

Subject: POLLUTION PREVENTION AND WASTE MANAGEMENT POLICY

1. PURPOSE. The mission of the U.S. Department of Transportation (DOT) is to deliver the world's leading transportation system, serving the American people and economy through the safe, efficient, sustainable, and equitable movement of people and goods. This Order conveys policy, delegates authority, and assigns responsibility to ensure that DOT, including its Operating Administrations (OAs), meets all legal and regulatory requirements related to pollution prevention and waste management (PPWM), pursuant to the Pollution Prevention Act (PPA) of 1990, the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA), the Resource Conservation and Recovery Act of 1976 (RCRA), as amended, Executive Order (EO) 14057, *Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability*, and other applicable requirements set forth in law, regulations, or executive actions. Pursuant to these requirements, DOT must ensure that pollution and waste are prevented or reduced at the source to the maximum extent possible, and remaining waste is disposed in an environmentally safe manner. The requirements of this Order are intended to enhance DOT operations by reducing waste and pollution while promoting healthier and more productive workplaces.
2. CANCELLATION AND EFFECTIVE DATE. This Order cancels and supersedes DOT Order 4356A, *Pollution Prevention and Waste Management Policy*, issued December 1, 2020. This Order is effective upon issuance.
3. BACKGROUND. This Order applies to internal DOT actions and activities (e.g., all phases of administration, planning, design, programming, budgeting, operations, maintenance, training, and acquisition) that generate pollution or waste within DOT-owned and DOT-leased facilities (direct-leases and General Services Administration (GSA) leases).
 - a. For the purpose of this Order, Operating Administration (OA) refers to the nine DOT Operating Administrations, the Office of the Secretary, and the Office of Inspector General.
 - b. OAs are responsible for waste management requirements within all DOT buildings including leased buildings (e.g. direct-leases and GSA leases) where DOT is directly responsible for waste management or for payment of contracted waste management services.

- c. OAs must comply with all relevant laws, regulations, executive actions, and other directives, including those set forth in Appendix I of this Order, along with any legal requirements not cited herein, or established after issuance.
 - d. The requirements of this Order are not intended to restrict or inhibit DOT's ability to fulfill its mission or adversely affect in a material way the Department's operations or the safety of the traveling public.
 - e. This Order is intended solely to improve the internal management of the Department. It is not intended to and does not create any right or benefit, substantive or procedural, enforceable by any party against the United States, the Department, or its entities, officers, employees, or agents, or any other person.
 - f. For the actions contained in this Order, "must" or "shall" conveys statutory or regulatory requirements, and "should" or "may" convey recommendations for efficient and effective implementation.
4. REFERENCES. See Appendix I for a list of authorities and guidance documents.
5. DEFINITIONS. See Appendix II for a list of key terms.
6. POLICY. It is the policy of the Department to manage, divert, and report non-hazardous municipal solid waste (MSW) and construction and demolition (C&D) debris to achieve at least 50 percent diversion from landfill by fiscal year (FY) 2025 and 75 percent by FY 2030. The Department will also strive to achieve net-zero waste in buildings, typically defined as 90 percent diversion, when possible and work with facility managers to initiate programs to toward this goal. The management and diversion of MSW and C&D debris will provide additional benefits by avoiding greenhouse gas (GHG) emissions related to the acquisition of raw material, the manufacture and transport of material, as well as downstream waste management activities.
- a. The Department will implement a comprehensive waste management strategy and comply with all relevant requirements in the following areas:
 - 1) MSW Management;
 - 2) C&D Debris Management;
 - 3) Toxic and Hazardous Waste Reduction;
 - 4) Management of Ozone-Depleting Substances; and

5) Safer Choice Alternatives

- b. Pursuant to 42 U.S.C. § 13101(b) and EO 14057 implementing instructions, the Department will follow the Environmental Protection Agency's (EPA) Waste Management Hierarchy and prioritize waste management practices to reduce the amount of overall waste generated at the source (source reduction) and support material reuse where feasible, followed by recycling and composting, then energy recovery, and finally responsible treatment and disposal as a last resort.
 - 1) Employees across all duty stations, on-site at federal facilities and remote, should reduce waste and re-use materials to the maximum extent possible.
 - c. Sections 8–12 of this Order set forth specific requirements, exclusions, and suggested procedures for efficient and effective pollution prevention and waste management.
 - d. The Department will track and report non-hazardous solid waste management metrics in accordance with federal mandates. Section 13 of this Order sets forth reporting requirements.
 - 1) OAs should consider tracking final disposition of MSW and C&D debris.
 - e. The Sustainability Governance and Engagement directives described in the Overarching Sustainability Policy are intended to facilitate and support OA actions to implement the requirements in this Order.
 - f. OAs should also follow requirements related to this Order that are found in DOT's current Sustainable Buildings, Sustainable Acquisition, and Electronics Stewardship Policies, or any subsequent updates that supersede them.
7. **RESPONSIBILITIES.** The following personnel are responsible for implementing this Order.
- a. **DOT Chief Sustainability Officer (CSO):** The Secretary of Transportation has delegated to the Assistant Secretary of Administration the duties of CSO pursuant to 49 Code of Federal Regulations (CFR) § 1.38(c)(2). The CSO serves as the senior official responsible for the day-to-day management, implementation, performance, and compliance with all applicable energy, environmental, and sustainability statutes, regulations, executive actions, and other requirements. Related to the requirements of this Order, the CSO will:

- 1) Represent DOT on pollution prevention and waste management matters with officials from the federal Executive Branch, Congress, and all other external stakeholders;
 - 2) Communicate all internal pollution prevention and waste management requirements to the OAs and report to the Secretary and Deputy Secretary of Transportation on the adequacy and effectiveness of DOT's implementation;
 - 3) Coordinate with all appropriate Secretarial Offices and OAs to implement this Order; and,
 - 4) In conjunction with the Deputy Assistant Secretary for Policy, attend management reviews with the Chair of Council on Environmental Quality (CEQ) and the Director of Office of Management and Budget (OMB) to assess implementation and progress on agency plans, goals, and targets developed pursuant to EO 14057.
- b. **DOT Assistant Secretary for Administration:** Provides Departmental leadership and develops DOT policy on issues related to human resources, security, acquisition and grants, information services, energy, environmental management and sustainability, transportation, facilities, and space management.
- c. **DOT Deputy Assistant Secretary for Policy:** Guides the Department's policy and advances strategic initiatives related to climate change mitigation, adaptation, and resilience. Represents DOT on climate change matters with officials from the federal Executive Branch, Congress, and other external stakeholders.
- d. **DOT Chief Science Officer:** Serves as principal advisor to the Secretary of Transportation on science and technology issues. Ensures DOT's research, development, and technology programs are scientifically and technologically well-founded and conducted with integrity.
- e. **DOT Office of the Senior Procurement Executive (OSPE):** Facilitates the accomplishment of DOT's mission by providing effective and sustainable business policies, practices, and services in acquisition, financial assistance management, and competitive sourcing. Leads Departmental efforts to achieve net zero emissions from federal procurement, including a "buy clean" policy. Ensures the Department prioritizes pollution prevention and waste management in contracting and procurement.
- f. **DOT Senior Real Property Officer:** Oversees the siting, acquisition, and operations of DOT facilities and the integration into regional and local planning initiatives.

- g. **DOT Office of the Secretary of Transportation (OST); Office of Facilities, Information, and Asset Management; Energy and Resource Efficiency Program (EREP):** Related to the requirements of this Order, EREP will:
- 1) Develop pollution prevention and waste management policies to improve efficiency, reduce waste, and reduce costs for DOT facilities;
 - 2) Provide strategy development, oversight, evaluation, methodology, and assistance for implementation of waste policy;
 - 3) Assist the CSO in communicating all pollution prevention and waste management requirements to the OAs; and
 - 4) Aggregate and assemble data for DOT-wide internal and external sustainability reports, including waste data and supporting documentation.
- h. **DOT Office of the General Counsel (OGC):** Interprets and provides guidance at a Departmental level on new and existing environmental and sustainability statutes, regulations, executive actions, and other requirements. Reviews OST contracts and ensures they meet all applicable statutes, regulations, executive actions, and other requirements for OST or other OAs as requested.¹
- i. **OA Administrator:** Ensures OA conforms to and implements all applicable requirements for pollution prevention and waste management set forth in this Order. The OA Administrator may delegate responsibilities as necessary to meet pollution prevention and waste management requirements to other OA personnel, as appropriate. Related to the requirements of this Order, the OA Administrator will:
- 1) Issue data collection requests and analyze data for reporting progress milestones;
 - 2) Incorporate pollution prevention and waste management goals into performance plans and appraisals as appropriate;
 - 3) Advocate for financial resources and dedicate financial resources to pollution prevention and waste management initiatives;
 - 4) Ensure employees with pollution prevention, waste management, or facility responsibilities receive appropriate training;

¹ For FAA, this requirement applies to the extent the policy herein is consistent with 49 U.S.C. § 106(f)(2)(D).

- 5) Communicate new pollution prevention and waste management requirements, including financial and workforce resources, throughout OA;
 - 6) Ensure that pollution prevention and waste management information is tracked and reported to the appropriate systems at the minimum intervals;
 - 7) Submit requests, if appropriate, for exemptions to specific goals or requirements of this Order in accordance with Section 602 of EO 14057 to the CSO.
- j. **Facility Manager:** Implement the requirements of this Order and create procedures to reduce MSW at the facility or facilities under their purview. OAs or Facility Managers may assign or delegate responsibilities to more appropriate personnel, as needed. To meet the requirements of this Order Facility Managers or the designee will:
- 1) Ensure facility compliance with applicable pollution prevention laws and regulations;
 - 2) Reduce the use of hazardous substances to the maximum extent possible;
 - 3) Seek to use Safer Choice Alternatives to toxic substances to the maximum extent possible;
 - 4) Ensure proper management of ozone depleting substances and seek to replace outdated Heating, Ventilation, and Air Conditioning (HVAC) equipment with the latest recommendations for ozone depleting substances, per the Montreal Protocol and subsequent amendments;²
 - 5) Become familiar with local, territorial, and state rules, regulations, and procedures for MSW reduction through recycling, food and yard waste composting, and other MSW programs;
 - 6) Facilitate completion of waste audits, as required, to help determine areas for improvement in waste diversion;
 - 7) Ensure MSW and C&D debris are tracked annually and seek to obtain quantitative data (weight, etc.) for MSW and C&D debris;
 - 8) Complete required reporting on MSW and C&D debris diversion rates;

² [International Treaties and Cooperation about the Protection of the Stratospheric Ozone Layer | US EPA](#), accessed December 11, 2023.

- 9) Examine operations and maintenance contracts and incorporate best practices to reduce waste to the maximum extent possible;
- 10) Examine facility/facilities operations to enhance MSW and C&D diversion to the maximum extent possible, with net-zero waste (90% diversion) as the goal.

k. **OA Senior Procurement Official (Chief Acquisition Officer or Federal Aviation Administration (FAA) Acquisition Executive):** Awards and administers contracts and ensures compliance with the Federal Acquisitions Regulations (FAR), Transportation Acquisitions Regulations (TAR), Transportation Acquisition Manual (TAM), and other Departmental policies related to acquisition.³ For a full description, refer to the DOT Sustainable Acquisition Policy.

8. MUNICIPAL SOLID WASTE MANAGEMENT. In its routine activities, DOT generates multiple types of waste, such as solid waste, hazardous waste, and construction and demolition (C&D) debris. As such, waste management is critical to prevent environmental pollution, lower disposal costs and achieve the net-zero GHG emissions economy-wide goals as established in EO 14008. By using sustainable materials management practices, DOT can prevent pollution, support the achievement of waste reduction goals and may lessen future costs related to the processing of waste from DOT facilities. For instance, the reduction and diversion of organic food waste is critical as the anaerobic decomposition of organic materials in MSW landfills produce significant quantities of methane. Methane has a global warming potential (GWP) that is thousands of times greater than carbon dioxide and a primary driver of global warming and climate change.

- a. Pursuant to 42 U.S.C. § 6961, OAs must comply with all federal, state, territorial, interstate, and local requirements for the management and disposal of non-hazardous solid waste and hazardous waste.
- b. While pursuing the path to net-zero emissions by 2050, OAs shall work to implement methods to reduce, reuse, or recover solid waste streams resulting in more than 90 percent diversion from landfill or incinerators (e.g., net-zero waste).
- c. DOT has adopted EPA's "Solid Waste Management Hierarchy" for managing solid waste. The hierarchy prioritizes waste prevention, otherwise referred to as 'source reduction' (including reuse, sale, donation, and exchange) as the preferred method, followed by recycling (composting and remanufacturing), energy recovery, and lastly, treatment and disposal.

³ For FAA, this requirement applies to the extent the policy herein is consistent with 49 U.S.C. § 106(f)(2)(D).

- d. In accordance with EO 14057 and accompanying *Implementing Instructions*, OAs must:
- 1) Annually divert at least 50 percent of MSW, including food and compostable material, and C&D, by FY 2025 and divert at least 75 percent of both waste types by FY 2030.⁴
 - 2) Reduce, annually, the total amount of waste generated and the percentage of waste sent to treatment and disposal facilities, including landfill and incineration without energy recovery.
 - 3) Annually, track non-hazardous solid waste management progress for the total amount of waste generated, the amount diverted from the waste stream (e.g., reuse, recycling), and the percentage sent to energy recovery, treatment and disposal facilities.
 - (a) OAs must track and report MSW from facilities 25,000 gross square feet (GSF) or greater.
 - (b) OAs should strive to track waste from facilities smaller than 25,000 GSF. If a site manages and tracks waste at a campus or facility level, OAs should report the waste generated and diverted for all relevant buildings, including those smaller than 25,000 GSF.
 - (c) OAs should consider tracking waste from other mission and non-mission-related activities (e.g., waste not associated with buildings or facilities, such as campgrounds, illegal dumping, storm debris, or wildfire camps). OAs should not include tracking of these types of wastes in the reporting metric, but tracking will help OAs to incorporate waste minimization strategies in all types of operations.
 - (d) OAs should use EPA's ENERGY STAR® Portfolio Manager to track waste at the facility level or ensure that waste tracked using OA-specific waste tracking systems use categories that align with the EPA definitions and methodologies.
 - (e) OAs should conduct waste management audits of their facilities annually or as needed.

⁴ For the purposes of reporting progress toward E.O. 14057 waste diversion goals, agencies may not count waste disposed of through waste-to-energy processes, in accordance with the EO 14057 implementing instructions.

- (i) Audits should assess waste generation and disposal, including but not limited to waste stream composition (volume or weight by type of waste), the effectiveness of current recycling programs and waste diversion technologies, cost savings, and source reduction opportunities.
- e. OAs should ensure that all waste management service contracts require vendors to report the quantity of materials received to facilitate reporting and compliance. GSA's Sustainable Facilities Tool includes guidance for contracts and plans.
- f. Source Reduction and Material Reuse: Source reduction can reduce GHG emissions, save natural resources, conserve energy, and reduce pollution. In accordance with the EPA Waste Management Hierarchy, OAs should evaluate processes and procedures across the organization to identify opportunities to reduce the amount and toxicity of waste generated, and to reuse materials to the maximum extent practicable. OAs shall implement the following approaches for waste prevention, where feasible:
 - 1) Purchase only products, services, and equipment that are necessary to complete the mission.
 - 2) Use procurement guidance such as EPA's Comprehensive Procurement Guidelines (CPG) program and DOT's Sustainable Acquisitions Policy to reduce materials use by purchasing multi-attribute, environmentally preferable products.
 - 3) Ensure that Information Technology (IT) investments minimize duplication, achieve efficiencies, maximize performance, and leverage shared-service delivery models, in accordance with DOT Order 1351.39A, IT Management Policy.
 - 4) In accordance with 42 U.S.C. § 6962, 7 U.S.C. § 8102 and DOT's Sustainable Acquisition Policy, purchase products that incorporate recycled content, enhance recyclability or biodegradability, use biobased chemicals, and/or contain lower embodied carbon and minimal toxicity (e.g. Safe Choice Alternatives).
 - 5) Purchase products and equipment in bulk to reduce packaging and require vendors to minimize the amount of packaging and waste generated when

providing products and services to DOT facilities.

- 6) Follow the actions outlined in *Mobilizing Federal Action on Plastic Pollution: Progress, Principles, and Priorities*. Encourage practices that reduce employee-generated waste from food and drink packaging, such as using reusable food and beverage containers, and working to eliminate single use plastics.
 - (a) Evaluate the use of disposable products, such as single-use plastic water bottles, and identify reusable alternatives where feasible and life cycle cost-effective.
- 7) Implement organic green waste (e.g. grass, vegetation) and food waste bans that prohibit facilities from sending organic waste to the landfill and utilize an organics collection service, compost organic waste onsite, or send organic waste to a compost or anaerobic digestion facility.
- 8) Reduce paper use by distributing materials electronically rather than printing and copying, and implement duplex printing, where feasible in accordance with DOT Order 1360.5C, IT Policy and Administration of Print Services.
- 9) Reuse or extend the service of all items necessary for daily operations (e.g., real property, real estate, fleet vehicles, heavy equipment, and personal property) before acquiring replacements.
- 10) Employ category management, best in class solutions, and blanket purchase agreements, along with standard equipment and furniture configurations, to facilitate purchase efficiency and product reuse within the Department.
- 11) Ensure that electronic equipment is not prematurely discarded by rotating equipment to staff with different electronics needs, thus extending the useful life of electronic equipment.
- 12) Reuse materials for other purposes, where viable, or return all reusable materials to a common DOT warehouse for inventory and reuse or sale at public auction, pursuant to 41 CFR Part 102-36.
- 13) Where reuse within the Department or sale options pursuant to 41 CFR Part 102-36 is not feasible, donate surplus property to eligible non-federal

organizations under the Federal Surplus Personal Property Donation Program, authorized by 40 U.S.C. §549. All sale, donation, and exchange records must be maintained in accordance with DOT Order 4410.4, Equipment Management and Control.

- 14) Where reuse is not a viable option, OAs should participate in take-back programs offered by manufacturers or vendors.
- g. Recycling and Composting: Recycling and composting have several benefits, including but not limited to, reducing GHG emissions, preventing releases of air and water pollution, saving energy, supplying raw materials to industry, and providing green jobs.
- 1) OAs shall implement and maintain comprehensive recycling and composting programs where feasible.
 - 2) OAs should designate recycling coordinators to meet the waste management requirements.
 - 3) OAs should ensure that all recycling and composting contracts require regular reports that quantify waste diverted to facilitate tracking.
 - 4) The Department participates in a nationwide recycling contract administered by GSA that is responsible for the collection of recyclable materials in federal buildings.
 - (a) OAs should work with GSA to ensure that the recycling program at GSA managed facilities meets the Department's needs, to the maximum extent possible.
 - (b) OAs should participate in cooperative recycling programs with other federal facilities, state, territorial, or local agencies, or non-profit organizations to the maximum extent possible, considering costs, cost avoidance, return on investment, and availability of markets.
 - 5) For DOT facilities that offer onsite food services, OAs shall, where feasible:
 - (a) Require vendors to maximize waste diversion and provide recyclable, compostable, or reusable food containers.
 - (b) Work with vendors and/or non-profit organizations to redirect safe food and/or organic waste from traditional waste streams and landfills

- by donation or composting.
- (c) Participate in recycling programs offered by manufacturers or vendors, where reuse or take back is not an option.
 - (d) Participate in off-site composting programs or establish on-site programs where feasible and life cycle cost-effective.
 - (e) Implement sustainable food management practices found in the U.S. Environmental Protection Agency, U.S. Department of Agriculture, and the U.S. Food and Drug Administration's " National Strategy for Reducing Food Loss and Waste and Recycling Organics."
- 6) OAs must use certified electronics recyclers, who have demonstrated to an accredited, independent third-party auditor that they meet specific standards to safely recycle and manage electronics.
 - 7) OAs must use the proceeds generated by recycling materials in accordance with Public Law 103-329, Section 608.
- h. Energy Recovery: Energy recovery from waste is the conversion of non-recyclable waste materials into usable heat, electricity, or fuel through a variety of processes. It is a less preferred method of waste management, but where source reduction, materials reuse, and recycling or composting are not feasible, OAs should manage or arrange for the procurement of waste management services in a manner which maximizes energy and resource recovery (42 U.S.C. § 6962(f)) and reduces air pollution Energy recovery does not count as waste diversion in the required reports.
- 1) Where cost-effective, OAs should dispose of non-recyclable waste through a permitted Waste-to-Energy facility for conversion to energy by incineration or to a permitted Landfill Gas to Energy facility, consistent with local and state law.
 - 2) OAs should ensure that all Waste-to-Energy service contracts require regular performance reports to facilitate tracking of the percent of non-hazardous solid waste sent to treatment and disposal facilities.
 - 3) OAs should consider phasing out the use of Waste-to-Energy incineration facilities near communities with environmental justice concerns.⁵

⁵ EPA's [EJScreen: Environmental Justice \(EJ\) Screening and Mapping Tool | US EPA](#), can be used as a resource to help identify EJ communities. Please also contact EREP with any questions on identifying EJ communities.

- i. Treatment and Disposal: Treatment of waste through physical, chemical, or biological methods can help reduce the volume and toxicity of waste prior to disposal. In accordance with OMB circular A-11, OAs must consider all MSW alternatives (e.g., recycling, reuse or donation) before disposal.

If source reduction or other diversion options are not viable or cost-effective, OAs should prioritize treatment to reduce the volume and toxicity of waste, followed by disposal of non-hazardous solid waste in landfills as a last resort.

- 1) OAs must also evaluate the regulatory requirements relevant to the disposal of each item to ensure that proper procedures are followed and disposal is timely and cost-effective.
- 2) OAs should reduce the amount of non-recyclable waste disposed in landfills through physical, chemical and/or biological treatment where cost-effective.
- 3) Landfills used by OAs for waste disposal must have current operating permits and comply with federal, state, territorial, and local regulations, including standards for ground- water monitoring systems.
 - (a) OAs should contract with waste service providers that use sanitary landfills with leachate collection systems.

- j. Section 13 of this Order contains a summary of relevant reporting requirements.

- k. OAs should also follow all policies regarding solid waste management included in DOT's Sustainable Buildings and Sustainable Acquisition Policies.

- 9. **CONSTRUCTION AND DEMOLITION DEBRIS MANAGEMENT.** Construction and demolition of facilities, buildings and other structures often involve large quantities of materials and present great opportunities to reduce and divert debris. OAs should use a comprehensive strategy to reduce the amount of waste disposed of in landfills for all DOT C&D projects, including the following approaches:

- a. In accordance with EO 14057 and accompanying *Implementing Instructions*, OAs must require contractors to track and provide accounting of the final disposal destinations for C&D debris generated from all construction projects.

- 1) OAs must achieve at least 50 percent diversion of C&D debris from landfill by FY 2025 and 75 percent by FY 2030.

- b. OAs should use a comprehensive strategy to reduce the amount of C&D debris disposed in landfill from all construction projects, including the following

approaches:

- 1) Ensure that C&D contracts include provisions that require contractors to comply with all federal, state, territorial, interstate, and local requirements related to waste management.
- 2) Require waste reports for all relevant contracts to facilitate tracking of C&D debris prevention and recycling progress.
- 3) Ensure that project managers or contractors implement a C&D materials management plan for all new construction, renovation, modernization, and beginning in FY 2024, tenant improvement projects for leases subject to green leasing.
 - (a) The plan should address proper handling of C&D debris according to EPA's Sustainable Materials Management website that provides Best Practices for Reducing, Reusing, and Recycling Construction and Demolition Materials. Sections 8e through 8i of this Order generally apply in managing C&D debris.
- 4) Employ building designs that use materials efficiently and facilitate future changes and repurposing, including eventual deconstruction, which involves the salvage and reuse of building materials.
- 5) Utilize the EPA's Disaster Debris Recovery Tool to find information, mapping ability, and locations of over 20,000 facilities capable of managing different materials found in debris from disasters or other settings.
- 6) Use products that incorporate such features as recycled content, recyclability, biodegradability, and minimal toxicity.
- 7) Track generation and disposition of C&D debris separately from MSW and, where data are available, report on volume and disposition of C&D debris. Section 12 of this Order contains a schedule of reporting requirements.
- 8) Conduct waste management audits of C&D activities annually or as needed to identify opportunities for improving waste management practices.
- 9) Ensure that C&D projects comply with the requirements in Section 10 of this Order, including minimal use and careful handling of toxic and hazardous

materials. Also, ensure compliance with all federal, state, territorial, interstate, and local requirements related to C&D waste management.

- 10) Review and follow policy statements regarding the purchase of C&D products with recovered content and other features for source reduction, included in DOT's Sustainable Acquisition Policy.

10. TOXIC AND HAZARDOUS WASTE REDUCTION. Effective management of toxic and hazardous waste mitigates threats to human health and the environment. The requirements of this Section apply to all OAs that acquire, use, or dispose of toxic and hazardous waste.

- a. Pursuant to 42 U.S.C. § 6902(b) and 42 U.S.C. § 13101(b), OAs must minimize the quantity of toxic and hazardous materials acquired, used, and disposed of.
- b. OAs must follow RCRA requirements for hazardous waste identification, classification, generation, management and disposal in accordance with 42 U.S.C. §§ 6921-6939g and implementing regulations at 40 CFR Parts 260-280.
- c. OAs must comply with the provisions set forth in EPCRA, as amended (42 U.S.C. §§ 11001-11005 and 11021-11023), in light of applicable EPA guidance, and without regard to the Standard Industrial Classification or North American Industrial Classification System delineations.
 - 1) OAs must require their contractors to provide the information needed by the federal facility to comply with EPCRA.
 - 2) OA facilities that submit annual toxic chemical release forms in accordance with EPCRA (42 U.S.C. § 11023) must do so electronically, as provided in EPA's EPCRA Section 313 guidance.
 - (a) Electronic reporting must include required elements from the Pollution Prevention Act of 1990 (42 U.S.C. § 13106). For example, it requires a toxic chemical source reduction and recycling report for the preceding calendar year.
- d. OAs must follow Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, or Superfund) requirements, where applicable. 42 U.S.C. § 9620 describes federal agency responsibilities under this Act.
- e. OAs must follow Toxic Substances Control Act implementing regulations at 40 CFR

Part 700-799.

- f. OAs must implement EPA's Integrated Pest Management Principles to reduce and eliminate the use of toxic and hazardous chemicals and materials.
 - g. OAs shall reuse and recycle hazardous materials to minimize their introduction into the waste stream to the maximum extent possible, where cost-effective.
 - h. OAs shall conduct an alternatives analysis prior to procuring products that contain hazardous or toxic materials, and prioritize alternatives that minimize toxic and hazardous substances, to the maximum extent possible.
 - 1) Consult Section 8f, "Source Reduction and Materials Reuse," of this Order for more actions to facilitate acquisitions with minimal toxic and hazardous substances.
 - i. Section 13 of this Order contains a schedule for reporting releases of toxic and hazardous waste.
 - j. OAs should also follow requirements related to the purchase of products that minimize toxic and hazardous materials that are found in DOT's Sustainable Acquisition Policy.
11. MANAGEMENT OF OZONE-DEPLETING SUBSTANCES. Minimizing the use and release of ozone-depleting substances (ODS) can increase stratospheric ozone protection, improving human health and the environment. In addition, many ODS compounds have global warming potentials (GWP) that are thousands of times greater than carbon dioxide, and much longer lifetimes. Thus, it's critical to reduce or eliminate the use of ODS to achieve net-zero GHG emissions goals. The requirements of this Section apply to all OAs that acquire, use, or dispose of ODS and emit GHG emissions related to waste disposal.
- a. Pursuant to Title VI of the Clean Air Act (CAA) (42 U.S.C. §§ 7671-7671q), OAs must implement programs to phase out the procurement of ODS, and give preference to alternative chemicals, products, and manufacturing processes that lessen the depletion of ozone in the upper atmosphere, where feasible and life cycle cost-effective, to the maximum extent possible. EPA's Significant New Alternatives Policy (SNAP) program publishes a list of safe alternatives to ODS.

- b. When applicable, OAs must produce reports in accordance with the requirements of 42 U.S.C. §§ 11001-11005 and §§ 11021-11023, from EPCRA (refer to Section 10 of this Order), including an annual Toxics Release Inventory (TRI). OAs must also report refrigerant amounts in the Annual Energy Data Report, in accordance with 42 U.S.C. § 8253.
- c. OAs must ensure that their facilities have obtained an air pollution permit (e.g., Title V Permit) if required under the CAA. OAs must ensure that air pollution emissions of facility system equipment meet each respective facility's CAA permit requirements and limitations.
- d. Section 13 of this Order contains a schedule for reporting related to ODS.
- e. OAs shall follow the requirements related to reduction of toxic and hazardous materials through the procurement process, and the purchase of products made from recovered materials, that are found in DOT's Sustainable Acquisition Policy.
- f. OAs should raise awareness about the GWP of ODS and the significant benefits of using alternatives identified by EPA's SNAP program, through establishment of reduction targets, monitoring and reporting, and employee engagement.

12. SAFE CHOICE ALTERNATIVES. A primary goal of EO 14057 is to harness the buying power of the federal government to positively influence markets for sustainable products. From a waste perspective, this approach can lead to buying products that are less toxic, less resource intensive, and often less expensive than traditional products.

- a. OAs shall seek out products that meet the criteria of EPA's Safer Choice Program⁶ where feasible.
- b. OAs shall seek to reduce and/or eliminate where feasible, the purchase of products that contain per- and polyfluoroalkyl substances (PFAS).⁷ The Safer Choice program provides easy to access recommendation for purchasing

⁶ The Safer Choice Label - is a type of Eco Labeling that focuses on products which are more protective of the environmental and safer for human health yet maintain their effectiveness.

⁷ U.S. Environmental Protection Agency, PFAS Explained, <https://www.epa.gov/pfas/pfas-explained>, accessed January 27, 2022

products that do not contain PFAS.⁸ Products certified under EPA’s Safer Choice Program may not contain intentionally added PFAS.

- c. OAs shall purchase materials that meet the standards for Environmentally Preferable Products (EPP)⁹ where feasible. The EPP program focuses on products that consider the life cycle impact of products when making purchasing decisions. This cradle to grave evaluation can help OAs minimize their environmental footprint.
- d. OAs shall follow the requirements related to reduction of harmful materials through the procurement process, and the purchase of environmentally friendly products and materials, that are found in DOT’s Sustainable Acquisition Policy.

13. SUMMARY OF REPORTING REQUIREMENTS. OAs may use the monitoring and documentation systems listed in the table below to meet the requirements of this Order. These systems are generally web-based and proprietary to the federal government.

Reporting Module	Purpose	Data Attributes to Report	Reporting Frequency
DOT annual reporting of solid waste data collection and target setting	Track and report on non-hazardous solid waste generated, and the percentage sent to treatment and disposal facilities; report C&D waste data where available; set annual targets for waste reduction	Collection methods, material types, recovered weight/volume, and recipients of the diverted material	Annually, no later than November 15 (same as the Annual Energy Data Report)
Energy Star Portfolio Manager (ESPM)	Track and report non-hazardous solid waste generated.	Material types, quantity, cost	Annually, no later than November 15 (same as the Annual Energy Data Report)

⁸ [Search Products that Meet the Safer Choice Standard | US EPA](#), accessed June 9, 2023

⁹ [About the Environmentally Preferable Purchasing Program | US EPA](#), accessed June 6, 2023

Toxics Release Inventory Reporting via EPA's TRI-MEweb online reporting tool	Report on releases of toxic and hazardous materials	Name, use, and quantity of toxic chemicals at the facility, transferred, disposed of, and entering the environment annually, along with on-site toxic chemical waste treatment methods and efficiency, energy recovery, toxic chemical recycling, and source reduction	Annually, no later than July 1 (if applicable for your facility)
Pollution Prevention and Waste Audits	Assessment of waste generation and disposal, waste stream composition, effectiveness of current recycling programs and waste diversion technologies, source reduction opportunities for both solid waste and C&D waste	Estimated total weight/volume of waste generated, diverted, converted to energy, by type of material, number of facilities with composting programs, assessment of recycled waste streams, percent of facilities with recycling programs, and percent of facilities implementing integrated pest management and landscaping	As needed to accurately track and reduce waste generated and the percentage sent to treatment and disposal facilities

14. POLICY UPDATES AND/OR REVISIONS. This Order must be reviewed at least once every three years to determine whether updates or revisions are necessary. In the interim, all applicable laws revised by Congress and all new executive actions or guidance related to waste management are considered incorporated by reference.
15. POLICY EXCEPTION REQUIREMENTS. OA Administrators may submit a request for an exception to the CSO, through EREP. Approvals for exceptions to the requirements of this Order should be coordinated with OGC.
16. DISTRIBUTION. This Order is distributed to all OST offices listed in Section 7 of this Order, the DOT Senior Real Property Officer, OA Administrators, OA Chief Acquisition Officers, and the Federal Aviation Administration (FAA) Acquisition Executive.
17. CONTACT. If you have specific questions related to this Order, please contact EREP (M- 90) at DOTsustains@dot.gov.

Philip A. McNamara
Assistant Secretary for Administration,
Chief Sustainability Officer

APPENDIX I: AUTHORITIES AND REFERENCES.

1. Public Laws and Statutes

- a. Clean Air Act of 1970 (CAA), as amended, 42 U.S.C. §§ 7401–7671q.
- b. Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. §§ 9601–9675.
- c. Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA), 42 U.S.C. §§ 11001-11050.
- d. Federal Insecticide, Fungicide and Rodenticide Act of 1972 (FIFRA), 7 U.S.C. §§ 136 -136y.
- e. Federal Water Pollution Control Amendments of 1972 (Clean Water Act), 33 U.S.C. §§ 1251–1387.
- f. Land Disposal Program Flexibility Act of 1996, Pub. L. No. 104-119, 42 U.S.C. §§ 6901, 6921, 6924, 6925, 6947, 6949a.
- g. National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. §§ 4321–4347.
- h. Pollution Prevention Act of 1990 (PPA), 42 U.S.C. §§ 13101-13109.
- i. Resource Conservation and Recovery Act of 1976 (RCRA), as amended, Pub. L. No. 94-580 (42 U.S.C. §§ 6901–6992k).
- j. Toxic Substances Control Act of 1976 (TSCA), 15 U.S.C. §§ 2601–2692.

2. Regulations

- a. EPA Regulations, 40 CFR Parts 350–373 and 702–749.
- b. Federal Management Regulation, Subchapter B - Disposition of Excess Personal Property, 41 CFR Part 102-36.

3. Executive Actions

- a. CEQ: Implementing Instructions for EO 14057, Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability, December 2021.
- b. EO 14057, Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability, December 2021.
 - a. M-22-03, Advancing Equity in Federal Procurement, December 2021.
 - b. M-19-13, Category Management: Making Smarter Use of Common Contract Solutions and Practices, March 2019. OMB Circular No. A-11, Preparation, Submission, and Execution of the Budget, August 2023.

4. Guidance and Directives

- a. CEQ: Guiding Principles for Sustainable Federal Buildings and Associated Instructions, December 2020.
- b. DOT Order 1351.39A Information Technology (IT) Management Policy

- c. DOT Order 1360.5C, Information Technology Policy and Administration of Print Services
- d. DOT Order 4410.4, Equipment Management and Control

5. Online Resources

- a. Emerge Knowledge Design: Re-TRAC: A platform that can help manage, measure, and assess waste and recycling programs
- b. EPA: Comprehensive Procurement Guidelines
- c. EPA: Disaster Debris Recovery Tool
- d. EPA: Emergency Planning and Community Right-to-Know Act (EPCRA)
- e. EPA: EPCRA Section 313 Guidance
- f. EPA: Federal Green Challenge
- g. EPA: Pollution Prevention Resources
- h. EPA: Recommendations of Specifications, Standards, and Ecolabels for Federal Purchasing
- i. EPA: Resource Conservation and Recovery Act (RCRA) Overview
- j. EPA: Sustainable Management of Food
- k. EPA: Sustainable Materials Management: Non-Hazardous Materials and Waste Management Hierarchy
- l. EPA: Toxics Release Inventory (TRI) Program
- m. GSA: Green Procurement Compilation (GPC)
- n. GSA: Sustainable Facilities Tool: Solid Waste Management

APPENDIX II. KEY TERMS.

1. **Best in Class:** An acquisition designation to identify government-wide contracts that are vetted, well-managed, and recommended or required (pursuant to OMB memoranda or other policy), and satisfy key criteria defined by OMB.
2. **Blanket Purchase Agreements:** An agreement established by a government buyer with a schedule contractor to fill repetitive needs for supplies or services (FAR 8.405-3).
3. **Category Management:** The business practice of buying common goods and services as an enterprise to eliminate redundancies, increase efficiency, and deliver more value and savings from the government's acquisition programs.
4. **Composting:** The controlled biological decomposition of organic material under aerobic or anaerobic conditions. Organic materials are broken down (decomposed by microorganisms) into compost, also known as humus.
5. **Construction and Demolition (C&D) Debris:** C&D debris is waste from new construction, modernization, demolition, deconstruction and, beginning in FY 2024, tenant improvement projects for leases subject to green leasing requirements. Agencies should exclude land clearing debris from C&D debris calculations.
6. **Direct-Lease:** A building or facility leased by DOT, but not owned by GSA. FAA and the U.S. Maritime Administration are the only OAs with the authority to enter into these leasing agreements.
7. **Disposal:** The discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into or on any land or water.
8. **Diversion:** Also known as Solid Waste Diversion. Redirecting materials, which might otherwise enter the waste stream, to recycling or reuse and keeping them from entering a disposal facility, excluding Waste-to-Energy facilities. Waste prevention, reuse, composting, mulching, recycling, and donation are generally accepted diversion methods.
9. **Duplex Printing:** A feature of computer printers and multifunction printers that allows the automatic printing of a sheet of paper on both sides.
10. **Embodied Carbon:** Also known as Embodied greenhouse gas (GHG) emissions, refers to the amount of GHG emissions associated with the extraction, production, transport, and manufacturing lifecycle stages of a product.

11. **Energy Recovery:** Also known as Waste-to-Energy. The conversion of non-recyclable waste materials into usable heat, electricity, or fuel through processes including combustion, gasification, pyrolyzation, anaerobic digestion and landfill gas recovery.
12. **Executive Action:** Includes EOs, presidential memoranda, implementing instructions, and other documents issued by the Executive Office of the President.
13. **Facility:** Any building, installation, structure, or other property (including any applicable fixtures) owned or operated by, or constructed or manufactured and leased to, the federal government. Facility is used interchangeably with building throughout this Order, based on the original statutory or guidance language.
14. **Facility Manager:** The person who is responsible for directing a variety of service functions to provide building occupants with adequate facilities in which to conduct agency business. In providing these services, they manage building operations, (including waste management), maintenance, repair, and alteration programs, and advise agency representatives on optimal use of the building's facilities.
15. **Global Warming Potential (GWP):** a measure of how much energy the emissions of 1 ton of a gas will absorb over a given period of time, relative to the emissions of 1 ton of carbon dioxide.
16. **Hazardous Waste:** Waste with properties that make it dangerous or capable of having a harmful effect on human health or the environment. Hazardous waste is generated from many sources, ranging from industrial manufacturing process wastes to batteries, and may come in many forms, including liquids, solids, gases, and sludges. Hazardous waste requires special treatment, transportation, and disposal, and cannot be sent to landfills, or other receiving facilities, that are designated for municipal solid waste. EPA's regulations regarding identification of hazardous waste are codified at 40 CFR Part 261.
17. **Landfill:** A permitted solid waste disposal unit where non-hazardous solid waste is placed in or on the land.
18. **Leachate:** Water that collects contaminants as it trickles through wastes, pesticides, or fertilizers. Leaching may occur in landfills, farming areas, and feedlots and may result in hazardous substances entering surface water, ground water, or soil.
19. **Life Cycle Cost-Effective:** The life cycle costs of a product, project, or measure are estimated to be equal to or less than the base case (i.e., current or standard practice or product) in accordance with 10 CFR Part 436 Subpart A.
20. **Municipal Solid Waste (MSW):** waste from standard facility operations, typically including food, compostable and organic materials, and everyday items such as product

packaging, paper products, yard trimmings, clothing, bottles and cans, newspapers, and certain batteries.

21. **Net-Zero Waste:** reducing, reusing, and recovering waste streams to convert them to valuable resources with minimal (more than 90 percent diversion) solid waste sent to landfills over the course of the year.
22. **Non-Hazardous Solid Waste:** all other waste (e.g. municipal solid waste) that is not classified by EPA as hazardous waste as codified in 40 CFR Part 261.
23. **Ozone-Depleting Substance (ODS):** A chemical substance, usually consisting of some combination of chlorine, fluorine, or bromine plus carbon, such as chlorofluorocarbons and hydro chlorofluorocarbons, which has been shown to destroy stratospheric ozone. These substances are commonly found in aerosol products, foams, and fire extinguishers, and are used as refrigerants and in air-conditioning and cooling equipment.
24. **Per-and polyfluoroalkyl substances (PFAS):** A group of chemicals used to make coatings and products that resist heat, oil, stains, grease, and water. These coatings are used in a variety of products, including clothing, furniture, adhesives, food packaging, heat-resistant non-stick cooking surfaces, and the insulation of electrical wire, among other uses.
25. **Pollution Prevention:** “Source reduction” as defined in the Pollution Prevention Act of 1990 (42 U.S.C. § 13102), and other practices that reduce or eliminate the creation of pollutants through (a) increased efficiency in the use of raw materials, energy, water, or other resources, or (b) the protection of natural resources by conservation.
26. **Recovered Material:** Also known as recycled material, or recovered content. Waste material and by-products that have been recovered or diverted from solid waste. This does not include materials and by-products generated from, and commonly reused within, an original manufacturing process.
27. **Reuse:** The use of a product or material again for the same purpose in its original form or with little enhancement or change. Could include salvage of existing materials on-site, reclamation of products by manufacturers and return of packaging materials to the manufacturer, shipper or other packaging reuse sources.
28. **Recycling:** A process of collecting a product or material, separating and processing it, and then returning it to the economy in the form of raw materials, or remelting a product or material into a new finished good.
29. **Source Reduction:** Also known as Waste Prevention. Any change in the design, manufacture, purchase, or use of materials or products (including packaging) to reduce

their amount or toxicity before they are discarded and become solid waste. Source reduction also refers to the reuse of products or materials.

30. **Toxic:** A chemical or mixture that may be harmful to the environment.
31. **Treatment:** Any activity or processing designed to change the physical form or chemical composition of hazardous waste, to render it non-hazardous.
32. **Waste Management Audit:** An assessment of waste generation and disposal including waste stream composition (volume or weight by type of waste), effectiveness of current recycling programs and waste diversion methods, cost savings, and source reduction opportunities. The audit should result in a waste reduction and diversion program tailored to the facility.
33. **Waste Prevention:** Also known as Source Reduction. Any change in the design, manufacturing, purchase, or use of materials or products, (including packaging), to reduce their amount or toxicity before they are discarded and become solid waste (also refers to the reuse of products or materials)
34. **Waste-to-Energy:** Energy recovery from waste through the conversion of non-recyclable waste materials into useable heat, electricity, or fuel through a variety of processes, including combustion, gasification, pyrolyzation, anaerobic digestion, and landfill gas (LFG) recover.