

7. Hazardous Materials, Solid Waste, and Pollution Prevention

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Hazardous materials, solid waste, and pollution prevention as an impact category includes an evaluation of the following:

- Waste streams that would be generated by a project, potential for the wastes to impact environmental resources, and the impacts on waste handling and disposal facilities that would likely receive the wastes;
- Potential hazardous materials that could be used during construction and operation of a project, and applicable pollution prevention procedures;
- Potential to encounter existing hazardous materials at contaminated sites during construction, operation, and decommissioning of a project; and
- Potential to interfere with any ongoing remediation of existing contaminated sites at the proposed project site or in the immediate vicinity of a project site.

The terms *hazardous material*, *hazardous waste*, and *hazardous substance* are often used interchangeably when used informally to refer to contaminants, industrial wastes, dangerous goods, and petroleum products. Each of these terms, however, has a specific technical meaning based on the relevant regulations, which are summarized in Section 7.1 below and described in more detail in Appendix B.6.

Solid Waste is defined by the implementing regulations of the Resource Conservation and Recovery Act (RCRA) generally as any discarded material that meets specific regulatory requirements, and can include such items as refuse and scrap metal, spent materials, chemical by-products, and sludge from industrial and municipal waste water and water treatment plants (see 40 Code of Federal Regulations (CFR) § 261.2 for the full regulatory definition).

Hazardous waste is a type of solid waste defined under the implementing regulations of RCRA. A hazardous waste (see 40 CFR § 261.3) is a solid waste that possesses at least one of the following four characteristics: ignitibility, corrosivity, reactivity, or toxicity as defined in

40 CFR part 261 subpart C, or is listed in one of four lists in 40 CFR part 261 subpart D, which contains a list of specific types of solid waste that the U.S. Environmental Protection Agency (EPA) has deemed hazardous. RCRA imposes stringent requirements on the handling, management, and disposal of hazardous waste, especially in comparison to requirements for non-hazardous wastes.

Hazardous substance is a term broadly defined under Section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (see 42 U.S. Code [U.S.C.] § 9601(14)). Hazardous substances include:

- any element, compound, mixture, solution, or substance designated as hazardous under Section 102 of CERCLA;
- any hazardous substance designated under Section 311(b)(2)(A) or any toxic pollutant listed under Section 307(a) of the Clean Water Act (CWA);
- any hazardous waste under Section 3001 of RCRA;
- any hazardous air pollutant listed under Section 112 of the Clean Air Act (CAA); and
- any imminently hazardous chemical substance or mixture for which the EPA Administrator has “taken action under” Section 7 of the Toxic Substances Control Act (TSCA).

Please note that the definition of hazardous substances under CERCLA excludes petroleum products, unless specifically listed or designated there under.

Hazardous material is any substance or material that has been determined to be capable of posing an unreasonable risk to health, safety, and property when transported in commerce. The term hazardous materials includes both hazardous wastes and hazardous substances, as well as petroleum and natural gas substances and materials (see 49 CFR § 172.101).

Pollution prevention describes methods used to avoid, prevent, or reduce pollutant discharges or emissions through strategies such as using fewer toxic inputs, redesigning products, altering manufacturing and maintenance processes, and conserving energy.

7.4. Regulatory Setting

Exhibit 7-1 lists the statutes, regulations, Executive Orders (EOs), and other requirements related to hazardous materials, solid waste, and pollution prevention. See Appendix B.6 for more detail on these requirements.

Exhibit 7-1. Statutes, Regulations, Executive Orders, and Other Requirements Related to Hazardous Materials, Solid Waste, and Pollution Prevention

Statute, Executive Order, or Other Requirement	Location in U.S. Code or <i>Federal Register</i>	Implementing Regulation(s)	Oversight Agency ^a	Summary ^a
Comprehensive Environmental Response, Compensation, and Liability Act (as amended by the Superfund Amendments Re-authorization Act of 1986 and the Community Environmental Response Facilitation Act of 1992)	42 U.S.C. §§ 9601-9675	40 CFR parts 300, 311, 355, 370, and 373	EPA	<p>Establishes joint and several liability for those parties responsible for hazardous substance releases to pay cleanup costs and establishes a trust fund to finance cleanup costs in situations in which no responsible party could be identified. Enables the creation of the NPL, a list of sites with known releases or threatened releases of hazardous substances in the United States and its territories used to guide the EPA in determining which sites warrant further investigation.</p> <p>As conditions of a sale, release, or transfer of federal lands or facilities used to store hazardous materials or where a release or disposal of hazardous materials has occurred, federal agencies must:</p> <ul style="list-style-type: none"> • identify those lands or facilities; and • complete waste or contaminate clean-up of these lands or facilities.
Emergency Planning and Community Right to Know Act	42 U.S.C. §§ 11001-11050	40 CFR parts 350-372	EPA	EPCRA requires hazardous chemical emergency planning by federal, state, and local governments, Indian tribes, and industry. It also requires industry to report on the storage, use, and releases of hazardous chemicals to federal, state, and local governments.
Federal Facilities Compliance Act	42 U.S.C. § 6961	40 CFR part 22	EPA	Waives any immunity otherwise applicable to federal agencies for substantive or procedural requirement in connection with a federal, state, interstate, or local solid waste or hazardous waste regulatory programs.
Hazardous Materials Transportation Act	49 U.S.C. §§ 5101-5128	49 CFR parts 100-185	DOT	Establishes procedures, reporting requirements, and approval processes for the transport of hazardous materials by common, contract, and private carriers and by aircraft, railcar, vessel, and motor vehicle.

Statute, Executive Order, or Other Requirement	Location in U.S. Code or <i>Federal Register</i>	Implementing Regulation(s)	Oversight Agency ^a	Summary ^a
Oil Pollution Act	33 U.S.C. §§ 2701-2762	40 CFR parts 109-116	EPA; USCG	Requires oil storage facilities and vessels to submit to the EPA plans detailing how the facilities will respond to large oil discharges. EPA has published regulations for aboveground storage facilities; the USCG has done so for oil tankers. The Act also requires the development of Area Contingency Plans to prepare and plan for oil spill response on a regional scale.
Pollution Prevention Act	42 U.S.C. §§ 13101-13109	CEQ Memorandum on Pollution Prevention and the National Environmental Policy Act, 58 <i>Federal Register</i> 6478 (January 12, 1993)	CEQ; EPA	Requires pollution prevention and source reduction control so that wastes would have less effect on the environment while in use and after disposal. See Appendix B.6.8 for more information on the CEQ Memorandum on Pollution Prevention and NEPA.
Resource Conservation and Recovery Act	42 U.S.C. §§ 6901-6992k	40 CFR parts 240-299	EPA	Establishes guidelines for hazardous waste and non-hazardous solid waste management activities in the United States. Regulates the generation, storage, treatment, and disposal of waste.
Toxic Substances Control Act	15 U.S.C. §§ 2601-2697	40 CFR parts 745, 761 and 763	EPA	Provides the EPA with the authority to regulate the production, importation, use, and disposal of chemicals defined as toxic, including lead, radon, asbestos, and PCBs, that have the potential to cause unreasonable risk of injury to public health or the environment.
Executive Order 12088, Federal Compliance with Pollution Control Standards	43 <i>Federal Register</i> 47707, (October 13, 1978)	Not applicable	EPA	Directs federal agencies to comply with applicable pollution control standards.

Statute, Executive Order, or Other Requirement	Location in U.S. Code or <i>Federal Register</i>	Implementing Regulation(s)	Oversight Agency ^a	Summary ^a
Executive Order 12580, <i>Superfund Implementation</i> as amended by Executive Order 13016, as further amended by Executive Order 13308	52 <i>Federal Register</i> 2923, (January 23, 1987) 61 <i>Federal Register</i> 45871, (August 30, 1996) 68 <i>Federal Register</i> 37691, (June 20, 2003)	Not applicable	EPA	Delegates to a number of federal departments and agencies the authority and responsibility to implement certain provisions of CERCLA.
CEQ Memorandum on Pollution Prevention and the National Environmental Policy Act	Not applicable	Not applicable	Not applicable	This memorandum provides guidance to the federal agencies on incorporating pollution prevention principles, techniques, and mechanisms into their planning and decision making processes and evaluating and reporting those efforts in documents prepared pursuant to NEPA.
FAA Orders and Advisory Circulars	Not applicable	Not applicable	FAA	See Appendix B.6 for detailed description of the relevant FAA Orders and Advisory Circulars.

^a CEQ = Council on Environmental Quality; CFR = Code of Federal Regulations; DOT = U.S. Department of Transportation; EPA = U.S. Environmental Protection Agency; EPCRA = Emergency Planning and Community Right to Know Act; FAA = Federal Aviation Administration; NEPA = National Environmental Policy Act; NPL = National Priorities List; OMB = Office of Management and Budget; PCBs = polychlorinated biphenyls; U.S.C. = United States Code; USCG = U.S. Coast Guard.

7.4.1. Consultations, Permits, and Other Approvals

If the proposed action or alternative(s) would include the generation of hazardous waste, operators of activities that would generate hazardous waste must obtain a RCRA hazardous waste generator identification number from EPA or an authorized state (see 40 CFR § 262.12). There may also be some situations that would require RCRA Hazardous Waste Treatment, Storage, and Disposal (TSD) permits. If it is clear that a RCRA generator ID number or TSD permit would be required, it should be stated in the NEPA document.

In addition, there may be additional state and local statutes and regulations that apply to the proposed action or alternative(s) (e.g., fuel storage tank operating permits). This should be determined on a case-by-case basis by contacting relevant state and local regulatory agencies in the early stages of project planning.

There are no formal required federal consultation processes related to hazardous materials, solid waste, and pollution prevention. However, there are many federal, state, and local agencies involved in the regulation of hazardous materials and early coordination with these agencies will aid in the collection of the necessary data during the NEPA process. In particular, the FAA should coordinate with the appropriate federal, state, tribal, or local agencies as early as possible

in the NEPA process regarding potential impacts resulting from or to previously contaminated sites. If a formal agreement between the FAA and the relevant agency is reached regarding clean-up or avoidance of a contaminated site, it should be included in the NEPA document or incorporated by reference, as appropriate. In many cases, construction activities may not commence until a formal agreement between the FAA (or applicant, as appropriate) and the relevant agency has been executed regarding the site.

When conducting the NEPA review, the FAA should also consider consultation with relevant entities regarding potential waste generation from the proposed action or alternative(s).

7.5. Affected Environment

When describing the study area for hazardous materials, solid waste, and pollution prevention, consider: (1) existing contaminated sites at the proposed project site or in the immediate vicinity of a project site; and (2) local disposal capacity for solid and hazardous wastes generated from the proposed action or alternative(s).

7.5.1. Identification of Contaminated Sites

The NEPA document should clearly identify any contaminated sites at the proposed project site or in the immediate vicinity of a project site. This includes, but is not limited to, National Priorities List (NPL) sites and sites in consideration for listing on the NPL, RCRA Solid Waste Management Units, and contaminated sites regulated under state cleanup laws. The identity of contaminated sites can be found through a number of resources that are listed below.

- EPA maintains several databases that track CERCLA and RCRA cleanup sites:
 - The EPA's Superfund Site Information website at: <https://cumulis.epa.gov/supercpad/CurSites/srchsites.cfm> provides Superfund site information through EPA's Superfund Enterprise Management System database including proposed, current, and deleted NPL sites;
 - The EPA's Cleanups in My Community website at: <http://www2.epa.gov/cleanups/cleanups-my-community> provides information on RCRA Corrective Action sites, NPL sites, and some Brownfields sites for a specific geographic area; and
 - The EPA's Hazardous Waste Corrective Action website at: <https://www.epa.gov/hw/learn-about-corrective-action> provides information about RCRA corrective action facilities.
- **United States Coast Guard (USCG)** operates the National Response Center (NRC), which is the sole federal point of contact for reporting all hazardous substances and oil spills. In this capacity, the USCG assists and conducts hazardous spill clean-ups in the United States. The NRC maintains a database called the Emergency Response Notification System, which is a comprehensive list of all spills, and may be useful in determining if the proposed project area may be contaminated.
- **United States Geological Survey** maintains an archive of aerial photographs that may be helpful in determining past land uses.

- **State agencies** can provide help in identifying hazardous waste sites in the proposed project area and in identifying those sites with facility management plans in place (e.g., Hazardous Waste Management Plans, Emergency Response Plans, etc.). This includes state listings of state regulated hazardous waste sites (state superfund equivalent sites), identified leaking underground storage sites, and other state managed hazardous material release sites.
- **Local government agencies** can provide helpful information in determining the current and past use of a property. In some regions, installation of above ground storage tanks is required to be reported to the local fire department or building department.
- Private Vendors can provide data, information and generate radius reports of hazardous waste sites.
- Environmental Due Diligence Audits (EDDA) or other similar environmental site assessments or reports prepared for the proposed project site or other sites in the project area can provide useful information about environmental contamination. The FAA must conduct an EDDA as required and in accordance with FAA Order 1050.19. In particular, the FAA must conduct a Phase I EDDA prior to the acquisition of real property. Further, in the event that serious contamination is known to exist in the project area, an EDDA or similar investigation should be conducted to determine the scope, nature, and extent of such contamination and its possible impacts on the proposed action and alternatives.
- National Priority List, RCRA Corrective Action, and some state regulated sites are required to maintain an administrative record of remediation actions and clean-up sites for public access or review, often at a nearby library. Many locations are now using only on-line administrative records. The administrative record will contain copies of key documents such as Records of Decision, Environmental Investigation Reports, Risk Assessments, and Environmental Monitoring Reports.

For each contaminated site identified, the NEPA document should include the name, location, and owner/operator of the site, the type and extent of contamination, the distance and direction of the contaminated site from the location of the proposed action or alternative(s), and the regulatory status of the contaminated site, including the assessment and clean-up activities. If the proposed action or alternative(s) would be located at a site where contamination has occurred, the document should describe any cleanup activities that have been done in the past or any cleanup that would be done prior to or during the commencement of the proposed action or alternative(s).

7.5.2. Identification of Solid and Hazardous Waste Disposal Capacity

Where relevant, the NEPA document should identify waste disposal facilities and capacities for the types of wastes expected to be generated from the proposed action or alternative(s).

- **Hazardous waste disposal facilities** – identify potential disposal sites and determine if capacity is sufficient to receive project-related wastes. The EPA’s RCRAInfo database at: <https://www3.epa.gov/enviro/facts/rcrainfo/search.html> provides information about RCRA hazardous waste management facilities.

- **Solid waste disposal facilities** – determine the capacity of nearby disposal facilities for receiving project-associated waste and whether the proposed project would strain existing disposal facilities.

Be aware that certain TSCA regulated wastes such as polychlorinated biphenyls (PCBs) may need to be disposed of at facilities specifically permitted to handle such waste. The NEPA document should identify the disposal facilities and capacities for the PCB wastes expected to be generated.

7.6. Environmental Consequences

After describing the affected environment for hazardous materials, solid waste, and pollution prevention, the NEPA document should:

- Describe the waste that would be generated from the construction, operation and/or decommissioning of the proposed action or alternative(s), including waste generated from the disturbance of hazardous materials at an existing contaminated site.
- Identify the regulatory classifications, handling, transportation, and disposal requirements for each waste stream.
- Determine if waste disposal related to the proposed action or alternative(s) would result in impacts to facility disposal capacity.
- Determine whether the proposed action or alternative(s) would interfere with any ongoing remediation of existing contaminated sites at the proposed project site or in the immediate vicinity of a project site.

7.6.1. Hazardous Materials

The NEPA document should identify types and quantities of any hazardous materials located at the proposed project site or in the immediate vicinity of a project site or that would be used onsite as part of the implementation of the proposed action or alternative(s), including:

- If hazardous materials would be used, the NEPA document should describe how they would be stored and managed. Describe the storage and use of oil, gasoline, jet fuel, or other petroleum products. Identify hazardous materials that would be present on the site associated with construction equipment and operations.
- The NEPA document should determine if any identified contaminated sites would be impacted by the proposed action or alternative(s). If the contaminated site would affect the proposed action or alternative(s), describe that as well.
- The NEPA document should describe any special precautions needed to transport hazardous materials, if required, as part of the proposed action or alternative(s).
- The NEPA document should also provide the locations of aboveground and underground storage tanks located in the study area, if they would be used or potentially impacted by the proposed action or alternative(s). A possible source of information would be the FAA's Facility Service and Equipment Profile database.

7.6.2. Hazardous Waste

The NEPA document should identify types and quantities of any hazardous waste that would be generated by the implementation of the proposed action or alternative(s), and describe how hazardous waste would be stored and managed. Describe any special precautions needed to transport hazardous waste, if required, as part of the proposed action or alternative(s). Identify any on-site treatment, engineering, or administrative controls that may be applied to the hazardous waste encountered.

7.6.3. Solid Waste

The NEPA document should identify types and quantities of any solid waste that would be generated by the implementation of the proposed action or alternative(s), and describe how the solid waste would be stored, managed, and disposed.

7.6.4. Pollution Prevention

The NEPA document should describe any pollution prevention activities, plans, programs, or policies currently being undertaken or in effect that may be relevant to the proposed action or alternative(s), including:

- How pollution prevention plans or programs associated with the proposed action or alternative(s) would avoid, prevent, or reduce pollutant discharges or emissions.
- Aspects of construction, operation, and decommissioning of the proposed action or alternative(s) that should be addressed in pollution prevention programs.
- Aspects of operations and waste generation from the proposed action or alternative(s) that could result in accidental discharges with the potential to cause negative impacts to the environment.
- Appropriate pollution prevention planning measures to address accidental discharges.
- Methods to be employed to control spills and any other unauthorized releases during implementation of the proposed action or alternative(s).

7.6.5. Significance Determination

The FAA has not established a significance threshold for hazardous materials, solid waste, or pollution prevention in FAA Order 1050.1F; however, the FAA has identified factors to consider in evaluating the context and intensity of potential environmental impacts for hazardous materials, solid waste, or pollution prevention (see Exhibit 4-1 of FAA Order 1050.1F). Please note that these factors are not intended to be thresholds. If these factors exist, there is not necessarily a significant impact; rather, the FAA must evaluate these factors in light of context and intensity to determine if there are significant impacts. Factors to consider that may be applicable to hazardous materials, solid waste, and pollution prevention include, but are not limited to, situations in which the proposed action or alternative(s) would have the potential to:

- violate applicable federal, state, tribal, or local laws or regulations regarding hazardous materials and/or solid waste management;

- involve a contaminated site (including, but not limited to, a site listed on the NPL). Contaminated sites may encompass relatively large areas. However, not all of the grounds within the boundaries of a contaminated site are contaminated, which leaves space for siting a facility on non-contaminated land within the boundaries of a contaminated site. An Environmental Impact Statement (EIS) is not necessarily required. Paragraph 6-2.3.a of FAA Order 1050.1F allows for mitigating impacts below significant levels (e.g., modifying an action to site it on non-contaminated grounds within a contaminated site). Therefore, if appropriately mitigated, actions within the boundaries of a contaminated site would not have significant impacts;
- produce an appreciably different quantity or type of hazardous waste;
- generate an appreciably different quantity or type of solid waste or use a different method of collection or disposal and/or would exceed local capacity; or
- adversely affect human health and the environment.

7.7. Mitigation

Some examples of potential measures to mitigate impacts related to hazardous materials, solid waste, and pollution include:

- mitigation or monitoring requirements applicable to prior or ongoing cleanup activities, such as at an NPL site;
- implementing any on-site treatment, engineering, or administrative controls that may be applied to reduce the hazards posed by wastes encountered;
- developing a hazardous materials response plan and/or a spill prevention, control, and countermeasure plan to identify those precautions, training requirements, and response measures that would be taken to prevent and contain releases of hazardous materials;
- employing source reduction strategies such as recovering, recycling, or composting waste materials;
- finding markets for recovered, recycled, or composted products, or other wastes that are usable for producing energy or other activities;
- recycling of construction debris associated with the action;
- development and incorporation of an Environmental Management System; and
- incorporating recommendations provided by federal, state, tribal, or local agencies responsible for managing any known contaminated sites.

Appendix B. Hazardous Materials, Solid Waste, and Pollution Prevention

Federal activities affecting all environmental impact categories are governed by many statutes, regulations, and Executive Orders. Each impact category chapter of this Desk Reference (Chapters 1-14, as applicable) contains an exhibit with a tabular overview of the major applicable Federal statutes, regulations, Executive Orders, and the agencies responsible for overseeing their implementation. This appendix supplements the background information relevant to those requirements that is provided in the chapter exhibits. Please note that these requirements may not be applicable to every FAA action, and should only be included when relevant to the proposed project.

B.6. Hazardous Materials, Solid Waste, and Pollution Prevention

The following statutes, Executive Orders, memorandum, and FAA orders and advisory circulars govern hazardous materials, solid waste, and pollution prevention.

B.6.1. Comprehensive Environmental Response, Compensation, and Liability Act

Enacted in 1980, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) was created to provide federal authority to respond to releases of hazardous substances which may be harmful to public health or the environment. It established liability for those parties responsible for hazardous substance releases to pay cleanup costs and established a trust fund to finance cleanup costs in situations in which no responsible party could be identified. In addition, CERCLA enabled the creation of the National Priorities List (NPL), a list of sites with known releases or threatened releases of hazardous substances in the United States and its territories, used to guide the EPA in determining which sites warrant further investigation.

Some important aspects of CERCLA that are applicable to federal actions include:

- Notifying the EPA and the public regarding release of hazardous substances that exceed reportable quantities. Under CERCLA, the EPA has established a list of those elements, compounds, mixtures, solutions, or substances considered a hazardous substance within the meaning of CERCLA. These substances are listed in 40 CFR § 302.4;
- Requiring all federal agencies to comply with CERCLA regulations at all federally-owned facilities; and
- Establishing an “innocent landowners” defense to CERCLA liability if the party acquiring the property conducted all appropriate inquiries prior to acquisition of the property.

For a general overview of CERCLA, see <https://www.epa.gov/superfund/superfund-cercla-overview>. NPL site information may be accessed via EPA’s Superfund Enterprise Management System database, which is available at: <https://cumulis.epa.gov/supercpad/CurSites/srchsites.cfm>.

B.6.2. Oil Pollution Act

The Oil Pollution Act of 1990 streamlined and strengthened the EPA's ability to prevent and respond to catastrophic oil spills. A trust fund financed by a tax on oil is available to clean up spills when the responsible party is incapable or unwilling to do so. The Act requires oil storage facilities and vessels to submit to the federal government plans detailing how they will respond to large discharges. The EPA has published regulations for aboveground storage facilities (see 40 CFR parts 9-300); the U.S. Coast Guard (USCG) has done so for oil tankers. The Act also requires the development of Area Contingency Plans to prepare and plan for oil spill response on a regional scale. The Act applies to facilities storing: (1) at least 1,320 gallons in aboveground containers that are 55 gallons in size or larger; or (2) at least 42,000 gallons in underground storage tanks.

For more information on the Oil Pollution Act, see the EPA website at:
<https://www.epa.gov/laws-regulations/summary-oil-pollution-act>.

B.6.3. Pollution Prevention Act

The Pollution Prevention Act of 1990 requires pollution prevention and source reduction control so that wastes will have less effect on the environment while in use and after disposal. The intent of this Act should also be considered when reviewing potential sources associated with a proposed project and related pollution prevention measures.

For more information on the Pollution Prevention Act, see the EPA website at:
<https://www.epa.gov/laws-regulations/summary-pollution-prevention-act>.

B.6.4. Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA) is a federal statute that establishes guidelines for hazardous waste and non-hazardous solid waste management activities in the United States (40 CFR 240-299). Specifically, RCRA regulates the generation, storage, treatment, and disposal of waste. Administered by the EPA, the goals of RCRA are to protect human health and the environment from the potential hazards of waste disposal, to conserve energy and natural resources, to reduce the amount of waste generated, and to ensure that wastes are managed in an environmentally sound manner.

To achieve these goals, RCRA establishes three separate programs that govern hazardous and non-hazardous wastes:

Hazardous wastes. Subtitle C of RCRA establishes guidelines for the generation, treatment, storage, and disposal (TSD) of hazardous wastes.

Non-hazardous wastes. Subtitle D of RCRA creates a regulatory program for non-hazardous solid waste, such as household garbage, refuse (including construction material), and non-hazardous industrial solid waste.

Underground storage tanks. Subtitle I of RCRA governs the storage of materials in underground storage tanks, including storage of both unused products (including gasoline) and wastes.

Of these programs, the hazardous wastes and non-hazardous waste programs most relevant to FAA actions are described in more detail below.

B.6.4.1. Hazardous Waste Management

The NEPA review should demonstrate that the FAA or applicant, as appropriate, has determined whether hazardous wastes (as defined in 40 CFR part 261) will be disturbed, generated, transported, treated, stored, or disposed of by the action under consideration, and if so, how these wastes will be handled to conform to the regulatory requirements in 40 CFR parts 260-280 and transported to conform to 49 CFR parts 171-199. Therefore, the NEPA document should identify the types and approximate amounts of hazardous waste that will be generated, and identify appropriate disposal facilities.

The EPA's current list of identified hazardous wastes is available on the EPA's Wastes website at: <https://www.epa.gov/hw/defining-hazardous-waste-listed-characteristic-and-mixed-radiological-wastes#listed>.

B.6.4.2. Non-hazardous Waste Management

In addition to hazardous wastes, RCRA also sets forth a framework for the management of non-hazardous solid wastes that are exempt from Subtitle C regulations. In contrast to the hazardous waste program, RCRA does not authorize the EPA to issue federal permits for disposal of non-hazardous solid wastes; rather, all planning, permitting, and enforcement responsibilities for these types of wastes is ultimately delegated to state and local governments.

For additional information on RCRA, and how it may be applicable to the proposed action or alternative(s), see the EPA's Wastes website at: <https://www.epa.gov/hw> or consult EPA's RCRA Online website at: <https://rcrapublic.epa.gov/rcraonline/>.

B.6.5. Toxic Substances Control Act

The Toxic Substances Control Act (TSCA) provides the EPA with the authority to regulate the production, importation, use, and disposal of chemicals defined as toxic, including lead, radon, asbestos, and polychlorinated biphenyls (PCBs), that have the potential to cause unreasonable risk of injury to public health or the environment. Through this Act, the EPA has established reporting, testing, and distribution requirements for the chemicals listed in the TSCA Inventory, which include substances such as asbestos, indoor radon, lead, and PCBs.

For more information on TSCA, see <https://www.epa.gov/tsca-inventory>.

B.6.6. Executive Order 12088, *Federal Compliance with Pollution Control Standards*

Executive Order 12088, *Federal Compliance With Pollution Control Standards*, 43 *Federal Register* 47707, (October 17, 1978) directs federal agencies to comply with applicable pollution control standards, in the prevention, control, and abatement of environmental pollution and to consult with the EPA, state, interstate, and local agencies concerning the best techniques and methods available for the prevention, control, and abatement of environmental pollution. In addition, this Executive Order directs federal agencies to ensure that construction or operation of federal facilities outside the United States complies with the environmental pollution control

standards of general applicability in the host country or jurisdiction. The NEPA document should identify how the FAA is complying with the applicable pollution control standards.

For more information on this Executive Order, see http://energy.gov/sites/prod/files/nepapub/nepa_documents/RedDont/Req-EO12088pollutioncontrol.pdf.

The former requirements of Section 1-4 of EO 12088 regarding pollution control plans were revoked by section 901 of Executive Order 13148, Greening the Government Through Leadership in Environmental Management (April 21, 2000).

B.6.7. Executive Order 12580, Superfund Implementation

Executive Order 12580, *Superfund Implementation*, 52 *Federal Register* 2923, (January 29, 1987) addresses various federal agency activities in implementing the statutory provisions and regulations of CERCLA. The Executive Order creates a National Response Team made up of various federal agencies and departments for national planning and coordination of preparedness and response actions, and also creates regional response teams. The Executive Order also contains a very detailed delegation of various Presidential responsibilities imposed under CERCLA to various officials in federal department agencies. Among the types of authorities delegated are those for response action oversight, enforcement, liability determinations, litigation, and Superfund management. The Executive Order applies to or affects responses to major oil or hazardous substance spills or releases that occur on- or off-site and impact the facility.

For more information on this Executive Order, see <http://www.archives.gov/Federal-register/codification/executive-order/12580.html>.

Also see Executive Order 13016, *Amendment to Executive Order No. 12580*, August 30, 1996 (61 *Federal Register* 45871) available at: <http://www.gpo.gov/fdsys/pkg/FR-1996-08-30/pdf/96-22462.pdf>, and Executive Order 13308, *Further Amendment to Executive Order 12580*, as amended, June 20, 2003 (68 *Federal Register* 37691) available at: <http://www.gpo.gov/fdsys/pkg/FR-2003-06-24/pdf/03-16102.pdf>.

B.6.8. Council on Environmental Quality Memorandum on Pollution Prevention and the National Environmental Policy Act

The CEQ Memorandum on *Pollution Prevention and the National Environmental Policy Act* (January 12, 1993) encourages early consideration by federal agencies (for example, during the NEPA scoping process) of opportunities for pollution prevention. In accordance with this guidance, the FAA should, to the extent practicable, include pollution prevention considerations in the proposed action and its alternative(s); address pollution prevention in the environmental consequences section; and disclose in the Record of Decision (ROD) the extent to which pollution prevention was considered.

The memorandum can be accessed from CEQ's website at: https://www.energy.gov/sites/prod/files/nepapub/nepa_documents/RedDont/G-CEQ-PollutionPreventionNEPA.pdf.

FAA Orders and Advisory Circulars

There are several FAA orders to review for guidance on the design, construction, and operational compliance of FAA facilities with pollution control statutes depending on the nature of the proposed action or alternative(s). These include the following:

- FAA Order 1050.10C, Prevention, Control and Abatement of Environmental Pollution at FAA Facilities at: http://www.faa.gov/documentLibrary/media/Order/ND/1050_10c.pdf;
- FAA Order 1050.14B, Polychlorinated Biphenyls (PCB) in the National Airspace System at: <http://www.faa.gov/documentLibrary/media/Order/order%201050.14B.pdf>;
- FAA Order 1050.15B, Fuel Storage Tanks at FAA Facilities at: https://www.faa.gov/documentLibrary/media/Order/FAA_Order_1050.15B.pdf;
- FAA Order 1050.16A, Implementation Guidance for Storage Tank (TANK) Systems at: https://www.faa.gov/regulations_policies/orders_notices/index.cfm/go/document.information/documentID/1026389;
- FAA Order 1050.18, Chlorofluorocarbons and Halon Use at FAA Facilities at: http://www.faa.gov/documentLibrary/media/order/energy_orders/1050.18.pdf.

The full text of these orders can be accessed through the FAA document library on the FAA's website.

Additionally, there are two FAA advisory circulars that may provide further guidance:

- FAA AC 150/5320-15A, *Management of Airport Industrial Waste* at: http://www.faa.gov/documentLibrary/media/advisory_circular/150-5320-15A/150_5320_15a.pdf; and
- FAA AC 140.5200-33B, *Hazardous Wildlife Attractants On or Near Airports*, at: http://www.faa.gov/documentLibrary/media/advisory_circular/150-5200-33B/150_5200_33b.pdf.