

PART 1 – GENERAL**1.1 SUMMARY**

- A. The Contractor shall be responsible for waste handling, transport, and disposal activities. All waste handling activities including, but not limited to, packaging, labeling, marking, storage, and disposal will be conducted in accordance with applicable regulations and the Environmental Affairs Department (EAD) procedures.
- B. The Owner and its contractors are expected to minimize the generation of construction waste, regulated waste and encourage recycling/reuse/salvaging whenever feasible.
- C. Utilize the minimum screening and testing criteria described by this Section for constituents of concern where contaminants are known, anticipated or encountered.
- D. Report weights of materials recycled and materials not recycled or reused throughout the project.
- E. Remove all Contractor-generated Waste from the Airport property and dispose of properly.
- F. Costs associated with performing analytical sampling, screening, containerizing, storing, transportation and disposal of impacted soil, solid waste, hazardous wastes, special wastes, regulated wastes, universal wastes, in solid or liquid form, and materials that are recyclable, reusable, or salvageable is the responsibility of the Contractor, unless otherwise stated in the Contract.

1.2 DEFINITIONS

- A. Class 1 Waste: Any nonhazardous industrial solid waste or mixture of industrial solid wastes that, because of its concentration, or physical or chemical characteristics, is toxic, corrosive, flammable, a strong sensitizer or irritant; a generator of sudden pressure by decomposition, heat, or other means; or may pose a substantial present or potential danger to human health or the environment when improperly managed, processed, stored, transported, or disposed of or otherwise managed, as further defined in Chapter 30 of Texas Administrative Code (TAC) §335.505.
- B. Class 2 Waste: Any individual industrial solid waste or combination of industrial solid wastes that cannot be described as Hazardous, Class 1, or Class 3 as defined in Chapter 30 TAC §335.506.
- C. Class 3 Waste: Inert and essentially insoluble industrial solid waste, usually including but not limited to materials such as rock, brick, glass, dirt, and certain plastics and rubber that is not readily decomposable, as further defined in Chapter 30 TAC §335.507.
- D. Generator: Entity that produces the waste.
 - 1. Existing Airport site/facility – The waste generated is to be managed as Owner generated wastes.
 - 2. All waste resulting from materials brought on-site by Contractor or waste resulting from Work (that is not Owner waste) is to be managed as Contractor generated waste.
- E. Industrial Solid Waste: A solid waste resulting from or incidental to any process of industry or manufacturing, which may include a hazardous waste.

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- F. Regulated Waste: Any solid waste that requires special handling and disposal because of its quantity, concentration, physical or chemical characteristics.
- G. Reuse: Making use of a material without altering its form. Materials can be reused on-site or reused on other projects off-site, as approved by the Owner.
- H. Recycling: The process of sorting, cleaning, treating, and reconstituting materials for the purpose of using the material in the manufacture of a new product.
- I. Representative Sample: A portion of a substance being tested that can be expected to exhibit the average properties of the whole. More guidance on sampling is available in the Texas Commission on Environmental Quality (TCEQ) document, "Industrial and Hazardous Waste Sampling and Shipping Procedures."
- J. Salvage: Recovery of materials for on-site reuse.
- K. Solid Waste: Any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant or air pollution control facility, and other discarded material including solid, liquid, semisolid or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations.

1.3 ABBREVIATIONS

- A. CESQG: Conditionally Exempt Small Quantity Generator as defined in 40 CFR 261.5.
- B. NELAC: National Environmental Laboratory Accreditation Conference.
- C. NVLAP: National Voluntary Laboratory Accreditation Program.
- D. SMP: Soil Management Plan
- E. WMP: Waste Management Plan
- F. WMR: Waste Management Report

1.4 REFERENCES

- A. The following is a list of standards which may be referenced in this Section:
 - 1. Code of Federal Regulations (CFR):
 - a. Title 29 Part 1910, Occupational Safety and Health Standards
 - b. Title 40 Part 260, Hazardous Waste Management System: General
 - c. Title 40 Part 261, Identification and Listing of Hazardous Waste
 - d. Title 40 Part 262, Standards Applicable to Generators of Hazardous Waste
 - e. Title 40 Part 263, Standards Applicable to Transporters of Hazardous Waste
 - f. Title 40 Part 266, Standards for the Management of Specific Hazardous Wastes and Specific Types of Hazardous Waste Management Facilities
 - g. Title 40 Part 268, Land Disposal Restrictions
 - h. Title 40 Part 273, Standards for Universal Waste Management
 - i. Title 40 Part 279, Standards for the Management of Used Oil
 - j. Title 49 Part 172, Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements, and Security Plans

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- k. Title 49 Part 173, Shippers – General Requirements for Shipments and Packagings
- l. Title 49 Part 177, Carriage by Public Highway
- m. Title 49 Part 178, Specifications for Packagings
- 2. Texas Administrative Code:
 - a. TAC Title 30 Chapter 335, Industrial Solid Waste and Municipal Hazardous Waste
- 3. Environmental Protection Agency Guidance:
 - a. Characterization of Building-Related Construction and Demolition in the United States.
 - b. Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Compendium (SW-846)
- 4. Texas Commission on Environmental Quality Guidance:
 - a. RG-022, Guidelines for the Classification and Coding of Industrial and Hazardous Wastes
 - b. RG-086, Transporting Waste in Texas – A Guide to Regulations
 - c. RG-234, Industrial and Hazardous Waste: Rules and Regulations for Small Quantity Generators
 - d. RG-366/TRRP-13, Review and Reporting of COC Concentration Data under TRRP
 - e. Industrial and Hazardous Waste Sampling and Shipping Procedures
- 5. Airport Publications:
 - a. Green Building Standards (GBS)
 - b. Contaminated Media Management Plan
 - c. Integrated Waste Management & Pollution Prevention Plan

1.5 SUBMITTALS

- A. A Waste Management Plan (WMP) shall be submitted to the Owner's Authorized Representative (OAR) prior to receiving permit approval from the EAD.
- B. A Waste Management Report (WMR) shall be submitted on the first of each month, and upon request by the OAR.
- C. Waste profile documentation (process knowledge, waste profile form, applicable Material Safety Data Sheets (MSDS), and/or any analytical results) shall be submitted to the EAD, through the OAR, prior to submission to the landfill, for each hazardous or industrial waste stream.
- D. Submit copies of manifests for all Owner generated regulated waste to the EAD, through the OAR, upon request and during Project close-out.
- E. Submit copies of all construction demolition and landscaping waste or recycling documentation to the EAD, through the OAR, upon request.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION**3.1 REGULATED WASTE MANAGEMENT – GENERAL**

- A. This section covers materials that are classified as regulated waste and may not be disposed of as construction, demolition, or land clearing waste.
- B. The Contractor shall be responsible for the profiling, transportation, and disposal of all waste generated within the Project site or generated by the Contractor.
- C. Each regulated waste stream generated will have its own waste profile.
 - 1. The Contractor shall conduct testing and analysis of potentially regulated waste streams as soon as possible.
 - 2. Laboratory analysis shall be conducted by NELAC or NVLAP(Asbestos Only) accredited lab. Ensure that individuals collecting samples have the appropriate training and regulatory credentials.
 - 3. Containers shall be sampled separately, unless the waste is completely uniform. Waste is considered uniform if the waste is from one area.
- D. The Contractor shall arrange for the transportation of waste to an approved disposal facility. The Contractor shall only use disposal or recycling facilities listed on the Pre-Approved Disposal/Landfill Facilities list. The list can be located at: <https://www.dfairport.com/sustainability/index.php>
Landfills or Recycling facilities not listed, will need to be audited by the EAD before they will be added as an approved disposal location.
- E. The Contractor shall ensure all waste leaves the Airport property with the proper shipping paperwork. When waste is ready for disposal it must be transported by a licensed Department of Transportation (DOT) transporter.
- F. The Contractor shall dispose of all waste in a timely manner and prior to project closeout. Universal wastes must be disposed of within one (1) year from the date of generation. Hazardous wastes must be disposed of within six (6) months of the date of generation.
- G. The following are a list of commonly encountered regulated wastes:
 - 1. Class 1 Non-Hazardous: Texas-specific classifications.
 - 2. Class 2 Non-Hazardous: Texas-specific classifications.
 - 3. Asbestos;
 - 4. Grease-trap waste;
 - 5. Grit-trap waste;
 - 6. Mercury containing equipment;
 - 7. Non-reusable soil;
 - 8. Paint and paint related waste;
 - 9. Rechargeable Batteries

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10. Water removed from fire suppression systems;
 11. Fluorescent lamp ballasts that are not labeled as “No-PCB’s”;
 12. Electronic lamp ballasts that contain batteries;
 13. Used Lamps
 14. Used Oil Filters
- H. Unknown waste stream(s) (i.e unknown liquid and solid materials) not associated with the Project shall be communicated immediately to the EAD, through the OAR. EAD will assist in the proper characterization/profiling and disposal of unknown wastes. The OAR will determine whether the identified material is addressed in the Contract. Upon discovery, the Contractor shall properly contain the unknown waste in a safe manner. The Contractor shall not dispose or mix unknown wastes with other waste streams.

3.2 WASTE MANAGEMENT PLAN

- A. Prior to obtaining a building permit, provide a WMP which includes the type of waste, the storage method, handling and transportation procedures, and the disposal location; and how the wastes will be managed in accordance with applicable Federal, State and local rules and regulations.

A template for the waste management plan can be located at:
<https://www.dfwairport.com/sustainability/index.php>

- B. Include in the WMP a description of how the plan will be conveyed to each new Subcontractor that enters the Project site and how containers will be identified.
- C. Revise and resubmit when additional waste streams are identified, to make corrections, changes in disposal locations or as required by the OAR.
- D. Approval of the WMP does not relieve the Contractor of responsibility for compliance with applicable environmental regulations.

3.3 REGULATED WASTE MANAGEMENT OF OWNER GENERATED WASTES

- A. The Owner shall be considered the generator of all existing waste. Any waste resulting from materials brought on-site by the Contractor or waste resulting from work from an entity that is not the Owner, is to be managed as Contractor generated wastes. The Owner’s waste shall not be mixed with any other generator’s waste.
- B. The EAD, through the OAR, will provide the Contractor with a regulated waste determination. The Contractor shall provide process knowledge form, MSDS, and /or lab results for the potentially regulated waste streams to the EAD, through the OAR.

The process knowledge form can be located at:
<https://www.dfwairport.com/sustainability/index.php>

- C. When sampling soil, the Contaminated Media Management Plan (CMMP) shall be followed.
- D. The Contractor shall prepare the waste profile documents required by the landfill, including, at a minimum, the process knowledge, the waste profile form, applicable MSDS, and/or any analytical results. All waste profiles, and supporting documentation, must be reviewed and signed by EAD staff prior to being submitted to the waste disposal facility for approval.

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- E. The Contractor shall ensure that shipping documents for Owner generated wastes are reviewed, and signed by an Owner's employee, or a representative designated by the Vice President, Environmental Affairs. Notification to the EAD, through the OAR, shall be provided, in advance, so that manifest signing arrangements can be coordinated. All shipping documents must be provided to the EAD, through the OAR.
- F. Collect and prepare copies of all documentation including waste profiles, test results, manifests, and waste receipts that may be required for Project close-out.

3.4 REGULATED WASTE MANAGEMENT OF CONTRACTOR GENERATED WASTE

- A. Any waste resulting from materials brought on-site by the Contractor or waste resulting from work from an entity that is not the Owner, shall be managed as Contractor generated wastes. Contractor generated wastes shall not be mixed with any generated waste from the Owner.
- B. Waste disposal facilities may require the Contractor to complete a waste profile document that identifies the generator (Contractor), customer (Contractor), method of payment, characteristics of the waste (either from lab analysis or generator knowledge), and quantity of the waste. All waste profiles, and supporting documentation, must be provided to the Owner's staff, through the OAR, upon request.
- C. Testing and analysis of potentially regulated waste streams shall be provided to the EAD, through the OAR. EAD can assist with sampling parameters upon request.
- D. All documentation including waste profiles, test results, manifests, and waste receipts shall be made available to the EAD, through the OAR, upon request.

3.5 CONSTRUCTION, DEMOLITION, LAND CLEARING WASTE (CDL) & RECYCLING, REUSE SALVAGE MANAGEMENT

- A. The Contractor shall submit a WMR to the EAD, through the OAR, on the first of each month and upon request. The WMR can be located at: <https://www.dfairport.com/sustainability/index.php>

The waste management report includes the following information:

- 1. List of disposed, recycled, salvaged, or reused materials
 - 2. The quantity of the materials
 - 3. Copy of disposal or recycling receipts
 - 4. Salvage documentation
 - 5. Credit Receipts
- B. Materials that are not characterized as regulated waste are considered CDL and may be disposed of as construction/municipal waste or recycled. The Contractor shall provide all necessary resources and labor to properly remove, contain, transport, and dispose of such waste or recyclable/reusable/salvageable material.
- C. The Contractor shall utilize a qualified waste handling firm(s) to dispose of all construction waste on the project. This firm(s) shall transport non-recyclable, and/or recyclable materials to an Owner approved landfill or recycling location.
- D. The Contractor shall be responsible for reporting weight, classification, any reimbursement rate of materials delivered and the supporting documentation to the OAR in the WMR.

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- E. The Contractor shall remove and properly dispose of CDL waste from the Project site on a regular basis. CDL waste shall not be allowed to accumulate on the Project site.
- F. Recyclable, Reusable, Salvageable materials include, but are not limited to the following:
 - 1. Ferrous Metals (Steel)
 - 2. Non-Ferrous Metals (Copper and Stainless Steel)
 - 3. Tin
 - 4. Aluminum
 - 5. Asphalt
 - 6. Concrete
 - 7. Carpet
 - 8. Wood

3.6 WASTE MANAGEMENT PLAN IMPLEMENTATION

- A. Provide copies of the WMP to the job site foremen, and each Subcontractor.
- B. Provide on-site instruction of appropriate separation, handling, and recycling, salvage, reuse and return methods to be used by all parties at the appropriate stages of the Project.
- C. Conduct waste management meetings during the weekly meeting to share and discuss waste management goals.
- D. Labeling and Containers:
 - 1. Label all containers in accordance with 30 TAC 335 Subchapter C and 40 CFR 262 & 264
 - 2. Package and label wastes to comply with Department of Transportation. DOT labeling requirements as specified in 49 CFR Parts 172, 173, 174, 177, 178, and 179 if transporting.
 - 3. Provide containers for CDL waste.
 - 4. Bins shall be protected during non-working hours from off-site contamination.
- E. Storage:
 - 1. Store wastes by classification and type, in accordance with 30 TAC 335. See "Guidelines for the Classification and Coding of Industrial and Hazardous Wastes" for more information.
 - 2. Place waste only in containers specifically marked and labeled for that waste.
 - 3. Provide containers compatible with the applicable waste stream.
 - 4. Waste containers shall be maintained in good condition and sealed closed when waste is not being added or removed.
 - 5. Do not store incompatible wastes near one another.
 - 6. Space containers sufficiently apart to allow access in case of emergency.
 - 7. Do not commingle regulated materials.

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8. Ensure all hazardous, universal, or other regulated waste materials are segregated from CDL waste and recycled material.
9. Ensure recycled materials are clearly labeled with a list of acceptable materials. The list of acceptable materials must be the same as the materials recycled at the recycling processor facility.
10. Ensure recyclable materials contain no more than 10 percent non-recyclable material, by volume.
11. Retain Owner generated wastes on the Airport property in a secure location until waste characterization is complete and waste is ready for disposal.

F. Inspections:

1. The Contractor shall inspect waste storage areas weekly to ensure proper handling of wastes.
2. At a minimum, inspections shall observe the following:
 - a. Presence of spilled material;
 - b. Integrity of secondary containment structure;
 - c. Maintenance of emergency pathways;
 - d. Integrity of containers (evidence of leaking, bulging, or corroding);
 - e. Closed and secured container lids or covers;
 - f. Accurate and complete container labels;
 - g. Segregation of containers by hazard class;
 - h. Storage capacity of accumulation area;
 - i. Segregation of regulated waste, CDL waste, and recycled materials.

PART 4 - MEASUREMENT AND PAYMENT

Not Used.

- END OF SECTION -