, brown barrels/gray lids for solid waste, and green barrels/lids for green waste and food waste. These color-coded bins help streamline waste sorting and ensure that each type of waste goes into the appropriate receptable.

2.3.4 City of Perris

CR&R Waste Services manages solid waste, recycling, and green waste services for the City of Perris. The City collaborates with the County to organize multiple hazardous waste collection events throughout the year. Regular solid waste collection occurs once a week, with the City requiring the community to place solid waste in black containers, recycling in grey containers, and green waste in green containers. Hazardous waste and construction debris are collected locally through service providers, and CR&R offers complimentary bulky item pick-up services.

2.3.5 City of Moreno Valley

The City of Moreno Valley is also contracted with Waste Management of the Inland Empire to manage its solid waste and recycling services. Together, they have established a comprehensive commercial recycling program that offers free assistance to businesses and multifamily complexes, supporting the implementation or expansion of recycling initiatives.

Moreno Valley has also implemented a food donation program aimed at addressing hunger in the community as well as reducing food waste. The City's website provides information on local food pantries, an interactive food pantry map, guidance on who to donate to, and the importance of contributing to the cause.

To promote community beautification and environmental awareness, Moreno Valley has implemented a variety of initiatives. The City offers interactive activities and presentations to educate the public on recycling and reducing carbon footprints, in addition to the Keep Moreno Valley Beautiful program that focuses on encouraging community participation in keeping parks, trails and roads clean. The City also hosts events such as, Community Day of Service, hazardous waste collections, mulch giveaways, and used oil filter exchanges to engage residents in sustainable practices.

3 Recommendations

Developing and implementing a successful recycling program can be challenging within an airport environment due to factors such as airport staff having limited time and resources,

operational issues for external contractors accessing secure areas, and having limited control over tenant waste management activities. Potential opportunities for improvement and cost savings may be realized from conducting a more thorough review of program costs and contracts currently in place. Conducting a bin right-sizing exercise can help determine if any costs savings from changes in bin sizes, quantities, and frequency of pickups are possible. Given the small scale of the Airport's waste and recycling program, Airport staff may wish to consider the following recommendations to improve and expand recycling efforts and reduce the amount of solid waste generated.

Data Collection:

- Consider right-sizing bins and containers to maximize cost savings.
- Review existing contracts for waste and recycling services including services, fees, and available service options.
- Work with tenants and waste and recycling service providers to obtain more accurate information on quantities or volumes of waste and recycling being handled.
    - Request the following data monthly or annually from each tenant:
        - Amount (weight/volume) of solid waste collected.
        - Amount (weight/volume) of recycling collected.
        - Amount of organic waste (weight/volume) diverted/collected.
        - Amount of other materials being diverted from solid waste stream.

Airport Operations:

- Organize a green team or designate a recycling coordinator to track data and educate staff and tenants on best practices.
- Implement paper reduction policies such as double-sided printing, digital or electronic document management.
- Provide potable water source to employees to prevent the use of single-use water bottles
- Provide reusable food ware in break rooms.
- Explore opportunities for green purchasing, including switching to compostable or recyclable materials, purchasing supplies with recycled content, reducing packaging waste, etc.
- Consider training staff or providing/improving signage containing information on materials accepted in each container on site, including dumpsters.
- Consider establishing goals and targets for the Airport related to waste management (reduction, materials reuse, and recycling goals) such as diverting a certain percentage of waste from landfills and incineration by a target year or meeting local regulations (i.e. diverting at least 50 percent of construction and demolition waste; 75 percent for other materials).

Tenant Operations:

- Facilitate expanding waste diversion opportunities for airport and tenant operations that currently do not recycle.
- Consider limiting or monitoring use of dumpsters by tenants (i.e. locks or cameras) if contamination is an issue.
- Contribute to effectively reduce food waste and promote composting alignment with the state's regulations.

Overall Facilities Planning:

- Consider space and access needs for recycling storage and collection when designing any new facilities or renovating existing facilities and infrastructure.