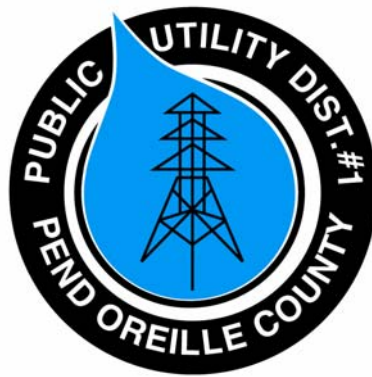


**SPILL PREVENTION CONTROL
AND COUNTERMEASURE PLAN
AND
SPILL RESPONSE PLAN
FOR
OIL AND HAZARDOUS MATERIALS**



**Box Canyon Hydroelectric Project
and
Box Canyon Substation/Switchyard**

**Public Utility District No. 1
of Pend Oreille County, Washington**

Original August 2005

Revised July 2006

EXECUTIVE SUMMARY

This Spill Prevention Control and Countermeasures (SPCC) Plan and Spill Response Plan/Contingency Plan (SRP/CP) for Oil and Hazardous Materials have been developed by the Public Utility District No. 1 of Pend Oreille County (District) pursuant to Title 40 Code of Federal Regulations, Parts 109, 110, and 112, and by the order of the Federal Energy Regulatory Commission (FERC or Commission)(112 FERC 61,055, July 11, 2005). The plan describes the measures that will be used to prevent, control, and respond to spills of oil or hazardous materials at the District's Box Canyon Hydroelectric Project (Project). The District's goal for the Box Canyon Project facilities is zero discharge of hazardous materials, including oil, to the environment. Measures of the SPCC are implemented to prevent such incidents. Should a spill occur, the District will implement the SRP/CP.

The initial work on the plan document was performed by a team of staff members; Patrick Buckley, Nathan Jones and Eileen Dugger. The final document was reviewed and approved by Nathan Jones, P.E. Manager of Production for the Box Canyon Hydroelectric Project. Drawings in the text were produced by Kim Remick, Summer Employee.

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SPILL PREVENTION, CONTROL, AND COUNTERMEASURES (SPCC) PLAN

**BOX CANYON
HYDROELECTRIC PROJECT**

**PUBLIC UTILITY DISTRICT NUMBER 1
OF PEND OREILLE COUNTY, WASHINGTON**

The designated person who is accountable for oil spill prevention at this facility
BOX CANYON MANAGER OF PRODUCTION

MANAGEMENT APPROVAL

This SPCC Plan will be implemented as herein described.

Signature

Bob Geddes, General Manager
Public Utility District Number 1 of Pend Oreille County, Washington

Date

CERTIFICATION

I hereby certify that I have examined the facilities, and being familiar with the provisions of the Title 40 CFR, Part 112, attest that this SPCC Plan has been prepared in accordance with good engineering practices.

Signature

Nathan Jones, P.E., Manager of Production at Box Canyon
Public Utility District No. 1 of Pend Oreille County

Date

Washington License Number: #__38510.....

**CERTIFICATION OF THE APPLICABILITY
OF THE SUBSTANTIAL HARM CRITERIA**

Facility Name: Box Canyon Hydroelectric Project

Facility Address: 7492 Hwy 31
Ione, WA 99139

1. Does the facility transfer oil over water to or from vessels and does the facility have a total storage capacity greater than or equal to 42,000 gallons?

Yes X No

NOTE: The combined oil storage volume at Box Canyon and the switchyard exceeds 42,000 gallons, total.

2. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area?

Yes No X

3. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in Attachment C-III to this appendix, 40 CFR 112 or a comparable formula, 1) such that a discharge from the facility could cause injury to wildlife and sensitive environments? For further description of fish and wildlife and sensitive environments, see Appendices I, II, and III to DOC/NOAA's "Guidance for Facility and Vessel Response Plans: Fish Wildlife and Sensitive Environments" (see Appendix E to this part, section 10, for availability) and the applicable Area Contingency Plan.

Yes No X

4. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in Attachment C-III to this appendix, or a comparable formula 1) such that a discharge from the facility would shut down a public drinking water intake?

- 1) If a comparable formula is used documentation of the reliability and analytical soundness of the comparable formula must be attached to this form.
- 2) For the purposes of 40 CFR part 112, public drinking water intakes are analogous to public water systems as described at 40 CFR (143.2 (c).

Yes No X

5. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last five years.

Yes No X

Certification

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

Signature

Nathan Jones
Name (Please type or print)

Manager, Production
Title

Date

SECTION 100
FACILITY INFORMATION AND CONTACTS

101 NAME OF THIS FACILITY

BOX CANYON HYDROELECTRIC PROJECT
and BOX CANYON SUBSTATION/SWITCHYARD

102 YEAR OF INITIAL FACILITY OPERATION

1952

103 OWNER AND OPERATOR OF THIS FACILITY

Public Utility District Number 1 of Pend Oreille County, Washington
P.O. Box 190
Newport, Washington 99156
(509) 447-3137

104 FACILITY CONTACTS

Please refer to Figure A-1, Appendix A

Oil Spills are to be reported immediately to the Box Canyon Dam Control Room Operations Desk. The Operator on Duty will contact the Manager of Production, who is the designated Incident Commander and will initiate the notification procedures, including contacts of the Director, Regulatory and Environmental Affairs and the Newport District Dispatch. The Operator on Duty is designated as the Incident Commander in the absence of the Manager of Production. At such time, the Operator on Duty has the same responsibilities and authority as the Manager of Production as they apply to this SPCC Plan.

The Director of Regulatory and Environmental Affairs notifies the relevant local, state and federal agencies as required. The Incident Commander notifies appropriate District personnel from the Duty Roster.

All Public Utility District No. 1 extension telephone numbers are reached (if not on a District telephone) by calling (509) 447-3137 first (this is a 24 hours/day, 7 days/week telephone number).

104.1 Box Canyon Control Room

Operations Desk
(509) 447-6706
(In-Plant Emergency Extension – 706)

104.2 Box Canyon Operations Supervisor, MANAGER OF PRODUCTION

Nathan Jones, P.E.
(509) 447-3137 Ext. 701
(509) 442-4101
home: (509) 446-2116

SECTION 100
FACILITY INFORMATION AND CONTACTS

cell: (509) 671-1409

104.3 DIRECTOR, REGULATORY AND ENVIRONMENTAL AFFAIRS

Mark Cauchy, Director of Environmental and Regulatory Affairs

Office: (509)447-9331

Home: (509)447-2235

Cell: (509)671-0242

104.4 Other Internal Contacts

Jim Scheel, Director

Hydro Operations & Power Supply

(509) 447-6702

Cell: (509) 671-1299

Home: (509) 442-3691

Elton Smith, Maintenance Foreman

(509) 447-6705

(509) 447-6706

Bob Geddes, GENERAL MANAGER

(509) 447-9342 (office)

(509) 447-4085 (home)

(509) 671-1642 (cell)

Mark Cauchy, Historic Preservation Coordinator

Office: (509)447-9331

Home: (509)447-2235

Cell: (509)671-0242

105 GOVERNMENT AGENCY CONTACTS

Please refer to Appendix A-1

105.1 Federal Contact (33 CFR 153.203)

National Response Center (NRC)

U.S. Coast Guard

2100 Second Street, SW

Washington, DC 20593

(800) 424-8802

(202) 267-2675 (toll calls)

U. S. Coast Guard

District 13 Office, Federal Building

915 Second Avenue

Seattle, Washington 98174

SECTION 100
FACILITY INFORMATION AND CONTACTS

(206) 442-5850

U.S. EPA Region 10 1200 Sixth Avenue
Seattle, Washington 98101

(206) 442-5810

(206) 553-1263

105.2 State Contacts

Washington State Department of Ecology

N. 4601 Monroe

Spokane, WA 99205-1295

(509) 456-2926

24-hour Emergency Spill Response: (800) 258-5990

105.3 County Contacts

Pend Oreille County

Pend Oreille County Dept. of Emergency Management

(509) 447-3731

FAX: (509) 447-0286

Emergency: (509) 447-3151

Pend Oreille County Sheriff Administration: (509) 447-4942

Environmental Health

(509) 447-3131

Fire District #2 (509) 446-2727

Fire District #4 (509) 447-2476

Fire District #6 (509) 447-3736

Spokane County

Spokane County Sheriff

(509) 456-2240

106 OIL SPILL CONTAINMENT AND CLEANUP

The District uses its own trained personnel for internal oil spill containment and clean-up activities. Spills external to District facility boundaries are evaluated by the Incident Commander, and outside containment and cleanup services are used if deemed necessary by the Incident Commander. Contractor services are listed in Appendix B of the Spill Response Plan.

107 DESCRIPTION OF THIS FACILITY

107.1 Location of the Facility

SECTION 100

FACILITY INFORMATION AND CONTACTS

The Box Canyon Project is a hydroelectric power plant located on the Pend Oreille River in northeast Washington State. It is four miles north of Ione, Washington on Highway 31. Box Canyon Dam is shown on highway maps of the area. (See the following pages with Locus maps, Figures 1, 2, & 3, Section 100.)

107.2 Size of the Facility

The Box Canyon power plant generates a maximum of 69 megawatts of hydroelectric power through four Kaplan turbines. Each hydroelectric set includes controls, switch apparatus, and governing mechanisms. Power is transmitted through conventional transformers and transmission lines. Box Canyon Dam houses all the electrical power generating equipment, and includes water diversion structures, including (a) a 62-foot-high, 260-foot-long reinforced concrete dam with integral spillway; (b) a 217-foot-long, 35-foot-diameter diversion tunnel; (c) a 1,170-foot-long forebay channel; (d) an auxiliary spillway with gates. (Figures 4, 5, 6, Section 500.)

107.3 Areas of the Facility Subject to SPCC Planning Requirements

Box Canyon Dam/Powerhouse include several areas that contain oil storage equipment. A site plan for Box Canyon Dam/Powerhouse is shown in Figure 3, Section 100. Box Canyon Dam/Powerhouse contains 8 primary floors/levels. The elevations of each level/floor are shown in the Table 1, Appendix B along with the vertical distance between levels. On-land facilities with oil storage include the Switchyard and Maintenance Shop (Figure 3).

The vehicle storage building contains between two and four 55-gallon barrels of various petroleum products as further described in section 500.

SECTION 200

PURPOSE OF THE PLAN

201 PURPOSE

The purpose of this plan is to describe facilities, responsible parties, and procedures and plans that are implemented at the Box Canyon Project to prevent the discharge of oil into or upon the navigable waters of Washington, the United States, and/or adjoining shorelines. Should such a discharge of oil occur, this plan also describes procedures that will be implemented to mitigate the release and minimize the threat to the public health and safety or to the environment and natural resources. The procedures, methods, and equipment described in this document meet the requirements of the United States Environmental Protection Agency (U.S. EPA), under Title 40 Code of Federal Regulations (40 CFR) Parts 109, 110, and 112.

The District is required under 40 CFR 112 to prepare a SPCC Plan on the basis of the following criteria:

The District owns and operates a non-transportation-related onshore facility “engaged in storing, transferring and consuming oil and oil products, which could reasonably be expected to discharge oil in harmful quantities into or upon the navigable waters of the United States.”

The District stores oil for its use in various locations at the Project in above-ground containers in a total amount that exceeds 1,320 gallons, and is therefore not an exempt facility, pursuant to 40 CFR 112.1(d)(2)(ii).

The District has determined that the State of Washington Department of Ecology, Washington Administrative Code (WAC), Chapters 173-180 (A-D), Oil Spills, are not applicable as District facilities are not engaged in the transfer of oil in the bulk to or from a tank vessel or pipeline.

This SPCC plan is supported by the facility’s Spill Response Plan (SRP) for Oil and Hazardous Materials, created to comply with the National Oil and Hazardous Substances Contingency Plan (40 CFR 300); the State of Washington Hazardous Materials Emergency Response Plan; and, the Pend Oreille County Emergency Support Function 10 (ESF), a portion of the county’s Comprehensive Emergency Response Plan.

202 SPCC PLAN REVIEW AND AMENDMENT REQUIREMENTS

The SPCC Plan is amended whenever there is a change in facility design, construction, operation or maintenance which materially affects the potential for a discharge of oil into or upon the navigable waters of Washington, the United States, or adjoining shorelines. Such amendments shall be incorporated as soon as possible, but not later than six months after such change occurs. The DIRECTOR, REGULATORY AND ENVIRONMENTAL AFFAIRS will be notified of the amendment within a month after the amendment has been implemented. The Director, Regulatory and Environmental Affairs will then modify the SPCC Plan accordingly and will ensure that it is re-certified by a registered professional engineer, the Plant manager, in accordance with 40 CFR 112.3.

SECTION 200

PURPOSE OF THE PLAN

Notwithstanding the above paragraph, a review and evaluation of the SPCC Plan shall be completed at least once every five years. As a result of this review and evaluation, the plan shall be amended to include more effective prevention and control technology as required. Anytime a facility change or review and evaluation results in the need for SPCC Plan amendments, the SPCC Plan shall be re-certified by a professional engineer in accordance with 40 CFR Part 112.3.

203 SPCC PLAN REVIEW AND AMENDMENT DOCUMENTATION

Each review or amendment to the SPCC Plan will be documented in a Review and Amendment Log. Documentation will include a summary of the review or amendment, the number, date and plan sections affected by the review or amendment and the name and signature of the person completing the review or amendment. (See Appendix B-2, Table 2)

204 SPCC PLAN COORDINATION WITH OTHER PLANS

The District will ensure that the SPCC plan procedures are incorporated into activities conducted pursuant to resource management plans under its FERC license. Where any spill has the potential to affect historic or cultural sites or resources, the Historic Preservation Coordinator will be notified and will follow procedures in the District's Historic Resource Management Plan, including notification of appropriate experts and or agency and tribal representatives, as necessary.

SECTION 300
PUBLIC UTILITY DISTRICT POLICY

It is the policy (by resolution #1214 of the Board) of Public Utility District No.1 of Pend Oreille County, Washington, and of all its contractors to recognize that oil contamination of the waters of the State of Washington is harmful. Therefore, it is required that the strongest emphasis be placed on oil spill prevention, and that the latest engineering and safety procedures be used at all times when dealing with oil and its associated equipment.

SECTION 400 OIL SPILL HISTORY

In the early 1980s, over-greasing of turbine components resulted in visible discharge in the waters downstream of the Box Canyon Dam. This situation was corrected prior to 1984, and there have been no significant releases of oil or waste since that time. Because the total discharge was small, no citations or fines were issued, and no corrective actions were required.

501 POTENTIAL SPILL EVENTS

There are two major facilities at the Box Canyon Hydroelectric Project that contain significant quantities of oil. They are the Box Canyon Dam and the Box Canyon Substation/ Switchyard. These two sites are physically separate. They are maintained and operated by different divisions of the District and have two different spill pathways.

501.1 Dam/Powerhouse

The probability of an oil spill at Box Canyon Dam is low. The four hydroelectric turbine generators and the related equipment have operated for over 50 years without a significant oil spill. All of the major oil storage components are behind dikes, or drain directly to controlled sumps or holding locations. Therefore, failure of one of these tanks or barrels would probably not result in an oil spill unless the components were moved outside of the present diked or contained area. Even then, it is likely that a spill could be contained before oil could reach the waters of the Pend Oreille River. However unlikely, an unconfined spill in the dam could result in a discharge directly into the river, thus the issue is a source of concern to the District and these facilities are subject to regulation under 40 CFR 112.

A slow leak from a piece of equipment (not behind a dike) due to a failed gasket or seal, cracked bushing, or a leaking oil stop plug is a more likely spill event than failure of a storage component. Other events that could possibly result in an oil spill include equipment or oil handling accidents or sabotage.

Section 502 identifies the potential types of failure by listing the individual oil storage tanks and equipment, and their associated maximum spill potential (volume of oil when full). Section 503 describes the methods of spill prevention and control, and the countermeasures that would be followed by facility personnel in case of spills or leaks of oil storage tanks and oil equipment. Most oil spill events will be prevented or contained within the facility. There are two scenarios where total containment will be impossible or impractical and oil may reach river waters. These circumstances are described in Sections 503.1 and 503.6.

501.2 Land Based Buildings

There are four buildings that are separate from the dam and powerhouse, yet are part of the Box Canyon Hydroelectric Project Complex. Those buildings are: the maintenance shop, vehicle storage building, the storage shed, and the visitor's center. The vehicle storage building contains

SECTION 500 FACILITY ANALYSIS

If an oil spill reaches the river water, the Spill Response Plan (SRP) for Oil and Hazardous Materials will be implemented. The SRP describes the commitment of manpower, equipment, and materials required to expeditiously control and remove any harmful quantity of oil discharged.

501.4 Project Related Activities

Under the Project's FERC license, various activities to preserve and enhance resources affected by the Project will be performed on lands within and outside the Project boundary owned by the District and others. Where activities involve the use of trucks or heavy equipment there could be the risk of a relatively small spill of oil or fuel. Project staff and contractors will use care and best practices to prevent such occurrences. When license compliance activities occur on National Forest lands, staff and contractors will comply with Forest Service rules and regulations with respect to spill prevention, containment and cleanup. Activities will be reviewed by the Historic Preservation Coordinator to assure that known cultural or historic sites will not be subject to risk of such spills.

502 OIL EQUIPMENT AND STORAGE (112.7(a))

At the Box Canyon Dam site, any one of the tanks or machinery parts listed in Table 3 has the potential to rupture or burst due to accidental impact, over pressurization, or some other mode of failure. The oil spill flow rate and direction of flow within the facility would vary depending on the type and severity of failure. If oil were to reach the river, it would flow downstream, but the rate and dispersion would vary. The volume of oil contained within each system component represents the maximum oil spill potential of that system. Table 3 in Appendix B-2, shows the three main oil containing systems, the components of each system, the number of system components, the volume of oil contained in each system component, and the total volume of oil in all system components. Each of these system components is discussed individually in Section 503. Please note site plans on Figures 4, 5, & 6 in Appendix D for location of various oil-bearing components.

503 SPILL PREVENTION, CONTAINMENT, AND COUNTERMEASURES

503.1 Spill Response Plan/Contingency Plan

The purpose of Sections 500 and 600 of this SPCC Plan is to meet the U.S. Environmental Protection Agency requirements for oil spill contingency planning as defined in 40 CFR Part 112. Sections 500 and 600 comprise the Contingency Plan for the Box Canyon Hydroelectric Project.

503.1.1 Commitment to Contingency Plan

The District is committed to providing the manpower, equipment, and materials required to expeditiously control and remove any harmful quantity of oil discharged. This will include hiring an oil spill response contractor if needed.

503.1.2 Need for a Contingency Plan

SECTION 500 FACILITY ANALYSIS

The purpose of Sections 500 and 600 of this SPCC Plan is to meet the U.S. Environmental Protection Agency requirements for oil spill contingency planning as defined in 40 CFR Part 112. Sections 500 and 600 comprise the Contingency Plan for the Box Canyon Hydroelectric Project.

503.1.1 Commitment to Contingency Plan

The District is committed to providing the manpower, equipment, and materials required to expeditiously control and remove any harmful quantity of oil discharged. This will include hiring an oil spill response contractor if needed.

503.1.2 Need for a Contingency Plan

The Box Canyon Hydroelectric Project is located directly on the Pend Oreille River. Therefore, any uncontained spills that occur could drain directly into the river. Although technically, the Box Canyon Hydroelectric Project does not have oil storage that exceeds 42,000 gallons, the combined volume of the oil stored at the Project and at the nearby substation/switchyard (Table 3) does exceed 42,000 gallons. Although not required under 40 CFR 112.7(d), staff believe it is prudent to have a contingency plan.

503.2 Dam/Powerhouse

503.2.1 Turbine Generators

Each of the following turbine generator components is explained and oil volumes given on a per unit basis. Box Canyon has a total of four turbine generators operating. The primary containment method is the floor drain/sump system. The drain system and locations of the oil storage units are shown on figures 5 and 6.

503.2.2 Turbine Runner Hubs

Each of the four turbines has a lower hub that contains the blade pitch controls and is the center mounting position for the five blades. Each hub contains 750 gallons of oil.

Oil leakage from the turbine runner hubs creates the potential for an oil spill directly into the river. Although large and significant instantaneous spills would be very unlikely, and have never occurred, and would be the result of a catastrophic equipment failure, slow leaks could occur that would allow small quantities of oil leakage to the river. Such leaks would occur around or through failed seals.

If a catastrophic failure of a turbine were to occur, 750 gallons of oil could spill into the river almost instantly. Such a failure has never occurred in the history of Box Canyon operations, and is very rare within the industry.

More likely than a catastrophic oil leakage from the turbine runner hub is the potential for small leaks to occur from around the hub seals. However, the seals are immersed in the water flow, and under normal operating head conditions the water pressure at this level is greater than the operating oil pressure. Therefore, any form of leakage at the seals would result in water leakage into the hub oil cavity rather than oil leakage into the water. Oil may leak out from any breach in the seals only when the turbine is dewatered, during

SECTION 500

FACILITY ANALYSIS

which time the spiral case is open for inspection and the leak would be detected. During this type of maintenance the turbine is isolated from the river channel and flow.

Hub seals are inspected every four years as part of our normal preventive maintenance program. Any loss of oil during normal unit operation would be detected by a change in oil level indication, which is inspected four times daily. If a significant leak were detected the unit could be isolated from the river flow path and repairs made.

All above water level turbine runner hub oil systems, such as sight glasses, piping, and valves, are inspected at least four times daily by operators. Any small leak from this equipment is contained at the source, or flows to the main plant sump via the powerhouse drains.

503.2.3 Governor Oil System

The governor oil system consists of a sump, storage tank, piping to the turbine oil head and shaft, and piping to the wicket gate servomotors. The total volume of oil is 1000 gallons. Small leaks or total failures and the resultant spills from the reservoir or storage tank will result in spill flows to the generator floor, to the floor drains, and eventually to the main plant sump. Leaks in the governor oil head or turbine shaft area may go to the generator floor, or flow down the generator shaft to the turbine pit.

All leaks and spills could be visually detected by operations personnel on their normal rounds, which occur at least four times daily. Additionally the low governor oil pressure alarm on the plant annunciator system sounds after a loss of approximately 200 gallons. The low governor oil pressure alarm would indicate a loss of oil, at which point the operator would investigate the cause/spill. Also, the entire system is drained and fully inspected on a four-year cycle.

503.2.4 Main Plant Sump

All powerhouse drains flow to the main plant sump. The sump has a total storage capacity of well over 10,000 gallons, and a normal operating level capacity of 1575 gallons. Under normal operation, leakage water into the dam flows to the sump through the powerhouse drainage system, and is discharged to the tailrace water via two pumps. The pump operation is controlled by sump float level indicators and controls. The pumps stop operation to maintain 3 ½ feet of water level. Therefore, small oil volumes within the sump would reside on top of the minimum water level and not be pumped to discharge. Large volumes of oil that would reach the sump quickly from a large spill would be detected on the high sump alarms, alerting the operator to take corrective measures. In the event of a large spill, the main plant sumps would be shut down and the oil would be pumped from the sump to disposal containers. An outline of the main plant sump pumping schematic is attached.

503.2.5 Generator Thrust Bearings

Each generator has an upper thrust and guide bearing assembly that support the weight of the rotor assembly and centers it within its bore. The bearings are a Babbitt type that operates in an oil bath.

SECTION 500 FACILITY ANALYSIS

The total thrust bearing volume is approximately 1150 gallons per unit. Although small leaks from seals and fittings are possible, a near instantaneous total loss of oil would occur only during a catastrophic equipment failure. Any loss of oil would flow down the generator shaft to the turbine pit, and be detected by operators on rounds, which occur four times daily. Small spills and leaks may be detected by operators and cleaned or absorbed at the site. Any oil not contained by the turbine pit would flow via drains to the main plant sump. Also, the generator air housing, where most leaks can initially be detected, is fully inspected during annual unit outages.

503.2.6 Turbine Bearings

Each turbine is fitted with a lower bearing to support the shaft axially. The bearing is grease lubricated. Leakage from this location in an perceptible volumes is highly unlikely, due to the nature of the grease lubrication.

503.2.7 Turbine Pit

Each of the four generator units has a turbine pit, an enclosure just above the turbine head cover but below the elevation level of the turbine floor. Any spills or leakage from any of the components directly above this area, including the generator bearings and governor, will be contained within the turbine pit. Under unit operation the pit is normally partially filled with water up to a level of 1983 due to normal leakage past the lower shaft seals. The very small flow of leakage water into the lower pit is continually drained off to the main plant sump through drain piping.

Each pit has a total storage volume greater than any single total catastrophic spill from any of the individual components. Small oil spills that accumulate in this area may be detected by operators; the area is inspected four times daily. Cleanup up of spills in this area would consist of using portable pumps to transfer large spill volumes to drums for disposal. Small leaks would be removed from the water surface with the use of absorbent mats, which would then be disposed of in an approved manner. Large spills and volumes of oil would flow through the pit overflow drain to the main plant sump.

503.3 Powerhouse

503.3.1 Oil Storage Room

Approximately 1500 gallons of grease, oil, and solvents are stored in the common oil storage room. Most storage is in 55-gallon drums, and the drums are stored on racks to allow for periodic dispersion of small amounts for maintenance purposes. Small drips or leaks from any drums are contained in local oil booms and absorbents. A total failure of any single drum would result in the loss of up to 55 gallons of oil to the floor, which would drain to the main plant sump. The oil storage room is inspected by operations personnel four times daily.

503.3.2 Oil Filter and Transfer Tanks

SECTION 500 FACILITY ANALYSIS

One 2000 gallon portable oil tank is located on the turbine floor and is used during turbine-generator overhauls to temporarily store and transfer oil during oil filtering and equipment maintenance operations. Turbine hub oil, governor oil, or generator thrust bearing oil may be transferred and stored in this tank. It is commonly used for up to three weeks during a year, and remains empty during other times. During transfer and filtering operations the system is always manned. During storage the tank is inspected four times daily during operators rounds.

Spill from this tank could occur from the main inlet or drain valve, or the hose and fittings to and from the tank. Up to the total volume of the tank could spill to the turbine floor, then through the floor drains to the main plant sump.

503.4 Emergency Generator

A diesel powered emergency generator is located in its own building on the spillway. It has a motor oil capacity of 7 gallons and a diesel fuel storage capacity of 144 gallons. Spills from either of these systems would drain directly to the diesel generator building floor. The building floor has a contained spill pit with a capacity of over 1000 gallons that fully encircles the generator skid.

The generator is visually inspected twice daily, and a more thorough operational check occurs monthly, or before each starting operation. Leaks or spills would be detected at this time. The leak source would be repaired, and the spill containment pit cleaned out and the contents properly disposed of. There is virtually no chance for spill leakage to reach grounds or waterways.

503.5 On Land

503.5.1 Box Canyon Substation/Switchyard

The Box Canyon Substation/Switchyard houses four generation step-up transformers, one PAR transformer, one distribution transformer, and nine voltage regulators. All equipment within the switchyard is inspected on a twice-daily basis by operations personnel. (See Figure 4)

503.5.2 GSU Transformers

The four generation step-up (GSU) transformers are the primary generator transformers that transmit the produced power to transmission line voltages. Each has an oil capacity of 4800 gallons, and each is housed within its own spill containment dike with a total storage capacity of 6400 gallons. Minor drips and leaks, and a total GSU shell failure that allows for the spill of the entire volume of oil can be contained within these dikes. Small leaks and spills are mopped up with absorbent pads and then properly disposed of. Large spills would require the transfer of the oil to drums for disposal and additional cleanup measures within the dike structure. It is highly unlikely that oil would reach any grounds or waterways.

503.5.3 PAR Transformer

The phase angle regulator (PAR) transformer controls the power flow within the District's transmission system. The total oil capacity of the PAR is 11700 gallons of oil.

SECTION 500 FACILITY ANALYSIS

The PAR is housed within a spill containment dike that will contain most spills up to a total failure of the transformer tank resulting in a loss of all oil. Small leaks and spills are mopped up with absorbent pads and then properly disposed of. Large spills would require the transfer of the oil to drums for disposal and additional cleanup measures within the dike structure.

503.5.4 Distribution Transformer

Within the Box Canyon switchyard is a single 115kv to 13.2kv distribution transformer. Total oil capacity of the tank is 4320 gallons, and the transformer lies within a spill containment dike that will contain most spills up to a total failure of the transformer tank resulting in a loss of all oil. Small leaks and spills are mopped up with absorbent pads and then disposed of. Large spills would require the transfer of the oil to drums for disposal and additional cleanup measures within the dike structure.

503.5.5 Voltage Regulators

Within the Box Canyon switchyard are nine voltage regulators for the distribution system. Three have oil capacities of 69 gallons of oil, three have 91-gallon capacities, and three have 111-gallon capacities. Any leaks or total failure of these regulators will result in a spill of oil to the rock of the substation grounds. Upon detection of a spill, cleanup of the rock would take place.

503.6 MAINTENANCE SHOP

(Refer to Figure 4.) A building approximately 80 ft by 150 ft contains the Box Canyon Maintenance Shop. The shop is used to support all levels of maintenance activities at the Box Canyon site, including fabrication and repair of dam equipment, and maintenance of the facilities' mobile equipment. For this task up to 50 gallons of new oil is stored in one gallon or smaller containers, and up to two 55-gallon drums of waste oil are stored. The waste oil drums are located on a fully contained spill pallet and would not allow the release of any oil in the event of a drum failure. When the capacity of the two drums is reached, the waste oil is properly disposed of off site. Additionally, small quantities of up to five gallons of new and used vehicle anti-freeze are stored on site in contained pails. All oils and fluids are stored on spill containment pallets or in shop locations where a spill could be readily contained prior to reaching a drain.

Small quantities of paints and thinners are stored in explosion proof cabinets in the shop. Up to 50 gallons of paints and thinners may be stored in up to five gallon buckets. Any spill would be contained in the explosion proof cabinet and not released to any floor drains or external location.

503.7 Fuel Tanks, Fuel Dispensing Pumps, and Other Auxiliary Tank Equipment (40 CFR 112.7(f))

The Box Canyon facilities employ the use of a mobile fuel truck. The one-ton pickup truck has been fitted with a 100-gallon gasoline tank and 120-gallon diesel fuel tank. The vehicle is used primarily around the Box Canyon site for fueling off-road vehicles. Each of the tanks is a standard single wall fuel tank, and does not have secondary containment.

SECTION 500 FACILITY ANALYSIS

Each tank has an electric pump and approximately 20 feet of hose with a fill nozzle used to fuel vehicles.

The fuel truck is inspected before every use. (See Appendix C) Any leaks or faulty equipment are repaired prior to use. Additionally, a written annual PM (preventive maintenance) for the vehicle outlines a thorough inspection list and items to check. This vehicle has never had a significant spill incident.

The fuel truck does not carry on-board spill containment devices. However, booms, absorbents, and other spill containment devices are stored where the vehicle is parked and at other sites around the Box Canyon facilities. In the event of a minor leak, the vehicle would be quickly driven to the parking area, the leak absorbed, and the faulty equipment repaired. In the event of a significant spill, the vehicle would be driven to a less sensitive area such as a paved area, and the leak would be contained by the use of on site spill materials.

503.8 Contingency Procedures

The importance of oil spill prevention, containment, and clean up shall be stressed during the annual safety training meetings. As discussed in Section 700, "Training of Personnel," all work crews will be familiar with the SPCC Plan and the Contingency Plan. As soon as an employee notices an oil spill of any kind, he or she will notify the Hydro Operator Control Room. Notification of all interested parties shall then follow the notification procedures outlined in Section 600. If the spill is not contained within the facility, the oil spill discoverer shall recover as much oil as is feasible, using the oil-containing equipment stored on site while waiting for further instructions.

Once notified, the plant Production Manager shall concurrently follow the notification plan described in Figure A-1, while organizing oil containment, recovery, and clean-up operations. For extended clean-up operations, the Hydro Operator Control Room shall be the communication center.

Box Canyon Project personnel shall provide the emergency containment and oil collection procedures of which they are capable with the supplies on hand. When it is determined that a thorough clean up of any oil spill in harmful amounts is beyond the capabilities of the on-site resources of the Box Canyon Project, an oil spill response contractor shall be hired. A list of Department of Ecology Approved Primary Response Contractors (PRC) updated in August 2004 is contained in Appendix B of this plan.

The most recent updated list can be provided by Shellyne Grisham of the Ecology Spills Policy and Planning Section at (360) 407-60959 (Ask for Approved Spill Response Contractors List.)

504 FACILITY SECURITY (40 CFR 112.7 (g))

The Box Canyon Dam facility area is bounded by security fencing, cliffs, and the Pend Oreille River. Access is through a vehicular gate that is locked during all hours except normal working hours of 7:00 a.m. to 3:30 p.m., Monday through Friday. Lighting is provided for night security, inspection, and normal work activities.

The transformer deck, spillway, and access roads are monitored by security cameras. The plant control room, (staffed 24 hours per day, 365 days per year) continuously observes these areas via monitors. Any

SECTION 500 FACILITY ANALYSIS

observation by control room personnel of an oil spill or of suspicious activity is reported to the Manager of Production immediately. Employees are instructed to be observant and to report any unusual activities to their shift supervisor.

The maintenance center and switchyard are also surrounded by security fencing. Both areas are covered by cameras and lighting.

505 EMERGENCY PROCEDURES – SPILL RESPONSE PLAN/CONTINGENCY PLAN

505.1 General

US EPA regulations (40 CFR Part 112) define a spill as the discharge of oil, “into or upon the navigable waters of the United States or adjoining shorelines, in quantities that may be harmful.” Harmful quantities are defined as discharges of oil that: (a) Violate applicable water quality standards; or (b) Cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines. [61 FR 7421, Feb. 28, 1996] Contaminated ground water may also have the potential to seep, leach, or flow into navigable waters, and would be included in this definition. Storm sewers are considered to fall under the definition of a “navigable waterway” since most storm sewers eventually discharge into a navigable waterway.

An important facet of an effective response procedure during an oil or hazardous substance release incident is to keep the material separated from water to minimize migration and the resulting potential increase in human and environmental exposure. Every effort should be made to prevent spills and emphasize substance containment at the source rather than resort to separation of the material from expanded portions of the environment or downstream water.

505.2 Discovery of a Release

The person discovering a release of material from a container, tank, or operating equipment should initiate certain actions immediately, including:

505.2.1 Extinguish any sources of ignition

Until the released material is identified as nonflammable and noncombustible, all potential sources of ignition in the area should be removed. Vehicles should be turned off. If the ignition source is stationary, attempt to move spilled material away from ignition source. Avoid sparks and movement creating static electricity.

505.2.2 Identify the material released

Consult MSDS sheets, which provide the information for proper identification of the characteristics of the released material. Refer to MSDS sheets at the Box Canyon Shop.

505.2.3 Assure that no danger to human health exists, then attempt to stop the release at its source

SECTION 500 FACILITY ANALYSIS

Simple procedures (turning valves, plugging leaks, etc.) may be attempted by the discoverer if there are no health or safety hazards and there is a reasonable certainty of the origin of the leak.

505.3.4 Initiate spill notification and reporting procedure

Report the incident immediately to the Hydro Operations Control Room (509-442-4106 or Ext. 706 or 707). If there is an immediate threat to human life (e.g. a fire in progress or fumes overcoming workers), an alarm should be sounded to evacuate the building, which will initiate a fire department response. Request the assistance of the fire department's hazardous materials response team if an uncontrollable spill has occurred and/or if the spill has migrated beyond the site boundaries.

505.3 Containment of a Release

If material is released outside a containment area, it is critical that the material be contained as quickly as possible. Action to be conducted may include:

505.3.1 Attempt to stop the release at the source

If the source of the release has not been found; if special protective equipment is necessary to approach the release area; or if assistance is required to stop the release, a fire department response should be initiated by contacting the Hydro Operations Control Room (509-442-4106 or Ext. 706 or 707).

505.3.2 Contain the material released into the environment

Following proper safety procedures, the spill should be contained by absorbent materials and dikes using shovels and brooms. Consult applicable MSDS sheets for material compatibility and environmental precautions.

505.3.3 Recover or clean up the material spilled

As much material as possible should be recovered and reused where appropriate. Material which cannot be reused must be discarded as hazardous waste. Liquids absorbed by solid materials shall be shoveled into open top drum, or if the size of the spill warrants, into a roll-off container. When drums are filled after a cleanup, the drum lids shall be secured and the drums shall be appropriately labeled identifying the contents, the date of the spill/cleanup, and the site name and location. Combining non-compatible materials can cause potentially dangerous chemical and/or physical reactions or may severely limit disposal options. Compatibility information can be found on the MSDS sheets.

505.3.4 Cleanup of the spill area

Surfaces that are contaminated by a release shall be cleaned using an appropriate substance or water. Cleanup water must be minimized, contained and properly disposed. Occasionally, porous materials (such as wood, soil, or oil-dry) may be contaminated; such materials will require special handling for disposal.

505.3.5 Decontaminate tools and equipment used in cleanup

SECTION 500

FACILITY ANALYSIS

Even if dedicated to cleanup efforts, tools and equipment that have been used must be decontaminated before replacing them in the spill control kit.

505.3.6 Notification and reports to outside agencies

The SPCC Coordinator shall determine if a reportable spill has occurred and shall make all necessary notifications. Verbal notification to government agencies and emergency planning committees shall be executed, if necessary. In all cases where verbal notification is given, a confirming written report shall be sent to the same entity.

505.3.7 Review the SPCC Plan

Appropriate personnel shall review spill response efforts, notification procedures, and cleanup equipment usage to evaluate their adequacy during the spill episode. Where deficiencies are found, the plan shall be revised and amended.

SECTION 600

NOTIFICATION AND DOCUMENTATION REQUIREMENTS

601 IN-HOUSE NOTIFICATION

The discoverer of an oil spill at the Box Canyon Project shall immediately notify the Hydro Operations Control Room. The control room shall notify the Maintenance Foreman or Manager of Production. Figure A-1, the SPCC Notification Chart, shows the lines of communication to be followed in the event of an oil spill incident.

The Manager of Production or Maintenance Foreman will be the Incident Commander (IC) in the event of a spill. The IC will assemble cleanup crews and notify District, local, state, and federal authorities of the spill as required by law and described in this document.

602 EXTERNAL NOTIFICATION REQUIREMENTS (112.7(a)(3))

602.1 Reporting Requirements

EPA has established requirements to report spills to navigable waters or adjoining shorelines. Specifically, EPA requires persons in charge of facilities that discharge oil in quantities that may be harmful to public health or welfare, or to the environment, to report the spill to the National Response Center and Washington State Response Center (See Section 5). EPA has determined that discharges of oil in quantities that may be harmful include those that:

- Violate applicable water quality standards;
- Cause a film or sheen upon, or discoloration of the surface of the water or adjoining shorelines; or
- Cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines.

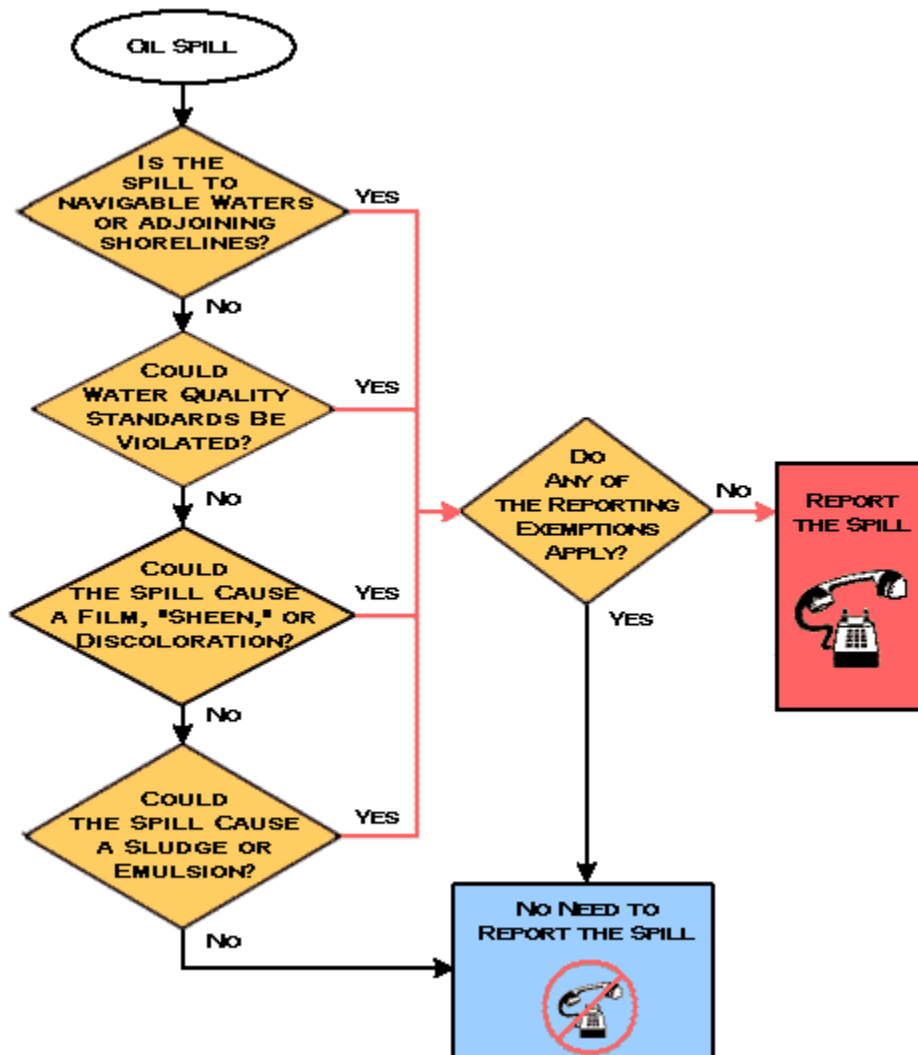
The requirement for reporting oil spills stems from EPA's Discharge of Oil regulation, which has come to be known as the "sheen rule." Under this regulation, reporting oil spills does not depend on the specific amount of oil spilled, but rather on the presence of a visible sheen created by the spilled oil. EPA provides several exemptions from the oil spill reporting requirement, which include:

- Discharges in connection with research, demonstration projects, or studies relating to the prevention control, or abatement of oil pollution.
- Discharges allowed under a National Pollutant Discharge Elimination System (NPDES) permit.

602.2 External Reporting Responsibility

The Director of Regulatory and Environmental Affairs shall be responsible for oil spill notification to the appropriate state and federal officials. This shall be done as soon as possible after proper assessment and quantification of the oil spill occurrence.

**FIGURE 7
WHEN TO REPORT OIL SPILLS**



The appropriate federal and state contacts for the Box Canyon Project are as follows:

REQUIRED NOTIFICATION OF OIL SPILLS:

- | | | | |
|----|--|------------|----------------|
| 1. | National Response Center (NRC) | | 1-800-424-8802 |
| | | Toll Call: | (202) 267-2675 |
| 2. | Emergency Management Division | | 1-800-258-5990 |
| | | Toll Call: | (253) 912-4901 |
| | | | (253) 912-4902 |
| | | | (253) 912-4904 |
| | | | (253) 912-4906 |
| 3. | US Environmental Protection Agency (EPA) | | (206) 553-1263 |
| | Region 10, Seattle | | 1-800-424-8802 |

RECOMMENDED NOTIFICATION OF OIL SPILLS:

- | | | |
|----|--|----------------|
| 4. | Washington State Department of Ecology (DOE) | (509) 575-2490 |
|----|--|----------------|

When reporting a spill or release to the above agencies, it is important to convey as much information as possible. Information reported should include:

- ◆ Time of Call
- ◆ Caller Name, Address, & Phone Number
- ◆ Facility information:
 - Name
 - Type of Facility
 - Location of Incident
 - Time of Incident
 - Type of Incident (Explosion, Collision, Grounding, etc.)
 - Pollutant(s)
 - Estimated Amount of Spill
 - Total Potential Amount
 - Weather/Sea Conditions
 - Point of Contact (Responsible Party Name & Phone #)
 - Facility Agent(s) (Name & Phone)

For liability purposes, the calls should be followed with a letter to be filed in the oil spill log and to be sent to the EPA and DOE listing the information given and received during the notification phone calls. There can be civil and criminal charges for not reporting discharges in a timely manner or for reporting false information. Thus, documentation of the notification call is important. The addresses are shown below:

U.S. EPA, Region 10
1200 Sixth Ave.
Mail code: ECL 116
Seattle, Washington 98101

Washington State Department of Ecology
Central Office
15 West Yakima Avenue, Suite 200
Yakima, Washington 98902

603 NOTIFICATION TO OTHERS

The local fire department shall be notified by the Incident Commander or designee if there is a potential fire hazard concurrent with the oil spill occurrence.

The local police department shall be notified by the Incident Commander or designee if there is evidence of sabotage, misconduct, or other wrong doing.

The responsibility of contacting and/or responding to the news media shall be the exclusive responsibility of the Contracts and Public Information Administrator.

604 DOCUMENTATION OF SPILL EVENT

A log shall be kept of all oil spill events. The log shall contain the date and time of discovery, actions taken, telephone calls, and weather conditions. It shall be a complete account of the spill event through completion of cleanup and restoration. A copy of the log shall be sent to the Manager of Production and Director, Regulatory and Environmental Affairs upon completion. The Box Canyon operator shall keep the log on file in the event of any future legal or government action that may result from the spill event.

The log shall be completed by the initial oil spill discoverer along with the operator who was on duty at the time of the spill. All reports of oil spill shall be kept on file for a minimum of three years and shall include the following information:

1. Date and time of the spill, and the location where it was first observed.
2. Type and quantity of the oil spill.
3. Cause of the spill.
4. Personnel and equipment involved.
5. Containment and cleanup action taken.
6. Sequence and time of events.
7. Evidence, such as witnesses, photographs, and samples.
8. Action taken to prevent similar occurrences.
9. Assessment of damage and steps required for restoration.
10. Samples taken and laboratories used.

605 OIL SPILL REPORT REQUIREMENTS

If either of the following two conditions occur, then the project must submit within 60 days a report of the spill(s) to EPA's Regional Administrator in accordance with 40 CFR 112.4. A copy of this report must be submitted to the Washington Department of Ecology (see Section 105.2).

1. Any oil spill into the Pend Oreille River or over 1000 gallons on adjoining banks in a single spill event.
2. Two oil spills of more than 42 gallons each into the Pend Oreille River or adjoining banks within a 12-month period.

606 SPCC PLAN LOCATION

At least one copy of the SPCC Plan and the Oil Spill Contingency Plan shall be kept in the following locations. All personnel shall be informed of these locations:

1. The Manager of Production's Office
2. The Director, Hydro Operations and Power Supply's Office
3. The Control Room
4. The General Manager's Office
5. The Director, Regulatory and Environmental Affairs' Office
6. Dispatch Office in Newport
7. In addition to the above locations, all persons on the Incident Command Roster will have an Emergency Response Kit, which will contain a copy of this SPCC and the SRP. Personnel who are on-call shall keep the Emergency Response Kit with them.

SECTION 700
MAINTENANCE AND INSPECTION PROCEDURES/RECORDS

701 OPERATIONS AND MAINTENANCE INSPECTIONS (112.7(e))

A routine visual inspection of all oil containing equipment at the Box Canyon Dam site is visually inspected at a minimum of twice daily by the shift operating personnel. This includes all turbine-generator, powerhouse, switchyard, and auxiliary equipment mentioned in Section 500 of this report. Operators are instructed to inform the maintenance foreman and Manager of Production in the event of any leaks or equipment failure or damage that requires immediate attention. For significant events the plant Emergency Action Plan (EAP) is utilized for emergency notification and action.

More intensive additional operations and maintenance inspections included the following:

1. Turbine-generators are overhauled and inspected on a four-year basis. This includes formal inspections of the oil containing equipment, including the turbine hub, turbine bearing and pit, generator thrust bearing, entire governor system, and all auxiliary equipment generation equipment.
2. The oil transfer equipment located on the turbine floor is inspected annually prior to use during unit overhauls, and after use prior to storage for the remainder of the year. During use the equipment is continually monitored.
3. The main plant sump is thoroughly inspected on an annual basis or anytime an oil leak within the powerhouse occurs. The annual PM includes the inspection of the sump, pumps and piping, and the level indication and alarm system.
4. The emergency generator is inspected and test run on a monthly basis.
5. The mobile fuel truck is inspected prior to every use and a thorough inspection completed on an annual basis.
6. GSU transformers are thoroughly inspected on a four-year basis during unit overhauls. The PAR transformer is thoroughly inspected on an annual basis.

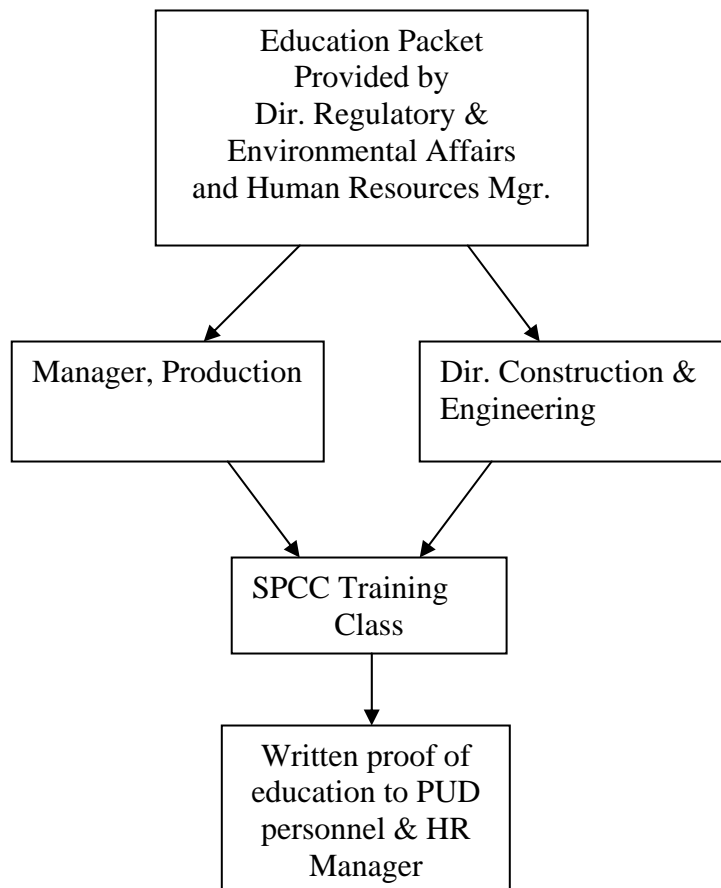
All PM inspections are recorded and stored in the maintenance files for at least three years. Any oil leaks or potential problems identified during inspections are immediately addressed.

SECTION 800 PERSONNEL TRAINING

The Director, Regulatory and Environmental Affairs and the Human Resources Manager are responsible for providing an annual training program for Box Canyon personnel (40 CFR 112.7). Instruction is provided in accord with the *Hazardous Materials Spill Training Manual*, which includes methods and procedures to prevent, control, and clean up an oil spill.

Training programs and periodic briefings provide regular review with applicable staff of the SPCC Plan, the SRP, and the *Procedures Manual for Inspection and Record Retention*. They also describe actual experiences, recent spill events or failures (if any), and new or preventative control and clean-up measures. Training includes review of all District forms and documentation procedures. The objectives of the training and briefings are to give crews an understanding of the SPCC Plan, the SRP, and the *Procedures Manual for Inspection and Record Retention* and their requirements. Additional training information (training plans) is given in the SRP.

SPCC Annual Training



SECTION 900
GLOSSARY OF TECHNICAL TERMS AND ABBREVIATIONS

API	American Petroleum Institute
CFR	Code of Federal Regulations
KVA	Kilovolt Amperes
NFPA	National Fire Prevention Association
NRC	National Response Center
PUD	Public Utility District
SPCC	Spill Prevention, Control, and Countermeasures
SRP	Spill Response Plan for Oil and Hazardous Materials

**EMERGENCY PROCEDURES
SPILL RESPONSE PLAN/CONTINGENCY PLAN
FLOW CHART**

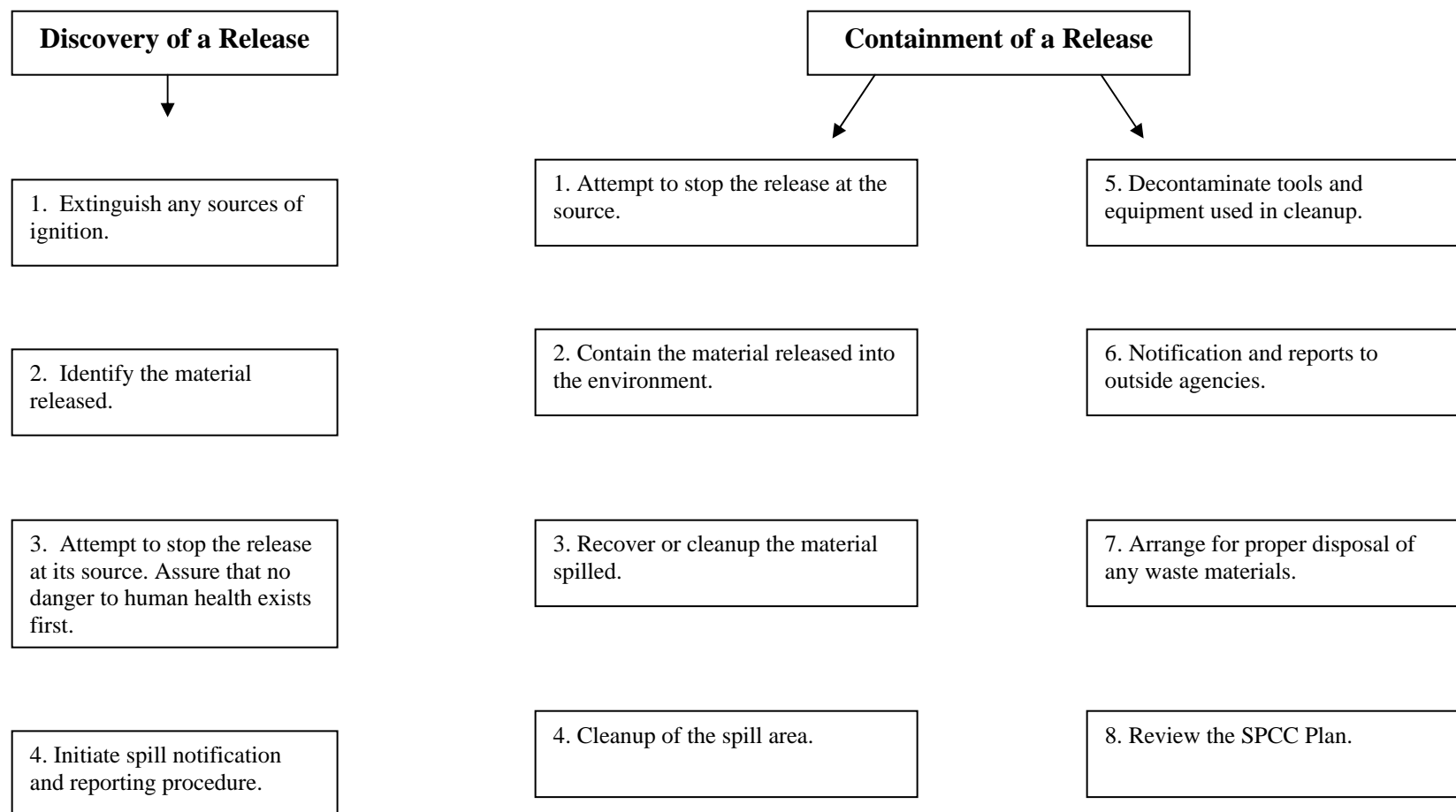
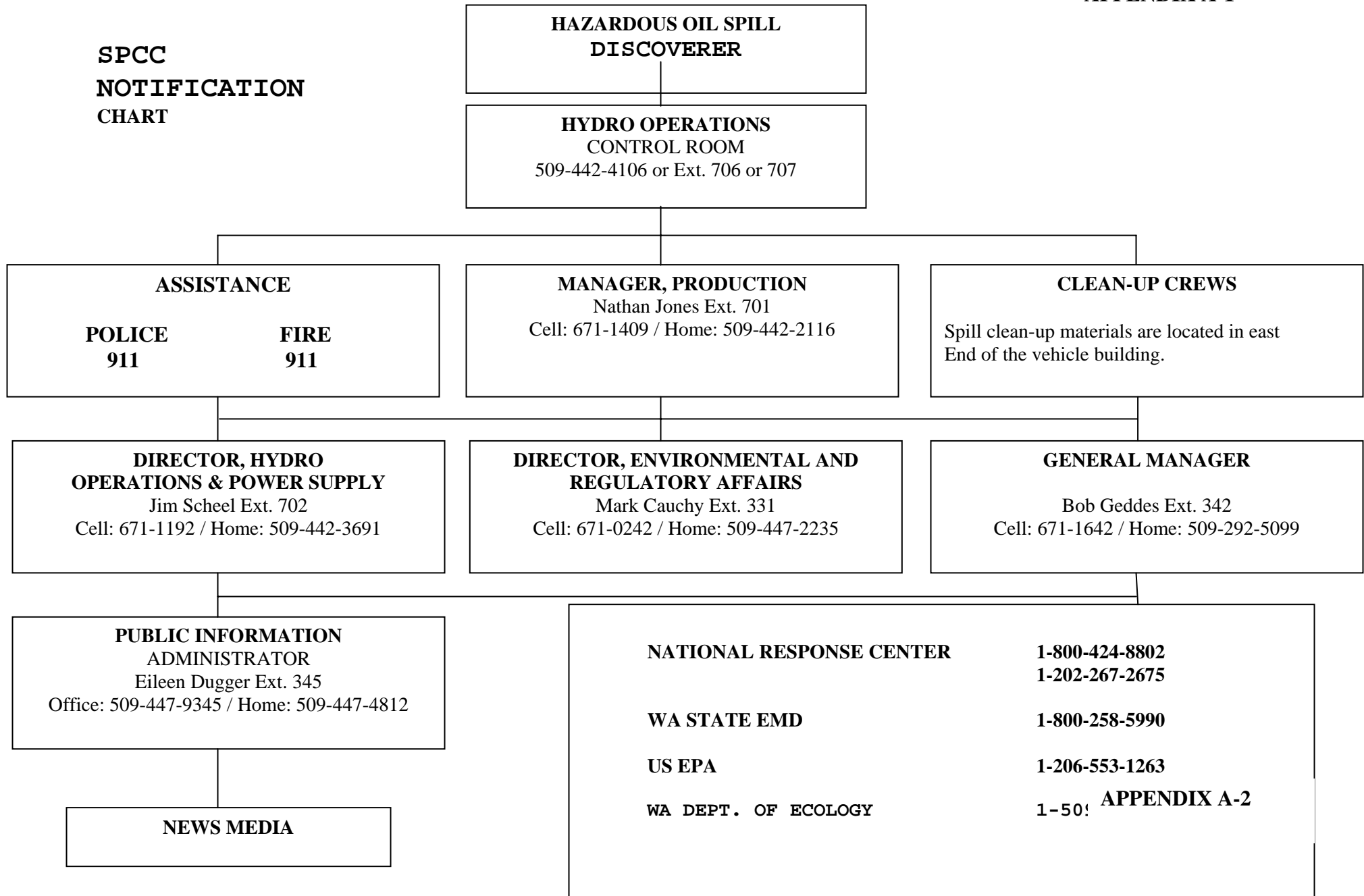


Figure A-2 Emergency Procedures Flow Chart

**SPCC
NOTIFICATION
CHART**





EXTERNAL USE ONLY!

Approved Primary Response Contractors (PRC)
 Approved as per Chapter 173-181 WAC & Chapter 317-10
 Updated June 7, 2004

All Out Industrial & Env. Services

3303 D Washington Way
 Longview, WA 98632-1942
 (360) 414-8655

PRC Contact: Ray Caldwell

Ecology Contact:

Roy Robertson (360) 407-7202

Certified Cleaning Services, Inc.

2103 East 112th Street
 Tacoma, WA 98445-3729
 (253)-536--5500

PRC Contact: Susan Nobal

Ecology Contact:

Roy Robertson (360) 407-7202

Clean Sound Cooperative, Inc.

1105 13th Street, Suite 100
 Everett, WA 98201-1679
 (425) 783-0908

PRC Contact: Richard Wright

Ecology Contact:

Roy Robertson (360) 407-7202

Clean Rivers Cooperative, Inc.

200 SW Market, Suite 190
 Portland, OR 97201
 (503) 220-2040

PRC Contact: Brent Way

Ecology Contact:

Roy Robertson (360) 407-7202

Cowlitz Clean Sweep, Inc. Services

55 International Way
 Longview, WA 98632

(360) 423-6316

PRC Contact: Todd Partridge

Ecology Contact:

Roy Robertson (360) 407-7202

National Response Corporation

20500 Richmond Beach Dr NW
 Seattle, WA 98177

(206) 546-7150

PRC Contact: Jim Riedel

Ecology Contact:

Roy Robertson (360) 407-7202

Global Diving and Salvage

3840 W. Marginal Way SW
 Seattle, WA 98106

(206) 623-0621

PRC Contact: Devon Grennan

Ecology Contact:

Roy Robertson (360) 407-7202

Islands' Oil Spill Association

Post Office Box 2316
 Friday Harbor, WA 98250-5322
 (360) 378-5322

PRC Contact: Julie Knight

Ecology Contact:

Roy Robertson (360) 407-7202

Marine Spill F

1105 13th Street
 Everett, WA 98201

(425) 252-1300

PRC Contact: M

Ecology Contact:

Roy Robertson

Matrix Service

3810 Bakerview
 Bellingham, WA 98201

(360) 676-4905

PRC Contact: T

Ecology Contact:

Roy Robertson

Tidewater Envi

6305 NW Lowe
 Vancouver, WA 98684

(360) 695-8008

Oregon (503) 28

PRC Contact: J

Ecology Contact:

Roy Robertson

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APPENDIX B - 2

TABLE 1

BOX CANYON POWERHOUSE CAPACITY OF DEVICES BY FLOOR

ELEVATION (ABOVE MSL)	FLOOR DESCRIPTION	DEVICE	VOLUME, GAL
2016.0	GENERATOR FLOOR	Governor Oil System (Sump & Tank) Generator Thrust Bearings	Four X 1000
			Four X 1150
2002.0	TURBINE FLOOR	Transfer Tank Oil Storage Room	2000
			1500
1985.0	TURBINE PIT	Spill Receiving Location Turbine Bearing	Spill volume
			Greased
1922.5	MAIN PLANT	Spill Receiving Location	Spill volume

APPENDIX B - 2

TABLE 2
EMERGENCY RESPONSE EQUIPMENT AND SERVICES

SPILL CLEAN-UP EQUIPMENT SALES		
Blue Ribbon Environmental Products, Inc. 6310 N. Pittsburg Spokane, WA 99217	Haz-Mat Response Trailers, Emergency Haz-Mat Spill Response Kits	509-489-1704 FAX: 509-489-1785
Flexible Containment Products 16124 East Euclid Ave. Spokane, WA 99216	Booms, Storage & Separation, Other Products	509-624-8921 FAX: 509-624-9780
Oxarc, Inc. 4003 Broadway Ave. Spokane, WA 99202	Safety products, Spill Containment Equipment & Supplies, Hazardous Waste Clean-up Equipment & Supplies	509-535-7794 FAX: 509-535-0368
EMERGENCY CLEAN-UP SERVICE AGENCIES		
Alliance Environmental and Construction LLC PO Box 9103 Spokane, WA 99209		509-326-1381 FAX: 509-267-8074
Able Clean-up Technologies Inc. 4117 E. Nebraska Ave. Spokane, WA 99224		509-466-5255 FAX: 509-487-9810
Big Sky Industrial 9711 West Euclid Rd. Spokane, WA 99224		509-624-4949 FAX: 509-624-0099
NRS Environmental Services Spokane, WA		Emergency Hotline 1-800-337-7455

APPENDIX B - 2

TABLE 3

BOX CANYON HYDROELECTRIC PROJECT OIL EQUIPMENT AND STORAGE VOLUMES

System Component	Number of Components	Volume of Each, gallons	Total Volume, gallons
DAM/POWERHOUSE			
Generator Thrust Bearings	4	1150	4600
Turbine Bearings	4	(Greased)	(Greased)
Governor Oil System (Sump & Tank)	4	1000	4000
Turbine Runner Hubs	4	750	3000
Transfer Tank	1	2000	
Oil Storage Room	27	55	1500
Diesel Generator & Fuel	1	144	144
SWITCHYARD			
Generator Unit Transformers	4	4320	17280
Phase Angle Regulator (PAR)	1	11700	11700
Distribution Transformer	1	4320	4320
Distribution Voltage Regulators	9	69 to 111	843
Distribution Reclosers	3	40	120
Station Service Transformer Bank	3	50	150
MAINTENANCE SHOP			
No volumes over 55 gallons			
TOTAL FOR ALL SYSTEMS			47,657

APPENDIX B - 2

TABLE 4

SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN REVISION LOG			
Revision Number	Date of Revision	Date Entered	Name (Print) and Signature
1	5-11-06		Nathan Jones
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			

APPENDIX C

NOTICE TO TANK TRUCK DRIVERS

To prevent the release of substances hazardous to the environment, tank truck drivers entering this site are to comply with the following rules:

1. Inspect tank, fitting, and liquid level indicator prior to filling.
2. Place drip pans under all pump hose fittings prior to loading/unloading.
3. Set the handbrake before starting to load/unload.
4. Plug the drains closest to the delivery truck.
5. Remain within 25 feet of the vehicle while loading/unloading.
6. Maintain an unobstructed view of the cargo tank and load/unload hose.
7. Drain loading/unloading line to storage tank when loading/unloading is complete.
8. Verify that all drain valves are closed before disconnecting loading/unloading lines.
9. Inspect vehicle before departure to be sure all loading/unloading lines have been disconnected and vent valves closed.
10. Immediately report any leakage or spillage to the Control Room:

Extension: 706 or 707

Phone #: 509-442-4106

Appendix D

Project Maps and Drawings

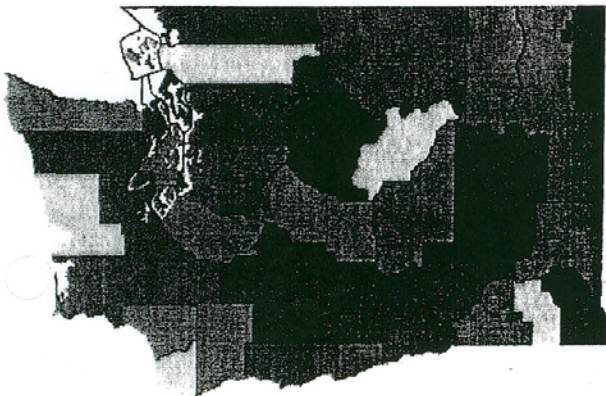
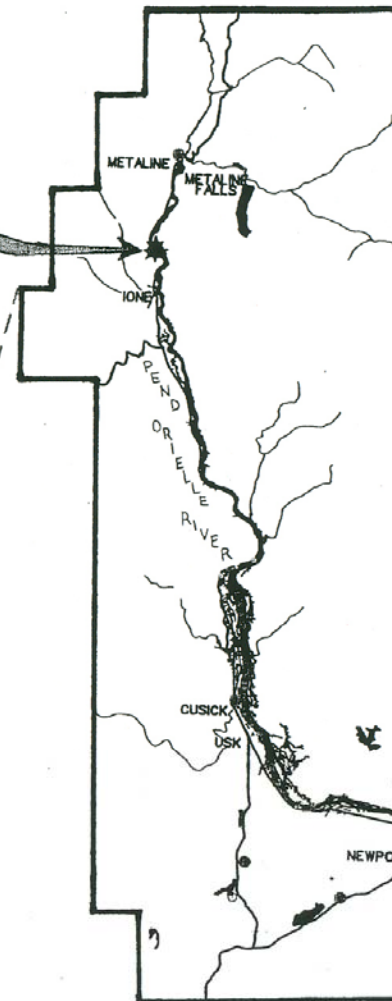
**Non-Internet Public
Contains Privileged Information - Do Not Release**

FIGURE 1



BOX CANYON HYDROELECTRIC PROJECT

LOCUS MAPS



PEND OREILI
COUNTY

Page 34
Twp. 38 N.
Rng. 43 E.W.M.

Township:	40	41	42	43
	39	37	38	40
	38	36	35	36
	37	28	30	31
	36	24	26	27
	35	20	21	22
	34	18	18	19
	33	17	13	14
	32	8	9	10
	31	4	5	6
	30		1	2
Range	41	42	43	44
	45			

**Pend Oreille County
Washington**

Road Legend

- Paved County Rds & State Highways
- County Gravel Roads Maintained
- Private Named Rds Non-Maintained Co Rds
- US Forest Service Roads
- Unnamed Roads

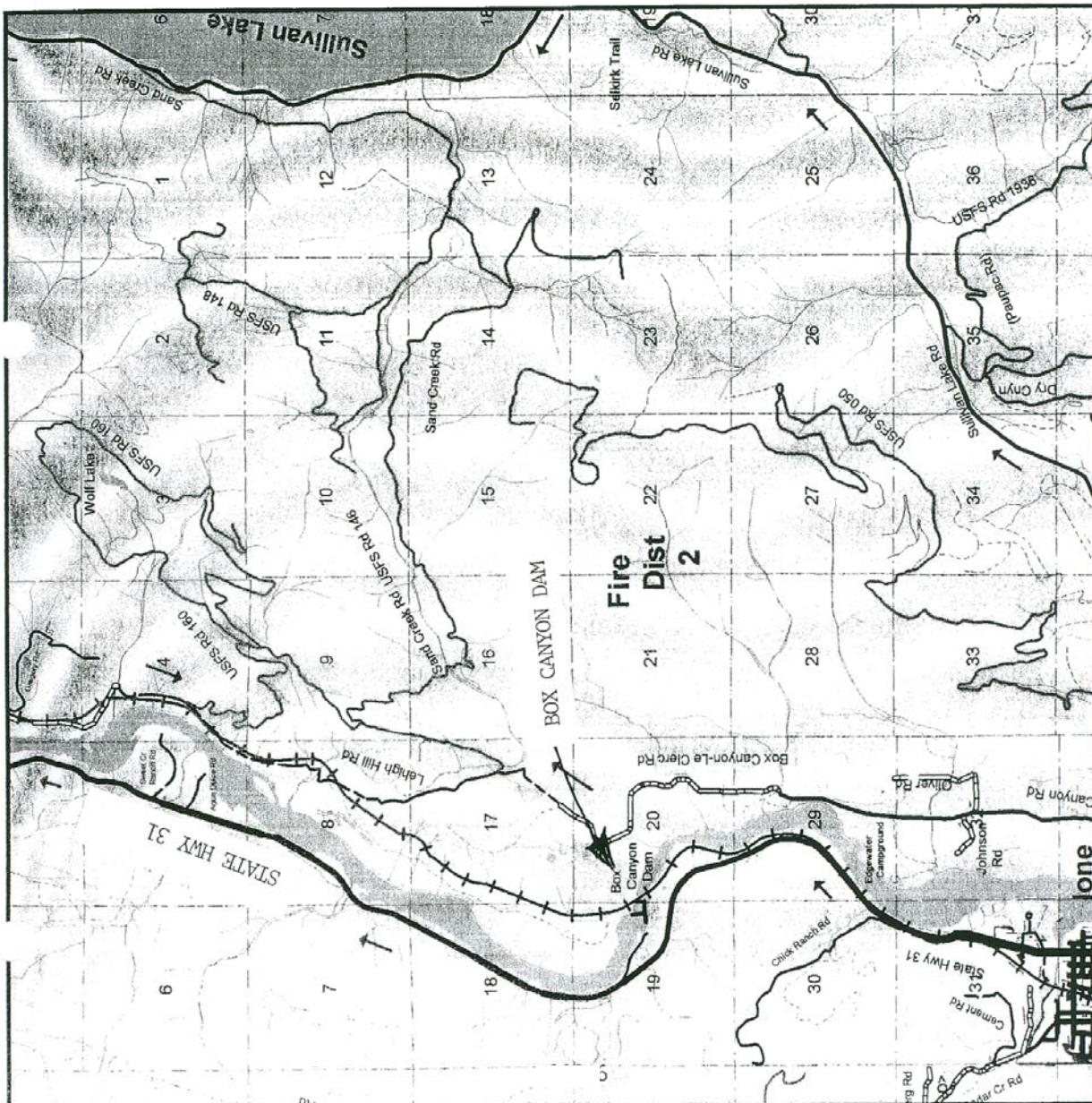


FIGURE 2

— MAIN HIGHWAY ACCESS

FIGURE 3

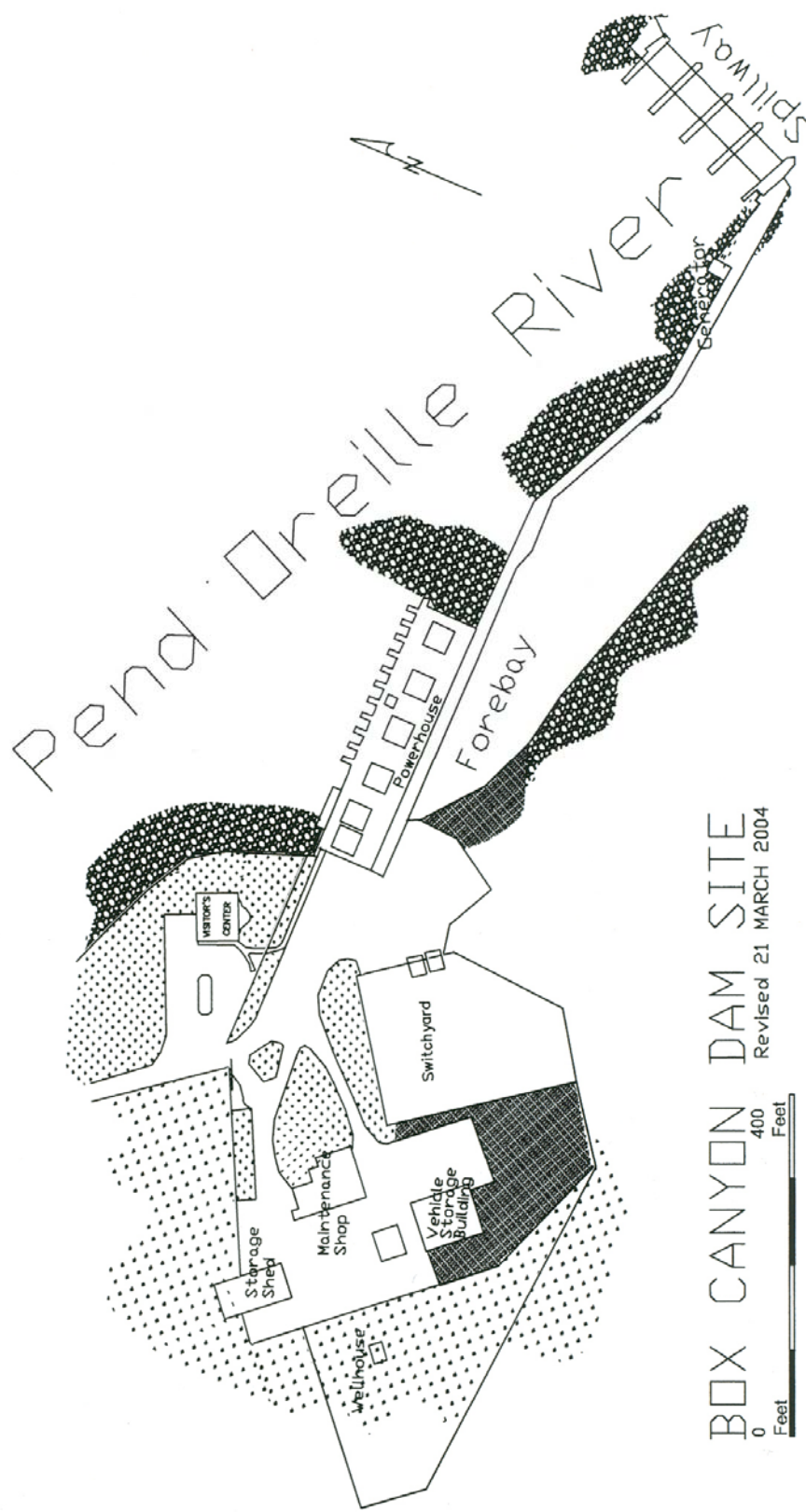
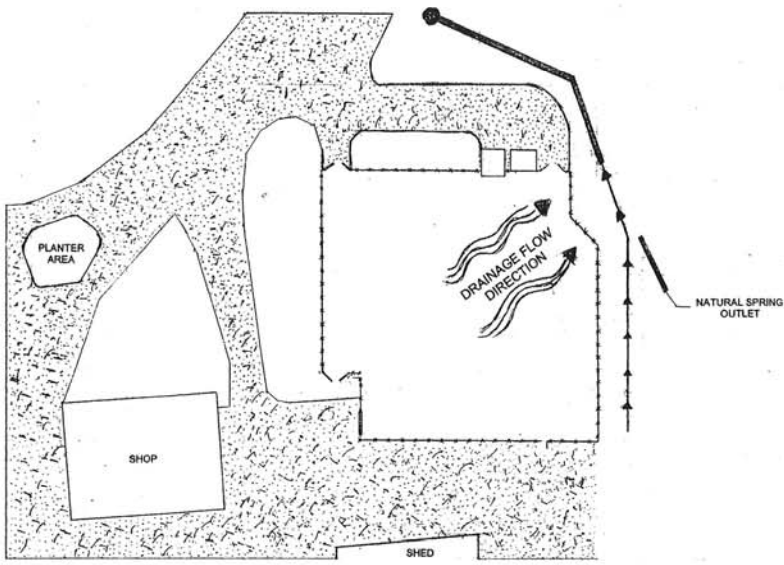
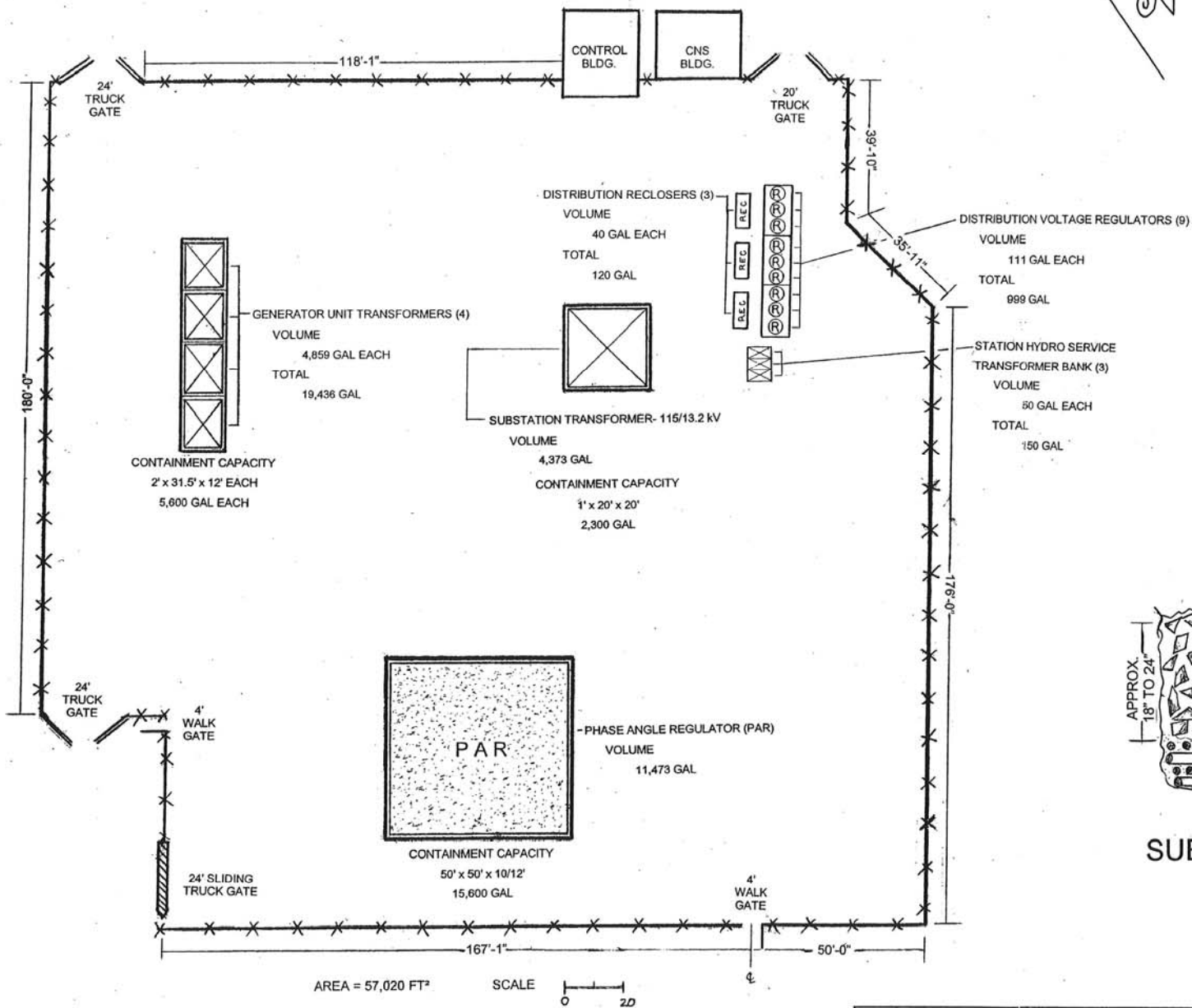
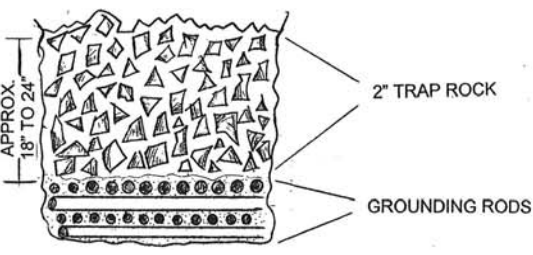


FIGURE 4

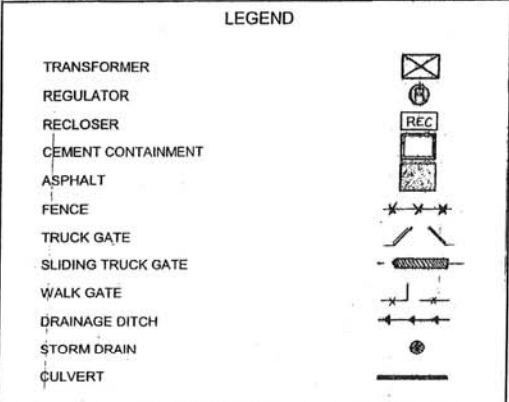
DEVICE PLAN




OVERHEAD PLAN



SUBSTRATE DETAIL





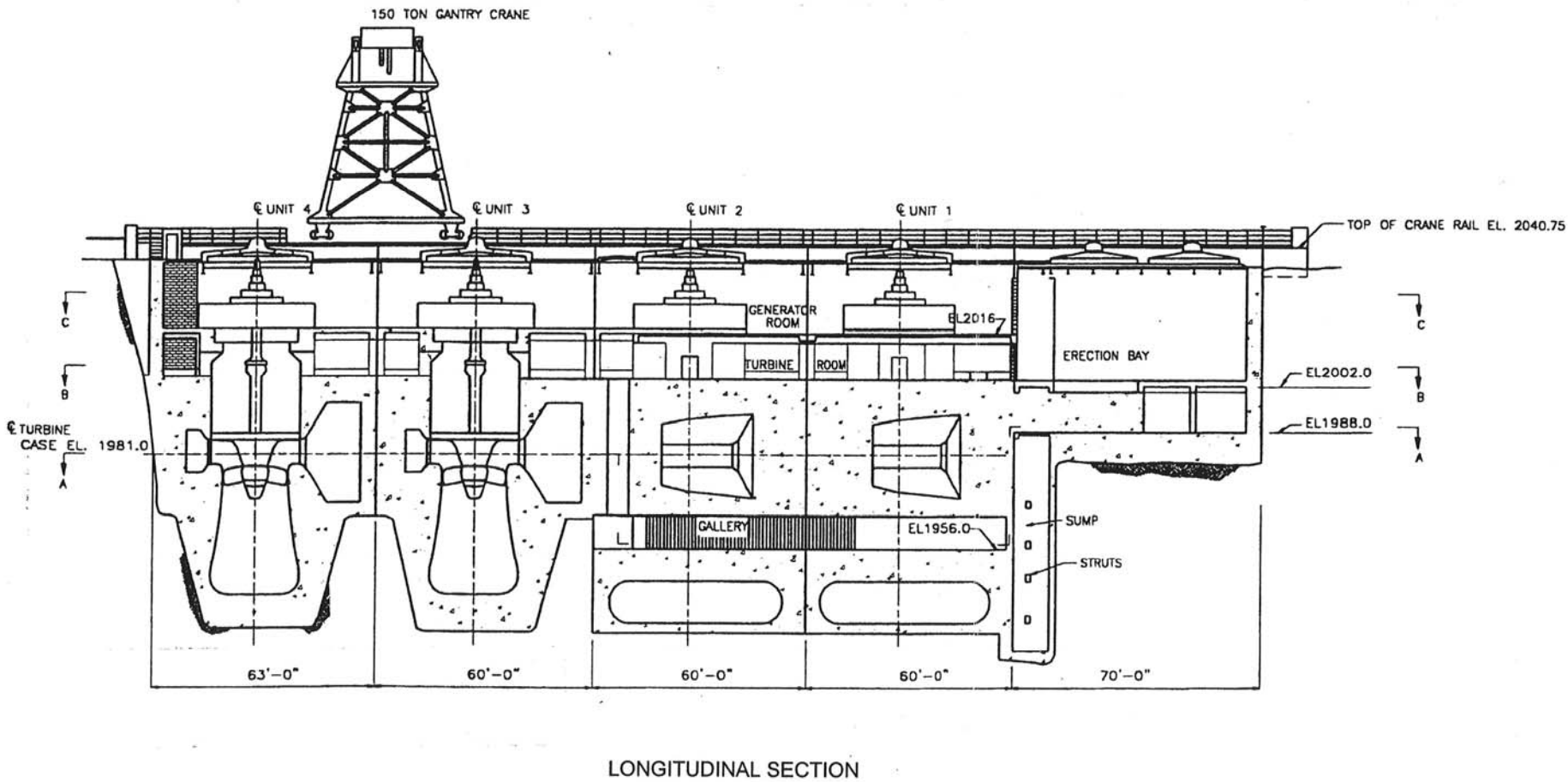
P.U.D. NO. 1 of
PEND OREILLE COUNTY
NEWPORT, WASHINGTON

ENGINEERING RECORD		DATE
DRAWN	KAR	8/12/04
CHECKED		
APPROVED		
DWG SCALE	NA	

BOX CANYON 115KV SWITCHYARD

DRAWING 1/1

FIGURE 5

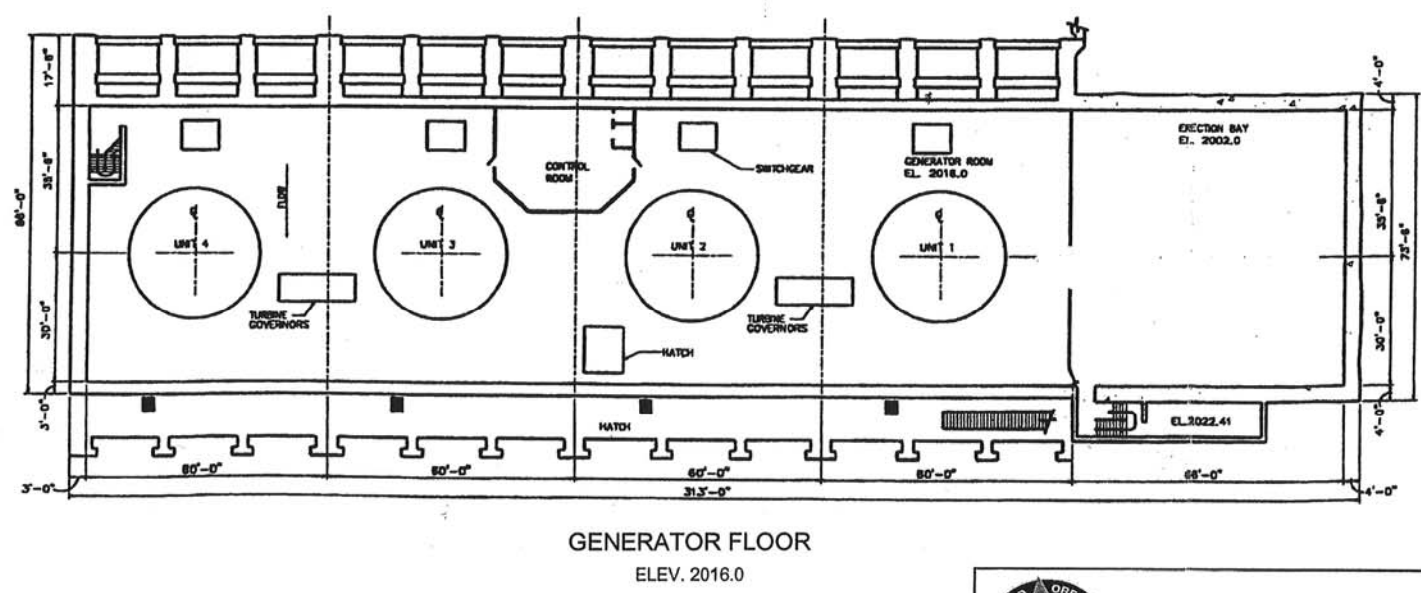
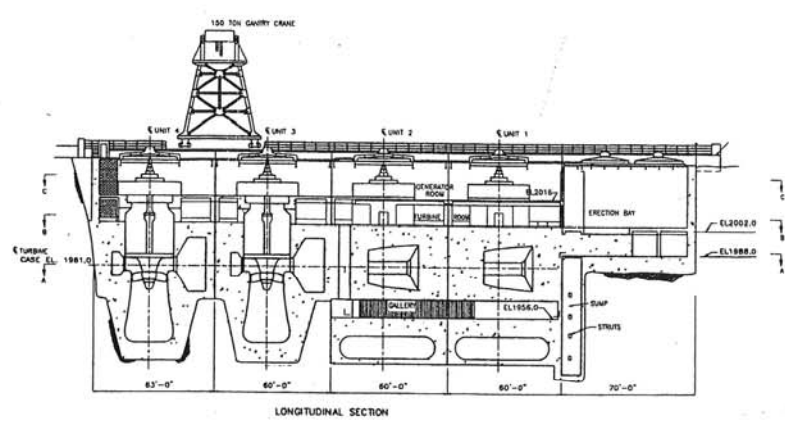
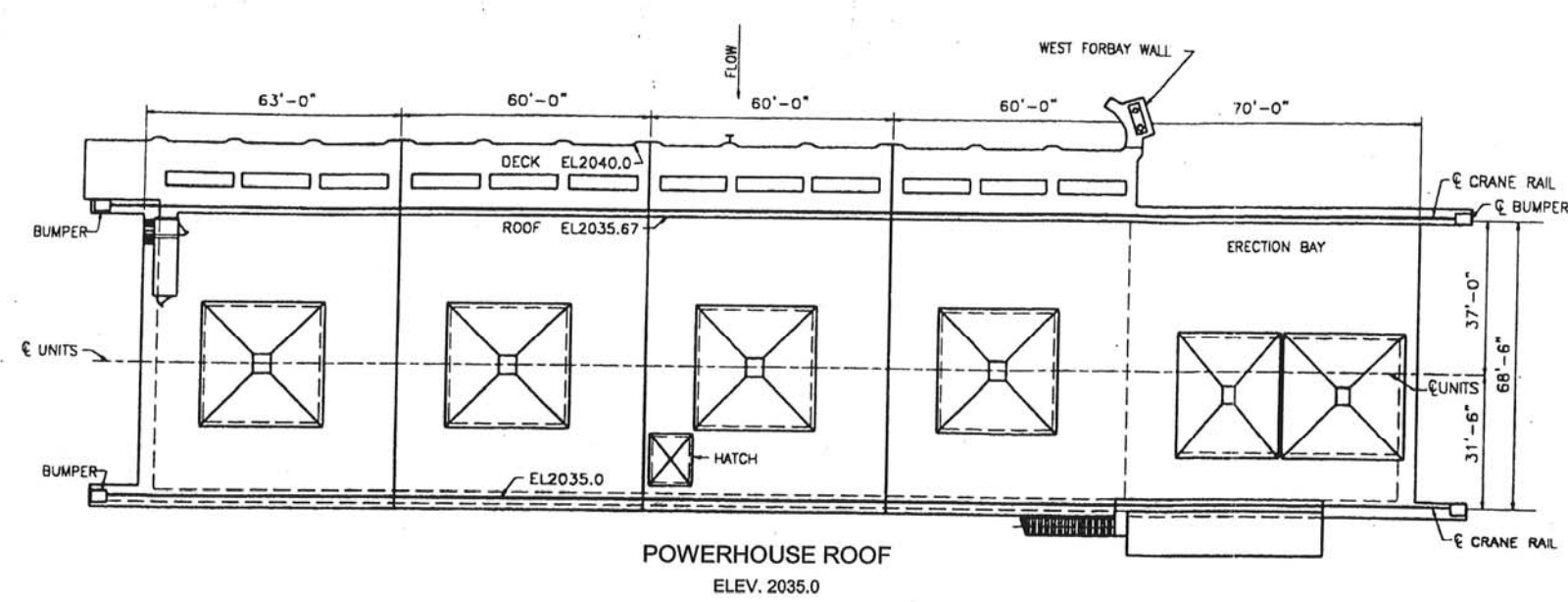



P.U.D. NO. 1 of
PEND OREILLE COUNTY

ENGINEERING RECORD		DATE
DRAWN	KAR	8/18/04
CHECKED		

BOX CANYON DAM/POWERHOUSE

FIGURE 6





P.U.D. NO. 1 of
PEND OREILLE COUNTY
NEWPORT, WASHINGTON

ENGINEERING RECORD		DATE
DRAWN	KAR	8/16/04
CHECKED		
APPROVED		
DWG SCALE:	NA	

BOX CANYON DAM/POWERHOUSE

DRAWING 2/4