

Seattle-Tacoma International Airport (SEA) COVID-19 Waste Handling Guidance

Created 7/2/2020, Revised 11/5/2020

Purpose, Applicability, and Scope

The purpose of this document is to recommend guidance for managing municipal solid waste (MSW) and biohazard wastes with potential or known COVID-19 contamination with the goal of reducing employee risk and ensuring safe disposal of wastes at SEA.

The recommendations are based on a review of the existing COVID-19 waste guidance from local and national public health organizations and Airports Council International (ACI) at the time this document was written. These sources reflect the best available information at the time regarding the risks of transmitting COVID-19 when handling waste materials. The organizations and links to the reference documents are listed in the Review of Applicable Guidance section below.

This guidance applies to all Port employees, contractors, tenants, and operators that generate, handle, or manage MSW and biohazard wastes at SEA. These groups should follow this guidance as well as their employer's policies and procedures when handling wastes to ensure proper disposal and maintain compliance with applicable worker safety requirements. This guidance also describes Roles and Responsibilities for different Port departments and airport tenants to ensure that the recommendations can be implemented in an organized manner.

Definitions

Municipal Solid Waste (MSW)ⁱ Commonly known as trash or garbage, MSW consists of everyday items we use and then throw away, such as product packaging, grass clippings, furniture, clothing, bottles, food scraps, newspapers, appliances, paint, and batteries. This comes from our homes, schools, hospitals, and businesses.

Regulated/Biohazard Wasteⁱⁱ Because disposal containers (e.g., bags and bins) for this waste are labeled as Biohazard, we use the term biohazard throughout this document to refer to Regulated/Biohazard Waste. Biohazard waste is any of the following:

- (a) Liquid or semiliquid blood or other potentially infectious materials (OPIM);
- (b) Contaminated items that would release blood or OPIM in a liquid or semiliquid state, if compressed;
- (c) Items that are caked with dried blood or OPIM and are capable of releasing these materials during handling;
- (d) Contaminated sharps;
- (e) Pathological and microbiological wastes containing blood or OPIM.

Other Potentially Infectious Materials (OPIM)ⁱⁱ includes the following:

- (a) Human body fluids: Semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, any body fluid that is visibly contaminated with blood, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids.

Seattle-Tacoma International Airport (SEA) COVID-19 Waste Handling Guidance

Created 7/2/2020, Revised 11/5/2020

- (b) Any unfixed tissue or organ (other than intact skin) from a human (living or dead).
- (c) HIV-containing cell or tissue cultures, organ cultures, and HIV-or HBV-containing culture medium or other solutions; and blood, organs, or other tissues from experimental animals infected with HIV or HBV.
- (d) Blood and tissues of experimental animals infected with bloodborne pathogens.

Contaminated sharpsⁱⁱ Any contaminated object that can penetrate the skin including, but not limited to, needles, scalpels, broken glass, broken capillary tubes, and exposed ends of dental wires.

Personal Protective Equipment (PPE)ⁱⁱ Specialized clothing or equipment worn by an employee for protection against a hazard. General work clothes (for example, uniforms, pants, shirts, or blouses) not intended to function as protection against a hazard are not considered to be PPE

USDA APHIS Regulated Garbageⁱⁱⁱ Certain wastes from international flights originating outside the U.S. and Canada, typically including materials derived in whole or in part from fruits, vegetables, meats, or other plant or animal material and associated packaging or waste. Other cabin waste not regulated by APHIS, that has been commingled with Regulated Garbage, is also considered Regulated Garbage. USDA APHIS Regulated Garbage requires special handling and disposal such as sterilization before landfilling or incineration to prevent introduction of foreign agricultural pests and diseases.

Review of Applicable Guidance

Guidance from public health agencies at the national, state and local levels, as well as the Airports Council International (ACI) was reviewed to understand current approaches to handling waste materials potentially contaminated with COVID-19. For each document, a summary of the specific guidance for handling COVID-19 contaminated waste is listed in the table below.

Source	Waste Guidance Summary
King County Public Health^{iv}	<ul style="list-style-type: none"> • Workers and employers should manage municipal solid waste with potential or known COVID-19 contamination like any other non-contaminated municipal waste. • Use typical engineering and administrative controls, safe work practices, and PPE, such as puncture-resistant gloves and face and eye protection, to prevent exposure to waste, including any contaminants in the materials. • Such measures can help protect workers from sharps and other items that can cause injuries or exposures to infectious materials.

Seattle-Tacoma International Airport (SEA) COVID-19 Waste Handling Guidance

Created 7/2/2020, Revised 11/5/2020

	<ul style="list-style-type: none"> • Do not touch your face. • Wash your hands frequently when possible or use alcohol-based sanitizer as an alternative if handwashing is not available. • Do not come to work if you feel sick.
<p>U.S. Dept. of Labor – Occupational Safety and Health Administration^v</p>	<ul style="list-style-type: none"> • Management of waste that is suspected or known to contain or be contaminated with COVID-19 does not require special precautions beyond those already used to protect workers from the hazards they encounter during their routine job tasks in solid waste and wastewater management. • For municipal solid waste and medical waste with potential or known COVID-19 contamination, workers and employers should manage these wastes like any other non-contaminated municipal waste or regulated medical waste.
<p>U.S. Centers for Disease Control and Prevention^{vi}</p>	<ul style="list-style-type: none"> • Recent studies indicate that the virus can be spread by people who are not showing symptoms. It may be possible that a person can get COVID-19 by touching a surface or object that has the virus on it and then touching their own mouth, nose, or possibly their eyes. This is not thought to be the main way the virus spreads, but we are still learning more about this virus. • Older adults and people of any age who have serious underlying medical conditions may be at higher risk for more serious complications from COVID-19.
<p>Airports Council International - Aviation Operations During COVID-19 Business Restart and Recovery^{vii}</p>	<ul style="list-style-type: none"> • Summarizes guidance (WHO, CDC, OSHA, IATA) on managing airport waste to minimize the spread of the disease and prevent cross-contamination of biohazard and MSW waste. • Recommends airports follow local health authority guidance and regulation on waste management procedures as appropriate, but also recommends: <ul style="list-style-type: none"> ○ Applying risk-based approach to evaluate situation and scale up or down measures, as required ○ Separate waste from ill/symptomatic passengers, crew or employees and manage and dispose as biohazard ○ Consider measures to ensure proper disposal of waste from ill/symptomatic passengers, crew or employees. ○ Consider additional messaging to prevent cross-contaminating recycling and compost with PPE from asymptomatic passengers or biohazard waste from ill/symptomatic passengers.

Seattle-Tacoma International Airport (SEA) COVID-19 Waste Handling Guidance

Created 7/2/2020, Revised 11/5/2020

Findings and Recommendations

Separate waste from ill/symptomatic individuals

Deplaned Waste

- Cabin waste generated during flight operations where no passenger or crew member exhibits COVID-19 symptoms should be handled as normal waste^{viii}
- If a passenger or crew member exhibits COVID-19 symptoms, all waste materials including part-consumed meals, beverages and disposable items such as used paper towels, tissues and PPE generated while treating or supporting the passenger or crew member should be treated as potentially biohazardous waste. This waste should be placed in the biohazard waste disposal bag held in the aircraft's Universal Precaution Kit or double bagged in standard plastic waste bag (if a biohazard bag is not available). The bags should be labelled and sealed for handling, storage, and treatment. Prior to landing, airline crew must notify the local CDC Quarantine Station and aircraft service providers including cleaning and catering companies, to the presence of potentially biohazardous waste.^{ix}
- Airlines, cabin cleaners, and ground support or inflight catering services collecting biohazard waste contaminated by body fluids should handle and dispose of this waste through their own contracts for biohazard waste disposal.

Airport Building Waste

- Municipal solid waste that is not associated with ill/symptomatic passengers or employees should be handled as MSW.
- Discarded PPE from asymptomatic passengers or employees (social distancing waste) should be handled as MSW.
- All waste including MSW and tissues, masks and other PPE items generated during treatment, health-screenings, or testing of ill/symptomatic passengers or employees by SEA Fire Department, CDC, or other medical first responders or testing service providers should be disposed as biohazard waste. Disposal locations should be clearly defined.

Follow General Waste Management Procedures

- Continue to use typical engineering and administrative controls, safe work practices and PPE, such as gloves and face and eye protection for handling municipal solid or biohazard waste, as appropriate, to prevent exposure to waste, including any contaminants in the materials.
- Securely close but do not compress bags used to transport MSW or biohazard waste as this could rupture bags and increase handler exposure.
- Continue sorting and disposing of MSW, recycling, and compostables following established SEA procedures.

Seattle-Tacoma International Airport (SEA) COVID-19 Waste Handling Guidance

Created 7/2/2020, Revised 11/5/2020

Monitor Changing Conditions and Guidance

- All employers operating at SEA should remain alert to changing outbreak conditions, including as they relate to community spread of the virus and testing availability, and implement infection prevention measures accordingly.
- All employers operating at SEA, including Port Health & Safety, should assess the hazards to which workers may be exposed; evaluate the risk of exposure; and select, implement, and ensure workers use controls to prevent exposure.
- AV Environmental will monitor changes in waste handling guidance from local, state, and federal Public Health Agencies, aviation industry groups including ACI, and IATA and coordinate with Port Health & Safety to update this guidance as appropriate.

Use Exposure Prevention Precautions

- Follow employer’s Health and Safety Plan regarding employee health screening and monitoring, exposure control practices, increased personal hygiene, and disinfection and sanitizing procedures.

Prevent Contamination of Waste Streams

- Biohazard waste containers must be appropriately labeled (biohazard symbol/red bags) and located near the point of generation or accumulation.
- MSW, recycling, and compost bins should be clearly labeled showing that PPE (masks, gloves, etc.) or cloth face coverings not contaminated with biohazard materials should be disposed of as MSW. This prevents trash from being thrown into the recycling or compost bins.

Roles & Responsibilities

Department	Role	Responsibilities
AV/Operations	Manage Airport Operations and Airport Communications Center	<ul style="list-style-type: none"> • Oversee terminal and airfield operations • Route critical communications to stakeholders, dispatch resources (ex. Janitorial needs, Maintenance request, hazard reporting) • Coordinate staging of inbound aircraft with ill/symptomatic passengers for treatment
AV/Maintenance	Manage SEA contracted Janitorial Services in airport buildings including collection and disposal of MSW and biohazard waste from	<ul style="list-style-type: none"> • Provide building cleaning, sanitizing, and janitorial services including municipal and biohazard waste collection, transport, and disposal in appropriate containers. • Ensure janitorial workers follow approved risk-based guidance to control and prevent exposure during routine operations.

Seattle-Tacoma International Airport (SEA) COVID-19 Waste Handling Guidance

Created 7/2/2020, Revised 11/5/2020

	public areas, Port office buildings, and biohazard waste collection areas.	<ul style="list-style-type: none"> • Purchase and site waste collection bins in POS controlled areas as needed
Port Fire/Police	First responders to aid calls requiring medical treatment.	<ul style="list-style-type: none"> • Follow established biohazard waste management protocols during aid call responses including coordinating biohazard waste collection and disposal with airport janitorial teams, CDC station staff, and tenants as appropriate.
AV/Facilities & Infrastructure	Manage solid waste disposal infrastructure, equipment, and services.	<ul style="list-style-type: none"> • Manage MSW infrastructure, equipment and collection service and biohazard waste service contracts with vendors.
AV/Environment & Sustainability	Provide regulatory and sustainability guidance for waste disposal and manage hazardous materials service and support contracts.	<ul style="list-style-type: none"> • Coordinate with Health and Safety on safe handling procedures for hazardous substances. • Manage waste reduction and recycling programs and coordinate strategies to achieve waste reduction and diversion goals with stakeholders.
Port Health & Safety	Conduct hazard risk assessments and provide guidance to reduce Port of Seattle employee exposure and material handling (hazardous/non-hazardous) risks.	<ul style="list-style-type: none"> • No direct involvement handling or managing waste. • Review and approve health and safety plans.
Other		
Center for Disease Control (CDC)	Operate SEA's CDC Quarantine Station and Isolation Room at SEA's Federal Inspection Service (FIS) Facility and respond to reports of illness or death on airplanes.	<ul style="list-style-type: none"> • Quarantine and treat ill/symptomatic international passengers. • Follow established MSW and biohazard waste management protocols including coordinating biohazard waste collection and disposal with airlines.
Airport Tenants	Manage waste from tenant operations.	<ul style="list-style-type: none"> • Manage and dispose MSW from tenant operations following existing SEA policy and procedures using facility waste compactors and dumpsters

Seattle-Tacoma International Airport (SEA) COVID-19 Waste Handling Guidance

Created 7/2/2020, Revised 11/5/2020

<p>Airline crews and support services (i.e. cabin cleaners, inflight caterers, ground support crews, baggage handlers, and cargo handlers)</p>	<p>Manage and dispose deplaned waste.</p>	<ul style="list-style-type: none"> • Follow industry specific guidance and regulations regarding reporting and waste management from treatment of COVID-19 ill/symptomatic passengers or crew^{ix}. • Domestic Flights - Manage and dispose MSW from domestic flights following existing airline policy and SEA procedures and Rules and Regulations using airfield waste and recycling compactors, inflight catering facility, or airline MSW waste disposal containers. • International Flights - Manage and dispose USDA APHIS Regulated Garbage using International waste containers at South Satellite loading dock, or Inflight caterer facilities approved to manage USDA APHIS Regulated garbage.
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Education and Training

The Port and other airport employers are required to provide training to all employees that may collect, store, or handle MSW or biohazard wastes at SEA to ensure safe handling and compliance with applicable waste management regulations. Employers are expected to update employee training with any COVID-related changes to waste management procedures.

Contact Information/Resources

- POS Airport Communication Center (AV/Operations); 206-787-5229
- POS Hazardous Materials Manager (AV/Environmental): Chris Milewski, Milewski.c@portseattle.org, o: 206-787-4633, m: 206-605-8333
- POS Waste Reduction and Recycling Manager (AV/Environmental): Jeremy Webb, Webb.j@portseattle.org, o: 206-787-5395
- POS Solid Waste Manager (AV/Facilities & Infrastructure Utilities): Jeff Walker, Walker.J@portseattle.org, o: 206-739-8052
- POS Custodial/Janitorial Services Manager (AV/Maintenance): Jinah Kim, kim.j@portseattle.org, o: 206-787-4774, m: 206-437-6856
- POS Health & Safety Program Manager: Tiffany Olson, Olson.T@portseattle.org, o:(206) 787-6873, m: (206) 459-2294
- POS Fire contact – Port of Seattle Fire: 206-787-5380
- POS Police contact – Port of Seattle Police: 206-787-3490

Other Resources

- [Seattle-Tacoma International Airport Schedule of Rules & Regulations No. 5, Revised 6/9/2020](#)

Seattle-Tacoma International Airport (SEA) COVID-19 Waste Handling Guidance

Created 7/2/2020, Revised 11/5/2020

References

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- ^{vi} U.S. Centers for Disease Control and Prevention, What Waste Collectors and Recyclers Need to Know about COVID-19, 5/7/2020, Retrieved from <https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/waste-collection-recycling-workers.html>
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- ^{ix} International Air Transport Association (IATA), Guidance for Cabin Operations During and Post Pandemic Edition 3 – 05 Jun 2020, Retrieved from: <https://www.iata.org/contentassets/df216feeb8bb4d52a3e16befe9671033/iata-guidance-cabin-operations-during-post-pandemic.pdf>