
DEVIL CANYON PROJECT RELICENSING FERC PROJECT NUMBER 14797



HAZARDOUS MATERIALS MANAGEMENT PLAN

November 2019



State of California
California Natural Resources Agency
DEPARTMENT OF WATER
RESOURCES
Hydropower License Planning and
Compliance Office

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COMMONLY USED TERMS, ACRONYMS AND ABBREVIATIONS

Application for New License	DWR's Application for a New License for the Devil Canyon Project Relicensing, FERC Project Number 14797
OES	Office of Emergency Services
CDFW	California Department of Fish and Wildlife
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
DPR	California Department of Parks and Recreation
DWR	California Department of Water Resources
FERC	Federal Energy Regulatory Commission
hazardous material	A material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment, if released into the workplace or the environment
hazardous waste	A solid or liquid waste, or combination of wastes, which because of its quantity, concentration, or physical, chemical or infectious characteristics may pose a substantial present or potential hazard to human health and safety or the environment, if improperly treated, stored, transported, disposed of, or otherwise managed
LRWQCB	Lahontan Regional Water Quality Control Board
NFS	National Forest System
O&M	operation and maintenance
Plan	Hazardous Materials Management Plan
PM&E measures	Protection, Mitigation, and Enhancement measures, which are operation and management activities to: (1) protect resources against impacts from continued operation and maintenance of the Project; (2) mitigate any impacts from continued operation and maintenance of the Project (if the resource cannot be fully protected); and (3) enhance resources affected by continued Project operation and maintenance
PPE	personal protective equipment
Project	Devil Canyon Project Relicensing, FERC Project Number 14797

Project boundary	The area to which DWR requires access for normal Project operations and maintenance. The boundary is shown in Exhibit G of DWR's Application for New License.
SBNF	San Bernardino National Forest
SDS	Safety Data Sheet
SPCC	Spill Prevention, Control, and Countermeasure Plan
SRA	State Recreation Area
SWP	State Water Project
U.S.	United States
USFS	U.S. Department of Agriculture, Forest Service

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1.0 INTRODUCTION

In November 2019, the California Department of Water Resources (DWR), pursuant to Title 18 of the Code of Federal Regulations, Subchapter B (Regulation under the Federal Power Act), Part 4, Subpart F (Application for License for Major Project – Existing Dam) (Traditional Licensing Process), filed with the Federal Energy Regulatory Commission (FERC) an Application for a New License for Major Project – Existing Dam (Application for New License) for DWR’s Devil Canyon Project Relicensing, FERC Project Number 14797 (Project).

DWR included this Hazardous Materials Management Plan (Plan) in its November 2019 Application for New License. This Plan addresses hazardous materials, including hazardous waste, defined as “a solid or liquid waste, or combination of wastes, which because of its quantity, concentration, or physical, chemical or infectious characteristics may pose a substantial present or potential hazard to human health and safety or the environment, if improperly treated, stored, transported, disposed of, or otherwise managed” (California Health and Safety Code, Section 25501[n][1]). Hazardous wastes are further defined by the California Department of Toxic Substances Control as “liquids, solids, or contained gases, and can be the by-products of manufacturing processes, used oil, discarded used materials, or discarded unused commercial products, such as cleaning fluids (solvents) or pesticides” (DTSC 2016).

All elevation data in this exhibit are in U.S. Department of Commerce, National Oceanic and Atmospheric Association, National Geodetic Survey Vertical Datum of 1929, unless otherwise stated.

1.1 BACKGROUND

1.1.1 Brief Description of the Project

The Project is part of a larger water storage and delivery system, the State Water Project (SWP), which is the largest state-owned and operated water supply project of its kind in the United States. The SWP provides southern California with many benefits, including affordable water supply, reliable regional clean energy, opportunities to integrate green energy, accessible public recreation opportunities, and environmental benefits.

The Project, which is on the East Branch of the SWP in San Bernardino County, has a FERC-authorized installed capacity of 280 megawatts. Project facilities range in elevation from 3,378 feet to 1,778 feet and include: Cedar Springs Dam and Silverwood Lake; San Bernardino Tunnel; Devil Canyon Powerplant Penstocks and Surge Chamber; Devil Canyon Powerplant and Switchyard; Devil Canyon Afterbay and Second Afterbay; Silverwood Lake-associated recreation facilities; and appurtenant facilities and features. The California Department of Parks and Recreation (DPR), on behalf of DWR, maintains and operates the Silverwood Lake-associated Project recreation facilities as part of the Silverwood Lake State Recreation Area (SRA). Non-Project facilities (e.g., the Pacific Crest National Scenic Trail) traverse or are located in

the Silverwood Lake SRA but are not Project facilities. The Project does not include any open water conduits or transmission lines. DWR operates the Project in a run-of-release mode using SWP water as the water is delivered to downstream SWP water users.

The Project boundary comprises 2,079.2 acres, of which 125.7 acres are National Forest System (NFS) lands managed by the U.S. Department of Agriculture, Forest Service (USFS), as part of the San Bernardino National Forest (SBNF). USFS administers the SBNF in conformance with the SBNF Land Management Plan (USFS 2005), as subsequently amended (USFS 2006).

DWR will continue to operate the Project as it has been operated historically, with the addition of a number of Protection, Mitigation, and Enhancement (PM&E) measures, which are operation and management activities to: (1) protect resources against potential impacts from continued operation and maintenance (O&M) of the Project; (2) mitigate any impacts from continued O&M of the Project (if the resource cannot be fully protected); and (3) enhance resources affected by continued Project O&M. This Plan is one of those PM&E measures.

Figure 1.1-1 shows the Project vicinity. Figure 1.1-2 shows primary Project facilities, including DWR's Project boundary.



Figure 1.1-1. Devil Canyon Project Vicinity

1.2 PURPOSE OF THE PLAN

This Plan is intended to provide guidance for the storage, use, and transportation of hazardous materials used or generated within the Project boundary. To the extent appropriate, DWR will coordinate the efforts required under this Plan with other Project resource efforts, including implementation of other resource management plans and measures included in the license.

1.3 GOALS AND OBJECTIVES OF THE PLAN

The primary goal of the Plan is to describe the current standard practices that DWR follows when storing, using, transporting, and disposing of hazardous materials used for routine O&M of the Project. The objective of the Plan is to provide the guidance necessary to meet Plan goals.

1.4 CONTENTS OF THE PLAN

This Plan includes the following:

- Section 1.0. Introduction. This section includes introductory information, including the purpose and goals of the Plan.
- Section 2.0. Project-Specific Hazardous Materials Use, Transport, Storage, and Disposal. This section provides a list of hazardous materials that DWR uses, transports, stores, and disposes in the routine O&M of the Project. The volume and location of the hazardous materials are described. DWR does not dispose of any hazardous substance within the Project boundary.
- Section 3.0. Hazardous Materials Management. This section lists the practices that DWR employs to manage hazardous materials during O&M of the Project.
- Section 4.0. Consultation, Reporting, and Plan Revisions. This section describes consultation between DWR, California Department of Fish and Wildlife (CDFW), and the SBNF; reporting; and Plan review regarding hazardous materials.
- Section 5.0. References Cited. This section includes the resource documents cited in this Plan.

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2.0 PROJECT-SPECIFIC HAZARDOUS MATERIALS USE, TRANSPORT, STORAGE, AND DISPOSAL

DWR uses hazardous materials during routine O&M of the Project's facilities. DWR also transports hazardous materials to sites located in the Project boundary when they are to be used for periodic maintenance work, as described below. Table 2.0-1 provides a general description, by location, of hazardous materials that may be used, stored, or transported for routine Project O&M. Refer to Section 3.2 of this Plan regarding procedures for clean-up of hazardous material spills, including during transport.

DWR and DPR have Hazardous Materials Business Plans and Spill Prevention, Control, and Countermeasure (SPCC) plans for the hazardous materials stored at Devil Canyon Powerplant and Silverwood Lake SRA, as shown in Table 2.0-1. Devil Canyon Powerplant is the only Project facility where DWR stores hazardous materials. DPR hazardous materials are stored at the DPR maintenance facility at Silverwood Lake SWRA. In addition, limited quantities of gasoline and other materials, as listed in Table 2.0-1, are kept by DPR at the marina. Neither DWR's Devil Canyon Powerplant nor DPR's maintenance facility are located on NFS lands.

Table 2.0-1. Devil Canyon Project Facilities and Hazardous Materials Stored, Used, or Transported for Routine Operation and Maintenance

Hazardous Materials*	Location	O&M Activity	Quantity
DEVIL CANYON FACILITIES¹			
Transformer oil	Exterior Transformer Yard, North of Powerplant	Plant maintenance, Electrical Plant Transformers	30,000 gallons
Diesel fuel No. 2	Exterior, North of Transformer Yard	Plant SEG Fuel Tank	1,800 gallons
Welding gas (75% argon, 25% CO ₂)	Exterior, South of Powerplant	Plant Maintenance Activity	> 100 cubic feet
Chevron hydraulic oil AW 32	Hazmat/Waste & Storage area NW of Powerplant	Plant maintenance, Plant Hydraulic Equipment	>220 gallons
Chevron gear lubricant – Meropa 150	Hazmat/Waste & Storage area NW of Powerplant	Plant maintenance, DC 225Ton Crane	>110 gallons
Chevron hydraulic fluid - Rando HD 150	Hazmat/Waste & Storage area NW of Powerplant	Plant maintenance, EBX Unit Oil	>165 gallons
Chevron motor oil SAE 15W-40	Hazmat/Waste & Storage area NW of Powerplant	Plant maintenance, Plant and Ck Site SEG Oil	>110 gallons
K-1 Kerosene	Hazmat/Waste & Storage area NW of Powerplant	Plant maintenance, Used in Steam Cleaner	> 110 gallons
Mobil EAL 224H – hydraulic fluid	Hazmat/Waste & Storage area NW of Powerplant	Plant maintenance, EBX Hydraulic Power Unit Oil	>165 gallons
Used oil/waste	Hazmat/Waste & Storage area NW of Powerplant	Transported offsite for recycling @ 55gal	>55 gallons
Oily rags	Hazmat/Waste & Storage area NW of Powerplant	Transported offsite for recycling @ 55gal	>150 pounds
Used oil	Hazmat/Waste & Storage area NW of Powerplant	Transported offsite for recycling @ 55gal	>165 gallons
Shell Diala oil AX	Hazmat/Waste & Storage area NW of Powerplant	Plant maintenance, EBX Transformer Oil	>110 gallons
SIGMA M-460 compressor fluid	Hazmat/Waste & Storage area NW of Powerplant	Plant maintenance, EBX Compressor Oil	>110 gallons

Table 2.0-1. Devil Canyon Project Facilities and Hazardous Materials Stored, Used, or Transported for Routine Operation and Maintenance (continued)

Hazardous Materials*	Location	O&M Activity	Quantity
Texaco Starplex Moly MPGM2 - grease	Hazmat/Waste & Storage area NW of Powerplant	Plant maintenance, EBX Pump Grease	>120 pounds
Chevron turbine oil GST 68	Hazmat/Waste & Storage area NW of Powerplant	Plant maintenance, DC Unit Plant Oil	>110 gallons
Used oil/waste	Plant Elev. 1938, U2 Oil Coalescer	Needle Oil/Water Separator	>50 gallons
Nitrogen	Plant elev. 1938, Cylinder Storage Cage	Plant maintenance, Plant Nitrogen for TSV System	3,800 cubic feet
Chevron turbine oil GST 68	Plant elev. 1938, Day Tanks near Units 1-4	Plant maintenance, Needle Day Tanks	>100 gallons
Nitrogen	Plant elev. 1938, E. end nitrogen bank	Plant maintenance, TSV System Nitrogen	22,500 cubic feet
Chevron turbine oil GST 68	Plant elev. 1938, TSV accumulation tanks	Plant maintenance, U1 & 2 TSV HPU	>350 gallons
Chevron turbine oil GST 68	Plant elev. 1938, TSV HPU control cabinet	Plant maintenance, U1 & 2 TSV HPU	>400 gallons
Chevron Dura-Lith grease EPNRG12	Plant elev. 1938, Hazmat/Storage Area	Plant Maintenance, PM grease	>400 pounds
Used oil/waste	Plant elev. 1938, Hazmat/Storage Area	Transported offsite for recycling @ 55gal	>30 gallons
Used antifreeze	Plant elev. 1938, Hazmat/Storage Area	Transported offsite for recycling @ 55gal	>35 gallons
Used/crushed oil filters	Plant elev. 1938, Hazmat/Storage Area	Transported offsite for recycling @ 55gal	>75 pounds
Acetylene	Plant elev. 1938, Portable	Plant Maintenance Welding	>150 cubic feet
Oxygen	Plant elev. 1938, Portable	Plant Maintenance Welding	>105 cubic feet
Chesterton 801 Industrial & Marine Solvent	Plant elev. 1938, Oil Centrifuge Room	Plant maintenance part cleaning (Pink Soap)	>30 gallons

Table 2.0-1. Devil Canyon Project Facilities and Hazardous Materials Stored, Used, or Transported for Routine Operation and Maintenance (continued)

Hazardous Materials*	Location	O&M Activity	Quantity
K-1 kerosene	Plant elev. 1938, Oil Centrifuge Room	Plant maintenance, Used in Steam Cleaners	>30 gallons
Oily rags	Plant elev. 1938, Oil Centrifuge Room	Transported offsite for recycling @ 55gal	>75 pounds
Texaco Ursa Super Plus 15W-40 oil	Plant elev. 1938, Oil Centrifuge Room	Plant maintenance, Plant & Check Site SEG	>30 gallons
Chevron turbine oil GST 68	Plant elev. 1938, Oil Centrifuge Room	Lubricates generator and turbine bearings	>30 gallons
Motor oil 15w-40	Plant elev. 1938, Oil Room	Plant maintenance, Plant & Check Site SEG	>190 gallons
Chevron turbine oil GST 68	Plant elev. 1938, Oil Room	Plant maintenance, Dirt/Clean Tanks Oil System	>1,970 gallons
Used oil/waste	Plant elev. 1938, Oil Room sump pit	Centrifuge Overflow, Transported offsite for recycling @ 55gal	>50 gallons
Dowtherm heat transfer fluid	Plant elev. 1938, HVAC Room	HAVAC Maintenance PM	>30 gallons
Carbon dioxide	Plant elev. 1938, Storage Room	Fire Suppression System	9,170 cubic feet
Nitrogen	Plant elev. 1938, West Nitrogen Bank	Plant maintenance, TSV System Nitrogen	22,500 cubic feet
Chevron turbine oil GST 68	Plant elev. 1938, West Nitrogen Bank	U3, 4 & Bypass Vlv HPU	>350 gallons
Lead acid batteries	Plant elev. 1954, East Battery Room	Essential Buss Emergency Plant Power	315 gallons
Carbon dioxide	Plant elev. 1954, East CO ₂ Bank	Fire Suppression System	39,300 cubic feet
Acetylene	Plant elev. 1954, portable	Plant Maintenance Welding	>150 cubic feet
Oxygen	Plant elev. 1954, portable	Plant Maintenance Welding	>100 cubic feet
Lead acid batteries	Plant elev. 1954, West Battery Room	Essential Buss Emergency Plant Power	>45 gallons
Carbon dioxide	Plant elev. 1954, West CO ₂ Bank	Fire Suppression System	30,130 cubic feet

Table 2.0-1. Devil Canyon Project Facilities and Hazardous Materials Stored, Used, or Transported for Routine Operation and Maintenance (continued)

Hazardous Materials*	Location	O&M Activity	Quantity
Chevron turbine oil GST 68	Plant elev. 1954, Turbine/LGB Reservoir	Lubricates generator and turbine bearings	>840 gallons
Waxie City Seal	Plant elev. 1970, North wall stairwell	Floor wax building maintenance	>40 gallons
Waxie W-400 Sealer	Plant elev. 1970, North wall stairwell	Floor wax building maintenance	>75 gallons
Oxygen	Plant elev. 1970, Exterior Cylinder Gas Storage Case	Plant Maintenance Welding	>200 cubic feet
Acetylene	Plant elev. 1970, SW Cylinder Gas Storage Closet	Plant Maintenance Welding	>500 cubic feet
Argon compressed	Plant elev. 1970, SW Cylinder Gas Storage Closet	Plant Maintenance Welding	1,600 cubic feet
Chevron turbine oil GST 68	Plant elev. 1970, Motor UGB/Governor Reservoir	Lubricates generator and turbine bearings	>2,320 gallons
A-1025 shielding gas	Plant elev. 1970, West Welding Shop	Plant Maintenance Welding	>1,800 cubic feet
Acetylene	Plant elev. 1970, West Welding Shop	Plant Maintenance Welding	>100 cubic feet
Argon compressed	Plant elev. 1970, West Welding Shop	Plant Maintenance Welding	>500 cubic feet
Oxygen	Plant elev. 1970, West Welding Shop	Plant Maintenance Welding	>200 cubic feet
SILVERWOOD LAKE STATE RECREATION AREA (DPR) ²			
Diesel fuel	DPR maintenance facility: 14651 Cedar Cir, Hesperia, CA	Refuel heavy equipment	1,000 gallons
Latex paint	DPR maintenance facility: 14651 Cedar Cir, Hesperia, CA	Facility maintenance	220 gallons
Port o pot blue (toilet deodorizer)	DPR maintenance facility: 14651 Cedar Cir, Hesperia, CA	Facility maintenance	220 gallons
Disinfectant	DPR maintenance facility: 14651 Cedar Cir, Hesperia, CA	Facility maintenance	200 gallons

Table 2.0-1. Devil Canyon Project Facilities and Hazardous Materials Stored, Used, or Transported for Routine Operation and Maintenance (continued)

Hazardous Materials*	Location	O&M Activity	Quantity
Liquefied petroleum gas (LPG)	DPR maintenance facility: 14651 Cedar Cir, Hesperia, CA.	HVAC	5,000 gallons
Gasoline	DPR maintenance facility: 14651 Cedar Cir, Hesperia, CA	Refuel equipment	4,000 gallons
Oxygen	DPR maintenance facility: 14651 Cedar Cir, Hesperia, CA	Facility maintenance - welding	1,000 cubic feet
Used lubricating oils	DPR maintenance facility: 14651 Cedar Cir, Hesperia, CA	Heavy equipment maintenance	35 gallons
Acetylene	DPR maintenance facility: 14651 Cedar Cir, Hesperia, CA	Facility maintenance - welding	750 cubic feet
Roundup Pro Concentrate	DPR maintenance facility: 14651 Cedar Cir, Hesperia, CA	Facility maintenance	100 gallons
Sodium Hypochlorite – Clorox Bleach	DPR maintenance facility: 14651 Cedar Cir, Hesperia, CA	Facility maintenance	100 gallons

Note:

*This list represents the products used or onsite during the writing of this plan. It is not intended to limit the type, volume, or storage location of products used or held during the term of the license.

¹DWR maintains a Hazardous Materials Business Plan for this facility.

²DPR maintains a Hazardous Materials Business Plan for this facility.

3.0 HAZARDOUS MATERIALS MANAGEMENT

3.1 ROUTINE O&M

Prior to conducting any O&M task, DWR staff normally develops solutions that will eliminate, nullify, or prevent hazards that may be encountered during task implementation, including hazards associated with hazardous substance handling.

3.1.1 Training

Using best practices and good judgment, and as required by regulations, DWR staff who handle hazardous materials during routine O&M are trained in the following:

- Safe handling of hazardous materials, including appropriate protocols with respect to hazardous substance storage, labeling, and Safety Data Sheets (SDS)
- Location and use of appropriate equipment and materials for cleaning up hazardous materials spills
- Procedures for cleaning up spills
- Use of spill control and personal protective equipment (PPE)

DWR formally documents all trainings.

3.1.2 Notification Procedures

DWR staff who handle hazardous materials are familiar with notification and reporting procedures in case of a hazardous materials spill or incident during routine O&M activities. These notification and reporting procedures may include:

- As soon as possible, but no later than 24 hours after the event of a reportable-quantity hazardous substance spill or accident, DWR informs the appropriate federal, State and county agencies and DPR; DWR initially notifies the California Governor's Office of Emergency Services (Cal OES) at 800-852-7550 or 916-262-1621.
- If the spill occurs on or affects resources on NFS lands, DWR will contact the SBNF to report the spill and discuss corrective actions. The contact information for SBNF Emergency Command Center dispatch, to initiate the SBNF's Emergency Response Plan is 909-383-5651 (24-hour emergency); or 909-382-2619 or 909-382-2633 (for office, general questions).
- Depending on the type of release, DWR may contact CDFW's Office of Spill Prevention and Response at 800-852-7550 or 916-845-0045, and/or the U.S. Department of the Interior, Fish and Wildlife Service for Natural Resource Damage Assessment: 760-431-9440 (extension 271) or 760-431-9440 (extension 291).

- Reporting includes the following details regarding the spill: product, magnitude, nature, time, date, location and actions taken. Reports can be made by any employee involved in release, the Site Manager, or DWR's Incident Commander.
- DWR will notify FERC of the event, including the agencies notified by DWR, pertinent details regarding the event, and any corrective actions or requirements of the responsible agencies.

In the rare event during which spill prevention activities fail, clean-up supplies from the Devil Canyon Powerplant will support product release response and control measures by DWR. From this inventory, trucks used for O&M are normally equipped with a fire extinguisher, shovel and bucket, as a matter of routine.

At DWR-maintained facilities within the Project boundary, the clean-up material inventory is specific to the products in use. Those clean-up materials may include, but are not limited to:

- Emergency Spill Kit
 - PPE (e.g., safety glasses, rubber gloves, booties, etc.)
 - Absorbent socks
 - Absorbent drip pillow
 - Absorbent skimmers
 - Absorbent spill pillows, 24-inch x 18-inch
 - Lite-dri absorbent (or equal)
 - Flat-bladed shovel and broom
 - Disposal bags and ties
 - Hazardous Materials Business Plan
 - Hazardous waste labels
 - Waste material containment drums for collection of spilled materials, including disposable spill kit items used in the spill response (e.g., absorbent socks and pillows, rubber gloves, etc.) for disposal in accordance with federal, state and local regulations.
- Absorbent Pads – Each pad (18 inches x 18 inches) is polypropylene fabric that absorbs 11 times its weight in liquid. Pads absorb 10 gallons of liquid per bale of 100 pads. Each clean-up crew normally has 100 absorbent pads.

- Absorbent Skimmers Booms – Skimmers float indefinitely before or after saturation with oils. Skimmers are made of meltdown polypropylene fill that repels water. They absorb 10 times their weight in oil and can be used in lakes, streams, or on the ground. Each skimmer normally has a harness kit attached that is made of yellow polypropylene rope with grommets that are used to connect skimmers. Each boom is usually 8 feet x 10 feet. Absorbent skimmer booms are useful when work is performed near water.
- Clean Drum – One 55-gallon clean drum, lined with polypropylene material or an overpack drum, can be used to store spill response materials until needed. When a spill occurs, soiled pads, pillows, skimmers and contaminated soil will be placed in the drum for disposal after the cleanup is accomplished.

3.2 SPILL RESPONSE

In the unlikely event that a spill occurs, DWR will determine the appropriate method of spill response according to the degree of hazard the spill represents, as characterized by two classes of spills: incidental spill; or non-incidental spill, which are defined below:

Incidental Spill:

- A spill that represents a low risk to personnel and the environment
- A spill that is either contained or the volume of spilled material is no more than five gallons
- A spill that can be absorbed and controlled at the time of release by trained employees working in the area
- A spill that will not reach a floor drain or storm drain or will contact soil

Non-Incidental Spill:

- A spill that represents a risk to human health or has the potential to harm the environment
- Therefore, the first action in response to a spill is to evaluate the hazard to determine whether it is an incidental or non-incidental spill, then implement the spill response actions according to DWR's procedures outlined below that facility personnel carry out when responding to, and reporting on, a spill/release.

3.2.1 Spill Response – Immediate Actions

- Evaluate the spill area. Does the spill represent a high or low risk of harm to human health or the environment, per the definition in Section 3.2?

- ***If a HIGH RISK spill (i.e., NON-INCIDENTAL SPILL, per the definition in Section 3.2) occurs***, the spill must be addressed by DWR's emergency personnel or qualified emergency response contractor:
 - Quickly identify and assess the situation and its potential hazards:
 - What material has spilled?
 - Where is the spill?
 - What happened to cause the spill?
 - How much spilled?
 - How much remains that could be spilled?
 - Is it contained?
 - When did the spill occur?
 - Are there any surface waters, groundwater, or wells nearby that could be affected?
 - Is help needed? Is help on the way?
 - Are there current or foreseeable weather conditions that could cause the spill to spread and/or worsen the potential hazard?
 - Notify Your Supervisor. Warn your supervisor and affected personnel in accordance with internal emergency response system procedures. If you can, do not leave the spill unattended when reporting to your supervisor; instead either communicate with your supervisor electronically (e.g., mobile phone, radio) while you monitor the spill, if possible, or find someone nearby to monitor the spill and to enforce safety/security measures and keep non-response personnel at a safe distance. Use the information you have gathered to inform your supervisor of the situation. The supervisor assures that the Incident Commander of a DWR facility assumes incident command for directing a coordinated response and ensuring the required external reporting notifications per Section 3.2.2.
 - When reporting a non-incident spill, provide the following information:
 - Contact number and location of the person reporting the spill (recommend giving this information first in case phone connection is lost)
 - All assessment information compiled from the list above

- Any other site-specific information that may be relevant, such as the presence of outside contractors that may be working in the area, or other unusual conditions or circumstances
- Alert the Area Control Center to notify employees of the danger and/or need for any evacuation
- Determine if you can act safely to stop the spill at an upstream valve. If you cannot shut off a valve, determine if you can dike or block-off the leak with absorbent materials. Remember – do everything only from a safe distance and avoid contact with the spilled product. Do not endanger yourself or others.
- Secure the Work Area. Clear the immediate area. Block off the spill site and areas where exposure may be a problem. Keep all sources of ignition away from the area. Assign several coworkers as needed to stand at safe points around the scene to keep people and vehicles from passing through the spill area. Shut down machinery that could ignite the spill. If machinery cannot be removed from the path of the spill, surround equipment with absorbent materials. Be aware of the potential for electric shock.
- Dispose. After the spill response has been completed, DWR's Environmental and Safety Manager will oversee the disposal process with contracted waste handlers.
- ***If a LOW RISK spill (i.e., INCIDENTAL SPILL, per the definition in Section 3.2) occurs***, the spill must be addressed by DWR's emergency personnel or a qualified emergency response contractor. The spill may be controlled in the following manner:
 - Alert your supervisor that an incidental spill has occurred.
 - Assess the spill:
 - Spill source
 - Material and quantity
 - Potential hazards
 - Potential environmental receptors
 - Before beginning any cleanup or containment operation, check the SDS for the type of PPE needed for the released product. Don PPE appropriate for controlling the release to prevent skin and eye contact (e.g., booties or shoe covers, nitrile gloves, eye protection, Tyvek[®] suit). A respirator may be donned to protect against inhalation hazards if appropriate for the spill

response and the responder is certified for its use. The type of PPE needed will vary according to the type and degree of hazard.

- Control the source of the spill (e.g., shut-off valve, diking) to prevent further spill;
- Protect floor drains, sumps, storm drains and other pathways leading to the environment with plugs, pigs, or drain covers.
- Surround the spill with absorbent material such as pads or pigs
- Surround the spill with absorbent material such as pads or pigs
- Absorb the spill
- Collect the residue, place it in an appropriate container, and properly label the container per DWR's Common Waste Stream protocols
- Clean the spill area with detergent and water.

3.2.2 Spill Reporting

3.2.2.1 *Immediate Reporting*

- Upon discovery of a spill, if the spill cannot be handled internally, the Incident Commander of a DWR facility will contact San Bernardino County OES at 909-386-8425 or Cal OES at 800-852-7550 or 916-262-1621 for any of the following conditions:
 - Any significant spill/release of petroleum
 - Discharges of any hazardous materials, oil, or petroleum products into State waters
 - Discharges that may threaten or impact water quality
- If San Bernardino County OES determines that emergency response assistance is required, the DWR Incident Commander will make a good faith effort to notify the following agencies:
 - Local Emergency Response Agency (9-1-1, or Local Fire Department)
 - San Bernardino County Fire – Hazardous Materials Division at 909-386-8425
 - Lahontan Regional Water Quality Control Board (LRWQCB) at 760-241-6583 or 530-542-5400
 - CDFW at 916-445-0045; press 5 for Spill Prevention and Response.

- DWR's Incident Commander will make a good faith effort to contact the U.S. Coast Guard National Response Center at 800-424-8802 if any of the following conditions are met:
 - The spill/release will reach a navigable body of water or an adjoining shoreline
 - Water quality standards could be violated
 - The spill/release could cause a film, sheen, or discoloration
 - The spill/release could cause a sludge or emulsion
 - The spill/release exceeds federal reportable quantities under the Comprehensive Environmental Response, Compensation, and Liability Act, or CERCLA.
- For serious injuries or harmful exposures to workers, DWR's Incident Commander will make a good faith effort contact the California Department of Industrial Relations/Division of Occupational Safety and Health District Office in San Bernardino at 909-383-4321 within eight hours.
- For hazardous waste tank system releases or secondary containment releases, DWR's Incident Commander will make a good faith effort to contact the California Environmental Protection Agency, Department of Toxic Substances Control at 916-255-3545.

To the extent known, DWR's Incident Commander provides the following information to the federal, State, and local reporting agencies during the initial telephone notifications:

- Identity of the caller and telephone number at which they can be reached
- Location, date, and time of the spill/release incident, or threatened spill/release incident
- Substance and quantity involved
- A description of what happened
- Medium or media affected by the spill/release (water or land)
- Time and duration of the spill/release
- Proper precautions to take
- Danger or threat posed by the spill/release
- Number and types of injuries (if any)

- Weather conditions at the incident location
- Any other information that may help emergency personnel responding to the incident

3.2.2.2 Follow-Up Reporting

- As soon as practical, but no later than 30 days of the spill/release, DWR's Incident Commander normally files a Section 304: Emergency Release Follow-Up Notice Reporting Form with Cal OES. (A blank Section 304: Emergency Release Follow-Up Notice Reporting Form is provided in Appendix A).
- If the spill/release is greater than 1,000 gallons, or is the second spill/release event of more than 42 gallons of oil within 12 months, DWR's Incident Commander will prepare a written report of the incident. The report normally will be submitted to the U.S. Environmental Protection Agency Regional Administrator and LRWQCB within 60 days of the triggering incident. The written report must include the following.
 - Name of the facility
 - Incident Commander's name
 - Location of the facility
 - Maximum storage or handling capacity of the facility and normal daily throughput
 - Corrective action and countermeasures taken, including a description of the equipment repairs and replacements
 - An adequate description of the facility, including maps, flow diagrams, and topographical maps, as necessary
 - The cause of the discharge, including failure analysis of the system or subsystem in which the failure occurred
 - Additional preventative measures taken or contemplated to minimize the possibility of recurrence
 - Other information the Regional Administrator may reasonably require pertinent to the SPCC Plan or discharge incident(s)

3.2.3 Best Management Practices

On NFS lands, BMP FAC-6 Hazardous Materials (USFS 2012) will be used. The following Best Management Practices will be adhered to on non-NFS lands:

- Vehicles and equipment will not be maintained or refueled in areas where hazardous materials may enter or contact surface water, groundwater, or soil.
- No debris, soil, silt, sand, rubbish, construction waste, cement or concrete or washings thereof, asphalt, paint, oil or other petroleum products, or any other materials which could be hazardous to aquatic life, will be stored or otherwise placed in an area where they may enter or contact surface water, groundwater, or soil.

3.3 NEW CONSTRUCTION

In addition to its own standard practices, should DWR hire a contractor to perform any maintenance work or new construction for the Project within the Project boundary, prior to the work, each contractor will have a work-specific SPCC plan in place, if one is required for the work. DWR will notify the SBNF of any new construction for the Project if the new construction is on NFS lands. The project-specific SPCC plan will normally include:

- Designating a supervisor to oversee and enforce proper spill prevention measures
- Providing spill response and prevention education for employees and subcontractors
- Stocking appropriate clean-up materials onsite near product storage, unloading, and use areas
- Designating hazardous waste storage areas away from storm drains or watercourses
- Minimizing production or generation of hazardous materials onsite or substitute materials used onsite with less hazardous materials

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4.0 CONSULTATION, REPORTING, AND PLAN REVISIONS

4.1 CONSULTATION AND REPORTING

DWR will annually review with the SBNF activities related to hazardous materials on NFS lands in the previous calendar year, as well as any activities related to hazardous materials on NFS lands planned for the current calendar year. In addition, DWR will consult with the SBNF, as needed, regarding hazardous materials.

DWR will follow SBNF reporting requirements for hazardous substance events.

4.2 PLAN REVISIONS

DWR, in consultation with the SBNF, will review, update and/or revise this Plan, as it pertains to use of hazardous materials on NFS lands. Any updates to the Plan will be prepared in coordination and consultation with the SBNF. The SBNF will have 60 days after receipt of the updated plan to provide written comment and recommendations before DWR files the updated Plan with FERC for FERC's approval. DWR will include documentation of all relevant coordination and consultation with the updated Plan filed with FERC. If DWR does not adopt a particular recommendation by the SBNF, the filing will include DWR's reasons for not doing so. DWR will implement the Plan as approved by FERC. The Plan will not be considered revised until FERC issues its approval.

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5.0 REFERENCES CITED

- California Environmental Protection Agency, Department of Toxic Substances Control (DTSC). 2016. Defining Hazardous Waste. Last updated March 22, 2016. Available online:
https://www.dtsc.ca.gov/HazardousWaste/upload/HWMP_DefiningHW111.pdf
- U.S. Department of Agriculture, Forest Service (USFS). 2012. FS 990a – National Best Management Practices for Water Quality Management on National Forest System Lands - Volume 1: National Core BMP Technical Guide. 177 pp. Available online:
https://www.fs.fed.us/naturalresources/watershed/pubs/FS_National_Core_BMPs_April2012.pdf
- _____. 2006. San Bernardino National Forest Land Management Plan, Final Environmental Impact Statement, Record of Decision. U.S. Department of Agriculture, Forest Service, Pacific Southwest Region. April 2006. Available online:
https://www.fs.usda.gov/wps/portal/fsinternet/cs/main!/ut/p/z1/04_Sj9CPykssy0xPLMnMz0vMAfljo8zijQwgnNHCwN_DI8zPwBcqYKAfDIZggAM4GuhHEaMfj4Io_MaH60dhtSLMB2ECITMKckMjDDIdFQEHRNG/dz/d5/L2dBISEvZ0FBIS9nQSEh/?position=BROWSEBYSUBJECT&pname=San%20Bernardino%20National%20Forest-%20Planning&navtype=BROWSEBYSUBJECT&ss=110512&pnavid=13000000000000&navid=1301000000000000&ttype=main&cid=FSE_003756
- _____. 2005. San Bernardino National Forest Land Management Plan, Part 2, San Bernardino National Forest Strategy. Department of Agriculture. Pacific Southwest Region. 117 pp. and appendices. Available online:
https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fsbdev7_007719.pdf

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Appendix A

Section 304: Emergency Release Follow-Up Notice Reporting Form

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Written Reporting of Emergency Releases

The requirements for written reports can be found in the California Code of Regulations - Title 19, Division 2, Chapter 4, Article 2, Section 2705, which states:

- (a) If required to submit a written emergency release follow-up notice pursuant to 42 U.S.C. section 11004(c) (1989), or as that section may be subsequently amended, a business shall prepare the written emergency release follow-up notice using the form specified in subsection (c) of this section.
- (b) A written emergency release follow-up notice prepared pursuant to subsection (a) shall be sent to the Chemical Emergency Planning and Response Commission (CEPRC) at 3650 Schriever Avenue, Mather, CA 95655. This written report shall be sent as soon as practicable following a release, but no later than 7 days from the date of the release.
- (c) The following reporting form (with instructions), the 'Emergency Release Follow-up Notice Reporting Form,' shall be used for filing the written emergency release follow-up notice required by subsection (a) of this section.

EMERGENCY RELEASE FOLLOW - UP NOTICE REPORTING FORM

A	BUSINESS NAME	FACILITY EMERGENCY CONTACT & PHONE NUMBER () -
B	INCIDENT DATE MO DAY YR	TIME NOTIFIED OES (use 24 hr time)
C	INCIDENT ADDRESS LOCATION	CITY / COMMUNITY COUNTY ZIP
D	CHEMICAL OR TRADE NAME (print or type) CAS Number	
	CHECK IF CHEMICAL IS LISTED IN 40 CFR 355, APPENDIX A <input type="checkbox"/>	CHECK IF RELEASE REQUIRES NOTIFICATION UNDER 42 U.S.C. Section 9603 (a) <input type="checkbox"/>
	PHYSICAL STATE CONTAINED <input type="checkbox"/> SOLID <input type="checkbox"/> LIQUID <input type="checkbox"/> GAS	PHYSICAL STATE RELEASED <input type="checkbox"/> SOLID <input type="checkbox"/> LIQUID <input type="checkbox"/> GAS
	ENVIRONMENTAL CONTAMINATION <input type="checkbox"/> AIR <input type="checkbox"/> WATER <input type="checkbox"/> GROUND <input type="checkbox"/> OTHER	QUANTITY RELEASED TIME OF RELEASE DURATION OF RELEASE ____DAYS ____HOURS ____MINUTES
E	ACTIONS TAKEN	
	KNOWN OR ANTICIPATED HEALTH EFFECTS (Use the comments section for addition information)	
F	<input type="checkbox"/> ACUTE OR IMMEDIATE (explain) _____	
	<input type="checkbox"/> CHRONIC OR DELAYED (explain) _____	
	<input type="checkbox"/> NOTKNOWN (explain) _____	
G	ADVICE REGARDING MEDICAL ATTENTION NECESSARY FOR EXPOSED INDIVIDUALS	
H	COMMENTS (INDICATE SECTION (A - G) AND ITEM WITH COMMENTS OR ADDITIONAL INFORMATION)	
I	CERTIFICATION: I certify under penalty of law that I have personally examined and I am familiar with the information submitted and believe the submitted information is true, accurate, and complete.	
	REPORTING FACILITY REPRESENTATIVE (print or type) _____	
	SIGNATURE OF REPORTING FACILITY REPRESENTATIVE _____ DATE: _____	

EMERGENCY RELEASE FOLLOW-UP NOTICE
REPORTING FORM INSTRUCTIONS

(This form may be reproduced, as needed)

GENERAL INFORMATION:

Chapter 6.95 of Division 20 of the California Health and Safety Code requires that written emergency release follow-up notices prepared pursuant to 42 U.S.C. § 11004, be submitted using this reporting form. Non-permitted releases of reportable quantities of Extremely Hazardous Substances (listed in 40 CFR 355, appendix A) or of chemicals that require release reporting under section 103(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 [42 U.S.C. § 9603(a)] must be reported on the form, as soon as practicable, but no later than 7 days, following a release. The written follow-up report is required in addition to the verbal notification.

BASIC INSTRUCTIONS:

- The form, when filled out, reports follow-up information required by 42 U.S.C § 11004. Ensure that all information requested by the form is provided as completely as possible.
- If the incident involves reportable releases of more than one chemical, prepare one report form for each chemical released.
- If the incident involves a series of separate releases of chemical(s) at different times, the releases should be reported on separate reporting forms.

SPECIFIC INSTRUCTIONS:

Block A: Enter the name of the business and the name and phone number of a contact person who can provide detailed facility information concerning the release.

Block B: Enter the date of the incident and the time that verbal notification was made to OES. The OES control number is provided to the caller by OES at the time verbal notification is made. Enter this control number in the space provided.

Block C: Provide information pertaining to the location where the release occurred. Include the street address, the city or community, the county and the zip code.

Block D: Provide information concerning the specific chemical that was released. Include the chemical or trade name and the Chemical Abstract Service (CAS) number. Check all categories that apply. Provide best available information on quantity, time and duration of the release.

Block E: Indicate all actions taken to respond to and contain the release as specified in 42 U.S.C. § 11004(c).

Block F: Check the categories that apply to the health effects that occurred or could result from the release. Provide an explanation or description of the effects in the space provided. Use Block H for additional comments/information if necessary to meet requirements specified in 42 U.S.C. § 11004(c).

Block G: Include information on the type of medical attention required for exposure to the chemical released. Indicate when and how this information was made available to individuals exposed and to medical personnel, if appropriate for the incident, as specified in 42 U.S.C. § 11004(c).

Block H: List any additional pertinent information.

Block I: Print or type the name of the facility representative submitting the report. Include the official signature and the date that the form was prepared.

MAIL THE COMPLETED REPORT TO:

**Chemical Emergency Planning and Response Commission (CEPRC) /
Local Emergency Planning Committee (LEPC)
Attn: Section 304 Reports
3650 Schriever Avenue,
Mather, CA 95655**

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