

Draft Application for a New License Major Project – Existing Dam

Hazardous Materials Management Plan

Security Level: Public

Yuba River Development Project FERC Project No. 2246

Draft – December 2013

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None.

GLOSSARY – DEFINITIONS OF TERMS, ACRONYMS AND ABBREVIATIONS

Term	Definition					
Business Plan	Hazardous Materials Business Response Plan					
C.F.R.	Code of Federal Regulations					
CUPA	Certified Unified Program Agency					
FERC	Federal Energy Regulatory Commission					
Forest Service	United States Department of Agriculture, Forest Service					
FPA	Federal Power Act					
hazardous materials	Any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or threatened hazard to human health and safety or to the environment, if released into the workplace or the environment.					
HSC	Health and Safety Code					
JHA	Job Hazard Analysis					
MSDS	Material Data Safety Sheets					
NFS	National Forest Service					
O&M	Operation and Maintenance					
Plan	Hazardous Materials Management Plan					
PNF	Plumas National Forest					
Project	Yuba River Development Project, FERC Project No. 2246					
SOP	Standard Operating Protocol					
TNF	Tahoe National Forest					
USACE	United States Army Corps of Engineers					
U.S.C.	United States Code					
YCWA	Yuba County Water Agency					

SECTION 1.0

INTRODUCTION

In April 2014, the Yuba County Water Agency (YCWA), pursuant to Section (§) 5.18 of Title 18 of the Code of Federal Regulations (C.F.R.), filed with the Federal Energy Regulatory Commission (FERC) an Application for a New License for Major Project – Existing Dam - for YCWA's 361.9 megawatt Yuba River Development Project, FERC No. 2246 (Project). The initial license for the Project was issued by the Federal Power Commission (FERC's predecessor) to YCWA on May 16, 1963, effective on May 1, 1963. The Federal Power Commission's May 6, 1966, Order Amending License changed the license's effective date to May 1, 1966, for a term ending on April 30, 2016.

YCWA includes in its Application for a New License this Hazardous Materials Management Plan (Plan).

The United States Department of Agriculture, Forest Service's (Forest Service) Federal Power Act (FPA) § 4(e) authority only applies in this Plan to Project facilities on National Forest System (NFS) land, and the United States Army Corps of Engineers' (USACE) FPA § 4(e) authority only applies in this Plan to Project facilities on federal land administered by the USACE. The Forest Service administers the Plumas National Forest (PNF) in conformance with the PNF Land and Resource Management Plan (USDA 1988), and administers the Tahoe National Forest (TNF) in conformance with TNF Land and Resource Management Plan (USDA 1990).

1.1 <u>Background</u>

1.1.1 Yuba River Development Project

The Project is located in Yuba, Sierra and Nevada counties, California, on the main stems of the Yuba River, the North Yuba River and the Middle Yuba River, and on Oregon Creek, a tributary to the Middle Yuba River. Major Project facilities, which range in elevation from 280 feet to 2,049 feet, include: 1) New Bullards Bar Dam and Reservoir; 2) Our House and Log Cabin diversion dams; 3) Lohman Ridge and Camptonville diversion tunnels; 4) New Colgate and Narrows 2 power tunnels and penstocks; 5) New Colgate, New Bullards Minimum Flow and Narrows 2 powerhouses; and 6) appurtenant facilities and features (e.g., administrative buildings, switchyards, roads, trails and gages). The existing Project does not include any aboveground open water conduits (e.g., canals or flumes) or any transmission lines.

In addition, the Project includes 16 developed recreation facilities. These include: 1) Hornswoggle Group Campground; 2) Schoolhouse Campground; 3) Dark Day Campground; 4) Cottage Creek Campground; 5) Garden Point Boat-in Campground; 6) Madrone Cove Boat-in Campground; 7) Frenchy Point Boat-in Campground; 8) Dark Day Picnic Area; 9) Sunset Vista

¹ Cottage Creek Campground was burned in 2011 and has not been rebuilt. YCWA is in discussions with the Forest Service regarding rebuilding the burned campground.

Point; 10) Dam Overlook; 11) Moran Road Day Use Area; 12) Cottage Creek Boat Launch; 13) Dark Day Boat Launch, including the Overflow Parking Area; 14) Schoolhouse Trail; 15) Bullards Bar Trail; and 16) floating comfort stations. All of the recreation facilities are located on NFS land, with the exception of the Dam Overlook, Cottage Creek Boat Launch and small portions of the Bullards Bar Trail, which are located on land owned by YCWA. All of the developed recreation facilities are located within the existing FERC Project Boundary, except for a few short segments of the Bullards Bar Trail to the east of the Dark Day Boat Launch. In addition, the Project includes two undeveloped recreation sites at Our House and Log Cabin diversion dams, both located on NFS land and within the existing FERC Project Boundary.

Figure 1.1-1 shows the Project Vicinity,⁴ proposed Project, and proposed FERC Project Boundary.⁵

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² Emerald Cove Marina provides visitor services at Cottage Creek Boat Launch, including houseboat and boat rentals, boat slips and moorings, fuel and a general store. The marina is operated under a lease from YCWA by a private company.

The Project recreation facilities included one campground that is no longer part of the Project. Burnt Bridge Campground was closed initially by the Forest Service in 1979 due to low use levels. FERC, in an August 19, 1993 Order, which approved YCWA's Revised Recreation Plan, directed YCWA to remove all improvements and restore the Burnt Bridge Campground to the condition it was in prior to development of the facility. YCWA consulted with the Forest Service and all that remains of Burnt Bridge Campground today is the circulation road and vehicle spurs; all other facilities were removed.

⁴ For the purpose of this Plan, "Project Vicinity" refers to the area surrounding the proposed Project on the order of United States Geological Survey 1:24,000 quadrangles.

⁵ The FERC Project Boundary is the area that YCWA uses for normal Project operations and maintenance. The Boundary is shown in Exhibit G of YCWA's Application for New License, and may be changed by FERC with cause from time to time during the term of the new license.

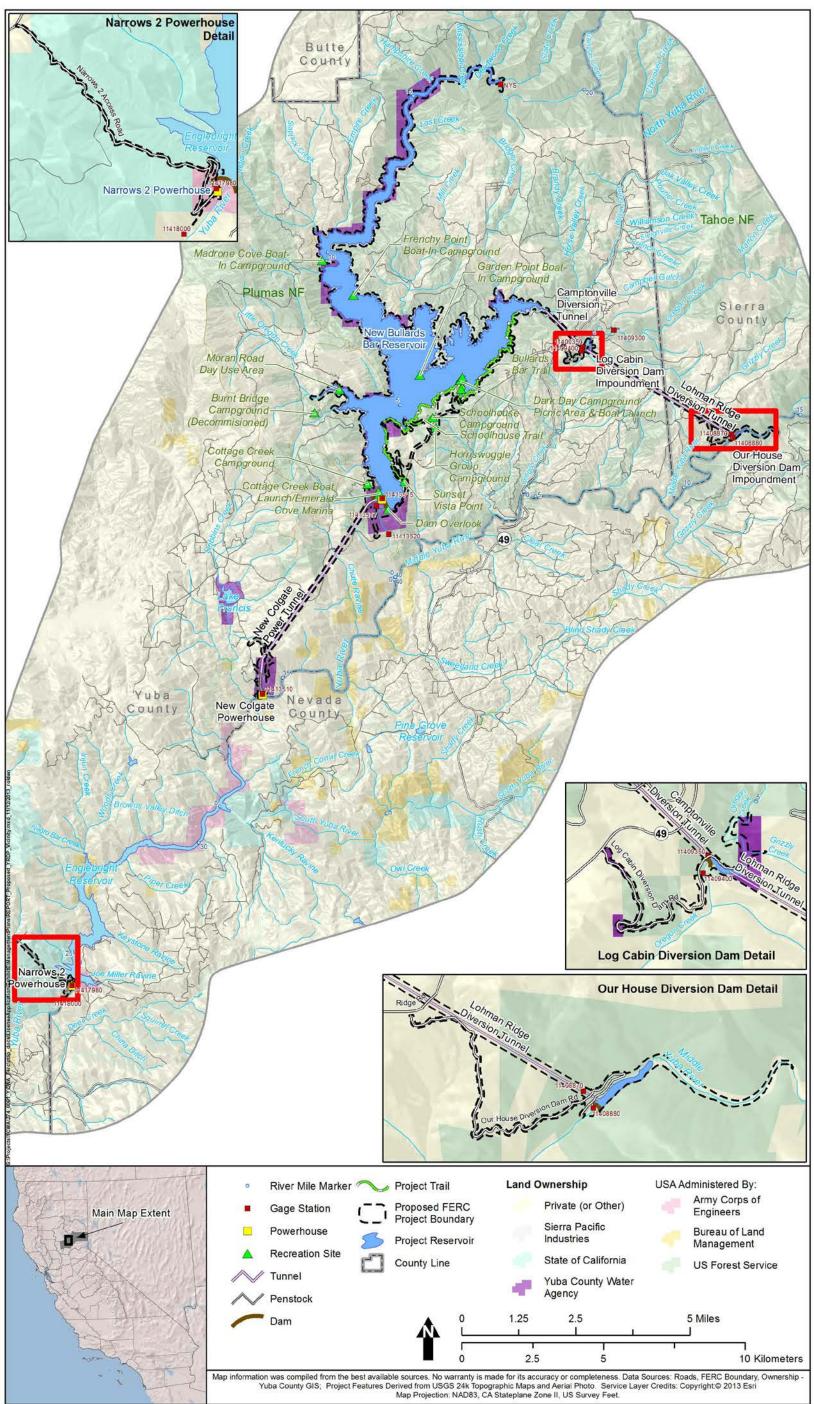


Figure 1.1-1. Yuba County Water Agency's Yuba River Development Project and Project Vicinity.

1.1.2 Hazardous Materials

For the purpose of this Plan, hazardous materials is defined as "any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or threatened hazard to human health and safety or to the environment, if released into the workplace or the environment" (California Health and Safety Code [HSC], § 25501(o)).

1.1.3 Regulatory Framework

Hazardous materials within the FERC Project Boundary are regulated by federal, state, and local laws and policies.

Federal authorities and regulations include:

- Resource Conservation and Recovery Act (42 United States Code [U.S.C.] 6901 et seq.)
- Hazardous Materials Transportation Act (49 U.S.C. Section 1801 et seq.)
- Clean Water Act (33 U.S.C. 1251 et seq.)
- Comprehensive Environmental Response Compensation and Liability Act and Superfund Amendment Reauthorization Act (43 U.S.C. 9601 et seq.)
- 40 C.F.R. 260-279 Federal Regulations on hazardous waste management
- 40 C.F.R. 350 et seq. Emergency Planning and Community Right to Know Act
- Toxic Substances Control Act (15 U.S.C. 2601 et seq.)

State agencies with jurisdiction over hazardous materials generally receive their authority through implementing the federal regulations listed above. Additional state regulations include:

- California Hazardous Waste Control Law (HSC Section 25501 et seq.)
- Carpenter-Presley-Tanner Hazardous Substances Account Act (HSC Section 25300 et seq.)
- Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (HSC Section 25404 et seq.)
- California Emergency Services Act (HSC Section 8550 et seq.)

The Yuba County, Sierra County and Nevada County Certified Unified Program Agencies (CUPA) are the local agencies responsible for oversight of the use and storage of hazardous materials within their respective counties. In California, CUPAs provide administration and enforcement of all regulations pertaining to hazardous materials, hazardous wastes, underground storage tanks and above ground storage tanks. Each CUPA's oversight responsibilities include reviewing, approving and monitoring Hazardous Materials Business Response Plans (also known as "Business Plans"), a synthesis document required by California law. These plans are required of all businesses within the county, including government agencies, that store or handle

hazardous materials in amounts equal to or exceeding 55 gallons, 500 pounds, or 200 cubic feet of gas (at standard temperature and pressure). Under California law, if threshold amounts of hazardous materials are used and stored at a site, there must be a Business Plan for the site, with copies given to local agencies that might conduct emergency response activities. The Uniform Fire Code has requirements for the storage and handling of hazardous materials.

YCWA files Business Plans with the Yuba, Sierra and Nevada counties each year. Along with the facility's address, each Business Plan contains basic information on the location, type, quantity and health risks of hazardous materials stored, used, or disposed of in the state, for the quantities identified above. A response plan, in the case of a spill, and a hazardous materials inventory is also included in the Business Plan. Material Data Safety Sheets (MSDS) for each hazardous material used must be available to people working with hazardous materials at all times. Electronic access to MSDS documents, either online or through verbal communication, satisfies this requirement; when YCWA is working on NFS land, for example, they can communicate via walkie-talkie to YCWA safety staff who has access to MSDS documents. Business Plans also satisfy State of California community right-to-know laws.

1.2 Purpose of the Hazardous Materials Management Plan

This Plan addresses the storage, use and transportation of hazardous materials used within the proposed FERC Project Boundary, with special emphasis on NFS land.

YCWA will coordinate, to the extent appropriate, the efforts required under this Plan with other Project resource efforts, including implementation of other resource management plans and measures included in the new license.

1.3 <u>Objectives of the Hazardous Materials Management Plan</u>

The objective of the Plan is to describe the standard practices that YCWA follows when storing, using, transporting, and disposing of hazardous materials used for routine operation and maintenance (O&M) of the Project, highlighting YCWA's practices, especially on NFS land. The Plan also addresses YCWA's approach to the storage, use, transportation, and disposal of hazardous materials related to new construction activities.

1.4 Contents of the Hazardous Materials Management Plan

This Plan includes the following:

- <u>Section 1. Introduction</u>. This section includes introductory information, including the purpose and goals of the Plan.
- Section 2. Hazardous Materials Stored, Used, Transported or Disposed of for Project purposes. This section provides a list of hazardous materials that YCWA stores, uses or transports in the routine O&M of the Project. The volume and location of the materials

- are described. YCWA does not dispose of any hazardous material within the proposed FERC Project Boundary on NFS land.
- <u>Section 3. Hazardous Materials Management</u>. Lists the practices that YCWA employs to manage hazardous materials during O&M of the Project, including O&M performed on NFS land.
- <u>Section 4. Reporting, Consultation and Plan Revisions</u>. This section describes reporting, consultation and Plan revisions.
- Section 5. References Cited. This section lists references cited in this Plan.

SECTION 2.0

HAZARDOUS MATERIALS STORED, USED, TRANSPORTED OR DISPOSED OF FOR THE PROJECT

YCWA uses hazardous materials during routine O&M of the Project's stream gage stations, the diversion dams, the access roads and the reservoir. YCWA also transports hazardous materials, when they are to be used for periodic maintenance work, to sites located in the greater watershed. The quantities of hazardous materials used or transported for any task at any single time are small (e.g., typically on the order of a gallon or less) and do not reach Business Plan or any other regulatory threshold values, and no hazardous materials are stored for future use anywhere on NFS land. Spent materials are all transported to YCWA's maintenance facilities associated with the powerhouses for proper disposal. Hazardous materials are not disposed of within the proposed FERC Project Boundary or on NFS land. Table 2.0-1 provides a description, by location, of hazardous materials that may be used, stored or transported for routine Project O&M.

Table 2.0-1. Yuba River Development Project facilities and hazardous materials stored, used or

transported for routine operation and maintenance.

Hazardous Materials					
FACILITIES LOCATED ON NFS LAND					
Lead acetate	Appurtenant Facilities— Streamflow Gage Stations	The solar panel at each gage station has a lead acetate battery. 12-15 stations watershed-wide. Within each station, each battery has its own spill containment. At least monthly, YCWA tests batteries and communications and inspects battery and spill containment basin.	Minimal ¹		
Gasoline, paint, solvent	Appurtenant Facilities— Project Roads	No hazardous materials are stored on site. The hazardous materials that may be brought on site during maintenance include gas powered weed eater, gas powered chain saw, gas can, spray paint, hot pads and gasoline refueling vehicle (truck). Road maintenance is performed as needed. Road maintenance can include cleaning road for slides, transporting workers to hand-clear vegetation from road drainage structures and reservoir shoreline access—land approach Vegetation control is performed manually on NFS land and does not introduce hazardous materials.	Minimal ¹		
Gasoline, fire extinguishers	New Bullards Bar Reservoir Reservoir Reservoir Reservoir Reservoir maintenance, such as debris removal, is performe water. YCWA also accesses the reservoir shoreline by boat shoreline access—water approach.		Minimal ¹		

⁶ The Forest Service maintains recreation facilities on NFS land.

⁷ Emerald Cove Marina, Inc. maintains the marina-related recreational facilities.

⁸ Annual debris removal is an example of reservoir maintenance, whereby YCWA may access the debris via road or reservoir.

Table 2.0-1. (continued)

Hazardous Materials	Location	YCWA O&M Activity	Quantity	
	FACILIT	TIES LOCATED ON NFS LANDS (continued)	<u> </u>	
	Log Cabin Diversion Dam	No hazardous materials are stored on site. The hazardous materials that may be brought on site during maintenance include those usually associated with the O&M of vehicles and machinery. Other materials considered hazardous are chemicals used in portable toilets and the associated human waste. Vegetation control is performed manually on NFS land and does not introduce hazardous materials. Dam maintenance performed as needed0 to 3 times a year.	Minimal ¹	
Diesel fuel, gasoline, hydraulic fluid, brake fluid, antifreeze, lubricants, paint, acetylene, compressed gas	Our House Diversion Dam	 Equipment and materials brought to site for each maintenance activity. Dam maintenance can consists of one or all of the following: Exercising the release valves, using a lawnmower-sized gasoline powered engine brought to the dam for that specific purpose Painting handrails and other weathered structures Patching the dam itself with grout or concrete. Occasional relicensing study (Entrainment) equipment, using two to three small (100 gallon) propane tanks at each site to power an electric generator. A portable toilet is brought to the job site. If needed, vegetation control is performed manually. Grout and concrete may be brought to the site for dam repair. Paint for painting safety rails. Acetylene for welding. Compressed gas canisters. 	Minimal ¹	
Day Use Areas:	Dark Day Picnic Area			
None Campgrounds:	Sunset Vista Point Dam Overlook Moran Road Day Use Area Dark Day Boat Launch Hornswoggle Group Schoolhouse	 Maintenance performed by Forest Service. Annual Pre-Season cleaning of roads and pads by YCWA 	Primarily maintained by Forest Service	
None	Dark Day Garden Point Boat-In Madrone Cove Boat-In Frenchy Point Boat-In Undeveloped Shoreline Areas	crews, using pickup trucks and hand tools.		
	FACI	LITIES NOT LOCATED ON NFS LAND		
Propane	Garden Point Cove	Debris management. Wood deemed a potential hazard to boating is collected at Garden Point Cove. On an annual basis, following receipt of NFS permit, propane is used to ignite burn pile.	<55 gallons ²	
Herbicides and pesticides	Access Roads and Facility Exteriors	In accordance with state and county regulations.	<55 gallons ²	
Gasoline and diesel fuel, paints, solvents,	Emerald Cove Marina	Boat fueling	Not applicable; maintained by	
lubricants and petroleum products.	Boat Maintenance Yard	Yard is located 0.25 miles north of reservoir.	Emerald Cove Marina, Inc	
None	Cottage Creek Boat Launch	None	None	
Chlorine solution tank	Cottage Creek Water Treatment Plant	Drinking water treatment and distribution	>55 gallons ³	
Gasoline and diesel fuel, paints, solvents,	Narrows 2 Powerhouse		>55 gallons ³	
brake fluid, antifreeze, lubricants and petroleum products, acetylene, compressed gas	New Colgate Powerhouse	Powerhouse operations, including limited vehicle maintenance and machine shop	>55 gallons ³	

Table 2.0-1. (continued)

Hazardous Materials	Location	YCWA O&M Activity	Quantity			
FACILITIES NOT LOCATED ON NFS LAND (continued)						
Toilet deodorizer ²	Comfort Stations	On-water comfort station management requires transfer and pumping of waste and deodorizer	None			

¹ Minimal = Quantities are generally small (<5 gallons) and are brought to the facility by YCWA infrequently.

Within the proposed FERC Project Boundary west and downstream of NFS land, YCWA stores hazardous materials, hazardous material cleanup materials and equipment, and has Business Plans for three facilities – Cottage Creek Water Treatment Plant, Narrows 2 Powerhouse and New Colgate Powerhouse. Emerald Cove Marina maintains its own hazardous materials management plan for its facilities and actions; it is also located west and downstream of NFS land. See Section 1.1.3 for a summary description of Business Plan requirements and contents. YCWA does not store hazardous materials or clean-up materials anywhere else within the proposed Project Boundary, including on NFS land.

See Section 1.1.3. Not a regulated quantity.

³ See Section 1.1.3. YCWA maintains a Business Plan for this facility. Business Plans are planning documents required when an entity stores or uses hazardous materials in amounts equal to or exceeding 55 gallons, 500 pounds, or 200 cubic feet of gas (at standard temperature and pressure). They are a tool used for communication and coordination between workers, emergency personnel and others.

SECTION 3.0

HAZARDOUS MATERIALS MANAGEMENT

3.1 Routine O&M

As shown in Table 2.0-1, all of YCWA's routine O&M conducted outdoors, including all of the O&M activities conducted on NFS land, is infrequent and, with the exception of trucks with refueling tanks, the volume of hazardous materials used at any one time are on the order of five gallons or less. Nevertheless, prior to conducting any O&M task, YCWA staff develops solutions that will eliminate, nullify or prevent hazards that may be encountered during task implementation, including hazards associated with hazardous material handling. As required by hazardous communication and other regulations, as well as best practices and good judgment, all YCWA staff who handle hazardous materials are:

- Trained in the safe handling of hazardous materials, including appropriate protocols with respect to hazardous material storage and labeling, and material safety data sheets
- Trained in the location and use of appropriate equipment and materials for cleaning up any hazardous materials spill
- Trained in the procedures for cleaning up small spills and large spills
- Trained in the use of spill control and personal protective equipment
- Familiar with notification procedures in case of a hazardous materials spill or incident
 - As soon as possible, but no later than 24 hours after the event of a reportable quantity hazardous material spill or accident, YCWA informs the appropriate federal, state and county agencies. If the spill occurs on or affects resources in the NFS, YCWA will contact either the TNF or PNF, as appropriate, to report the spill and discuss corrective actions. Reporting will include the magnitude, nature, time, date, location and actions taken.

In the rare event where spill prevention activities fail, clean-up material inventories at Cottage Creek Water Treatment Plant, Narrows 2 Powerhouse and New Colgate Powerhouse supply all Project tasks managed by YCWA. From this inventory, all trucks used for O&M are equipped with a fire extinguisher, shovel and bucket, as a matter of routine.

No further away than an hour from each YCWA-maintained facility located on NFS land, the clean-up material inventory includes, but is not limited to, items listed below.

- Emergency Spill Kit
 - > sorbent socks
 - disposal bags and ties
 - > safety glasses

- > rubber gloves
- ➤ Absorbent drip pillow
- ➤ Emergency Response Guide Book
- ➤ Absorbent spill pillows, 24" x 18"
- ➤ "Hazardous" labels
- ➤ Lite-Dri Absorbent (or equal)
- dedicated shovel and broom
- Absorbent Pads These pads (18" x 18") are 100 percent polypropylene fabric that absorbs 11 times its weight in liquids. Pads absorb 10 gallons of liquid per bale of 100 pads. Each crew will have 100 absorbent pads.
- Absorbent Skimmers Booms Skimmers will float indefinitely before or after saturation with oils. Skimmers are made of 100 percent meltdown polypropylene fill that repels water. They absorb ten times their weight in oil and can be used in lakes, streams, or on the ground. Each skimmer has a harness kit attached that is made of yellow polypropylene rope with grommets that are used to connect skimmers. Each boom is 8 feet x 10 feet. Absorbent skimmer booms will be required when work is performed near water.
- One 55 gallon clean drum, lined with polypropylene material (overpack). The drum can be used to store spill response materials until needed. When a spill occurs, all soiled pads, pillows, skimmers, contaminated soil, etc. shall be placed in the drum for disposal after the cleanup is accomplished.

In the remote chance that the prevention practices are not successful, YCWA maintains a contract with an on-call hazardous waste cleanup contractor.

3.1.1 Powerhouse Oil Sumps

Each powerhouse is equipped with an oil sump and each oil sump is equipped with an alarm and shut-off valve system. YCWA implements a rigorous program to keep oil out of the sumps - the powerhouse respective alarm and shut-off systems have never been activated for non-testing purposes. YCWA maintains its equipment to minimize and prevent leaks at the source. YCWA keeps absorbent materials on hand to collect any spilled oil and implements housekeeping practices that keep oil out of each sump.

3.2 New Construction

In addition to its own standard practices, should YCWA hire a contractor to perform any maintenance work or new construction, prior to the work, each contractor will have a work-specific spill prevention and control plan in place. The plan will:

- Designate a supervisor to oversee and enforce proper spill prevention measures.
- Provide spill response and prevention education for employees and subcontractors.
- Stock appropriate clean-up materials onsite near material storage, unloading and use areas.
- Designate hazardous waste storage areas away from storm drains or watercourses.
- Minimize production or generation of hazardous materials onsite or substitute materials used onsite with less hazardous materials.

SECTION 4.0

REPORTING, CONSULTATION AND PLAN REVISIONS

4.1 Annual Consultation Meeting

Each year during the term of the License, YCWA shall arrange to meet with the Forest Service for an annual meeting to discuss hazardous materials on NFS land within the FERC Project Boundary. At this time, YCWA will report on spills of hazardous materials on NFS land in the previous calendar year, and list any work planned on NFS land in the upcoming calendar year that will require the development of a spill prevention and control plan. The date of the meeting will be mutually agreed to by YCWA and the Forest Service, but in general, will be held within the first 90 days of each calendar year. It is intended that this meeting will occur as part of the Annual Consultation Meeting, described in YCWA's proposed Condition GEN1. YCWA will file a record of the meeting with FERC.

4.2 Plan Revisions

YCWA, in consultation with the Forest Service and other appropriate agencies, will review, update, and revise the Plan, as needed, when significant changes in the existing conditions or governing regulations occur. A minimum of 60 days will be allowed for the Forest Service and other appropriate agencies to comment and make recommendations before YCWA files the updated Plan with FERC for FERC's approval. YCWA will include all relevant documentation of coordination and consultation with the updated Plan filed with FERC. If YCWA does not adopt a particular recommendation by the Forest Service or other appropriate agency, the filing will include the reasons for not doing so, based on Project-specific information. YCWA will implement the Plan as approved by FERC.

SECTION 5.0

REFERENCES CITED

aı	tates Departmer nd Resource M lumas National	anagem		`	, ,	`	,	
N	ahoe National Ianagement Pla ppendices.		` /					