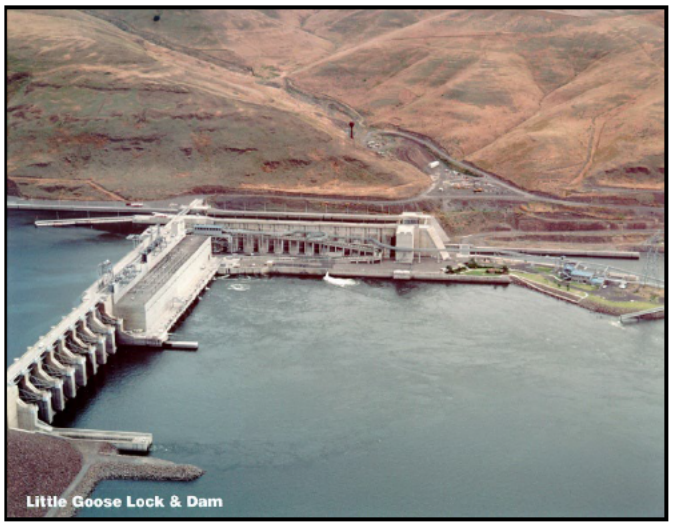
SPILL PREVENTION, CONTROL AND COUNTERMEASURE PLAN

Prepared for:

U.S. Army Corps of Engineers



Little Goose Lock and Dam

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December 2012

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ACRONYMS

ACE	Army Corps of Engineers
AST	Aboveground Storage Tank
Corps	Corps of Engineers
DOT	Department of Transportation
ECC	Environmental Compliance Coordinator
EPA	Environmental Protection Agency
GSA	General Services Administration
JFF	Juvenile Fish Monitoring Facility
MSDS	Materials Safety /Data Sheet
NCP	National Contingency Plan
NRC	National Response Center
OM	Operations Manager
PAO	Public Affairs Office
PE	Professional Engineer
PPE	Personal Protective Equipment
PSC	Portable Storage Containers
RA	Regional Administrator
SOP	Standard Operating Procedure
SPCC	Spill Prevention, Control, and Countermeasure
STI	Steel Tank Institute
TCLP	Toxicity Characteristic Leaching Procedure
U.S.	United States

QUICK RESPONSE GUIDE FOR SPILL INCIDENTS

FOR ALL SPILLS ON PROJECT NOTIFY:

CONTROL ROOM: **(509) 399-2233* Ext. 231***
POWERHOUSE OPERATOR: **or Code 80-111**

The Operator will notify the Project Environmental Compliance Coordinator (ECC). The Project ECC will implement the Spill Prevention, Control, and Countermeasure (SPCC) Plan for the project (outlined on Page 3) and serve as the Incident Commander (IC). In the absence of the Project ECC, the Operations Manager (OM) or Chief of Operations will serve as the IC. In the absence of all three designees, the Shift Operator will assume the IC role and ensure notifications are made.

FOR A SPILL ON OR OFF PROJECT LIKELY TO ENTER COE WATERS OR THE ENVIRONMENT IMMEDIATELY NOTIFY:

(1) NATIONAL RESPONSE CENTER (NRC): **1-800-424-8802***

(2) WASHINGTON DEPARTMENT OF ECOLOGY (24-HR): **(509) 329-3400***

(3) WASHINGTON DEPT. OF EMERGENCY MANAGEMENT: **1-800-258-5990***
Or (253) 512-4901

(4) OPERATIONS MANAGER:
Mr. Kenneth Breiten
work: Ext. 251
home: (509) 382-2548
work cell: (b)(6)
cell: (b)(6)

(5) PROJECT ENVIRONMENTAL COMPLIANCE COORDINATOR:
Ms. Stephanie Thomas
work: Ext. 288
cell: (b)(6)

(6) DISTRICT ENVIRONMENTAL COMPLIANCE COORDINATOR:
Mr. Damian Walter
work: (509) 527-7121
home: (b)(6)
cell:

(7) **24-HOUR CONTRACTING OFFICERS:**
***David Doty** **work: (509) 527-7207** **cell:** (b)(6)
***Ruthann Haider** **work: (509) 527-7201** **cell:**

"These Contracting Officers are the only USACE authorized representatives who have authority to trigger the US Coast Guard BOA contract to call out spill response contractors. PROJECT EMPLOYEES WILL NOT CALL NRC ENVIRONMENTAL OR ANY OTHER SPILL CONTRACTORS

(8) LOWER MONUMENTAL LOCK AND DAM **(509) 282-7231***

*** Denotes 24-hour number.**
*****NOTE: IF THE SPILL IS CONFINED TO THE FACILITY AND THERE IS NO THREAT OF OFF-SITE MIGRATION THE FIRST THREE PHONE NUMBERS DO NOT NEED TO BE CALLED**

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1.0 INTRODUCTION

1.1 PURPOSE

The purpose of this Spill Prevention, Control, and Countermeasure (SPCC) Plan is to describe measures implemented by the Little Goose Project to prevent oil discharges from occurring, and in the event of a discharge, prepare the Project to respond in a safe, effective, and timely manner. In addition, this SPCC Plan will be used as a reference for oil storage information and testing records, a training tool to communicate practices on preventing and responding to discharges, a guide to facility inspections, and a resource during emergency response.

This Plan addresses procedures taken prior to, during, and following a discharge upon United States Corps of Engineers (Corps) property. However, proper handling of petroleum products begin with spill prevention; therefore, a central objective is to highlight those components that focus on spill prevention. For full effectiveness, spill prevention will be a dynamic, ongoing process designed to reduce the potential for, and the minimization of, the effects of spills. This Plan acts to supplement the District Spill Action Plan located in Appendix A.

This SPCC Plan is tailored to the Little Goose Project located on the Snake River, Washington. For purposes of this Plan, the facility covers the Snake River, riparian, and wildlife habitat lands and will be implemented in case of spills on; Corps lands and waters, and property in the vicinity of the facility**.** The SPCC Plan identifies measures to prevent potential releases of oil to surface waters; however, not every potential situation can be foreseen.

1.2 SCOPE

The Federal Water Pollution Control Act, as Amended, has declared that it is the policy of the United States to develop a National Contingency Plan (NCP) to provide for a response to pollutant spills. Operation of the NCP requires a nationwide network of regional contingency plans; this SPCC Plan is part of that nationwide network.

This Plan has been prepared to meet the requirements of Title 40, Code of Federal Regulations Part 112 (40 CFR Part 112) and supersedes any previous SPCC plans. This plan attempts to fulfill the requirements of SPCC regulations found in 40 CFR 112.1-112.8, as adopted under 32 CFR 650.208. This instruction is based upon regulations promulgated by the EPA and Washington State environmental agencies.

1.3 POLICY

All Little Goose Project personnel will be alert to and appropriately report all spills, or the possibility of spills, of oil or hazardous substances on, or near Little Goose Project lands and waters. Any other substance, material, containers or unknown materials, etc., which may represent a health hazard will be reported. In any spill situation, the first priority is protecting personnel from injury.

Project personnel will take all reasonable precautions to prevent accidental spills of oil or hazardous substance. No person, including Corps employees and contractors, shall knowingly cause or allow oil or other hazardous substances to be released into the environment, or in a manner that creates a safety or health hazard. Nor shall they knowingly cause or allow oil or hazardous substances to be transported beyond site boundaries unless it is properly packaged, labeled, and placarded in accordance with US Department of Transportation (DOT) regulations.

No person, including Corps employees and contractors, shall be required or allowed to handle, or be exposed to, hazardous substances without adequate personal protective equipment (PPE). Any substance, of unknown or suspicious origin, shall be assumed to be hazardous and treated as such, unless competent personnel can positively identify it as being safe.

Issues of liability or areas of jurisdiction will not impede emergency response activities. Priority will be given to protection of personnel and the environment. Liability issues will be settled by the proper authorities, not by response personnel.

1.4 SPCC PLAN RESPONSIBILITIES

Execution of this SPCC Plan is the responsibility of the SPCC Coordinator. At the Little Goose Project, the Environmental Compliance Coordinator (ECC) will be the designated SPCC Coordinator. The SPCC Coordinator will be responsible for oil spill prevention at the facility and for coordinating spill response and spill prevention programs and activities. Additional day-to-day SPCC responsibilities belong to the SPCC Coordinator as well.

2.0 PLAN ADMINISTRATION

2.1 GENERAL FACILITY INFORMATION

Facility Name:	U.S. Army Corps of Engineers Little Goose Project
Facility Type:	Hydro-Power Plant and Dam SIC 4911
Date of Initial Operation:	May 1970
Facility Location:	Little Goose Dam Road, Dayton, Washington 99328 County: Columbia Latitude 46.583 Longitude -118.001
Facility Mailing Address:	Little Goose Project Office 1001 Little Goose Dam Road Dayton, Washington, 99328
Owned and Operated by:	U.S. Army Corps of Engineers 201 N 3rd Avenue, Walla Walla, Washington 99362
COE District Contact:	Damian Walter Work Phone: 509.527.7121 Cell Phone: (b)(6)
Hours of Operation:	Monday through Thursday 06:00 hrs – 17:00 hrs Control Room manned 24 hours a day, 7 days a week.
Total Oil Storage Capacity:	Approximately 190,000 gallons total
Types of Oil Stored:	General Electric Transil Oil Mobil 2190 Oil Unleaded and Diesel Fuel Heating Oil
Primary Facility Contact:	Kenneth Breiten, Operations Manager Work Phone: 509.399.2233, Ext. 251 Work Cell: 509.520.5675 Cell Phone: (b)(6) Home Phone: (b)(6)

2.2 APPLICABILITY

2.2.1 Certification of Applicability of the Substantial Harm Criteria (40 CFR 112.20 (e))

Facilities not expected to cause substantial harm based on the substantial harm criteria must complete a *Certification of Substantial Harm Determination* form and maintain the form as part of their SPCC Plan. Because the facility does not transfer oil over water and stores less than 1

million gallons of oil, it does not meet the substantial harm criteria and a Facility Response Plan is not required. The *Certification of Substantial Harm Determination* form is provided in Appendix B.

2.2.2 SPCC General Applicability (40 CFR 112.1)

The SPCC Plan is intended for those owners or operators of non-transportation related onshore or offshore facilities engaged in storing, transferring, or consuming oil and/or oil products, and have total aboveground storage capacity exceeding 1,320 gallons or underground storage capacity greater than 42,000 gallons of oil. Facilities exceeding these parameters must prepare and implement an SPCC Plan. The Corps has developed this SPCC Plan for the Little Goose Project because the facility stores more than 1,320 gallons of oil aboveground and is located in close proximity to navigable surface waters of the United States. This plan has been prepared in accordance with good engineering practices and has the full approval of management, who has committed the necessary resources to fully implement the SPCC Plan.

Affected Waterway:	Snake River
Distance:	The entire facility spans the affected waterway
Path:	Gravity Drainage to Snake River and Lake Bryan/Lake West

2.3 REQUIREMENTS FOR PREPARATION AND IMPLEMENTATION OF A SPCC PLAN

2.3.1 SPCC Plan Timeline (40 CFR 112.3 (a))

Date facility began operations:	May 1970
Date of initial SPCC Plan preparation:	January 1995
Current plan version:	January 2011
Administrative updates:	December 2012

2.3.2 Professional Engineer Certification (40 CFR 112.3(d))

The Registered Professional Engineer (PE) attests;

(1) PE is familiar with the requirements of 40 CFR Part 112.

(2) PE or agent has visited and examined the facility.

(3) This Plan has been prepared in accordance with good engineering practice, including consideration of applicable industry standards and requirements of 40 CFR Part 112.

(4) That procedures for required inspections and testing have been established

(5) That this Plan is adequate for the facility (40 CFR 112.3(d)).

This certification in no way relieves the owner or operator of the facility of his/her duty to prepare and fully implement this SPCC Plan in accordance with the requirements of 40 CFR Part 112. This Plan is valid only to the extent that the facility owner or operator maintains, tests, and inspects equipment, containment, and other devices as prescribed in this Plan.

	C 61268
Signature	PE Registration Number
Albert E. Williamson, PE	Senior Engineer
Name	Title
HDR Engineering, Inc.	
Company	Certification Date

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The following table presents the Spill Prevention, Control and Countermeasure (SPCC) Action Items for the Little Goose Lock and Dam. The Professional Engineer certification is contingent upon satisfactory completion of these items. The table lists the primary issue, proposed action item necessary to remedy the situation, a scheduled completion date and the responsible party. In addition, the affected sources or source areas are listed in the table. These sources are those that have been identified to need modifications to insure compliance with this plan. The Action Items are also referenced in the text. The date completed and signature columns will be filled in when an action item has been completed.

SPCC ACTION ITEMS

#	Issue	Action Item	Scheduled Completion Date	Responsible Party	Affected Sources/Source Areas	Date Completed	Signature
1							
2							
3							
4							
5							
6							

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2.3.3 Location of SPCC Plan (40 CFR 112.3(e))

A complete copy of this SPCC Plan is maintained at the facility in the Environmental Compliance Office located in the upper offices, on the 8th floor in the Tech Section. The office is attended whenever the facility is operating, i.e., 6:30 AM to 5:00 PM, Monday - Thursday.

2.3.4 Amendment of SPCC Plan by Regional Administrator (40 CFR 112.4 (a))

This SPCC Plan is not required to be filed with the United States Environmental Protection Agency (EPA), but a copy must be available for on-site review by the Regional Administrator (RA) during normal working hours if the subject facility is attended at least four hours a day.

2.3.5 Amendment of SPCC Plans by Owners or Operators (40 CFR 112.5 (a)(b)(c))

(a) Amend and implement the SPCC Plan within six (6) months whenever there is a change in facility design, construction, operation, or maintenance that materially affects the facility's spill potential. The revised Plan must be recertified by a PE.

(b) Review the SPCC Plan at least once every five (5) years and amend it to include more effective prevention and control technology, if such technology will significantly reduce the likelihood of a spill event and has been proven effective in the field at the time of the review. Documentation for these reviews is provided in Section 2.3.6.

(c) Plan amendments, other than administrative changes, must be recertified by PE on the certification page in Section 2.3.2.

2.3.6 Plan Review and Documentation

Review the Plan on an annual basis. Update the Plan to reflect any "administrative changes" that are applicable, such as personnel changes or revisions to contact information, such as phone numbers. Administrative changes must be documented in the Plan review log presented as Table 2-1, but do not have to be certified by a PE.

Documentation will include the date, summary of the review or amendment, affected SPCC Plan sections, and the name of the person completing the review or amendment. Forms for documenting the Plan reviews and amendments can be found in Appendix C.

2.3.7 Management Approval and Designated Person (40 CFR 112.7)

The U.S. Army Corps of Engineers, Walla Walla District (Corps) pursuant to 40 CFR 112 hereby establishes a Spill Prevention, Control, and Countermeasure Plan (SPCC Plan), which will be maintained at the Little Goose Lock and Dam. Project management acknowledges their responsibility to neighbors, employees, and the community to take all reasonable steps necessary to prevent spills from its facility in order to protect human health and the environment. If a spill does occur, the employees of Little Goose Project will take all necessary steps as outlined in the SPCC Plan to minimize the impact of such a spill.

Pursuant to 40 CFR 112.7, full approval of this SPCC is extended by management at a level of authority necessary to commit the resources for its implementation.

Authorized Facility Representative:

Signature: _____

Title: _____

Date: _____

Table 2-1: SPCC Plan Review and Amendment Log

Date	Summary of Amendments	PE Certification required?[1]	Name	Comments
January 1995	**Initial Plan Development**	yes	OBI	Entire Plan Amendment
Dec 1996	**Update Contact Info**	no	TGC	Appendix E
May 1997	**General update**	yes	TGC	Entire Plan Amendment
May 1998	**General update**	yes	RAB	Entire Plan Amendment
Aug 2000	**General update**	yes	RAB	Entire Plan Amendment
Mar 2001	**General update**	yes	RAB	Entire Plan Amendment
Nov 2001	**General update**	yes	RAB	Entire Plan Amendment
Mar 2002	**General update**	yes	RAB	Entire Plan Amendment
Aug 2002	**Update contact info**	no	RAB	Appendix E
May 2003	**Update contact info**	no	DER	Appendix E
Jan 2008	**Five year amendment**	yes	USACE	Entire Plan Amendment
Jan 2011	**Plan Revision**	yes	USACE	Entire Plan Amendment
Dec 2012	**Update contact info**	no	SRT	Appendix E
Mar 2013	**Update contact info**	no	SRT	Appendix E
Feb 2014	**Update contact info**	no	SRT	Appendix E

1. A registered Professional Engineer must certify any changes that materially affect the facility's potential to have a spill.

2.3.8 Cross-Reference with SPCC Provisions (40 CFR 112.7)

This SPCC Plan does not follow the exact order presented in 40 CFR Part 112. Section headings identify, where appropriate, the relevant sections(s) of the SPCC rule. Table 2-2 presents a cross-reference of Plan sections relative to applicable parts of 40 CFR Part 112.

2.3.9 Procedures, Methods, or Equipment Not Yet Fully Operational (40 CFR 112.7)

Bulk storage containers at this facility are inspected and cleaned by facility personnel. Section 3.13 of this Plan describes the inspection program following a regular schedule, including the dates by which each of the bulk storage containers must be tested.

2.3.10 Deviations and Alternative Measures (Environmental Equivalence) (112.7 (a) (2))

The federal SPCC regulations (40 CFR 112.7(d)) require the facility to provide a spill contingency plan that meets the requirements of 40 CFR 109 when it is not practicable to install secondary containment, as with the turbine hubs and head gate hydraulic cylinders. The Spill Action Plan included as Appendix A satisfies the majority of these requirements, and the rest are addressed in the location-specific contingency plan included as Appendix J.

2.3.11 Contractor Compliance Requirements

Occasionally, large-scale projects will occur on Little Goose Project lands or waters. Outside contractors may be present at the project for extended periods of time. Contractors may need to install petroleum storage containers. The Little Goose Project requires all contractors to follow this SPCC Plan, or develop and submit an acceptable Environmental Protection Plan prior to the start of work. This plan must comply with current SPCC regulations and will be kept on file at the project. The Contractor's Environmental Protection Plan shall include, but not be limited to, the following:

- Names of persons within the contractor's organization responsible for ensuring adherence to the plan, manifesting hazardous waste, and training.
- Contractor's Environmental Protection Personnel Training Program
- Plan of transportation routes
- Plan of work areas
- Plan of excavation areas
- Spill Control Plan in compliance with 40 CFR 68, 112, 302 and 355
- Hazardous Waste Disposal Plan
- Recycling and Solid Waste Minimization Plan
- Air Pollution Control Plan
- Containment Prevention Plan
- Waste Water Management Plan
- Historical, Archaeological, Cultural Resources, Biological Resources Wetlands Plan

Table 2.2: SPCC Cross-Reference

Provision	Plan Section
112.3(d)	2.3.2 Professional Engineer Certification
112.3(e)	2.3.3 Location of SPCC Plan
112.5	2.3.6. Plan Review and Documentation
112.7	2.3.7 Management Approval and Designated Person
112.7	2.3.8 Cross-Reference with SPCC Provisions
112.7(a)(3)	3.0 General SPCC Requirements Facility Layout Diagram (Appendix D)
112.7(a)(4)	3.10 Discharge Notification
112.7(a)(5)	1.0 Introduction
112.7(b)	3.11 Potential Discharge Volumes and Direction of Flow
112.7(c)	3.11 Potential Discharge Volumes and Direction of Flow
112.7(d)	3.12 Practicability of Secondary Containment
112.7(e)	3.13 Inspections, Tests, and Records
112.7(f)	3.14 Personnel, Training, Discharge Prevention Procedures
112.7(g)	3.15 Security
112.7(h)	3.16 Tank Truck Loading/Unloading Rack Requirements
112.7(i)	3.17 Brittle Fracture Evaluation
112.7(j)	3.18 Conformance w/ Applicable State/Local Requirements
112.8(b)	4.1 Facility Drainage
112.8(c)(1)	4.2.1 Construction
112.8(c)(2)	4.2.2 Secondary Containment
112.8(c)(3)	4.2.3 Drainage of Diked Areas
112.8(c)(4)	4.2.4 Corrosion Protection
112.8(c)(5)	4.2.4 Corrosion Protection
112.8(c)(6)	4.2.5 Inspections and Tests
112.8(c)(7)	4.3 Heating Coils
112.8(c)(8)	4.4 Overfill Prevention System
112.8(c)(9)	4.5 Effluent Treatment Facilities
112.8(c)(10)	4.6 Visible Discharges
112.8(c)(11)	4.7 Mobile and Portable Containers
112.8(d)	4.8 Transfer Operations, Pumping, and In-Plant Processes
112.20(e)	Appendix B Certification of Substantial Harm Determination

Only selected excerpts of relevant rule text are provided. For a complete list of SPCC requirements, refer to the full text of 40 CFR Part 112.

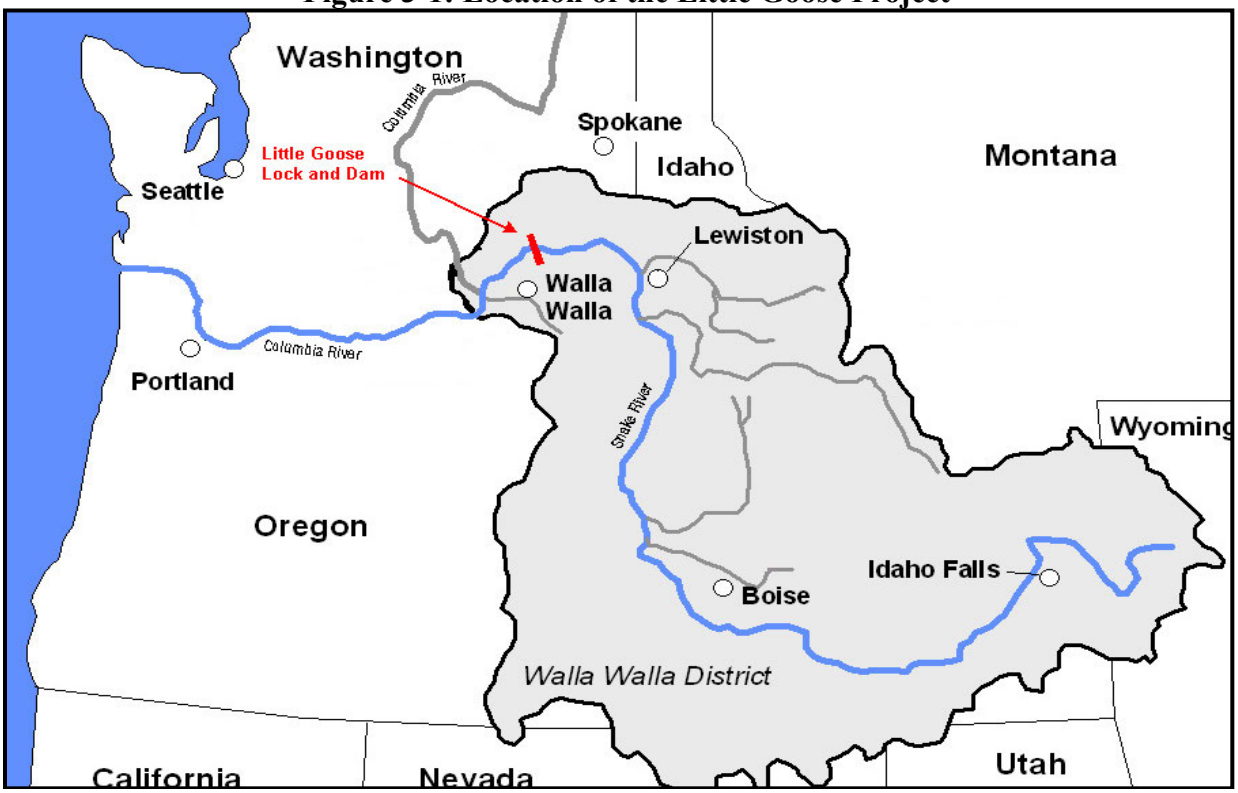
3.0 GENERAL SPCC REQUIREMENTS

3.1 FACILITY DESCRIPTION (40 CFR 112.7 (A) (3))

3.1.1 Location and Activities

The Little Goose Dam and Reservoir Project was authorized by the River and Harbor Act of 1945, Public Law 79-14, in accordance with House Document 704. Recreation was authorized in the Flood Control Act of 1944 (Public Law 78-534). The project is located near Dayton, Washington about 60 miles Northeast of Pasco (See Figure 3-1). The 5,398 acre project includes a dam, powerhouse, navigation lock, one fish ladder, and appurtenances providing for navigation, hydroelectric generation, recreation, and incidental irrigation. Approximately 50 Walla Walla District employees work at the Little Goose Project. They serve as electricians, lock operators, mechanics, welders, riggers, painters, utility men, heavy equipment operators, biologists, park rangers, ECC, administrative support staff, maintenance workers, engineers and a security guard.

Figure 3-1: Location of the Little Goose Project



Little Goose Dam is located on the Snake River at River Mile 70.3. The dam has an effective height of 98 feet and a crest length of 2,655 feet. The powerhouse has six 135,000-kilowatt generating units. Lake Bryan, formed by the Little Goose Dam, extends up the Snake River for a distance of 37.2 miles to the tailwater of Lower Granite Dam and has a surface area of 10,025 acres. The lake provides substantial recreational and wildlife benefits.

3.1.2 Facility Layout Diagram (40 CFR 112.7(a) (3))

Appendix D shows the general location of the facility. The facility diagram indicates the location and content of above ground storage tanks (ASTs), transfer stations, and connecting piping.

3.2 OIL STORAGE (40 CFR 112.7(A) (3) (I))

All oil storage at the facility can be classified into one of three groups: 1) Oil-filled operating equipment, 2) Aboveground Storage Tanks (ASTS) or, 3) Portable Storage Containers (PSCs). The majority of oil stored at the facility is inside oil-filled operating equipment. Approximately 80,000 gallons of transformer oil are housed in operating transformers located along the top of the powerhouse, with an additional 1,050 gallons stored in reserve at El. 558 (fourth floor). El. 558 also houses approximately 47,000 gallons of turbine oil stored within the six power generating units. In addition, two 10,000 gallon tanks of lubricating oil and two 20,000 gallon tanks of insulating oil are stored in the designed oil storage room in El. 498 (first floor).

Other hazardous waste streams at the facility include diesel and gasoline fuel in ASTs, a portable refueling trailer, propane gas tanks, carbon dioxide for fire suppression, various hydraulic oils, greases and refrigerants. The facility also utilizes an assortment of petroleum products, solvents, paints, thinners, cleaners, aerosols, epoxy, enamel, vinyl products, gear reducers, motors, small electrical components, etc. stored in 55-gallon or smaller containers. Typically, equipment at the facility requires little or no maintenance and is replaced with new equipment at the end of its useful life. A full inventory of materials, volumes and locations is listed in Tables 3-1 – 3-3 and also indicated on the facility diagram in Appendix D. All containers with capacity of 55 gallons or more are included.

Petroleum products and other hazardous waste materials in quantities less than 55 gallons are not regulated and only briefly addressed within this document. However, the facility is proactively pursuing activities designed to identify areas containing less than 55 gallons of petroleum products and provide adequate containment to reduce the possibility of a release (large or small) into the Snake River.

Table 3-1: Oil-filled Operating Equipment Location

Location	System	Container ID	Volume (Gallons)	Material	Description	Sheet 1 ID	Sheet
Powerhouse (El. 505)	Fish Pumps	Pump # 1	113	Gear Oil	In-System	12	5
		Pump # 2	113			12	5
		Pump # 3	113			12	5
Powerhouse (El. 542)	Lower Guide Bearings	Unit # 1	450	Turbine Oil	In-System	(Sheet 3)	3
		Unit # 2	450			(Sheet 3)	3
		Unit # 3	450			(Sheet 3)	3
		Unit # 4	450			(Sheet 3)	3
		Unit # 5	450			(Sheet 3)	3
		Unit # 6	450			(Sheet 3)	3
	Turbine Governor Sump Tank	Unit # 1	2,250	Turbine Oil	In-System	9	3
		Unit # 2	2,250			9	3
		Unit # 3	2,250			9	3
		Unit # 4	2,250			9	3
		Unit # 5	2,250			9	3
		Unit # 6	2,250			9	3
	Turbine Hub	Unit # 1	2,260	Turbine Oil	In-System	(Sheet 3)	3
		Unit # 2	2,260			(Sheet 3)	3
		Unit # 3	2,260			(Sheet 3)	3
		Unit # 4	2,260			(Sheet 3)	3
		Unit # 5	2,260			(Sheet 3)	3
		Unit # 6	2,260			(Sheet 3)	3
Powerhouse (El. 558)	Turbine Governor Accum. Oil Tank	Unit # 1	2,250	Turbine Oil	In-System	8	3
		Unit # 2	2,250			8	3
		Unit # 3	2,250			8	3
		Unit # 4	2,250			8	3
		Unit # 5	2,250			8	3
		Unit # 6	2,250			8	3
	Turbine Thrust Bearing	Unit # 1	2,500	Turbine Oil	In-System	(Sheet 3)	3
		Unit # 2	2,500			(Sheet 3)	3
		Unit # 3	2,500			(Sheet 3)	3
		Unit # 4	2,500			(Sheet 3)	3
		Unit # 5	2,500			(Sheet 3)	3
		Unit # 6	2,500			(Sheet 3)	3
	Upper Guide Bearing	Unit # 1	170	Turbine Oil	In-System	(Sheet 3)	3
		Unit # 2	170			(Sheet 3)	3
		Unit # 3	170			(Sheet 3)	3
		Unit # 4	170			(Sheet 3)	3
		Unit # 5	170			(Sheet 3)	3
		Unit # 6	170			(Sheet 3)	3
	Transformers	TO1	1,150	Transformer Oil	In-System	6	3
		TO2	1,150			7	3
Bascule Bridge (El. 522.75 and El. 616)	Upstream Gear Box	BB-US	120	Mobile Gear 632	In-System	24	17
	Downstream Gear Box	BB-DS	120			24	17
Navigation Lock Valves (El. 632.5 and 638)	Valve Pump Oil Tanks	1	225	Hydraulic Oil	In-System	22	15
		2	225			22	15
		3	225			22	15
		4	225			22	15

Table 3-1: Oil-filled Operating Equipment Location (Continued)

Facility	System	Container ID	Volume (Gallons)	Material	Description	Sheet 1 ID	Sheet No.
Miter Gate (El. 635.78)	Pump Tank- South Side	1	300	Hydraulic Oil	In-System	23	16
	Pump Tank- North Side	2	300			23	16
Navigation Lock- Upstream Gate (El. 639.75)	Oil Tanks- South Side	Western Bull Gear	70	Mobile Gear 629	In-System	21	14
		Western Gear Reducer	95	Mobile Gear 632		21	14
	Oil Tanks- North Side	Western Bull Gear	70	Mobile Gear 629		21	14
		Western Gear Reducer	95	Mobile Gear 632		21	14
Resource Yard (El. 644)	Spare Unit Transformer	SU-T	9,400	Transformer Oil	Out-of-System	18	11
Intake Deck (El. 651)	Main Unit Transformers	Unit # 1	15,539	Transformer Oil	In-System	14	7
		Unit # 2	15,539			14	7
		Unit # 3	15,539			14	7
		Unit # 4	10,667			15	8
		Unit # 5	10,667			15	8
		Unit # 6	10,667			15	8
	Head Gate Hydraulic Cylinders	1	390	Transformer Oil	In-System	34	19
		2	690			34	19
		3	690			34	19
Spillway Gate (El. 651)	Gear Boxes	GB-1	210	Mobile Gear 632	In-System	25	18
		GB-2	210			25	18
		GB-3	210			25	18
		GB-4	210			25	18
		GB-5	210			25	18
		GB-6	210			25	18
		GB-7	210			25	18
		GB-8	210			25	18
Mobile Crane Various Locations	FMC Linkbelt (new)	90 Ton	200	Hydraulic Oil		26	20
Juvenile Fish Facility	JFF Emergency Generator	JFF-EG	475	Diesel		27	20

Table 3-2: Aboveground Storage Tanks

Location	System	Container ID	Volume (Gallons)	Material	Description	Sheet 1 ID	Sheet No.
Powerhouse (El. 498)	Oil Storage Room	Clean Lube Oil	10,000	Turbine Oil	Shop-built AST	4	2
		Dirty Lube Oil	10,000			3	2
		Clean Trans Oil	20,000	Transformer Oil		2	2
		Dirty Trans Oil	20,000			1	2
Powerhouse (El. 542)	Emergency Generator Set	Day Tank	100	Diesel #2	Shop-built Tank	10	4
Powerhouse (El.558)	Emergency Diesel Generator AST	DT-1	3,000	Diesel	Shop-built AST	11	4
Powerhouse (El. 618)	Gravity Lube Oil Tank	N/A	500	Lube Oil	Shop-built Tank	17	10
Dam Gallery (El. 633)	Spillway Diesel Generator	N/A	100	Diesel	Shop-built AST	20	13
Resource Yard (El. 644)	Gasoline Storage AST	GT-1	1,000	Gasoline	Shop-built AST	19	12
Intake Deck (El. 651)	Kenix Gantry Crane Fuel AST	IC-1	100	Diesel	Shop-built AST	16	9
	Emergency Intake Gates	AST	1,320	Hydraulic Oil	Shop-built AST	13	6

Table 3-3: Portable Storage Containers

Location	Container ID	Volume (Gallons)	Material	Description	Sheet 1 ID	Sheet No.
Oil Storage Room (El. 494)	N/A	Varies	Used Oil, Non-Haz. Liquid Waste	Shop-built Drums	31	2
Oil Purification Room (El. 498)	N/A	Varies	Oil, Solvent, Grease	Shop-built Drums	32	2
Haz. Waste Storage Area (El. 498)	N/A	Varies	Hazardous Waste	Shop-built Drums	33	2
Fish Pump Gear Boxes (El. 505)	N/A	Varies	Oil, Non-Haz. Liquid Waste	Shop-built Drums	12	5
Flammable Materials Storage Building (El. 548)	N/A	Varies	Used Oil, Hazardous Waste	Shop-built Drums	30	-
Dam Gallery (El. 651)	N/A	55	Fuel Oil	Shop-built Drums	20	13
Various Locations	Portable Used Oil Tank	900	Used Oil	Shop-built Tank	28	21
Various Locations	Portable Grease Tank	55	Grease	Shop-built Tank	29	21
Various Locations	Portable Diesel Tank	100	Diesel	Shop-built Tank	5	20

3.3 EVALUATION OF DISCHARGE POTENTIAL

3.3.1 Distance to Navigable Waters and Adjoining Shorelines and Flow Paths

The Little Goose Project is located over the Snake River and as a result, the distance between any operating equipment and storage tanks and navigable waters is relatively short. Powerhouse interior drains are routed to sumps before discharging into the river.

The Little Goose Lock & Dam spans the entire width of the Snake River valley. The powerhouse, located below the dam, has been constructed such that all drains inside the powerhouse lead to a sump located under El. 498. The dam powerhouse drainage is typically necessary for water leaks in the wall that are prevalent throughout the building. Any oil spill or leak from equipment piping of a sizable quantity would also drain to the sump. Rooms with a significant amount of oil in the powerhouse are self-contained, and the drains have been plugged to prevent drainage to the sump, including the oil storage room at El. 494 and the oil purification room at El. 498. The oil storage room contains the largest quantity of oil at the facility and has approximately 33,000 gallons of storage capacity, as the doorway to the room is 4- feet above the floor. The oil purification room acts as secondary containment with the addition of a lip-seal.

The majority of the turbine components are within the powerhouse and are isolated from the river. The bottom-most turbine component, the turbine hub, is in direct contact with the river and a spill from the turbine hub will drain directly into the river. Each turbine has an associated governor tank, a reservoir from which turbine oil is distributed to each component. Piping leaks between the governor tank and the main unit would drain to the sump. This is further described in Section 4.1.

The majority of the facility's ground surface area is paved with asphalt. The remainder consists of compacted gravel, grass, and low-lying vegetation.

3.3.2 Discharge History

Spills of reportable quantity have occurred at the facility. These spills were reported to the proper authority and cleaned up. The cause of each spill was identified and repairs were made if necessary. The spill history for the facility up to the date of SPCC Plan preparation is provided in Table 3-4.

Table 3-4: Oil Discharge History

Description of Discharge	Corrective Actions Taken
March 2003 Less than five gallons of turbine oil was released from an O-Ring failure in a governor cabinet.	O-ring in main distributor being replaced and cleaning up – no oil to drains or river..
February 2004 Less than one gallon of oil was released from a vehicle located on the Northshore.	Notifications were made. Excavated roughly two 5-gallon buckets of contaminated soil.
March 2004 Less than two gallons of oil was released on Unit #5 when a float control on a seepage pump became stuck and allowed basin to overflow.	Mechanical crew cleaned up oil. Electricians are checking the pump control system and will repair/replace as needed to improve reliability. As an added precaution the float setting was lowered to initiate pumping sooner. NO oil to drains or river.
May 2004 Less than one gallon of grease was released in Spillway #1 from trunnion bearings during lubrication.	Some released greased was retrieved with buckets attached to ropes.
April 2005 Less than two gallons of Mobiltherm 603 Oil was released from an old heating system leak within the piping around Spill Gate #4.	Notifications made. Spill boom deployed around spillway 4. Spillway gate heating system pumped out.
August 2005 Approximately 270 gallons of oil was released on Unit #4, Headgate Slot C from a failed headgate cylinder. Most of the released oil was contained in the headgate slot.	Notifications made. Orifices closed. Spill boom deployed around unit 4 discharge. Emerald Petroleum Services called out with pump truck to pump out slots. Headgate cylinder pulled and repaired.
August 2005 Approximately five to 10 gallons of diesel fuel was released from the Northshore emergency diesel generator when a vent valve on the fuel filter became loose.	No fuel to sumps or river. Cleaned up fuel with pads and pigs. Vent Valve retightened.
March 2006 An investigation was made to determine a frothy like substance on a boat within the Navigation Lock. The substance did not smell nor did it feel like an oil or grease substance. Also did not have the rainbow color to its sheen. The substance was determined to be biologic.	Notification made. Investigated a possible sheen by boat within the navigation lock.
June 2006 Approximately 30 to 40 gallons of hydraulic oil was released in the Navigation Lock drain valve machinery room when an O-Ring on the pressure supply valve failed.	NO oil reached the river; so no notifications made. Oil was cleaned up with absorbent pads and oil vacuum. Also the gate chamber was inspected and no oil found or absorbed in socks that were put into the chamber water.
September 2006 Approximately five to 10 gallons of hydraulic oil was released on the sump pumps near the downriver side of the Navigation Lock from a faulty drain plug in room. The hydraulic oil in the drain was from the June 2006 leak.	Notifications made. Absorbent river boom deployed. Absorbent socks deployed in sump and sump cleaned out. New drain plug installed. Addition made to PM to inspect contents of sump prior to annual operation.

October 2006 Approximately three to eight gallons of oil was released from cracks in the gate seal heater piping system on Spillway #2.	Notifications made. Absorbent river boom deployed. The systems have already been pumped out. Project looking into some how encasing the residue oil with some sort of grout or expansion foam.
January 2007 An unknown amount of a yellow biologic mucous/pollen substance was observed in the Forebay Area. The substance did not have rainbow coloring and smelled like fish.	Notifications made. Absorbent pads deployed to try to collect samples and identify this substance.
January 2007 Approximately two to four ounces of hydraulic oil was released in the Forebay Area when the cap seal of the FMC movable crane hydraulic oil pressure tank O-Ring failed.	Notifications made. Absorbent booms and pads deployed to forebay. Oil on upper deck and around drains cleaned up.
January 2007 Approximately a few ounces of residual hydraulic oil in the sump system piping near the downriver side of the navigation lock were released. The residual in the sump system piping were from the September and June 2006 leaks.	Notifications made. Absorbent river boom deployed prior to cycling sump pumps. Absorbent socks deployed in sump and sump cleaned out.
February 2007 An unknown amount of biologic substance was observed on the Forebay northside near the security gate.	Tried collecting samples of substance with bucket and rope and absorbent pads and rope. No notifications performed.
May 2007 An undetermined amount of carbon substance from the Columbia Queen Boat being locked through the Navigation Lock was observed collecting on the water surface. The carbon substance is the result of the Columbia Queen tour boat using a mister over their vessels to knock down the exhaust.	Notifications made. Absorbent river boom deployed. Mark Stevens with WADOE said they have heard and seen this and it is not an oil or spill and there is really nothing you can do to clean it up.
September 2007 Approximately one quart of turbine oil was released on the Turbine Pit, Unit #3 when a hub seal leaker or the seal around the bolt failed.	Notifications made. Absorbent boom and pads deployed.
October 2007 Approximately 125 to 150 gallons of turbine oil was released into the Snake River from Unit #6 when the governor tank unloader/limit switch broke, causing overflow. Approximately 35 gallons of product was recovered from the river.	Notifications made. Absorbent river boom deployed. Absorbent socks deployed in sump and sump cleaned out. Examined all other unit governor limit switches.
March 2010 Approximately one gallon of residual oil was released from the headgate seal heater from Spill Bay #2. The heaters have been drained since 1999 and have had similar, previous leaks since.	Notifications made. Absorbent river boom deployed and containment boom placed along entire spillway.

3.4 DISCHARGE PREVENTION MEASURES 40 CFR 112.7(A) (3) (II))

3.4.1 General

The following measures are implemented to prevent oil discharges during the handling, use, or transfer of oil products at the facility. Oil-handling employees have received training in the proper implementation of these measures. Also see procedures outlined in Section 3.16.2.

The SPCC Coordinator will familiarize facility personnel with all aspects of spill prevention, including the types of oil at the facility (Tables 3-1 – 3-3) that must be reported when released, the procedures for making telephone notifications, and the agencies that must be contacted (Section 3.10). The SPCC Coordinator will also ensure that the list of agencies, emergency response contractors, and emergency telephone numbers found in Appendix E are readily available and up to date.

Though no hazardous materials are stored along the roads that access the dam, the potential for a leak or spill remains high due to the number of vehicles parked or traveling along this roadway and the short and direct drainage to the river. Fully stocked, portable spill kits and other spill cleanup equipment are kept in close proximity to the road in case of a leak or spill.

Throughout the facility, operational and preventive maintenance procedures are in place or are being developed to address leaks or spills promptly and efficiently resulting in minimal impact to the environment.

Hazardous materials at the facility are stored on secondary containment pallets or in secondary containment enclosures. Most materials less than 55 gallons are stored in fire cabinets or approved containers. For larger quantities, fifty-five gallon drums are used to store petroleum products. All drums are inspected prior to be being placed in service and replaced as necessary. The drums are stored on spill pallets within dedicated locations.

Spill response equipment is maintained in several locations throughout the facility. This equipment is used to immediately clean up a spill in order to prevent a discharge to the environment. All portable spill kits and equipment is inspected periodically and re-stocked as necessary. The facility also possesses a trailer and spill boom that can be deployed in the event of a larger spill.

3.4.2 Dam Powerhouse

The oil storage room is located at El. 498 and contains four storage tanks totaling 60,000 gallons; two 10,000 gallon tanks for turbine oil and two 20,000 gallon tanks for transformer oil. For each type of oil, one tank is designated for clean oil and the other for dirty oil. There is a pump station located within the room that delivers oil to and from the oil storage room. A turbine oil recovery system positioned in an adjacent room processes dirty oil and then transfers it to a clean-oil tank for re-use. Waste oil from the oil-recovery process is placed into 55-gallon drums for disposal. This room acts as secondary containment and all the drums in this room are grounded, to reduce the risk of spontaneous combustion.

Dirty transformer oil is recovered by the Bonneville Power Administration, which uses filters and heaters to remove the additive package, clean the oil, and inject a new additive package. The processed oil is then returned to the clean oil tanks. This recovery operation occurs on average every five years.

Transfer procedures provided in Section 3.16.1 are followed during transfer operation. In addition, all fuel/oil transfer processes take place entirely within the powerhouse, therefore, if a spill were to occur outside the secondary containment, it would still be contained on the concrete floor or it would reach the basement sump through the floor drains.

3.4.3 Piping

Oil is transferred on a non-routine basis between transformers, breakers and storage tanks via in-house direct piping. Temporary connections are not required to transfer oil from the equipment to the storage tanks. Valves are provided at various locations, allowing for the isolation of piping at numerous locations. Double-walled piping connects the turbines and transformers to the oil storage tanks. The piping is generally ductile iron, two to six inches in diameter, and runs through the powerhouse walls. Fill ports for the turbine and transformer oil are located at El. 558. The remainder of the piping in the turbine system and in other mechanical equipment found throughout the powerhouse is of various size and length, and is generally single-walled.

3.4.4 Turbines

There are six turbines located at El. 558 of the powerhouse and a breakdown of the storage capacity of each component is located in Table 3-1. A spill from any component will drain to the sump with the exception of the turbine hub, which will drain directly into the river. Each turbine unit contains approximately 7,800 gallons of lubricating oil. The turbine hub has a maximum storage capacity of 2,260 gallons. Each turbine consists of several components, including a generator thrust bearing, guide bearing sumps and a governor oil system. Governor and turbine oil are also stored near the generating units within a closed piping system. The total amount of lubricating oil stored within the systems is approximately 47,000 gallons.

All of the components that make up the turbine unit are separated, such that a leak or other release would be isolated to that particular component. If such an event were to occur, the pressure drop would activate an alarm in the powerhouse control room. That turbine would be shut down, isolating the leak. The powerhouse control room is manned 24 hours per day.

3.4.5 Transformers

The main unit transformers are located on the top of the dam at El. 651. There are six transformers used for the hydro-generated power. Transformers one through three can house 15,539 gallons of oil. Transformers three through six can house 10,667 gallons of oil. The approximate oil storage capacity for all six transformers is approximately 80,000-gallons of transformer oil. The transformers are filled and emptied through piping that is connected to the powerhouse oil storage tank described in Section 3.4.2. The transformer tanks can be filled or drained from a pump station located in the oil storage room on the first floor of the powerhouse.

Containment for the transformers consists of concrete curbing surrounding each transformer, each with approximately 110-percent storage capacity of the associated transformer.

There are two additional transformers located at El. 558 inside the powerhouse. These two transformers each contain 1,150 gallons of hydraulic oil. Although they are both in separate rooms and both of the transformers are enclosed in vaulted containment. Each room has a drain that has a containment berm around the drain and the berms are approximately 1 foot in height.

3.4.6 Maintenance Cranes

There are two mobile maintenance cranes located at the dam. The two mobile cranes include a FMC Link-Belt crane housing 200 gallons of hydraulic oil. The intake Gantry crane holds a maximum of 100 gallons of diesel and 1,320 gallons of hydraulic oil in a fuel storage tank in a sealed containment cover. Piping from this tank that leads to the crane engine is of single-wall construction as well.

3.4.7 Navigation Lock Area

The controls for the navigation lock are hydraulic oil systems with reservoirs of differing capacities. The structure contains less than 350 gallons of oil and grease, none of which is in quantities greater than 55 gallons. These quantities located within equipment consisting of gearboxes, lubricating and hydraulic systems. Greases used at the navigation lock are biodegradable.

3.4.8 Head Gate System

The Head Gate system of the powerhouse uses hydraulic cylinders for raising and lowering the head gates. Currently, three hydraulic cylinders are located in the intake gate slots and contain 390 gallons (fully extended) of hydraulic oil. A hydraulic oil storage tank on the intake deck is used to fill and remove oil as the cylinders are being used. The cylinders are removed, as needed, for operation and maintenance. Additional cylinders are stored on the 5th floor in the gate repair pit (El. 561) and within the Equipment Storage Yard (El. 600), which is used to store bulk heads, head gates, and other spare and miscellaneous equipment.

3.4.9 Secured Storage Area

The secured storage area consists of a fenced gravel lot, small amounts of lumber, equipment and ancillary items, and a hazardous waste storage building. The pre-fabricated steel storage building houses 55-gallon drums of waste oil and various products atop spill pallets.

3.4.10 Juvenile Fish Facility and Passage System

The Juvenile Fish Monitoring Facility (JFF) is located on the Snake River's southern shoreline, just downstream from the navigation lock. The JFF consists of an elevated fish channel from the spillway to the outfall at the JFF and a fish ladder to provide a passage for fish attempting to swim upstream. Gear reducers exist within the fish ladder system. Each reducer contains a steel

gearbox holding less than 55 gallons of lubricating oil. Miscellaneous small quantities of propane, cleaners, solvents, oils and greases are present inside the facility. In addition, an emergency, 475 gallon diesel generator serves the JFF.

3.4.11 Aboveground Storage Tanks

A shop-built 3,000 gallon diesel generator AST is located at the southern end of the tailrace deck and has secondary steel containment. The AST is connected to a shop-built, double walled, 100 gallon diesel generator day tank inside the Powerhouse and has a rupture basin. One AST exists at the Resource Yard. This AST is shop-built, contains approximately 1,000 gallons of gasoline, and has secondary steel containment. The AST holds diesel gasoline for the mobile crane and other vehicles.

3.5 DISCHARGE OR DRAINAGE CONTROLS 40 CFR 112.7(A) (3) (III))

The facility is configured to minimize the likelihood of a discharge reaching navigable waters. Some of the operational oil filled equipment lacks secondary containment. A rupture in one of these systems may leak oil into the pipe channels, on the floor and into the drains. The oil would then proceed to the drainage sump and finally into the unwatering sump.

Secondary containment is provided for all the oil storage tanks, transformers, hydraulic tanks and miscellaneous fuel and oil tanks.

3.5.1 A Release from Turbine Equipment in the River

The propellers and turbine hubs extend below the powerhouse into the river; a release to the river could occur from oil stored in the turbine hub. Similar to the other turbine components, a leak from the hub can be isolated by a control room operator to prevent a larger release.

3.5.2 A Release from Head Gate Cylinders in the River

The head gate cylinders and associated piping are located in the intake slots and are below pool water elevation; thus, normally submerged. A release to the river could occur from oil stored in the head gate cylinders. A leak from the head gate cylinders would be confined to the head gate slots and would not be released to navigable waters.

The federal SPCC regulations (40 CFR 112.7(d)) require the facility to provide a spill contingency plan that meets the requirements of 40 CFR 109 when it is not practicable to install secondary containment, as with the turbine hubs. The Spill Action Plan included as Appendix A satisfies the majority of these requirements, and the rest are addressed in the location-specific contingency plan included as Appendix J.

3.6 DISCHARGE COUNTERMEASURES 40 CFR 112.7(A) (3) (IV))

This section describes the response and cleanup procedures in the event of an oil discharge. The uncontrolled discharge of oil to groundwater, surface water, or soil is prohibited by state and

federal laws. Immediate action must be taken to control, contain, and recover discharged product.

Appendix A contains the current Spill Action Plan for the Walla Walla District Headquarters and Operating Projects (including the Little Goose Project). Corps employees will act as first responders to a spill at the facility. Their role is to control the spill, if possible, and to call for assistance.

The information below provides general guidance for spills. All employees are trained to follow spill response actions, as summarized in Appendix M. At no point during a spill response will an employee place themselves in harm's way. If a situation is deemed unsafe, employees will cease response and contact an emergency clean up contractor.

For the purpose of establishing appropriate response procedures, this SPCC Plan classifies discharges as either "minor" or "major," depending on the volume and characteristics of the material released.

A list of Emergency Contacts is provided in Appendix E. This list is also posted at prominent locations throughout the facility. A list of discharge response material kept at the facility is included in Appendix F.

3.6.1 Response to a Minor Discharge

A "minor" discharge is defined as one that poses no significant harm (or threat) to human health and safety or to the environment. Minor spills can occur from disconnection of hoses, hose or fitting leakage or failure and overfilling of tanks. These types of spills typically are limited to the surface area around the tank or equipment that failed, and can be cleaned up by trained facility personnel or contractors. Spill kits should be available in close proximity at any time when product is being transferred or during equipment maintenance, when small spills are most likely to occur.

Minor discharges are generally those where:

- The quantity of product discharged is small (e.g., may involve less than 10 gallons of oil)
- Discharged material is easily stopped and controlled at the time of the discharge
- Discharge is localized near the source
- Discharged material is not likely to reach water
- There is little risk to human health or safety
- There is little risk of fire or explosion.

Minor discharges can usually be cleaned up by The Little Goose Project personnel. The following guidelines apply:

- Immediately notify the Operations Manager (OM).
- Under the direction of the Operations Manager, contain the discharge with discharge response materials and equipment. Place discharge debris in properly labeled waste containers.

3.6.2 Response to a Major Discharge

A "major" discharge is defined as one that cannot be safely controlled or cleaned up by facility personnel. Spills greater than 10 gallons of oil would be most likely due to a breach of a turbine hub, which operates in the river, or due to an overflow of the powerhouse basement sump. Less likely large spill scenarios could occur if the facility were to be breached during a large earthquake or other destructive act, or if a tanker truck were to spill all of its contents on the grounds outside of the powerhouse. Some other possible spills could occur as follows: head gate cylinders that would leak into gate slots, governor equipment malfunctioning and producing a leak, cars parked over access road gratings could leak oil directly into the river from a leak beneath the car, or from a release from a truck transporting oil to or from the site.
Major discharges are generally those where:

- The discharge is large enough to spread beyond the immediate discharge area.
- The discharged material enters water.
- The discharge requires special equipment or training to clean up.
- The discharged material poses a hazard to human health or safety.
- There is a danger of fire or explosion.

In the event of a major discharge, the following guidelines apply:

- All workers must immediately evacuate the discharge site via the designated exit routes and move to the designated staging areas at a safe distance from the discharge (See Section 3.6).
- If the OM is not present at the facility, the SPCC Coordinator notifies the Operations Manager of the discharge and has authority to initiate notification and response. A discharge that threatens the Snake River may require immediate notification to downstream users.
- The OM (or SPCC Coordinator) must call for medical assistance if workers are injured.
- The OM (or SPCC Coordinator) must notify the Fire Department or Police Department as necessary.
- The OM (or SPCC Coordinator) must call contracting at the Walla Walla District Office to initiate the spill response and cleanup contractors listed in the Emergency Contacts listed in Appendix E if appropriate.
- The OM (or SPCC Coordinator) must immediately contact the National Response Center (888-424-8802).
- The OM (or SPCC Coordinator) must document the notifications on the Log provided in Appendix I and attach a copy to this SPCC Plan.
- The OM (or SPCC Coordinator) coordinates cleanup and obtains assistance from a cleanup contractor or other response organization as necessary.
- If the OM or SPCC coordinator is not available at the time of the discharge, then the senior on-site person assumes responsibility for coordinating response activities.

3.6.3 Corps-Caused Spills

If the spill is Corps-caused and located on Project lands, or confined by any Project structure (headgate slot, gallery, etc.), and it has been determined by the ECC that it is within the projects capabilities, containment and cleanup activities will be performed by project response personnel as outlined by this plan.

If a Corps-caused spill reaches the Snake River, response by The Little Goose Project personnel shall be limited to stopping/containing the source of the spill within project structures. If spills are outside of the means of the project personnel, an environmental cleanup contractor will be used.

Walla Wall District Contracting branch has a contract mechanism and authority upon receiving funds to issues a task order against a General Service Agreement (GSA) Spill response contract. Based on the situation a cleanup contractor will be retained through either this mechanism or the National Response Center mechanism.

3.6.4 Non Corps-Caused Spills

If the spill is not Corps-caused, and the responsible party is taking adequate and effective cleanup measures, obtain the information for the Spill Report and continue to monitor cleanup activities, particularly if it affects Corps operation or property.

If the spill is not Corps-caused, and the responsible party is either unknown, unaware of the spill, or their cleanup measures are ineffective, Corps cleanup activities may be initiated by Emergency Management Branch if the spill affects Corps operations or property. However, if the spill is either off Corps property and/or does not affect Corps operations, work cannot start until a funding number is obtained from EPA. The District Emergency Management Branch will negotiate with EPA for a funding number. Project funds will be charged for all spill activities prior to receipt of a funding number from EPA or reimbursement from the responsible party.

3.6.5 Spill Reporting

Any size discharge (i.e., one that creates a sheen, emulsion, or sludge) that affects or threatens to affect navigable waters or adjoining shorelines must be reported immediately to the National Response Center (1-800-424-8802). The Center is staffed 24 hours a day. A summary sheet is included in Appendix G to facilitate reporting.

3.6.6 Assessing the Risk

The risks presented by a release shall be assessed the moment a release is observed or discovered. Because risks can change throughout an emergency, assessing the risk shall continue throughout the duration of the incident. Employees shall react according to their level of training. A major release may require the evacuation of employees and response by outside emergency response services that are equipped and trained to handle major releases. When assessing the risk, employees shall identify the material spilled and the source of the spill. Once the material has been identified, employees shall obtain the Material Safety Data Sheet (MSDS) for the product that was spilled. An oil sheen reference guide is provided in Appendix H. The purpose of

this reference is to provide employees with standard descriptions in the event that an oil spill reaches water. The criterion for establishing whether a discharge of oil may be harmful to public health or welfare is as follows:

- Discharges that cause a sheen or discoloration on the surface of a water
- Discharges that violate applicable water quality standards
- Discharges that cause a sludge or emulsion to be deposited beneath the surface of the water or on adjoining shorelines

3.6.7 Securing the Area

It is important to secure the area surrounding the release in order to minimize distractions and to maintain a safe environment for emergency responders. Only those that are actively involved in the response will be permitted into the secure area. If necessary, barriers such as caution tape or cones may be utilized to secure the area. If more than one employee is available, one may perform a security role, keeping other employees out of the area while a second employee notifies a supervisor. Once the area has been secured, the person who discovered the spill will immediately notify the Control Room and their supervisor. The Control Room Operator on-site will notify the OM and ECC.

3.6.8 Don Protective Equipment

Employee safety is a primary concern during spill response activities. Employees will obtain and use the proper personal protective equipment. Once the type of material spilled has been identified, the MSDS for this substance must be consulted for personal protective equipment requirements and handling instructions.

3.6.9 Control the Release

Every effort will be made to keep a spill from spreading within the facility. Employees will respond to the spill by using sorbent materials to block the flow of the spill so that it does not spread and every effort will be made to prevent release into navigable water. **Under no circumstances will an employee take unsafe steps to control spills.** Containment activities will begin from the farthest point of progression of the liquid and work inward:

- Small spills confined to immediate area – Place sorbent materials in direct contact with the spilled liquid, working inward from the farthest point of progression of the liquid. The quicker the response, the smaller the contaminated area will be.
- Larger spills and spills escaping from immediate area – If liquid begins to spread outside of the immediate area, attempts will be made to stop the flow before it exits the paved area. This can be accomplished by using sorbent materials to block the flow and keep the spill contained near the source.

3.6.10 Clean Up the Impacted Area

Utilize available assets to recover spilled pollutants and to clean up pollution sites. Available cleanup materials are listed in Appendix F. Cleanup will begin as soon as possible after initial containment and required immediate reporting. The SPCC Coordinator, or his/her designee, will enlist all appropriate resources to stop the spill or release, including outside contractors to assist

in cleanup activities. The SPCC Coordinator will arrange for the proper treatment, storage, and disposal of spilled materials. Spill cleanup contractors shall not be allowed to dispose of spill residue until an approved or acceptable disposal facility has been identified (See Section 3.7).

3.6.11 Off-project spills

Personnel who learn of an off-project incident that could reasonably affect the project or could result in waterborne contamination will report it as usual. The ECC will notify the appropriate persons as shown in Section 3.9. If necessary and practical, the ECC may send a project employee to monitor the situation and report findings as they occur.

3.6.12 Cleanup Contractors

Walla Walla District will use the U.S. Coast Guard BOA contract for hiring Cleanup contractors. The Walla Walla District Contracting office is the only USACE representative authorized under the Federal Acquisition Regulations to contract cleanup services. Walla Walla District has 24-hour Contracting Officers, (David Doty and Ruthann Haider) who have authority to award and trigger the US Coast Guard BOA contract for spill response. The most likely contractor to respond would be NRC Environmental Services out of Portland, Oregon, PH# (800) 337-7455. However only an authorized USACE Contracting Officer may contact them for services.

3.6.13 Photos and Sample Collection

Photographs shall be taken by on-scene personnel using a digital camera. The images shall show the source and extent of the polluting spill. The following information shall be recorded with each image:

- Name and location of vessel, facility, or area
- Date and time the image was captured
- Name of photographer and witnesses

If the material is unknown, samples shall be obtained as early in the event as possible. Hazardous spill material sample bottles and labels are located in the warehouse. Sample collection forms are found in Appendix I. The following procedures must be followed while collecting pollutant spill samples:

- Obtain samples from water, soil, vegetation, or other appropriate locations
- Collect as much of the pollutant spill (up to one quart) as possible
- Tape Hazardous Materials Spill Labels to the glass sample container
- Refrigerate samples of volatile materials
- Maintain chain of custody when samples are transferred

3.6.14 Public Information and Response

Per Engineer Regulation 360-1-1, the District Commander is responsible for public relations within each district. The Public Affairs Office (PAO), under direction of the District Commander and Project Manager, is responsible for responding to media inquiries and providing other information to the public.

The Project's involvement in handling press inquiries during spill cleanup activities will be limited only to factual statements concerning Corps involvement pending arrival of the On-scene Coordinator from the EPA who will then be responsible for handling public information matters. Media representatives arriving on the scene must be tactfully but firmly informed that they will not be permitted to hamper spill recovery operations and, for their own safety, they will not be permitted to enter hazardous areas during the emergency. The media will be provided with full information and directed to safe areas from which photographic coverage may be obtained.

3.6.15 Follow-Up Action

The SPCC Coordinator will review the cause of the spill or release and initiate appropriate corrective actions to prevent similar occurrences and will ensure that all spill kits and sorbent materials will be restocked. The SPCC Coordinator will work with management to make certain that Corps completes any written follow-up reports required by local agencies.

Following any reportable spill, the SPCC Plan will be evaluated to determine whether the Plan successfully prepared the Project for the event. Following the evaluation, the plan will be updated as needed. Appendix I contains forms that can be used to facilitate the evaluation.

3.7 WASTE DISPOSAL (112.7 (A)(3)(V))

When a spill material is contaminated with dirt, oil absorbent granules, etc., and is not acceptable for recycling, material will be contained and stored per instructions of the SPCC Coordinator for disposal. Spill material that is recyclable will be disposed of per instructions of affected maintenance crew foreman. Spill responders will minimize contamination of recovered substances. This objective can be achieved by using clean containers for repackaging, and if possible, filtering recovered liquids for reuse. If a spilled material cannot be reused, attempt to minimize the quantity produced during the clean-up effort. However, this will not be done at the expense of personal protection or spill clean-up effectiveness.

3.7.1 Oil Disposal Regulations

Recovered oil cleaned up from spills must be properly managed. It is not necessarily hazardous waste. The Standards for the Management of Used Oil are found in 40 CFR Part 279. Here are some of its provisions having applicability to Corps owned facilities located in Idaho, Oregon, and Washington:

1. Materials containing or otherwise contaminated with used oil from which the used oil has been properly drained or removed to the extent possible such that no visible signs of free-flowing oil remain in or on the material:
    a. Are not used oil and thus not subject to the used oil management standards of 40 CFR 279; and,
    b. If applicable, are subject to the hazardous waste regulations of 40 CFR 124, 260 through 266, 268, and 270.
2. Used oil drained or removed from materials containing or otherwise contaminated with used oil is subject to regulation as used oil under 40 CFR 279.

3. Used oil containing more than 1,000 ppm total halogens in the oil is "presumed" to be hazardous waste. The Project must then have additional laboratory analyses done or it must somehow demonstrate the oil does not contain hazardous waste.

Disposal of sorbents must comply with the provisions of 40 CFR 264.314(e). It requires that only non-biodegradable sorbents will be used for treating free liquids, such as oil, if disposed of in landfills. If spill cleanup byproducts include any oil-soaked biodegradable sorbents, they may need to be disposed of by incineration. Disposal by open air burning is prohibited.

3.7.2 EPA Hazardous Waste

The EPA defines two types of hazardous wastes: Listed wastes (40 CFR 26 Subpart D) and characteristic wastes (40 CFR 261.20-24) a waste having any of the following characteristics is considered a hazardous waste:

- Ignitability (flash point less 140° F)
- Corrosivity (pH less than or equal to 2 or greater than or equal to pH 12.5)
- Reactivity (unstable or reacts violently when mixed with incompatible materials)
- Toxicity, as determined by the Toxicity Characteristic Leaching Procedure (TCLP)

All products rendered unusable and all contaminated soil, water, or equipment which fit the EPA definition of hazardous waste must be disposed of according to EPA and state regulations.

3.8 DECONTAMINATION

The first principle of decontamination is to avoid contamination.

Decontamination consists of physically removing contaminants and/or changing their physical or chemical properties. Emergency decontamination consists of removing contaminants splashed or spilled on an employee and caring for the victim. Routine spill response decontamination involves cleaning and removing personal protective equipment, and proper personal hygiene practices.

3.8.1 Routine Decontamination

Routine decontamination involves the cleaning and removal of PPE, along with proper personal hygiene practices. Decontamination of respirators is described in EM-385-1-1. The following is an example of a decontamination sequence for Level C protective clothing:

- Wash off boots
- Remove outer gloves
- Remove protective suit
- Remove boots
- Remove respirator
- Remove inner gloves
- Wash hands and face
- Ensure that all contaminated equipment which will be reused is properly decontaminated.

3.8.2 Emergency Decontamination

Emergency washing facilities will be readily available in the immediate work area for workers who may be exposed to harmful concentrations of a spilled material. If a spill occurs in an area remote from emergency washing facilities, portable eyewash stations shall be relocated to the spill work area.

Response personnel will assist in directing employees who are exposed to a harmful contact chemical to either the nearest eyewash or shower. The employee will flush the eyes or affected area for at least 15 minutes. Affected clothing and contaminated articles will be removed in the shower. Appropriate follow-up medical attention will be obtained.

Guidelines provided by product MSDS will be followed. MSDSs for substances most likely to be encountered in a spill at the Little Goose Project are available on site.

3.9 EMERGENCY CONTACT LIST (112.7 (A) (3) (VI))

FOR ALL SPILLS ON PROJECT NOTIFY:

CONTROL ROOM: **(509) 399-2233* Ext. 231***
POWERHOUSE OPERATOR: **or Code 80-111**

The Operator will notify the Project Environmental Compliance Coordinator (ECC). The Project ECC will implement the Spill Prevention, Control, and Countermeasure (SPCC) Plan for the project (outlined on Page 3) and serve as the Incident Commander (IC). In the absence of the Project ECC, the Operations Manager (OM) or Chief of Operations will serve as the IC. In the absence of all three designees, the Shift Operator will assume the IC role and ensure notifications are made.

FOR A SPILL ON OR OFF PROJECT LIKELY TO ENTER COE WATERS OR THE ENVIRONMENT IMMEDIATELY NOTIFY:

(1) NATIONAL RESPONSE CENTER (NRC): **1-800-424-8802***

(2) WASHINGTON DEPARTMENT OF ECOLOGY (24-HR): **(509) 329-3400***

(3) WASHINGTON DEPT. OF EMERGENCY MANAGEMENT: **1-800-258-5990***
Or (253) 512-4901

(4) OPERATIONS MANAGER:
Mr. Kenneth Breiten **work: Ext. 251**
home: (b)(6)
work cell: (509)520-5675
cell: (b)(6)

(5) PROJECT ENVIRONMENTAL COMPLIANCE COORDINATOR:
Ms. Stephanie Thomas **work: Ext. 288**
cell: (b)(6)

(6) DISTRICT ENVIRONMENTAL COMPLIANCE COORDINATOR:
Mr. Damian Walter **work: (509) 527-7121**
home: (b)(6)
cell:

(7) **24-HOUR CONTRACTING OFFICERS:**
***David Doty** **work: (509) 527-7207** **cell:** (b)(6)
***Ruthann Haider** **work: (509) 527-7201** **cell:**

"These Contracting Officers are the only USACE authorized representatives who have authority to trigger the US Coast Guard BOA contract to call out spill response contractors. PROJECT EMPLOYEES WILL NOT CALL NRC ENVIRONMENTAL OR ANY OTHER SPILL CONTRACTORS

(8) LOWER MONUMENTAL LOCK AND DAM **(509) 282-7231***

*** Denotes 24-hour number.**

*****NOTE: IF THE SPILL IS CONFINED TO THE FACILITY AND THERE IS NO THREAT OF OFF-SITE MIGRATION THE FIRST THREE PHONE NUMBERS DO NOT NEED TO BE CALLED.** *~A Copy of this Notification Process is posted at the front of this Plan~*

3.10 DISCHARGE NOTIFICATION PROCESS (40 CFR 112.7 (A) (4))

Immediately after initiating appropriate emergency measures to protect facility personnel and to confine the release, facility personnel will report any environmental release to management and to government agencies, if required. "Immediately" means as soon as a person is available to call without further endangering human life or the environment but in no event, longer than one (1) hour after the release. The following procedure describes the method used for reporting spills and un-permitted environmental releases to government agencies. Its purpose is to ensure compliance with applicable government regulations and to provide a standard procedure for responding to and reporting spills and releases.

The Telephone Notification Log included in Appendix G will be completed prior to reporting a spill to the proper notification contacts. The following information should be available when reporting a release:

- The exact address or location and phone number of facility
- Injured persons, if any
- Date and time of discharge
- Type of material discharged
- Rate of release
- Direction of Spill Movement
- Estimates of total quantity discharged
- Estimates of the quantity discharged as described in 40 CFR 112.1(b)
- Source of the discharge
- Description of all affected media
- Cause of discharge
- Any damages or injuries caused by the discharge
- Action being used to stop, remove, and mitigate the effects of the discharge
- Whether and evacuation may be needed
- Names of individuals and/or organizations who have also been contacted

When in doubt, report immediately. The time allowed for reporting a release varies from agency to agency. The SPCC Coordinator or his designee will report to management and government agencies immediately. Agencies have imposed significant fines and penalties for delayed reporting of releases. If the SPCC Coordinator is unavailable the on-site Operator will report the release.

3.11 POTENTIAL DISCHARGE VOLUMES AND DIRECTION OF FLOW (40 CFR 112.7(B))

Table 3-3 presents expected volume, discharge rate, general direction of flow in the event of equipment failure, and means of secondary containment for different parts of the facility where oil is stored, used, or handled.

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Table 3-5: Potential Discharge Volumes and Direction of Flow

Location	System	Maximum Volume Released (Gallons)	Direction of Flow Description	Rate of Flow
Powerhouse (El. 494)	Oil Storage	20,000	A release from the oil storage room is unlikely to reach the river as the room is fully contained. This concrete room's drains are plugged and the room is watertight to the doorway, which is approximately 4 feet from the floor. This room provides secondary containment for the oil storage tanks and piping, and has a total storage capacity of approximately 25,000 gallons (Appendix N). Any oil spilled outside of the room would overflow to the sump in the Erection Bay (El. 498).	N/A- Spill cannot leave building.
Powerhouse (El. 498)	Oil Purification Room	55	A release from the oil purification room is unlikely to reach the river as the room is contained. The oil purification room's drains are plugged; however, a lip-seal containment system exists within the doorways of the room.	N/A- Spill cannot leave building.
	Hazardous Waste Storage Area (El. 498)	55	The Hazardous Waste Storage Area is contained within the Oil Purification Room (see above.) A release from the Haz. Waste Storage Area is unlikely to reach the river as the room is contained. The room's drains are plugged; however, a lip-seal containment system exists within the doorways of the room. All hazardous waste drums are stored on a 4 drum containment pallet.	N/A- Spill cannot leave building.
Powerhouse (El. 505)	Fish Pumps	113	A release from the fish pumps could spill oil into the river. Because secondary containment is not practical and a spill is likely to reach navigable waters, a spill contingency plan is required. The Spill Action Plan provided in Appendix A satisfies the majority of these requirements; the remaining requirements are met with the location-specific contingency plan located in Appendix J.	Immediate
Powerhouse (El. 542)	Turbine Governor Sump Tanks	2,250	A release from the upper turbine components is unlikely to reach the river. Each turbine component uses and stores oil independently. If there is a leak or problem, the control room operators can isolate that component to prevent a further release. In the event that a spill occurs from an upper turbine component, the oil is likely to pool initially on the concrete floor near the turbines unless it reaches a drain that leads to the sump.	N/A- Spill cannot leave building.
	Emergency Generator Set (Day Tank)	100	A release from the tank is unlikely to reach the river as this tank is double-walled and contains a 200% capacity rupture basin. In the event that a spill occurs, the oil is likely to pool initially on the concrete floor unless it reaches a drain that leads to the sump.	N/A- Spill cannot leave building.
	Lower Guide Bearings	450	A release from the upper turbine components is unlikely to reach the river. Each turbine component uses and stores oil independently. If there is a leak or problem, the control room operators can isolate that component to prevent a further release. In the event that a spill occurs from an upper turbine component, the oil is likely to pool initially on the concrete floor near the turbines unless it reaches a drain that leads to the sump.	N/A- Spill cannot leave building.
	Turbine Hubs	2,260	The propellers and turbine hubs extend below the powerhouse into the river; a release to the river could occur from oil stored in the turbine hub. Similar to the other turbine components, a leak from the hub can be isolated by a control room operator to prevent a larger release. Because secondary containment is not practical and a spill is likely to reach navigable waters, a spill contingency plan is required. The Spill Action Plan provided in Appendix A satisfies the majority of these requirements; the remaining requirements are met with the location-specific contingency plan located in Appendix J.	Immediate
Powerhouse (El. 558)	Emergency Generator AST	3,000	A release from the tank is unlikely to reach the river. This tank is double-walled and contains a secondary steel containment, which has a total storage capacity of approximately 4,200 gallons (Appendix N).	Gradual

Table 3-5: Potential Discharge Volumes and Direction of Flow (Continued)

Location	System	Maximum Volume Released (Gallons)	Direction of Flow Description	Rate of Flow
Powerhouse (El. 558)	Turbine Thrust Bearings	2,500	A release from the upper turbine components is unlikely to reach the river. Each turbine component uses and stores oil independently. If there is a leak or problem, the control room operators can isolate that component to prevent a further release. In the event that a spill occurs from an upper turbine component, the oil is likely to pool initially on the concrete floor near the turbines unless it reaches a drain that leads to the sump.	N/A- Spill cannot leave building.
	Turbine Governor Accum. Oil Tank	2,250	A release from the upper turbine components is unlikely to reach the river. Each turbine component uses and stores oil independently. If there is a leak or problem, the control room operators can isolate that component to prevent a further release. In the event that a spill occurs from an upper turbine component, the oil is likely to pool initially on the concrete floor near the turbines unless it reaches a drain that leads to the sump.	N/A- Spill cannot leave building.
	Upper Guide Bearings	170	A release from the upper turbine components is unlikely to reach the river. Each turbine component uses and stores oil independently. If there is a leak or problem, the control room operators can isolate that component to prevent a further release. In the event that a spill occurs from an upper turbine component, the oil is likely to pool initially on the concrete floor near the turbines unless it reaches a drain that leads to the sump.	N/A- Spill cannot leave building.
	Transformers (TOs)	1,150	A release from these units is unlikely to reach the river. In the event of a spill, the oil is likely to pool initially on the concrete floor near the turbines unless it reaches a drain that leads to the sump.	N/A- Spill cannot leave building.
Bascule Bridge (El. 522.75 and 616)	Gear Boxes- Upstream and Downstream	120	This tank is inside and its room provides secondary containment. A release from the tank is unlikely to reach the river.	N/A- Spill cannot leave building.
Powerhouse (El. 618)	Gravity Lube Oil Tank	500	This tank is inside and its room provides secondary containment, which has a total storage capacity of approximately 540 gallons (Appendix N). A release from the tank is unlikely to reach the river.	N/A- Spill cannot leave building.
Navigation Lock Valves (El. 632.5 and 638)	Valves Pump Oil Tanks	225	A release from the hydraulic system for the locks could spill hydraulic oil into the river. Because secondary containment is not practical and a spill is likely to reach navigable waters, a spill contingency plan is required. The Spill Action Plan provided in Appendix A satisfies the majority of these requirements; the remaining requirements are met with the location-specific contingency plan located in Appendix J.	Immediate
Dam Gallery (El. 633)	Diesel Generator Spillway	100	This generator tank is single-walled; however, a release from the tank is unlikely to reach the river as its room is fully contained. This concrete room's floor drain is plugged.	N/A- Spill cannot leave building.
Miter Gate Pump Tanks (El. 635.78)	Pump Hydraulic Tanks- North and South	300	A release from the gate pumps could spill hydraulic oil into the river. Because secondary containment is not practical and a spill is likely to reach navigable waters, a spill contingency plan is required. The Spill Action Plan provided in Appendix A satisfies the majority of these requirements; the remaining requirements are met with the location-specific contingency plan located in Appendix J.	Immediate

Table 3-5: Potential Discharge Volumes and Direction of Flow (Continued)

Location	System	Maximum Volume Released (Gallons)	Direction of Flow Description	Rate of Flow
Navigation Lock-Upstream Gate (El. 639.75)	Upstream Gate Oil Tanks-North and South	95	A release from the hydraulic system for the locks could spill hydraulic oil into the river. Because secondary containment is not practical and a spill is likely to reach navigable waters, a spill contingency plan is required. The Spill Action Plan provided in Appendix A satisfies the majority of these requirements; the remaining requirements are met with the location-specific contingency plan located in Appendix J.	Immediate
Resource Yard (El. 644)	Gasoline Storage AST	1,000	A release from the tank is unlikely to reach the river. This tank is double-walled and contains a secondary steel containment, which has a total storage capacity of approximately 3,100 gallons (Appendix N).	Gradual
	Spare Unit Transformer	9,400	A release from this unit is unlikely to reach the river. In the event that a spill occurs, the oil will be contained within the oil barrier storm drain.	Gradual
Spillway Gate (El.. 651)	Gear Boxes	210	A release from the hydraulic system for the crane could spill hydraulic oil into the river. Because secondary containment is not practical and a spill is likely to reach navigable waters, a spill contingency plan is required. The Spill Action Plan provided in Appendix A satisfies the majority of these requirements; the remaining requirements are met with the location-specific contingency plan located in Appendix J.	Immediate
Intake Deck (El.. 651)	Main Unit Transformers	15,539	Six transformers sit on top of the roof of the powerhouse. Any loss of oil would be contained by the secondary containment system surrounding each transformer. The transformer tank levels are monitored in the control room and any sharp loss of oil pressure in the tanks would set off an alarm, an alarm would also be set off when the oil level in that tanks are low, after which the operators could isolate the water and product.	Gradual
	Emergency Intake Gate AST	1,320	This tank is inside a structure that contains a sealed containment cover. A release from the tank is unlikely to reach the river.	N/A- Spill cannot leave structure.
	Gantry Crane Fuel AST	100	This generator tank is inside a structure that provides appropriate secondary containment. A release from the tank is unlikely to reach the river.	N/A- Spill cannot leave structure.
	Head Gate Hydraulic Cylinders	390	A release from these units is likely to reach the river. Because secondary containment is not practical and a spill is likely to be discharged to navigable waters, a spill contingency plan is required. The Spill Action Plan provided in Appendix A satisfies the majority of these requirements; the remaining requirements are met with the location-specific contingency plan located in Appendix J.	Immediate
Mobile Crane-Various Locations	FMC Linkbelt (New)	200	A release from the hydraulic system for the crane could spill hydraulic oil into the river. Because secondary containment is not practical and a spill is likely to reach navigable waters, a spill contingency plan is required. The Spill Action Plan provided in Appendix A satisfies the majority of these requirements; the remaining requirements are met with the location-specific contingency plan located in Appendix J.	Immediate

Table 3-5: Potential Discharge Volumes and Direction of Flow (Continued)

Location	System	Maximum Volume Released (Gallons)	Direction of Flow Description	Rate of Flow
Juvenile Fish Facility	JFF Emergency Generator	475	This tank is inside a structure that contains a sealed containment cover. A release from the tank is unlikely to reach the river.	N/A- Spill cannot leave structure.
Gas (Haz. Waste) Building	Drums	55	All drums sit over secondary containment. The building is inspected regularly.	Gradual
Fish Pump Gear Boxes	Drums	55	All drums sit over secondary containment. The building is inspected regularly.	Gradual
Dam Gallery	Drum	55	A release from the drum is unlikely to reach the river as its room is fully contained. This concrete room's floor drain is plugged.	N/A- Spill cannot leave building.
Various Locations	Portable Used Oil Tank	900	A release from the hydraulic system for the crane could spill hydraulic oil into the river. Because secondary containment is not practical and a spill is likely to reach navigable waters, a spill contingency plan is required. The Spill Action Plan provided in Appendix A satisfies the majority of these requirements; the remaining requirements are met with the location-specific contingency plan located in Appendix J.	Immediate
Various Locations	Portable Grease Tank	55	A release from the hydraulic system for the crane could spill hydraulic oil into the river. Because secondary containment is not practical and a spill is likely to reach navigable waters, a spill contingency plan is required. The Spill Action Plan provided in Appendix A satisfies the majority of these requirements; the remaining requirements are met with the location-specific contingency plan located in Appendix J.	Immediate
Various Locations	Portable Diesel Tank	100	A release from the tank is unlikely to reach the river. This tank contains a secondary steel containment, which has a total storage capacity of approximately 150 gallons (Appendix N).	Gradual

3.12 PRACTICABILITY OF SECONDARY CONTAINMENT (40 CFR 112.7(D))

A spill contingency plan is required when it is not practical to install secondary containment on oil-filled operating equipment. The Spill Action Plan provided in Appendix A satisfies the majority of these requirements; the remaining requirements are met with the location-specific contingency plan located in Appendix J. The definition of the authorities, responsibilities, and duties of all persons at the project can be referenced in Appendix M.

3.13 INSPECTIONS, TESTS, AND RECORDS (40 CFR 112.7(E))

Little Goose Project personnel execute routine maintenance procedures to ensure that all equipment associated with petroleum products remain in proper operating condition. The SPCC Coordinator, or the Coordinator's designee, routinely walks through the facility, including the oil-storing equipment.

Table 3-5 summarizes the various types of inspections and tests performed at the facility.

All problems regarding tanks, piping, containment, or response equipment must immediately be reported to the Operations Manager. Visible oil leaks from tank walls, piping, or other components must be repaired as soon as possible to prevent a larger spill or a discharge to navigable waters or adjoining shorelines. Pooled oil is removed immediately upon discovery.

A record of each inspection, including the date and inspector's signature, shall be retained for a minimum of three years by the SPCC Coordinator. Checklists used for these inspections can be found in Appendix I.

Table 3-6: Inspection and Testing Program

Facility Component	Action	Frequency/Circumstances
ASTs	Test container integrity. Combine visual inspection with another testing technique (non-destructive shell testing). Inspect outside of container for signs of deterioration and discharges.	Following a regular schedule (monthly, annual, and during scheduled inspections) and whenever material repairs are made.
Container supports and foundation	Inspect container's supports and foundations.	Following a regular schedule (monthly, annual, and during scheduled inspections) and whenever material repairs are made.
All aboveground valves, piping, and appurtenances	Assess general condition of items, such as flange joints, expansion joints, valve glands and bodies, catch pans, pipeline supports, locking of valves, and metal surfaces.	Monthly
Lowermost drain and all outlets of tank truck	Visually inspect	Prior to filling and departure
Diked Areas (i.e. secondary containment structures)	Inspect for signs of deterioration, discharges, or accumulation of oil inside diked areas. Visually inspect content for presence of oil.	Monthly Prior to draining

Table 3-6: Inspection and Testing Program (Continued)

Facility Component	Action	Frequency/Circumstances
Inspections of Turbine Pits	Equipment within turbine pits may leak or drip oil. Due to the design of the equipment, oil runs down toward the turbine pit.	Monthly
Oil Filled Systems	Oil-containing equipment is subject to routine preventive maintenance procedures to insure that the equipment is operating correctly and is not leaking.	Monthly
Liquid Level Sensing Devices (overfill)	Test for proper operation.	Monthly
Sumps	This procedure will include looking into a sump to verify that there is no oil sheen on the water inside the sump. At a minimum, at manual dip test will be performed on the sumps on a quarterly basis. This procedure will include dipping an oil-absorbing mat into the sump to detect the presence of petroleum products.	Monthly In addition to the minimum quarterly basis, the procedures noted will be performed prior to any overhaul or dewatering activities
Spill Response Equipment	In the event that spill response equipment is used, an inspection will take place at the conclusion of the spill response activities and used, broken, damaged, missing or inoperative spill response equipment shall be replaced.	At a minimum, spill response equipment located on-site shall be inspected every three months in conjunction with the visual inspection to ensure that all items are present in good condition and in sufficient quantity to control a minor release.
Monitor System & Alarms	This testing procedure will evaluate the performance of the electrical components of the alarm system and will ensure that relays and annunciations (audible and/or visible) are in proper operating condition.	On an annual basis, the SPCC Coordinator, or the Coordinator's designee, shall conduct a test of all alarm systems associated with oil-containing equipment.
Fifty-five Gallon Drums	Visually Inspect	Visually inspected when received on site Drum storage areas are visually inspected monthly

3.13.1 Daily Visual Inspection

During the course of their duties, Little Goose Project personnel perform visual inspections of the facility daily. Visual inspections allow early detection of conditions that could lead to leaks and spills. The purpose of the inspection is to verify that spill prevention measures are in place, verify that equipment is in good condition and identify items that need to be repaired, replaced, or changed to ensure spill prevention. When practical, the inspections will be performed while the appropriate equipment is in operation.

System conditions that do not pose an immediate threat of fuel release can be scheduled for repair during routine maintenance. Visible leaks from the tank system large enough to cause the accumulation of oil or staining near the leak shall be promptly corrected.

3.13.2 Monthly Inspection

The checklist provided in Appendix I is used for monthly inspections by Little Goose Project personnel. The monthly inspections cover the following key elements:

- Observing the exterior of aboveground storage tanks, pipes, and other equipment for signs of deterioration, leaks, corrosion, and thinning.
- Observing the exterior of portable containers for signs of deterioration or leaks.
- Observing tank foundations and supports for signs of instability or excessive settlement.
- Observing the tank fill and discharge pipes for signs of poor connection that could cause a discharge, and tank vent for obstructions and proper operation.
- Verifying the proper functioning of overfill prevention systems.
- Checking the inventory of discharge response equipment and restocking as needed.
- Observing the effluent and measuring the quantity of accumulated oil within the oil/water separator.

All fire extinguishers and self contained breathing apparatus are inspected monthly on the preventive maintenance system.

3.13.3 Annual Inspection

Facility personnel perform a more thorough inspection of facility equipment on an annual basis. This annual inspection complements the monthly inspection described above. An annual checklist is also provided in Appendix I.

3.13.4 Aboveground storage containers (ASTs)

For information on inspections of aboveground storage containers, please refer to the "Standard for Inspection of In-Service Shop Fabricated ASTs for Storage of Combustible and Flammable Liquids," prepared by the Steel Tank Institute (SP001-00). This standard contains a schedule of periodic inspections to be performed on containers at the project. The schedule includes monthly, quarterly and annual visual inspections and preventive maintenance activities. This material is available from the District ECC Coordinator. See Table 4-3 for a list of containers requiring owner and formal inspection at this facility.

3.14 PERSONNEL, TRAINING, AND DISCHARGE PREVENTION PROCEDURES (40 CFR 112.7(F))

Little Goose designees have instructed oil-handling facility personnel in the operation and maintenance of oil pollution prevention equipment, discharge procedure protocols, applicable pollution control laws, rules and regulations, general facility operations, and the content of this SPCC Plan. Any new facility personnel with oil-handling responsibilities are provided with this same training prior to being involved in any oil operation.

The Operations Manager and the ECC are the facility designees and are responsible for oil discharge prevention, control, and response preparedness activities at this facility.

Annual discharge prevention briefings are held by the ECC for all facility personnel involved in oil operations. For this, the project utilizes the Walla Walla District Training Plan. The briefings are aimed at ensuring continued understanding and adherence to the discharge prevention procedures presented in the SPCC Plan. The briefings also highlight and describe known discharge events or failures, malfunctioning components, and recently implemented precautionary measures and best practices. Facility operators and other personnel will have the opportunity during the briefings to share recommendations concerning health, safety, and environmental issues encountered during facility operations. The SPCC Coordinator will also conduct an annual oil boom deployment training exercise. Personnel Training Logs and Personnel Training Forms can be found in Appendix L.

3.15 SECURITY (40 CFR 112.7(G))

The entire facility is bordered by steel security fencing and insurmountable geologic barriers. Entrance gates are guarded during the day and closed during non-visitor hours.

Any valves that permit outflow of a container's contents remain closed when in non-operating or non-standby status.

Fill ports, starter controls and valves for oil tanks and fuel tanks located outside the powerhouse are secured and accessible only to authorized personnel, albeit access to the area is already controlled by security fence and cameras.

Fill ports for the large transformer and turbine oil tanks are located inside the secured powerhouse building and locked.

Facility lighting within the plant is sufficient for the discovery of spills occurring during the hours of darkness and for the prevention of spills occurring through acts of vandalism. A video security system operates continuously and is monitored by the control room operator. The Control Room authorizes access to the project during the hours that the project is closed.

The project requires all persons conducting official business to obtain visitor identification badges at a designated entrance. Card key security systems are installed at gated entrances to the project and the entrance doors to most internal buildings. Site access is restricted to authorized personnel only. Ranger staff patrols the project lands year round and operators monitor the facility with cameras 24 hours a day.

All oil and hazardous materials storage areas will be locked or otherwise secured from public access. These areas will be accessible only to personnel who have been properly trained in the safe use and handling of the substances stored there.

3.16 TANK TRUCK LOADING/UNLOADING RACK REQUIREMENTS (40 CFR 112.7(H))

Delivery of oil or fuel is completed upon the request of Corps personnel. Oil products are ordered as needed depending on facility usage and oil delivery is not common, (approximately every five years) as the majority of oil is purified and re-used. At the present time, fuel is delivered to Little Goose Lock and Dam in containers with capacities no larger than 55 gallons and transferred to storage tanks using a pump located at El. 498.

Prior to the addition of oil or fuel to any tank, the supplier shall verify the quantity already in the tank. Fuel is delivered to the facility infrequently and only during normal business hours unless it is an emergency. Fuel is ordered as needed because of uncertain short and long-term fuel consumption. Because of this variability, different types of delivery vehicles may be used for each refueling. Procedures for bulk fuel transfers are included in this plan as a precautionary measure.

The potential for discharges during tank truck loading and unloading operations is of particular concern at this facility. The Little Goose Project management is committed to ensuring the safe transfer of material to and from storage tanks. The following measures are implemented to prevent oil discharges during tank truck loading and unloading operations.

3.16.1 Secondary Containment (40 CFR 112.7(h) (1))

During storage tank refueling, the tanker truck will park at El. 558 of the powerhouse at the pump station for connection to turbine or transformer oil fill valves. The truck will sit on top of a portable, rubber secondary containment mat to capture any small or large spills during fuel transfer.

3.16.2 Loading/Unloading Procedures (40 CFR 112.7(h) (2) and (3))

All suppliers must meet the minimum requirements and regulations for tank truck loading/unloading established by the U.S. Department of Transportation. The Little Goose Project ensures that the vendor understands the site layout, knows the protocol for entering the facility and unloading product, and has the necessary equipment to respond to a discharge from the vehicle or fuel delivery hose.

Vehicle filling operations are performed by facility personnel trained in proper discharge prevention procedures. The truck driver or facility personnel remain with the vehicle at all times while fuel is being transferred. Transfer operations are performed according to the minimum procedures outlined below.

At least one Corps employee trained in the implementation of this plan must be present at all times to observe refueling operations. No transfer operations shall begin until the Corps employee is present and ensures all preparation procedures listed below are in place:

Bulk Fuel Loading/Unloading Procedures

- Smoking during fuel unloading is strictly prohibited.
- Spill containment/clean-up material must be available and accessible for use.
- A fire extinguisher with a rating of at least 2-A, 20-B: C shall be positioned approximately 15 feet from the area.
- The delivery vehicle shall be parked on top of rubber secondary containment located as close to the fill port as possible.
- The delivery vehicle engine shall be turned off (U.S. Department of Transportation (DOT), 49 CFR 177.834).
- The delivery vehicle brakes shall be set and the wheels of tank vehicle shall be blocked (U.S. DOT, 49 CFR 177.834).
- Nonessential motors and potential ignition sources shall be turned off.
- Warning sign (DANGER DISCONNECT HOSE AND SHUT OFF PUMP BEFORE DRIVING AWAY) shall be placed in front of vehicle window (U.S. DOT, 49 CFR 177.834).
- A grounding bond shall be established. A grounding clamp shall be attached from the vehicle to a grounding rod, or fill pipe, to prevent the accumulation of static electricity (U.S. DOT, 49 CFR 177.834).
- The capacity of the tank shall be marked and visible. The volume of liquid being transferred shall be measured with a metering device that is accurate and compatible with the liquid. Use of a meter avoids overfilling the tank and records total gallons delivered to the facility.
- The storage tank fill cap shall be unlocked.
- The volume of fuel in the tank shall be determined. Chemical resistant gloves and eye protection shall be worn if personnel are exposed to product.
- The hose from the tank vehicle to the tank fill pipe shall be connected and all connections must be correct and secure and the hose must appear in good condition.
- Tank vehicle fuel valve shall be opened.
- As the tank is filled, it shall be monitored to verify the transfer is occurring smoothly with no spillage or leaks. Transfer of fuel shall cease immediately if there are any leaks in the transfer equipment. The fuel-dispensing nozzle shall have an automatic shutoff.
- Tank monitor shall be read to verify quantity of fuel in tank.
- When refueling is complete, tank vehicle fuel valve shall be closed, and grounding bond shall be disconnected.
- Hose from vehicle shall be removed, capped and drained to return residual fuel to the tank. Both ends of the hose shall be capped between uses.
- The volume measurements from the volume chart and meter shall be compared to confirm the amount of liquid delivered.
- Fill cap and valves shall be secured (U.S. DOT, 49 CFR 177.834).
- Sign and wheel blocks shall be removed prior to departure.
- Prior to filling/departure, the lower-most drains and all outlets on tank cars/trucks will be inspected and, if necessary ensured that they are tightened, adjusted, or replaced to prevent liquid discharge while in transit.

3.16.3 Fuel Transfer Record Keeping

Prior to the addition of oil or fuel to any tank, the supplier will verify the quantity already in the tank. Inventories during transfer events will be recorded by the petroleum supplier using a logbook or the standard form provided in Appendix I. These records will be maintained for a minimum of three years. Unusual decreases in fuel levels will be investigated.

3.17 BRITTLE FRACTURE EVALUATION (40 CFR 112.7(I))

There are no field-constructed tanks at the Little Goose Project. All storage tanks are shop-built.

3.18 CONFORMANCE WITH STATE AND LOCAL APPLICABLE REQUIREMENTS (40 CFR 112.7(J))

The requirements of 40 CFR 112 are in conformance with all State agency requirements and are the most stringent rules, regulations, and guidelines. This SPCC plan was written in conformance with the requirements of 40 CFR 112.

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4.0 SPCC Provisions for Onshore Facilities (Excluding Production Facilities)

4.1 FACILITY DRAINAGE (40 CFR 112.8(B))

The powerhouse drainage system is primarily designed to remove leakage and drainage water. Drainage sump pumps also remove any overflow from the unwatering sump during safety pool maintenance. The powerhouse has been constructed such that all internal drains lead to a sump located under El. 498. Releases of oil entering the drainage system sump should only occur as a result of system ruptures. Operator errors resulting in overfilling or draining of tanks inside the powerhouse should not reach the drainage sump. The internal storage tanks have secondary containments of adequate capacity to hold the complete contents of the largest tank, and all floor drains in tank storage areas have either been filled with concrete or contain removable plugs or ball valves. In the event of an oil spill reaching the drainage system, the powerhouse operator will take manual control of the unwatering pump to prevent oil from exiting the sump until it can be recovered.

4.1.1 Facility Drainage Sumps

There are 104 water pumps at the facility that discharge to the river. See Tables 4-1 and 4-2 for details of these pumping systems. The actual pumping rate for each pump is not known, but is assumed to be approximately the same as the *Rated Flow*. The rated flow listed in Table 4-1 is from the pump nameplate data and/or as-built contract drawings. All the pumps are vertical turbine or centrifugal type water pumps. For practical oil recovery, the oil will be prevented from reaching the sumps or recovered from the sumps prior to being pumped by these systems. None of the sumps have oil detection equipment; however, most of the equipment has oil-loss annunciation that indicate when even small amounts of oil have been lost. The pump intakes for all pumps draw from near the bottom of the sumps. The natural tendency of oil to float on water reduces the likelihood that oil entering the sumps will be pumped to the river, except where the sump flow is turbulent.

Table 4-1: Powerhouse Pump Flow-Rates

Pump #	Location	Rated Flow (gpm)
1	Powerhouse Unwatering Sump	12,500
2		12,500
3	Powerhouse Drainage Sump	1,500
4		1,500
5	North Nonoverflow Sump	700
6		1,500
7		1,500
8	Navigation Lock Unwatering Sump	1,500
9		2,800
10		2,800

4.1.2 Pumps 1 & 2 (Powerhouse Unwatering Sump)

Potential oil sources for these pumps are the main generator turbines, navigation lock upstream tainter valve hydraulic systems, fishway pumps, and overflow from the drainage sump. Water is drawn from the bottom of the main generator draft tubes when they are unwatered. Current practice is to monitor

the water level in the draft tube during unwatering and when the water level gets below the draft tube access hatch, the hatch is opened and any oil in the draft tube is recovered. If leakage occurs it is annunciated and cleaned up immediately.

The normal drainage sump operating water level is below the overflow opening between the drainage and unwatering sumps. Overflowing would only occur during emergencies or when it was planned and being monitored. These operational practices minimize the likelihood that oil in the drainage sump would get into the unwatering sump.

4.1.3 Pumps 3 & 4 (Powerhouse Drainage Sump)

Potential oil sources for these pumps are floor drains, turbine head cover drains, and overflow from the unwatering sump (see above). Oil and water leakage at the turbine head covers is routed to the drainage sump. Current practice is to replace seals and packing to reduce this leakage as much as possible. This leakage is extremely small and if it occurs, it is annunciated and cleaned up immediately. The drain piping is also embedded in concrete and is not readily accessible. Overall, the chance of oil discharged to the river by pumps 3 and 4 is the highest of any of the pumps at Little Goose. Additional oil spill protection is warranted for these pumps.

4.1.4 Pumps 5 thru 7 (North Nonoverflow Sump)

These pumps handle water leakage and seepage from the north nonoverflow and spillway areas. Potential sources of oil for these pumps are a spillway gate sill heater system and a diesel-electric generator. The sill heaters are no longer used, and the generator has a very small amount of oil in it. The likelihood of oil getting into this sump is extremely small. Additional oil spill protection is warranted for these pumps.\

4.1.5 Pumps 8 thru 10 (Navigation Lock Unwatering Sump)

The potential oil sources for these pumps are the downstream navigation lock tainter valve hydraulic systems. As indicated previously, these systems do not contain a large amount of oil and even small amounts of oil loss would be annunciated and would be recovered before it reached the sump.

4.2 BULK STORAGE CONTAINERS (40 CFR 112.8(C))

4.2.1 Construction (40 CFR 112.8 (c) (1))

All oil tanks used at this facility are constructed of steel, in accordance with industry specifications as described above. The design and construction of all bulk storage containers are compatible with the characteristics of the oil product they contain, and with temperature and pressure conditions.

Piping between fixed aboveground bulk storage tanks is made of steel and placed aboveground on appropriate supports designed to minimize erosion and stress.

4.2.2 Secondary Containment (40 CFR 112.8(c) (2))

Table 4-2: Oil Containers (112.7 (a) (3) (i)

Location	System	Container ID	Volume (Gallons)	Material	Description
Powerhouse (El. 498)	Oil Storage	Clean Trans Oil	20,000	Turbine Oil	Vaulted Storage Room (25,000 Gal. Capacity)
		Clean Lube Oil	10,000		
		Dirty Trans Oil	20,000	Transformer Oil	
		Dirty Lube Oil	10,000		
Powerhouse (El. 542)	Emergency Generator Set	Day Tank	100	Diesel #2	Double-walled Tank with 200% capacity rupture basin
Powerhouse (El. 548)	Emergency Generator Set	AST	3,000	Diesel	In Vaulted Containment (4,200 Gal. Capacity)
Powerhouse (El. 618)	Gravity Lube Oil Tank	N/A	500	Lube Oil	Room Acts as Secondary Containment, Drain Plugged (540 Gal. Capacity)
Dam Gallery (El. 633)	Spillway Diesel Generator	N/A	100	Diesel	Room Acts as Secondary Containment, Drain Plugged
Resource Yard (El. 644)	Gasoline Storage AST	N/A	1,000	Gasoline	In Vaulted Containment (3,100 Gal. Capacity)
Intake Deck (El. 651)	Gantry Crane Fuel AST	IC-1	100	Diesel	Double-walled Tank
	Emergency Intake Gates	AST	1,320	Hydraulic Oil	In Sealed Containment Cover

Note: Detailed secondary containment calculations can be found in Appendix N.

4.2.3 Drainage of Diked Areas (40 CFR 112.8(c) (3))

Rainwater will accumulate in outdoor uncovered secondary containment. Personnel check any open outdoor secondary containment (e.g. Portable Diesel Tank) after any rain event. As part of following the SOP for draining rainwater from secondary containment, an attendant will monitor the drainage process and complete a rainwater release inspection record afterwards. This record can be in any format but should include the following information:

- Was oil or a sheen present?
- The name of the person who verified the presence or absence of oil.
- When the release was initiated.
- When the release was terminated.

4.2.4 Corrosion Protection (40 CFR 112.8(c) (4)) and 40 CFR 112.8(c) (5))

This section is not applicable since there are no metallic underground storage tanks, partially buried or bunkered storage tanks at this facility.

4.2.5 Inspections and Tests (40 CFR 112.8(c) (6))

Current SPCC Regulations requires that aboveground containers be tested for integrity on a regular schedule. Shop-fabricated ASTs and portable containers at the facility are inspected and tested per

Steel Tank Institute (STI) Standard SP001. The frequency and type of integrity testing for shop-fabricated ASTs per STI's risk-based approach are summarized in Table 4-3.

During the inspection, the material condition and operability of the tank system will be assessed. All leak detection equipment will be assessed and the inspector will confirm that water and/or oil are not present. Special attention will be given to filters and flexible hoses during inspection and routine activities.

If the tank system is modified, repaired, or retrofit in a way that may affect the integrity of the system, the tank must be inspected by a certified tank inspector regardless of the last time that the tank was inspected.

Visual inspections of ASTs by facility personnel are performed according to the procedure described in this SPCC Plan. Leaks from tank seams, gaskets, rivets, and bolts are promptly corrected. Records of certified tank inspections are kept at the facility for at least three years. Shell test comparison records are retained for the life of the tanks

Table 4-3: Scope and Frequency of Bulk Storage Containers Inspections and Tests

Location	System	Container ID	Volume (Gallons)	Material	Description
Powerhouse (El. 498)	Oil Storage	Clean Trans Oil	20,000	Turbine Oil	P, E(20)
		Clean Lube Oil	10,000		
		Dirty Trans Oil	20,000	Transformer Oil	
		Dirty Lube Oil	10,000		
Powerhouse (El. 542)	Emergency Generator Set	Day Tank	100	Diesel #2	P
Powerhouse (El. 548)	Emergency Generator Set	AST	3,000	Diesel	P
Powerhouse (El. 618)	Gravity Lube Oil Tank	N/A	500	Lube Oil	P
Dam Gallery (El. 633)	Spillway Diesel Generator	N/A	100	Diesel	P
Resource Yard (El. 644)	Gasoline Storage AST	N/A	1,000	Gasoline	P
Intake Deck (El. 651)	Gantry Crane Fuel AST	IC-1	100	Diesel	P
	Emergency Intake Gates	AST	1,320	Hydraulic Oil	P

P – Periodic AST inspection
E – Formal External Inspection by certified inspector
I – Formal Internal Inspection by certified inspector
L – Leak test by owner or owner's designee
( ) indicates maximum inspection interval in years.
For example, E (20) indicates formal external inspection every 20 years.

4.3 HEATING COILS (40 CFR 112.8(C) (7))

The facility does not have heating coils.

4.4 OVERFILL PREVENTION SYSTEMS (40 CFR 112.8(C) (8))

All of the oil storage tanks are equipped with a direct-reading level gauge. For all of the AST's, a fast response system is in place for determining the liquid level of each bulk storage container. Direct

vision gauges are used and personnel are present to monitor the gauges and the overall filling of the bulk storage containers. General secondary containment is provided in the event of overfills, as described in this Plan.

Storage drums are refilled, as needed, and are monitored during the refilling process. Facility personnel are present throughout filling operations to monitor the product level in the tanks that are not equipped with overfill protection.

4.5 EFFLUENT TREATMENT FACILITIES (40 CFR 112.8(C) (9))

The facility does not maintain an effluent treatment facility.

4.6 VISIBLE DISCHARGES (40 CFR 112.8(C) (10))

Visible discharges from any container or appurtenance – including seams, gaskets, piping, pumps, valves, rivets, and bolts – are quickly corrected upon discovery.

4.7 MOBILE AND PORTABLE CONTAINERS (40 CFR 112.8(C) (11))

When not in use, mobile containers rest on secondary containment matting within the oil storage room (elevation 498). Small portable oil storage containers, such as 55-gallon drums, are stored inside the maintenance areas where secondary containment is provided by spill pallets or concrete curbing. Any discharged material is quickly contained and cleaned up using sorbent pads and appropriate cleaning products. The drains lead to self-contained sumps. Any 55-gallon drums that must be stored elsewhere sit on spill pallets or other secondary containment.

The portable diesel tank is generally located on the Intake Deck; however, it may be used elsewhere on site. It is used to refuel various small pieces of equipment (each less than 55-gallon capacity) such as trucks and compressors, which may be deployed at different areas on the site.

4.8 TRANSFER OPERATIONS, PUMPING, AND IN-PLANT PROCESSES (40 CFR 112.8(D))

4.8.1 Transfer Processes

The volume of oil used and stored at the Little Goose Project facility is relatively small when compared to other hydropower projects; however, every employee must carefully plan all oil handling and transfer operations top prevent oil spillage. In general, any time that oil or any other hazardous substance is being pumped or transferred into anything which could possibly overflow; the following precautions are taken:

- A spill kit shall be placed in immediate vicinity of the receiving tank and fill connection point (if applicable) before work begins. Oil loading is preformed inside the powerhouse.
- Secondary containment shall be in place around any oil truck in the powerhouse prior to connecting the truck to a fill line (See Section 3.16 for a detailed description of bulk oil/fuel transfer procedures). This operation is infrequent because the Little Goose Facility purifies and reuses dirty turbine oil.
- Suitable stoppers or mats shall be covering nearby drains during fuel/oil transfer events.

- An attendant shall continuously monitor the tank, sump, or container being filled. If the expected level changes do not occur in the receiving area, the attendant shall stop the fill and investigate.
- If the attendant cannot stop the fill, then he/she must maintain continuous communication with a person who can. This must be continued until the fill process is complete and equipment secured.
- If either the attendant or the person controlling the fill must leave their post, the filling operation shall be stopped and secured.
- Examples of filling operations which must be continuously attended are:
    - Unloading fuel trucks into Project gasoline storage tanks.
    - Filling vehicle and boat fuel tanks.
    - Filling governor oil sumps.
    - Filling main unit bearing sumps.
    - Filling oil storage tanks from tank trucks.
- Before using either the lubrication oil or insulating oil transfer systems, the valve line-up must be checked. Particular attention will be given to checking all unused valves.
- All tanks, piping systems hoses, and containers used for oil or hazardous substances will be kept in good repair. Any damaged, corroded, or worn containers or handling equipment will be taken out of service.
- Before pumping operations, draining storm water from containment area, disposing of water from maintenance or machinery areas, etc., the water will be checked for incidental quantities of oil.
- Powerplant operators will, as part of their routine duties, perform visual inspections on above ground piping, joints, valves and flanges; and will report any abnormal findings in the operating log, as well as to their immediate supervisor. Oil or hazardous substances which have entered, or are likely to enter the environment will be immediately reported to the control room. The control room will execute the proper contacting procedures.

Operating logs are maintained for an indefinite time period. Recent logs are in the control room, older logs are kept in the archives room.

4.8.2 Piping Systems (112.8 (d))

There is no underground piping at the Little Goose Project. Piping is generally aboveground or incased in the concrete structure. Petroleum piping is normally constructed of steel and varies in size ranging up to three inches in diameter. All flammable and combustible piping is installed and tested in accordance with NFPA 30 Flammable and Combustible Liquids codes.

Piping terminal connection at the transfer point is marked as to the origin and capped or blank-flanged when not in service or in standby service for and extended time.

Pipe supports are properly designed to minimize abrasion and corrosion and allow for expansion and contraction.

At the Project, aboveground piping is visible and can be easily inspected. Project personnel monitor piping systems (including valves, flange joints, expansion joints, valve glands and bodies, catch pans, supports, locks, and metal surfaces) as part of their daily rounds and immediately report leaks when discovered. Furthermore, integrity and leak testing is conducted anytime a piping system is installed, modified, relocated, or replaced.

Aboveground piping at the facility is generally confined to specific areas or within buildings. There are no overhead piping runs at the facility that cross roadways requiring driver warnings. Piping located in the vicinity of vehicle traffic is clearly marked with warning signs to avoid damage.

Warning signs are posted at appropriate locations throughout the facility to prevent vehicles from damaging aboveground piping and appurtenances. Most of the aboveground piping is located within areas that are not accessible to vehicular traffic. Brightly painted bollards are placed where needed to prevent vehicular collisions with equipment.

Vehicular traffic is not common in areas containing piping installations. However, vehicles are present in portions of the facility that have aboveground containers. In these instances, the containers are protected from vehicular impact by concrete walls, traffic bollards or curbing.

4.9 SPCC REQUIREMENTS NOT APPLICABLE TO THIS FACILITY

- 40 CFR 112.9 – SPCC Requirements for Oil Production Facilities (Onshore)
- 40 CFR 112.10 - SPCC Requirements for Oil Drilling and Workover Facilities (Onshore)
- 40 CFR 112.11 – SPCC Requirements for Oil Drilling, Production or Workover Facilities (Offshore)
- 40 CFR 112, SUBPART C - Requirements for Animal Fats and Oils and Greases, and Fish and Marine Mammal Oils; and for Vegetable Oils, Including Oils from Seeds, Nuts, and Fruits and Kernels
- 40 CFR 112, SUBPART D – With the exception of completing the evaluation of substantial harm criteria