Ames Procedural Requirements

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COMPLIANCE IS MANDATORY

Ames Environmental Procedural Requirements

Chapter 13 - Spill Prevention Control and Countermeasures and Facility Response Plan

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13.1 Applicability

These instructions are applicable to all civil servants, contractor employees, and resident agency personnel at Ames Research Center (Ames), - with the exception of the Defense Energy Support Point, which maintains its own Oil and Hazardous Substance Integrated Contingency Plan for facilities operated at Ames.

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13.2 Purpose

This chapter establishes procedures for preventing and controlling oil spills to protect human health and the environment and to comply with applicable Federal, State, and local regulations. The SPCC Plan focuses on procedures to prevent and control oil spills.

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13.3 Policy

It is the policy of the Ames to:

1. Comply with all pertinent Federal, State, and local statutory and regulatory requirements and Executive Orders related to spill prevention and management.
2. Consult about the best techniques and methods to prepare for and respond to oil spills, as appropriate, with Federal, State, and local agencies, including:

    - U.S. Environmental Protection Agency (EPA)
    - U.S. Coast Guard
    - California Office of Emergency Services
    - Regional Water Quality Control Board
    - Santa Clara County Health Department

3. Promote employee awareness of spill prevention and response through training and active information dissemination.

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13.4 Authority

All relevant Federal, state, and local laws and regulations pertaining to spill prevention and response including, but not limited to:

1. Code of Federal Regulations (CFR) Part 112 - Oil Pollution Prevention
2. Public Law 101-380, Oil Pollution Act 1990
3. Federal Water Pollution Control Act, as amended by the Clean Water Act of 1977 and the Water Quality Act of 1987 (33 U.S.C. 1251 et seq.)
4. California Aboveground Petroleum Storage Act (California Health and Safety Code Section; 25270-25270.12)
5. Lempert-Keene-Seastrand Oil Spill Prevention and Response Act (Public Resources Code Section 8574.1)
6. California Fish and Game Code (section 5650 (a) 1-6)
7. State of California, Department of Toxic Substances Control
8. Santa Clara County Hazardous Materials Storage Ordinance

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13.5 Responsibilities

13.5.1 Environmental Services Division

1. Perform systematic facility audits of affected facilities to determine the modifications required to achieve compliance with SPCC guidelines.
2. Review all plans and drawings related to oil storage, handling, or transfer facilities for new construction, maintenance, or remodeling for compliance with SPCC requirements.
3. Review and evaluate the SPCC Plan at least every five years, or when any major change in facility design, construction, operations, or maintenance occurs which significantly affects the potential to discharge oil, to ensure that the Plan is current and responsive to the activities at Moffett Field. Revise the FRP in conjunction with SPCC Plan revisions.
4. Obtain any permits necessary for the removal and installation of aboveground storage tanks (ASTs) and underground storage tanks (USTs), as specified in Chapter 24, Aboveground Storage Tanks and Chapter 10, Underground Storage Tanks.
5. Coordinate audits with Site Managers and other supervisors responsible for oil storage areas and operations.
6. Make the appropriate and required notifications to the Federal, state, and local regulatory agencies, as required in the SPCC Plan.
7. Maintain current lists of reportable quantities and provide technical advice to responders.
8. Provide technical support to the Ames community with regard to storage, spill prevention, containment measures, and disposal of oils and/or fuels.
9. Conduct investigations regarding spills.
10. Identify employees who need training. Provide required training, and maintain accurate employee training records, including employee job descriptions and the type and amount of training received.

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13.5.2 NASA Ames Fire Department

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13.5.3 Protective Services Office

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13.5.4 Facilities Engineering Branch

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13.5.5 Line Managers

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13.5.6 Oil Handlers

1. Attend SPCC training or annual SPCC refresher.
2. Follow procedures and perform required periodic inspections.
3. Notify supervisor of any leaks or deficiencies observed or identified by inspections.

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13.6 Definitions

13.6.1 Aboveground Storage Tank (AST)

Any stationary storage vessel or container used for the storage of hazardous materials, including oils. Some ASTs are constructed so that they may be relocated. ASTs that may be relocated based on their inherent construction are still considered an AST. An AST can be any size storage vessel/container so long as it is intended to be a stationary storage container. See also Chapter 24, Aboveground Storage Tanks.

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13.6.2 Defense Energy Support Center (DESC) and Defense Energy Support Point (DESP)

The Defense Energy Support Center (DESC) is a branch of the Defense Logistics Agency. The name of the facility serviced by DESC on site is the Defense Energy Support Point (DESP) Moffett Field. DESP Moffett Field occupies approximately 19 acres at Ames and includes three 50,000 gallon ASTs and a secondarily contained parking area for mobile aircraft refueling tankers. The facility also includes an inactive fuel farm and an inactive loading rack (currently used as additional secondarily contained parking area for mobile aircraft refueling tankers).

The DESP maintains its own SPCC Plan and provides SPCC training for its own personnel.

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13.6.3 Discharge

Discharge includes any spilling, leaking, pumping, pouring, emitting, emptying, or dumping not authorized by permit.

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13.6.4 Facility Response Plan (FRP)

Under 40 CFR 112, a Facility Response Plan (FRP) is required for any non-transportation-related onshore facility that, because of its location, could reasonably be expected to cause substantial harm to the environment by a discharge of oil or fuels. The EPA has determined that Ames currently does not possess the potential to "cause significant and substantial harm" to the environment by a discharge of oil and therefore is not required to submit an FRP to the EPA for approval. This determination will be re-evaluated should our operations or amounts of oil stored change significantly. All other requirements under 40 CFR 112 still apply and are not affected by this determination.

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13.6.5 Harmful Quantity

A discharge of oil to U.S. navigable waters that either violates applicable water quality standards or causes a sheen or film upon or discoloration of the surface water is considered a Harmful Quantity discharge.

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13.6.6 Nonreportable Spill

A non-reportable spill is one in which oil does not escape to the environment and:

- The material will not pose a health risk to any individual in the immediate area.
- The spill can be controlled and contained with on-hand spill response materials.
- The properties of the material are well known to the person(s) controlling and containing the spill.
- The person(s) controlling and containing the spill have had appropriate training.
- A non-reportable spill shall be recorded in the facility's spill log.

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13.6.7 Oils

Oil is any kind of petroleum based product, including but not limited to fuel, oil, jet fuel, sludge, oil refuse, and oil mixed with wastes other than dredged spoil. Oil also includes synthetics and oils from any animal or plant sources, such as cooking oil.

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13.6.8 Reportable Spills

A Reportable Spill is any actual or threatened discharge of an oil that enters the environment. Examples include:

- A spill enters a storm drain or ditch.
- A spill enters the sanitary sewer.
- A spill contacts soil.
- A spill contacts asphalt (particularly in the case of solvents).
- A spill into secondary containment requires more than eight hours to clean up.

Note: Call [redacted] to report a spill. The Environmental Services Division will make all off-site regulatory reports.

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13.6.9 Spill Prevention Control and Countermeasures (SPCC) Plan

The Spill Prevention Control and Countermeasures (SPCC) Plan focuses on procedures to prevent and control oil spills.

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13.6.10 Underground Storage Tank (UST)

An underground storage tank (UST) includes all tanks and associated piping or combination of tanks where 10 percent or more of the tank's volume is below ground surface. Exceptions to the UST definition applicable to Ames include septic tanks, storm water and wastewater collection systems, and tanks located in a basement but completely visible.

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13.7 Requirements for SPCC

This section describes the management requirements for ASTs, USTs, partially buried tanks, and containers storing oils. All tanks and containers must be managed in accordance with following requirements.

13.7.1 Secondary Containment

Secondary containment is required for all stationary or portable (mobile) tanks, containers, equipment and associated piping. For additional requirements, see Chapter 24, Aboveground Storage Tanks.

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13.7.2 Storage Conditions

All stationary or portable (mobile) tanks or containers must be managed in accordance with the requirements stated in Chapter 24, Aboveground Storage Tanks and Chapter 10, Underground Storage Tanks.

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13.7.3 Overfill Monitoring Devices for Tanks

New and old tanks should be fail-safe engineered or updated to a fail-safe engineering status by providing one or more of the following monitoring devices to quickly determine the liquid level in the tank and to prevent overfill:

- High-liquid-level alarm with audible and/or visual signal; liquid-level sensing devices shall be regularly tested to ensure proper operation.
- High-liquid-level pump cutoff device to stop flow at a predetermined level within the tank.
- Direct audible or code signal communication between the tank gauge and the pumping station.
- A fast response system for determining the liquid level in the tank.

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13.7.4 Corrosion Protection for Tanks

1. All buried metallic piping must be provided with corrosion protection.
2. Metallic storage tanks that are partially buried in soils must be protected against corrosion for the site-specific soil conditions.
3. Field-installed cathodic protection systems shall be designed and certified as adequate by a corrosion specialist. The cathodic protection system shall be tested by a certified tester within six months of installation and at least every three years thereafter.
4. Impressed-current cathodic protection systems shall also be inspected no less than every 60 calendar days to ensure that they are in proper working order.

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13.7.5 Training

All personnel who manage handle or store oils in quantities equal or greater that 55 gallons must have SPCC training. Refer to Chapter 7, Environmental Training, for more information.

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13.7.6 Inspections

1. ASTs that are not secondarily contained must be visually inspected on a daily basis. A record of all inspections, including inspector's name, date of inspection, deficiencies observed, and corrective actions taken must be recorded and maintained.
2. ASTs containing hazardous waste must also meet Federal and State hazardous waste management requirements. Daily inspections may be required. See Chapter 4, Hazardous Waste Management, and Chapter 24, Aboveground Storage Tanks, for additional requirements.
3. ASTs that are secondarily contained must be visually inspected at least bi-weekly, unless a variance has been obtained from the Environmental Services Division. A record of all

inspections, including inspector's name, date of inspection, deficiencies observed, and corrective actions taken must be recorded and maintained. Records shall be maintained for at least three years.

4. Storm water from tank secondary containment structure(s) must be visually inspected or tested prior to discharging. Clean storm water, with no visible sheen or deemed clean by testing, may be released into the sanitary sewer or preferably into the landscaped areas.
5. For complete list of required inspections and sample inspection checklist. Contact the Environmental Services Division.

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13.7.7 Integrity Program for ASTs

For integrity program requirements, refer to Chapter 24, Aboveground Storage Tanks.

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13.8 Metrics

1. Percent of updates to SPCC Plan and FRP completed within 6 months of any change that materially affects the potential to discharge oil.
   Goal=100%
2. Percent of updates completed at least every 5 years.
   Goal=100%
3. Percent of facilities/equipment with potential to discharge oil that are inspected in the Center-wide audit. Complete 20 percent of the facilities/equipment annually to achieve a five-year audit cycle.
   Goal=100%
4. Percent of affected personnel requiring annual SPCC training/refresher who have current SPCC training certification.
   Goal=100%

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13.9 Sources of Additional Information or Assistance

Environmental Services Division, [redacted]

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