

SECTION 02 81 00

TRANSPORTATION AND DISPOSAL OF HAZARDOUS MATERIALS

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

U.S. Department of Defense (DOD)

JEGS (Apr 2024) Japan Environmental Governing Standards

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1 (2024) Safety -- Safety and Occupational Health (SOH) Requirements

1.2 DEFINITIONS

1.2.1 Hazardous Material

Any material that exhibits any of the characteristics of a physical hazard, a health hazard, a simple asphyxiant, combustible dust, or pyrophoric gas, or is regulated by the Government of Japan (GoJ). See JEGS.

1.2.2 Aqueous Film Forming Foam (AFFF)

A fire suppression agent used by DoD and non-DoD entities that may contain perfluoroalkyl substances (PFAS). AFFF will be treated as a hazardous material for the purposes of this specification.

1.2.3 Perfluoroalkyl substances (PFAS)

A chemical substance of environmental concern due its toxicity to humans and fauna, persistence in the environment, and bioaccumulation potential.

1.2.4 Perfluorooctanoic acid (PFOA) & Perfluorooctane sulfonate (PFOS)

Fluorocarbon surfactants which are PFAS that are added to AFFF as surface active agents that facilitate fire suppression. PFOS and its salts are listed in the JEGS as a hazardous substance, indicating that the material is capable of posing an unreasonable risk to health, safety, or the environment if improperly handled, stored, issued, transported, labeled, or disposed of. The JEGS do not list PFOS/PFOA as a hazardous waste nor do they exhibit the listed hazardous waste characteristics.

1.2.5 AFFF Concentrate

AFFF Concentrate liquid for incineration. Unused or > 10% AFFF product that is pumpable and presumed to contain PFAS. All AFFF Concentrate encountered during this project shall be destroyed by high temperature

incineration using facilities that are licensed or permitted by the GoJ and approved by the DoD Lead Environmental Component in accordance with the criteria listed in JEGS for the destruction of hazardous wastes (including PFAS containing wastes).

1.2.6 AFFF Solutions

AFFF rinsate/ water-diluted liquid for incineration. Used or > 90% water solution that is pumpable and presumed to contain PFAS. All AFFF Solutions encountered during this project shall be destroyed by high temperature incineration using facilities that are licensed or permitted by the GoJ and approved by the DoD Lead Environmental Component in accordance with the criteria listed in JEGS for the destruction of hazardous wastes (including PFAS containing wastes).

1.2.7 AFFF-Contaminated Incidental Waste

AFFF-contaminated solids, sludges, or debris (e.g. personal protective equipment, filter media, etc.) for incineration. May contain some free liquids, but not pumpable and presumed to contain PFAS. All AFFF-Contaminated Incidental Wastes encountered during this project shall be destroyed by high temperature incineration using facilities that are licensed or permitted by the GoJ and approved by the DoD Lead Environmental Component in accordance with the criteria listed in JEGS for the destruction of hazardous wastes (including PFAS containing wastes).

1.2.8 Petroleum, Oils, and Lubricants (POL)

POL systems include: Bulk fueling facilities; Fuels laboratories; Refueler parking and maintenance facilities; POL pipelines; Aircraft fueling facilities and associated infrastructure; Marine fueling facilities and associated infrastructure; Ground vehicle fueling facilities and associated infrastructure (Military service station, Retail gas station, Compressed natural gas vehicle service stations and Liquid propane vehicle service stations to include industrial equipment (e.g., forklifts)).

1.3 SUBMITTALS

Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for Contractor Quality Control approval. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Waste Management And Disposal Plan; G

SD-06 Test Reports

Spill Response

SD-07 Certificates

Shipping Documents and Packagings Certification; G

Certificates Of Disposal/ Destruction; GSD-11 Closeout Submittals

AFFF Disposal Accountability Report; G

1.4 QUALITY ASSURANCE

1.4.1 Certification

The hazardous materials transporter and disposal facility must possess a current Certificate of Registration issued by the GoJ or local prefectural regulatory agency. Submit copies of the certificates with the Waste Management and Disposal Plan. The Contractor shall also comply with the EMS program, including all base environmental plans, instructions, EM 385-1-1, and the Japan Environmental Governing Standards (JEGS).

1.4.2 Laws and Regulations Requirements

Comply with the JEGS, GoJ, prefectural, and local laws and regulations which are applicable. These requirements are amended frequently and compliance with amendments is required as they become effective. Notify the Contracting Officer immediately if compliance exceeds the scope of work or conflicts with specific requirements of the contract.

1.5 POL Removal

Removal of POL is confined to the bulk tank containment area as shown on the demolition drawings.

PART 2 PRODUCTS

2.1 MATERIALS

Provide all materials required for the packaging, labeling, marking, and transportation of hazardous materials in conformance with GoJ and local prefectural laws and regulations. Details in this specification must not be construed as establishing the limits of the Contractor's responsibility.

2.1.1 Packagings

Provide bulk and non-bulk containers, as appropriate, suitable for shipping AFFF concentrate impacted media, solutions, and contaminated incidental materials to the disposal facility. Consult with the disposal facility for specific packaging requirements.

2.1.2 Labeling

Provide primary and subsidiary labels for all containers. Labels must be durable weather-resistant and capable of withstanding a 180-day exposure to conditions reasonably expected to be encountered during container storage and transportation, without deterioration or substantial color change.

2.1.3 Spill Response Materials

Provide spill response materials including, but not limited to, containers, adsorbent, shovels, and personal protective equipment. Spill response materials must be available at all times when hazardous materials/wastes are being handled or transported. Spill response materials must be compatible with the type of material being handled.

2.2 EQUIPMENT AND TOOLS

Provide miscellaneous equipment and tools necessary to handle hazardous

materials and hazardous wastes in a safe and environmentally sound manner.
Comply with EM 385-1-1.

PART 3 EXECUTION

3.1 WASTE MANAGEMENT AND DISPOSAL PLAN

All impacted media AFFF concentrates and solutions shall become the property of the Contractor and the Contractor is solely responsible for all management and disposal requirements. There is no intent of US Government entities to accept any wastes for disposal. The Contractor shall prepare a Waste Management and Disposal Plan detailing the way Hazardous Materials, including AFFF concentrates, solutions, and contaminated incidental wastes, will be managed and describing the types and volumes of these materials anticipated to be managed. The plan must address both onsite and offsite management. Describe the methods to be used to ensure accurate accountability of all hazardous materials encountered at the site; identify areas onsite where hazardous materials are to be handled and stored; describe waste minimization methods; identify and describe packaging and storage methods; identify transporters to be used and the haul route(s) to move hazardous materials from the site to the disposal facility; identify and describe facilities to be used for final treatment, storage, and disposal (TSD); and identify whether transfer facilities are to be used; and if so, how the materials will be tracked to ultimate disposal. Submit the plan to the Contracting Officer for approval prior to start of work.

3.2 OFFSITE HAZARDOUS WASTE MANAGEMENT

The Contractor is solely responsible for all management and disposal requirements. There is no intent of Government entities to accept any wastes for disposal. Coordinate the off-site transfer of all hazardous materials, including AFFF concentrates, solutions, and contaminated incidental wastes, with the installation environmental office and the Contracting Officer. Use disposal facilities that are licensed or permitted by the GoJ and approved by the DoD Lead Environmental Component in accordance with the criteria listed in the JEGS for the destruction of hazardous wastes (including PFAS containing wastes). Handling and transportation of such material shall be in accordance with Chapters 10 and 16 of the JEGS and GoJ or prefecture requirements, as applicable.

3.2.1 Treatment, Storage, and Disposal Facility and Transporter

Provide the Contracting Officer with the identity of licensed transporter(s) and a licensed disposal facility, by name, address, phone number, permit/ identification number, type of facility (treatment, storage, disposal), and permit expiration date. This information must be contained in the Waste Management and Disposal Plan and be approved by the Contracting Officer prior to waste disposal.

3.2.2 Shipping Documents and Packagings Certification

Prior to shipment of any hazardous material offsite and a minimum of 14 days prior to anticipated pickup, provide for review written certification to the Contracting Officer that hazardous materials have been properly packaged, labeled, and marked in accordance with Department of Transportation, JEGS, GoJ, and local prefectural requirements. Furnish designated disposal facility packaging assurances not later than 35 days after acceptance of the shipment. The Contractor's EM must also provide

written certification regarding waste minimization efforts documenting that efforts have been taken to reduce the volume of waste to the degree economically practicable and that the method of treatment, storage, or disposal selected minimizes threats to human health and the environment.

Package, label, and mark hazardous materials using the specified materials and in accordance with the referenced authorizations. Ensure that each shipment of hazardous material sent offsite is accompanied by properly completed shipping documents. If necessary, prepare a bill of lading for each shipment of hazardous material which fulfills the shipping paper requirements. The bill of lading must satisfy the requirements of GoJ, prefectural, or local law or regulation, and must be submitted to the Contracting Officer for review and approval. Bill of ladings requiring shipper's certifications must be signed by the Contractor.

3.3 TREATMENT AND DISPOSAL OF HAZARDOUS MATERIALS

The Contractor is solely responsible for the disposal of all hazardous materials, including AFFF concentrate, solutions, contaminated incidental materials, and metal components. There is no intent of Government entities to accept any wastes for disposal. AFFF concentrate shall be segregated from AFFF solutions (i.e. rinsate). All AFFF concentrate, solutions, contaminated incidental materials, and metal components Impacted media to be disposed of shall be packaged in containers suitable for shipping to the disposal facility. Consult with the disposal facility for containerization requirements. Transport all impacted media AFFF concentrate, solutions, contaminated incidental materials, and metal components to the disposal facility in accordance with the JEGS and GoJ or prefecture requirements, as applicable. Submit Certificates of Disposal/ Destruction documenting the ultimate destruction by incineration. The disposal certificate shall include:

- the identity of the disposal facility, by name, address, phone number, permit/ identification number, type of facility (treatment, storage, disposal), permit expiration date;
- types and quantities of material being destroyed (i.e., AFFF concentrate, AFFF solutions, AFFF systems components, location of origin of AFFF material);
- date AFFF material was accepted by the disposal facility; and
- a statement certifying the fact of incineration of the identified material, including the date(s) of disposal and process used.

Receipt of these certificates will be required for final payment.

3.3.1 AFFF Concentrate

Drain and collect for disposal all AFFF concentrate from atmospheric tanks, stationary bladder tanks, and associated piping containing concentrate from the tank to the AFFF proportioner. Dispose of all collected AFFF concentrate via high temperature incineration at disposal facilities that are licensed or permitted by the GoJ and approved by the Installation Environmental Component for the disposal of hazardous wastes (including PFAS containing wastes). The Contractor shall provide Certificates of Disposal/ Destruction (or processing) for all AFFF concentrate.

3.3.2 AFFF Solutions

Collect all water/liquid within the associated concenrate piping and

atmospheric tanks and dispose as AFFF solution. Dispose of all collected AFFF solutions via high temperature incineration at disposal facilities that are licensed or permitted by the GoJ and approved by the Installation Environmental Component for the disposal of hazardous wastes (including PFAS containing wastes). The Contractor shall provide Certificates of Disposal/ Destruction (or processing) for all AFFF solutions.

3.3.3 AFFF-Contaminated Incidental Waste

Collect and dispose of all miscellaneous AFFF contaminated incidental waste produced while conducting fieldwork consisting of non-metallic system components (that is, other than steel tanks or metal system piping, etc.), wipes, absorbent pads, gloves, Tyvek suits, etc. Dispose of all collected miscellaneous AFFF contaminated incidental waste via high temperature incineration at disposal facilities that are licensed or permitted by the GoJ and approved by the Installation Environmental Component for the disposal of hazardous wastes (including PFAS containing wastes). The Contractor shall provide Certificates of Disposal/ Destruction (or processing) for all contaminated incidental wastes.

To meet these requirements while also safely handling ACM materials, AFFF contaminated ACM gaskets shall be treated using a high temperature process that destroys (incinerates) AFFF materials while containing ACM materials safely. The resulting slag waste shall be landfilled at a facility licensed or permitted by the GoJ and approved by the Installation Environmental Component. The Contractor shall provide Certificates of Disposal/ Destruction (or processing) for all slag wastes.

3.3.4 Metal Components Requiring Disposal

Metal components requiring disposal (e.g., system piping contaminated with AFFF) shall 1) be triple rinsed prior to disposal through recycling via smelting or 2) disposed of as PFOS contaminated industrial waste at a facility licensed or permitted by the GoJ. The Contractor shall provide Certificates of Disposal/ Destruction (or processing) for the smelted metal waste.

3.3.5 AFFF Disposal Accountability Report

The Contractor shall provide an AFFF Disposal Accountability Report for all AFFF concentrate, solutions (i.e., rinsate, shell water) volumes removed or generated by the Contractor (as for the case of tank rinsate), AFFF-Contaminated Incidental Waste, and metal components requiring disposal through final disposition (disposal). AFFF concentrate and solutions shall be accounted for at the originating location (i.e., building, etc.). Quantities of other AFFF contaminated system components requiring disposal shall also be accounted for. Disposal certificates for all materials destroyed by high temperature incineration shall indicate quantities of AFFF concentrate/solution (typically weights) or weights of solid components (i.e., bladders, etc.) treated, as applicable.

3.3.6 POL Impacted Waste

Collect and dispose of all POL impacted waste. Dispose of all POL waste at disposal facilities that are licensed or permitted by the GoJ and approved by the Installation Environmental Component for the disposal of hazardous wastes. The Contractor shall provide Certificates of Disposal/ Destruction (or processing) for all contaminated incidental wastes.

3.4 SPILL RESPONSE

In the event of a spill or release of a hazardous substance, or pollutant or contaminant, notify the Contracting Officer immediately. Direction from the Contracting Officer concerning a spill or release is not considered a change under the contract. If the spill exceeds a reporting threshold, follow the pre-established procedures for immediate reporting to the Contracting Officer. Comply with applicable requirements of the installation Sill Prevention and Response Plan, JEGS, GoJ, prefectural, or local laws or regulations regarding any spill incident.

3.5 EMERGENCY CONTACTS

Whenever the Contractor ships hazardous materials, provide a 24 hr emergency response contact and phone number of a person knowledgeable about the hazardous materials being shipped and who has comprehensive emergency response and incident mitigation information for that material, or has immediate access to a person who possesses such knowledge and information. Always monitor the phone on a 24-hour basis when the hazardous materials are in transportation, including during storage incidental to transportation. Ensure that information regarding this emergency contact and phone number are placed on all hazardous material shipping documents. Designate an emergency coordinator and post the following information at areas in which hazardous wastes are managed:

- a. The name of the emergency coordinator.
- b. Phone number through which the emergency coordinator can be contacted on a 24 hour basis.
- c. The telephone number of the local fire department.
- d. The location of fire extinguishers and spill control materials.

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