

**ENTERGY OPERATIONS**  
**RIVER BEND STATION**  
**SPILL PREVENTION, CONTROL AND COUNTERMEASURE PLAN (SPCC)**

Revision 17

---

Prepared by: William H. Spell, Jr. 11/30/16  
William H. Spell, Jr. Date

Reviewed by: Adrainne J. Wilson 12-01-16  
Adrainne J. Wilson Date

---

**Senior Management Certification [40CFR112.7]**

This SPCC Plan has the full approval of management at a level of authority required to commit the necessary resources to fully implement this SPCC Plan.

Steven P. Vercelli 12-2-16  
Steven Vercelli Date

**General Manager, Plant Operations**

---

## **RIVER BEND STATION**

### **SPILL PREVENTION, CONTROL AND COUNTERMEASURE PLAN**



## TABLE OF CONTENTS

List of Figures .....	4
List of Tables .....	4
List of Attachments.....	4
REGULATORY REFERENCE CROSS INDEX.....	5
SPCC PLAN REVIEW PAGE [40CFR112.5(b)] .....	9
1.0 PURPOSE AND APPLICABILITY .....	13
2.0 GENERAL PLANT INFORMATION .....	13
3.0 SPCC PLAN AMENDMENTS AND REVIEWS .....	14
3.1 EPA Amendments .....	14
3.2 Facility Amendments (Louisiana more restrictive) .....	14
3.3 SPCC Plan Reviews (Louisiana more restrictive).....	15
3.4 Professional Engineer Certification [40CFR112.5(c)] .....	15
4.0 SPCC GENERAL REQUIREMENTS .....	15
4.1 Facility Conformance .....	15
4.2 RBS Facility Layout [40CFR112.7(a)(3)].....	15
4.3 Reporting and Response Procedures.....	17
4.4 Equipment Failures [40CFR112.7(b)] .....	18
4.5 Containment Measures.....	18
4.6 Inspections, Tests & Records [40CFR112.7(e)] .....	19
4.7 Personnel Training [40CFR112.7(f)] .....	22
4.8 Security [40CFR112.7(g)] .....	23
4.9 Loading/Unloading Procedures [40CFR112.7(h)] .....	24
4.10 Field-Constructed Aboveground Tanks [40CFR112.7(i)] .....	24
4.11 Additional Prevention Standards [40CFR112.7(j)].....	24
4.12 Facility Drainage [40CFR112.8(b)].....	24
4.13 Bulk Storage Containers [40CFR112.8(c)] .....	25
4.14 Facility Transfer Operations [40CFR112.8(d)] .....	27
5.0 FACILITY RESPONSE PLAN APPLICABILITY [40CFR112.20(e)].....	28

## **List of Figures**

<b>Figure 1 - RBS Facility Layout.....</b>	<b>29</b>
<b>Figure 2 - RBS Stormwater Flow Directions .....</b>	<b>30</b>
<b>Figure 3 - Oil and Gasoline Storage Locations .....</b>	<b>37</b>
<b>Figure 4 - Transformer Locations.....</b>	<b>42</b>
<b>Figure 5 - Chemical Storage Locations.....</b>	<b>45</b>

## **List of Tables**

<b>Table 1 - Oil and Gasoline Storage Locations.....</b>	<b>31</b>
<b>Table 2 - Transformer Locations .....</b>	<b>38</b>
<b>Table 3 - Chemical Storage Locations .....</b>	<b>43</b>

## **List of Attachments**

<b>Attachment 1- Product Unloading Verification Checklist (Typical) .....</b>	<b>46</b>
<b>Attachment 2 – SPCC Inspection Checklist (Typical) .....</b>	<b>47</b>
<b>Attachment 3 - Certification of Substantial Harm Determination .....</b>	<b>48</b>

## REGULATORY REFERENCE CROSS INDEX

Topic	Regulatory Citation	SPCC Section
SPCC Plan Purpose	40CFR112.1	1.1
Applicability (Containers/Tanks)	40CFR112.1(b)	1.2
General Plant Information	LAC33:IX.907.B.1 – LAC33:IX.907.B.6	2.0
P.E. Certification	40CFR112.3(d)	Cover Page or SPCC Plan Review Page
EPA SPCC Plan Amendments	40CFR112.4(a) 40CFR112.4(c) 40CFR112.4(e)	3.1.A 3.1.B 3.1.C
Facility SPCC Plan Amendments	LAC33:IX.905.E (more restrictive)	3.2
SPCC Plan Reviews	LAC33:IX.905.F (more restrictive)	3.3
Professional Engineer Certification	40CFR112.5(c)	3.4
<b>SPCC GENERAL REQUIREMENTS</b>	40CFR112.7	4.0
• Facility Conformance	40CFR112.7(a)(1) 40CFR112.7(a)(2)	4.1
<b>Facility Layout</b>	40CFR112.7(a)(3)	4.2
• Type of oil, gasoline and chemical containers and storage capacity	40CFR112.7(a)(3)(i)	4.2.B
• Discharge prevention measures for loading/unloading	40CFR112.7(a)(3)(ii)	4.2.C
• Discharge and drainage controls	40CFR112.7(a)(3)(iii)	4.2.D
• Countermeasures for discharge discovery, response and cleanup	40CFR112.7(a)(3)(iv)	4.2.E
• Disposal of recovered material	40CFR112.7(a)(3)(v)	4.2.F
• Contact list and phone numbers	40CFR112.7(a)(3)(vi)	4.2.G

## REGULATORY REFERENCE CROSS INDEX

Topic	Regulatory Citation	SPCC Section
• Reporting procedures	40CFR112.7(a)(4)	4.3.A
• Response procedures	40CFR112.7(a)(5)	4.3.B
• Equipment Failures	40CFR112.7(b)	4.4.A
• Containment/Diversiory Devices	40CFR112.7(c)	4.5.A
• Demonstration of impracticability, contingency plan	40CFR112.7(d)	4.5.B
• Inspections, Tests & Records	40CFR112.7(e)	4.6
<b>Personnel Training &amp; Discharge Prevention Procedures</b>	40CFR112.7(f)	4.7
• Personnel Training	40CFR112.7(f)(1)	4.7.A 4.7.B
• Spill prevention designee	40CFR112.7(f)(2)	4.7.C
• Spill prevention briefings	40CFR112.7(f)(3)	4.7.D
<b>Security</b>	40CFR112.7(g)	4.8
• Fencing and locked or guarded entrance gates	40CFR112.7(g)(1)	4.8.A
• Master flow and drain valves and any other valves permitting direct outward flow of the container's contents to the surface have adequate security measures	40CFR112.7(g)(2)	4.8.B
• Locked or secured oil pump starter controls	40CFR112.7(g)(3)	4.8.C
• Capped or flanged loading/unloading connections	40CFR112.7(g)(4)	4.8.D
• Facility lighting	40CFR112.7(g)(5)	4.8.E

## REGULATORY REFERENCE CROSS INDEX

Topic	Regulatory Citation	SPCC Section
<b>Loading/Unloading Procedures</b>	40CFR112.7(h)	4.9
➤ Containment drainage for truck loading/unloading	40CFR112.7(h)(1)	4.9.A
➤ Prevention of vehicle departure before complete disconnection	40CFR112.7(h)(2)	4.9.B
➤ Examination of on of drain and outlets prior to filling and departure	40CFR112.7(h)(3)	4.9.C
➤ Field-Constructed Aboveground Tanks	40CFR112.7(i)	4.10
➤ Compliance with State regulations	40CFR112.7(j)	4.11
<b>Facility Drainage</b>	40CFR112.8(b)	4.12
• Inspection of retained storm water prior to discharge	40CFR112.8(b)(1)	4.12.A
• Drainage from diked areas	40CFR112.8(b)(2)	4.12.B
• Drainage from undiked areas	40CFR112.8(b)(3)	4.12.C
• Diversion system for final discharge	40CFR112.8(b)(4)	4.12.C
• Use of lift pumps for facility drainage system	40CFR112.8(b)(5)	4.12.D
<b>Bulk Storage Containers</b>	40CFR112.8(c)	4.13
• Compatibility of storage tank with oil	40CFR112.8(c)(1)	4.13.A
• Secondary containment	40CFR112.8(c)(2)	4.13.B
• Rainwater or effluent bypass (inspection and record keeping)	40CFR112.8(c)(3)	4.13.C
• Underground tanks cathodic protection an leak testing	40CFR112.8(c)(4)	4.13.D
• Partially buried/bunkered tanks cathodic protection	40CFR112.8(c)(5)	4.13.D

## REGULATORY REFERENCE CROSS INDEX

Topic	Regulatory Citation	SPCC Section
• Testing and inspection of aboveground tanks	40CFR112.8(c)(6)	4.13.E
• Control of leakage through defective internal heating coils	40CFR112.8(c)(7)	4.13.F
• Tank overfill protection	40CFR112.8(c)(8)	4.13.G
• Observation of effluent discharges to waters	40CFR112.8(c)(9)	4.13.H
• Correction of visible oil leaks	40CFR112.8(c)(10)	4.13.I
• Positioning of mobile or portable oil storage tanks	40CFR112.8(c)(11)	4.13.J
<b>Transfer Operations</b>	40CFR112.8(d)	4.14
• Cathodic protection of buried piping	40CFR112.8(d)(1)	4.14.A
• Capping of out-of-service pipeline	40CFR112.8(d)(2)	4.14.B
• Design of pipe supports	40CFR112.8(d)(3)	4.14.C
• Examination and testing of aboveground valves and pipelines	40CFR112.8(d)(4)	4.14.D
• Warnings for aboveground piping	40CFR112.8(d)(5)	4.14.E
<b>Facility Response Plan Applicability</b>	40CFR112.20(e)	5.0



**SPCC PLAN REVIEW PAGE [40CFR112.5(b)]**

<b>Review Date</b>	<b>Revision Needed (Yes or No)</b>	<b>Revision Type * (Technical or Non-Technical)</b>
9/16/08  Revision 11	YES	<p>Add B.5.b pump storage location to Table 1 and Figure 2. TECHNICAL</p> <p>Add Paint Warehouse to Table 3 and Figure 4. TECHNICAL</p> <p>The PE Certification for Revision 11 only covers the technical amendments made in Revision 11. The original PE Certification still covers the remainder of the SPCC.</p> <p>Minor editorial – Added spare transformer location to Figure 3. Indicated that zinc chloride is currently not in use in Table 3. Added spacing on some steps for readability. Added Word Table of Contents instead of manually updated Table of Contents. Moved Table of contents up in document. NON-TECHNICAL</p>
6/18/09 Revision 12	Yes	<p>NON-TECHNICAL changes. Added P&amp;ID numbers to applicable systems in Table 1. Removed references to “two empty tankers” as the site is not currently employing two empty tankers. Replaced with generic wording that tankers if used will have controls. Moved the PE certification off of the front page to this section. Reworded 4.2.F to clarify the callout process to reflect RBNP-035 procedural guidance. Changed 4.11.B to indicate that P&amp;ID drawings are available for piping information. Edited a typo in Table 1 Fire Prot. Diesel Fuel Tank volume to match PID (field verified to be 500 gallons and not 300). Since Zinc Chloride is now being used again, made it active in Table 3.</p>
11/30/09  Revision 13	YES	<p>Removed “locked master flow and drain valves” from Regulatory Reference Cross Index</p> <p>Changed 4.8 B to remove “locked” and to match 40CFR112.7(g)(2)</p> <p>Added Spare Transformer mark #s in Table 2</p> <p>Added Figure 2, RBS Stormwater Flow Directions</p> <p>Modified Table 3 to include additional /various chemical totes</p> <p>Added note to Table 2 regarding spare transformers</p> <p>Figure 4 updated regarding spare transformers.</p> <p>Removed “alarms” from the three diesel fuel oil storage tanks in Step 4.2 C Tank Overfill</p> <p>NON-TECHNICAL</p>

<b>Review Date</b>	<b>Revision Needed (Yes or No)</b>	<b>Revision Type * (Technical or Non-Technical)</b>
5/17/13  Revision 14	YES	<p>1)Removed Spare Transformer #5, 1STX-XNS1A, from location at laydown area behind clarifier. It was placed in service at the East wall of the Turbine Building as reflected in Table 2 and Figure 4</p> <p>2)Added Rate of Flow to Tables 1, 2, and 3</p> <p>3)Changed section 3.3, SPCC Plan Review, from three to five years to reflect LAC33:IX.905.F</p> <p>4)Clarified section 4.5, Containment Measures, by adding regulatory examples</p> <p>5)Modified section 4.13(J) to more closely match 40CFR112.8(c)(11) for clarification of portable storage containers</p> <p>NON-TECHNICAL</p>
6/20/13  Revision 15	YES	<p>Added new Station Blackout Diesel Generator Fuel Tank #2 and new Backup Air Compressor Diesel Generator Fuel Tank, IAS-C6, to plan in Table 1 and Figure 3.</p> <p>Moved old Station Blackout Diesel Generator Fuel Tank #1 and old Backup Air Compressor Diesel Generator Fuel Tank, IAS-C4, on Figure 3</p> <p>Changed old Backup Air Compressor Diesel Generator Fuel Tank #1, IAS-C4, volume in Table 1 from 200 gallons to 160 gallons (see EC 11537)</p> <p>TECHNICAL</p>
4/1/2016  Revision 16	YES	<p>Non-Technical Changes</p> <ul style="list-style-type: none"> <li>• Step 1.3 - Added clarification for Louisiana SPC requirements</li> <li>• Step 2.0 - Changed the owner name and address</li> <li>• Step 3.4 – clarified that PE does not certify non-oil (chemical) changes.</li> <li>• Step 4.2.F - Added additional spill response phone number</li> <li>• Step 4.5 - Added sumps and collection systems per LAC 33,IX.907.D and 40CFR112.7(c)</li> <li>• Step 4.6.A – updated the process to initiate a work request</li> <li>• Step 4.6.B – reworded this step to remove superfluous information and added a database as an alternative to hardcopy form.</li> <li>• 4.13.E – the emergency diesel generator fuel tanks are governed by 40CFR280 and 10CFR50 and are not covered by 40CFR112. The volumes are listed in the table, but they are not subject to 40CFR112.8(c)(6).</li> <li>• Added temporary sulfuric acid and sodium hypochlorite tanks to Table 3 and updated introductory note on when to update Table 3.</li> <li>• Reworded the CR/WR order in several steps to match current work processes</li> <li>• Updated procedure references were made throughout</li> </ul>

Review Date	Revision Needed (Yes or No)	Revision Type * (Technical or Non-Technical)
4/1/2016  Revision 16		<ul style="list-style-type: none"> <li>• Step 4.8 – 40CFR112.7(g) has changed. The elements are still present. This section has minor edits and the no longer existent regulation references have been removed.</li> <li>• Changed Attachment 2</li> <li>• Removed signature column from SPCC Plan Review because it is not needed</li> <li>• Updated Table 3 chemicals and Figure 5</li> </ul> <p>Technical Changes</p> <ul style="list-style-type: none"> <li>• Added Spare Main Transformer to Table 2(EC-60908)</li> <li>• Table 1 – Added Flex Buildings (Item 33); updated tanker storage from 2 potential tankers to one (Item 15); Removed B.5.b pump because it is now in FLEX South Building (Item 30); changed reference from Hazardous Waste Yard to Hazmat Building (Items 19 and 20)</li> <li>• Table 2 – Added Spare Main Transformer</li> <li>• Updated Figures 3 &amp; 4</li> </ul>
11/15/16  Revision 17	Yes	<p>This revision is a non-technical change to clarify temporary tank inspections. Also changed were Attachment 2 and Figure 2.</p> <ul style="list-style-type: none"> <li>• Step 4.2.C – the bullet on mobile/portable tanks was updated.</li> <li>• Step 4.6.B – the bullet on portable liquid bins, tankers, and tanks was updated to clarify that portable liquid bins, tanks, and tankers are inspected and documented on a form similar to Attachment 2 or on the monthly inventory sheets</li> <li>• Attachment 2 was updated</li> <li>• Figure 2 was updated</li> </ul>

**\* Professional Engineer certification is only needed for technical amendments to the SPCC Plan.**

**P.E. Certification [40CFR112.3(d)]**

I hereby certify that I have examined the facility and being familiar with the provisions of 40CFR112 and LAC33.IX.Chapter 9, attest that this SPCC Plan has been prepared in accordance with good engineering practices, including consideration of applicable industry standards and with the requirements of these parts, that procedures for required inspections and testing have been established, and that the Plan is adequate for the facility.

Printed Name: CLAUDE E DEWEESE III  
Signature: Claude E Deweese III  
Registration Number: 27946  
State: LA Date: 6-20-2016



Claude E Deweese III

## **1.0 PURPOSE AND APPLICABILITY**

- 1.1 The purpose of this Spill Prevention, Control and Countermeasure (SPCC) Plan is to identify and describe the procedures, materials, equipment and facilities that are utilized at the River Bend Station (RBS) to minimize the frequency and severity of oil and chemical spills [40CFR112.1]
- 1.2 The SPCC requirements are applicable to the following containers [40CFR112.1(b)]:
  - Aboveground containers that are 55-gallons or greater in capacity.
  - Completely buried tanks not subject to ALL the technical requirements of 40CFR280 and 40CFR281.
  - Containers used for standby storage, seasonal storage or temporary storage, or not otherwise “permanently closed”.
  - Any “bunkered tank” or “partially buried tank”, or any container in a vault, each of which is considered an aboveground storage container.
- 1.3 This document contains spill prevention and control (SPC) requirements of LAC Title 33.Part IX, Subpart 1, Chapter 9. In addition to oil, the SPC requirements include hazardous substances with notification requirements for unauthorized discharges other than oil. These hazardous substances are not part of the 40CFR112 requirements. Hazardous substances in this document that support the SPC do not require a professional engineering certification.

## **2.0 GENERAL PLANT INFORMATION**

- 2.1 The information shown below is for purposes of requirements outlined in the Louisiana Administrative Code [LAC33:IX.907.B.1 – LAC33:IX.907.B.6]:

- |           |                    |   |
|-----------|--------------------|---|
| <b>A.</b> | Name of Facility:  | River Bend Station  |
| <b>B.</b> | Facility Operator: | Entergy Operations, Incorporated<br>5485 U.S. Highway 61<br>St. Francisville, Louisiana 70775                 |
| <b>C.</b> | Facility Owner:    | Entergy Louisiana, LLC<br>P.O. Box 61000<br>L-ENT-6H<br>New Orleans, LA 70161                                 |
| <b>D.</b> | Facility Location: | Approximately 2 miles South of St.<br>Francisville off U.S. Highway 61 in West<br>Feliciana Parish, Louisiana |

- E. Initial Facility Operation: June 16, 1986
- F. Facility Description: On-Shore Facility - Nuclear Fuel Steam Electrical Generation
- G. Nearest Receiving Water: Site drainage ditches to Grant's Bayou, then to Alligator Bayou, then to Thompson Creek, and then to Mississippi River.

### **3.0 SPCC PLAN AMENDMENTS AND REVIEWS**

#### **3.1 EPA Amendments**

- A. If RBS discharges more than 1,000 U.S. gallons of oil in a single discharge or discharges more than 42 U.S. gallons of oil in each of two discharges occurring within any twelve month period, submit the following information to the EPA within 60 days: [40CFR112.4(a)]
- Name of facility.
  - Your name.
  - Location of facility.
  - Maximum storage or handling capacity of facility and normal daily throughput.
  - Corrective action and countermeasures taken, including description of equipment repairs and replacements.
  - Adequate description of facility, including maps, flow diagrams, and topographical maps, as necessary.
  - Cause of discharge, including a failure analysis of system or subsystem in which failure occurred.
  - Additional preventive measures taken or contemplated to minimize possibility of recurrence.
  - Such other information as the EPA may reasonably require pertinent to Plan or discharge.
- B. State agency or agencies in charge of oil pollution control activities should be on copy for all information provided to the EPA. [40CFR112.4(c)]
- C. If EPA notifies facility that an amendment is necessary, SPCC Plan must be amended within 30 days after the notice, unless otherwise specified, and implemented no later than six months after the amendment. [40CFR112.4(e)]

#### **3.2 Facility Amendments (Louisiana more restrictive)**

- A. RBS must amend the SPCC Plan whenever there is a modification in facility design, storage capacity, operation or maintenance that renders the Plan inadequate and

implemented prior to or concurrent with the modification. [LAC33:IX.905.E]

### **3.3 SPCC Plan Reviews (Louisiana more restrictive)**

- A. The SPCC Plan must be reviewed and evaluated at least once every five years and if necessary, amended within 90 days of the review to include more effective prevention and control technology if the technology has been field-proven at the time of the review and will significantly reduce the likelihood of a discharge. [LAC33:IX.905.F]
- B. SPCC Plan reviews and evaluations are to be documented on the SPCC Plan Review Page (or similar) contained in this Plan.

### **3.4 Professional Engineer Certification [40CFR112.5(c)]**

- A. Professional Engineer must certify any technical amendments to the SPCC Plan related to oil. A Professional Engineer does not need to certify amendments for changes to substances other than oil.

## **4.0 SPCC GENERAL REQUIREMENTS**

### **4.1 Facility Conformance**

- A. The RBS SPCC Plan has been developed in accordance with the requirements and guidelines for preparation of SPCC Plans described in 40CFR112 and LAC 33:IX.905. The purpose of this Plan is to establish procedures and methods that will prevent and control, and define countermeasures to be implemented for the spillage from oil-filled equipment or oil and chemical bulk storage tanks. The ultimate goal of this Plan is to minimize the risk of a discharge into navigable waters of the United States and waters of the State of Louisiana. This Plan has the approval of Management at a level of authority necessary to commit the required resources for proper implementation and has been prepared in accordance with good engineering practices. This Plan meets the guidelines described in 40CFR112. [40CFR112.7(a)(1) & 40CFR112.7(a)(2)]

### **4.2 RBS Facility Layout [40CFR112.7(a)(3)]**

- A. Layout of the RBS facility is shown in Figure 1 to this Plan.
- B. Oil, gasoline and chemical storage locations present on the RBS site, along with storage capacity, are identified in Tables 1 through 3 and Figures 3 through 5 to this Plan. [40CFR112.7(a)(3)(i)]
- C. Discharge prevention measures including procedures for routine handling of oil, gasoline and chemical products are incorporated into overall plant operations and are administratively controlled by the site procedures listed below: [40CFR112.7(a)(3)(ii)]
  - RBS Procedure SOP-0012, Main Turbine Lube Oil System (SYS #111)
  - RBS Procedure SOP-0037, Fire Protection Water System Operating Procedure

- RBS Procedure SOP-0052, HPCS Diesel Generator (SYS #309)
- RBS Procedure SOP-0053, Standby Diesel Generator and Auxiliaries (SYS #309)
- RBS Procedure SOP-0054, Station Blackout Diesel Generator
- RBS Procedure COP-0110, Cooling Waters Systems Acid Addition
- RBS Procedure COP-0112, Dechlorination System Operation
- RBS Procedure COP-0116, Chlorination of the Various Cooling Water Systems
- RBS Procedure COP-0123, Chemical Treatment of the Standby Cooling Tower (SBCT)
- RBS Procedure COP-0127, Offloading of Trucks for Chemical Addition Systems

In summary, these procedures require the area to be flagged and/or truck wheels chocked, valves to be properly aligned, spill prevention measures to be established, permission to unload obtained, proper connecting and disconnecting of fill pipe, and inspections prior to departure of the truck. In addition, the majority of areas where oils, gasoline and chemicals are unloaded occur within containment. For unloading activities associated with oil and gasoline locations that are not administratively controlled by site procedures, the department responsible for the unloading activity is required to complete Attachment 1 to this Plan and forward the completed form to Chemistry/Environmental for record retention after the transfer is completed.

- Tank Overfill - The three 50,000 gallon diesel fuel oil tanks (Division I, II & III) have local level meters and associated day tanks are equipped with alarms that alert personnel to potential overfilling conditions in addition to the local level meters. Operators are present to monitor tank level to prevent overfilling.
- Mobile/Portable Tanks – RBS may occasionally have portable tankers and tanks on-site. These tankers, along with additional portable tanks, may be utilized on-site for purposes of refueling operations or temporary storage of oil. Although these tanks are staged at locations where a discharge could be promptly addressed utilizing absorbents available at the site to prevent a discharge to water, preventative measures such as blocking off storm drains or installing temporary containment measures are also implemented.
- Discovery of leaks - If leaks are discovered that results in oil, gasoline or chemical accumulation, the condition is typically documented in accordance with NMM Procedure EN-LI-102, Corrective Action Process. If applicable, a Work Request is initiated in accordance with NMM Procedure EN-WM-100, Work Request (WR) Generation, Screening and Classification. Discharge and drainage controls that exist for oil, gasoline and chemical storage containers located on the RBS site are identified in Tables 1 through 3 to this Plan. As already stated in Section 4.2.C of this Plan, unloading of oils, gasoline and chemicals occur within containment areas and spill prevention measures are established in accordance with site procedures for unloading activities. In the event of a spill, response personnel are cognizant of spill response material locations.[40CFR112.7(a)(3)(iii)]



- D. Countermeasures for discharge discovery, response and cleanup are incorporated into overall plant operations and are administratively controlled by RBS Procedure RBNP-035, "Hazardous Material Emergency Response Plan". This procedure prescribes the steps to be taken in the event of a spill, and outlines notification, response and cleanup actions. [40CFR112.7(a)(3)(iv)]
- E. Disposal of recovered spill materials is managed in accordance with Entergy Nuclear South's NMM Procedure EV-106, Waste Management Program. This procedure prescribes the requirements that the site must follow when managing and disposing of generated waste. [40CFR112.7(a)(3)(v)]
- F. Contact list and phone numbers for site spills are as follows: [40CFR112.7(a)(3)(vi)]
  - 1. Facility Response Coordinator - At RBS, all spills are reported to the Control Room at Extension 4524 or via the gaitronics system on Line 5 in accordance with RBS Procedure RBNP-035, Hazardous Material Emergency Response Plan. The Control Room then notifies the appropriate response personnel utilizing the current on-call duty list posted in the Control Room and the guidance in RBNP-035.
  - 2. National Response Center – (800) 424-8802.
  - 3. Federal, State and Local Agencies (LDEQ) - (225) 219-3640  
 LDPSC, Hazardous Materials Unit - (225) 925-6595  
 West Feliciana Parish LEPC and Sheriffs Office - (225) 635-3241  
 Waterworks Warning Network - Lower Mississippi River - (504) 599-0100, (225) 925-7216, (225) 925-7228, (225) 925-7229 or (225) 925-7230  
 U. S. Coast Guard – (225) 298-5400  
 EPA Region VI - (214) 655-2222
  - 4. Cleanup Contractors –
    - 1. Port Hudson Specialty Products 225-978-9604 or 225-753-9537 or 225-202-3030
    - 2. US Environmental 888-279-9930

#### **4.3 Reporting and Response Procedures**

- A. Reporting related to spills is procedurally controlled in accordance with RBS Procedure RBNP-035, Hazardous Material Emergency Response Plan. This procedure specifies the information to be gathered and reported to offsite regulatory agencies in the event of a spill. [40CFR112.7(a)(4)]

Spill responses are procedurally controlled in accordance with RBS Procedure RBNP-035, Hazardous Material Emergency Response Plan. This procedure outlines the notification and response actions to be taken in the event of a spill. [40CFR112.7(a)(5)]

#### 4.4 Equipment Failures [40CFR112.7(b)]

- A. The anticipated quantity of oil, gasoline, and chemicals that could occur in the event of a spill and the predicted flow direction is described in Tables 1 through 3 to this Plan.

#### 4.5 Containment Measures

- A. RBS will provide appropriate containment and/or diversionary structures or equipment to prevent a discharge. The entire containment system, including walls and floor, must be capable of containing the contents and must be constructed so that any discharge from a primary containment system, such as a tank, will not escape the containment system before cleanup occurs. At a minimum, RBS will use one of the following prevention systems or its equivalent: [40CFR112.7(c)]

Dikes, berms, or retaining walls sufficiently impervious to contain oil;

Curbing or drip pans;

Sumps and collection systems;

Culverting, gutters, or other drainage systems;

Weirs, booms, or other barriers;

Spill diversion ponds;

Retention ponds; or

Sorbent materials.

Sumps and collection systems

- B. Oil, gasoline and chemical containers at the RBS site are equipped with containment or diversionary structures as shown in Tables 1 through 3 to this Plan. In addition, response personnel are cognizant of spill response material locations. Spill response equipment is located in the HAZWOPR response trailer and also free issue. [40CFR112.7(c)]

- C. **IF** containment or diversionary structures are not practicable for containers, **THEN** RBS will: [40CFR112.7(d)]

- Document the reason(s) for impracticality.
- Follow the contingency measures outlined in RBS Procedure RBNP-035, "Hazardous Material Emergency Response Plan".
- Commit the required manpower, equipment and materials to expeditiously control and remove harmful quantities of spilled materials should a spill event occur.

## **4.6 Inspections, Tests & Records [40CFR112.7(e)]**

### **A. Plant Tours**

Plant tours are conducted periodically to visually identify abnormal plant conditions (i.e., drums, tanks, valves, leakage and deterioration of structures) in accordance with this SPCC Plan and the following procedures:

- RBS Procedure OSP-0028, Log Report – Normal Switchgear, Control and Diesel Generator Building
- RBS Procedure OSP-0030, Log Report – Turbine Building
- RBS Procedure OSP-0031, Log Report – Outside Area
- NMM Procedure EN-EV-106, Waste Management Program

If abnormal conditions such as leaks or container deterioration are observed, the condition is documented in accordance with NMM Procedure EN-LI-102, Corrective Action Process. The corrective action process will typically initiate a work request in accordance with NMM Procedure EN-WM-100, Work Request (WR) Generation, Screening and Classification.

### **B. Aboveground Tanks**

- RBS has several stationary oil tanks located inside buildings and covered structures that act as a back-up spill containment mechanism and that are not exposed to weather conditions. Any leaks associated with these tanks would be promptly identified in accordance with the procedures listed in Section 4.6.A above to this Plan and corrective actions taken as needed in accordance with NMM Procedure EN-LI-102, Corrective Action Process. As a result of the location of these tanks, it is highly unlikely that a tank failure would result in oil reaching navigable waters. Therefore based on best professional engineering judgment, RBS will continue to rely on visual observations to verify the integrity of these tanks in accordance with the process described in Section 4.6.A above to this Plan and the procedures listed in Section 4.6.C below to this Plan.
- The 6,000 gallon gasoline and diesel fuel oil tanks at the Vehicle Maintenance Shop are the only two stationary tanks at RBS that are exposed to the ambient temperature and humidity elements whose foundation is situated flush against the secondary containment floor. These tanks are under a covered roof. RBS will conduct integrity tests on these two tanks on a 10-year interval. The type of integrity test to be conducted will be based on recognized API, STI or other industry testing standards.
- Chemical tanks are visually inspected on a scheduled periodic basis as required in LAC33:IX.907 in accordance with RBS Procedure OSP-0031, Log Report – Outside Area and during Chemistry site rounds. Inspections conducted by Chemistry are scheduled as necessary and documented on an inspection sheet

similar to that shown in Attachment 2 or in a data management system.

- Portable liquid bins, tankers, and tanks are elevated, or placed in secondary containments, and are visually inspected periodically during Chemistry site rounds. These inspections are scheduled as necessary and documented on a form similar to Attachment 2 or on the monthly inventory sheets.
- 55-gallon containers are placed on pallets and typically stored under covered areas. These containers are periodically visually observed during site rounds conducted by Chemistry and inspections documented on a form similar to Attachment 2. Containment and diversionary structure requirements may be temporarily waived for short durations (ex: 1 shift) as long as the containers are structurally sound, employees are made cognizant of spill prevention measures by spill prevention briefing and the containers are under frequent observation (workers are in vicinity enough to report and contain a leak).
- Lube oil storage areas are periodically inspected through scheduled repetitive tasks in accordance with RBS Procedures ADM-0085 (Periodic Maintenance Program) and EDG-PR-004 (Preventive Maintenance Review/RCM).
- Diked areas when used will be inspected periodically during Chemistry site rounds. Inspections conducted by Chemistry are scheduled as necessary and documented. Inspections may be documented on Attachment 2 or other approved means.

#### C. Miscellaneous Inspections

Additional practices utilized in conjunction with other site activities that would identify plant equipment malfunctions or deteriorations are included in the following site procedures:

##### Emergency Diesel Generator Fuel Tanks

Preventive maintenance inspections are conducted on the Standby Diesel Generator Division I Fuel Tank (50,000 gallons), Standby Diesel Generator Division II Fuel Tank (50,000 gallons), and the HPCS Diesel Generator Division III Fuel Tank (50,000 gallons) in accordance with the preventative maintenance process.

##### Fire Protection Diesel Fuel Tanks

RBS Procedure SOP-0037, "Fire Protection Water System Operating Procedure" for periodic monitoring of the fuel tank levels, sediment and water accumulation in the fuel tanks and inspection of the general area.

##### Standby Diesel Generator Division I Fuel Tank & Day Tank

RBS Procedure SOP-0053, Standby Diesel Generator and Auxiliaries (SYS #309) for periodic monitoring of the fuel tank level, including the associated day tank, inspection of valves and the general area.

RBS Procedure STP-309-0201, Division I Diesel Generator Operability Test for

periodic monitoring of the fuel tank level, fuel transfer operability and water accumulation in the tanks.

RBS Procedure STP-309-6301, Division I EDG Fuel Oil Transfer Pump and Valve Operability Test, for inspection of the tank level and fuel transfer operability associated with the pumps and valves.

#### Standby Diesel Generator Division II Fuel Tank & Day Tank

RBS Procedure SOP-0053, Standby Diesel Generator and Auxiliaries (SYS #309), for periodic monitoring of the fuel tank level, including the associated day tank, inspection of valves and the general area.

RBS Procedure STP-309-0202, Division II Diesel Generator Operability Test, for periodic monitoring of the Standby Generator fuel tank level (including the day tank), fuel transfer operability and water accumulation in the tanks.

RBS Procedure STP-309-6302, Division II EDG Fuel Oil Transfer Pump and Valve Operability Test for inspection of tank level and fuel transfer operability associated with the pumps and valves.

#### HPCS Diesel Generator Division III Fuel Tank & Day Tank

RBS Procedure SOP-0052, HPCS Diesel Generator SYS #309, for periodic monitoring of the fuel tank level and inspection of valves and the general area .

RBS Procedure STP-309-0203, Division III Diesel Generator Operability Test, for periodic monitoring of the fuel tank level, fuel transfer operability and water accumulation in the tanks.

RBS Procedure STP-309-6315, Division III HPCS EDG Fuel Oil Transfer Pump and Valve Operability Test, for inspection of the fuel tank level and fuel transfer operability associated with the pumps and valves.

#### Station Blackout Diesel Generator Fuel Tank

RBS Procedure SOP-0054, “Contingency Equipment Operations” for periodic inspection of fuel tank for leaks.

#### Turbine Lube Oil Reservoir, Tanks & Sump

RBS Procedure SOP-0012, “Main Turbine Lube Oil System (SYS #111) for monitoring of tank levels and leaks associated with the lube oil system.

### **D. Spill Supplies**

Spill response supplies are periodically inventoried and replenished as necessary in accordance with RBS Procedure RBNP-035, Hazardous Materials Emergency Response Plan.

**E. Aboveground Valve and Piping**

Periodic inspections are conducted on aboveground valves and piping to identify potential deteriorating conditions in accordance with the site procedures and practices listed in Sections 4.6.A, 4.6.B and 4.6.C above to this Plan. If abnormal conditions such as leaks or container deterioration are observed, the condition is documented in accordance with NMM Procedure EN-LI-102, "Corrective Action Process. A work request is typically initiated in accordance with NMM Procedure EN-WM-100, Work Request (WR) Generation, Screening and Classification.

**F. Records**

Records of inspections and testing of tanks at the RBS site are maintained in accordance with NMM Procedure EN-AD-103, Document Control and Records Management Program, for a minimum of three years.

**4.7 Personnel Training [40CFR112.7(f)]**

**A. Site-Wide Personnel Training [40CFR112.7(f)(1)]**

Employees and contractors employed at the site are required to complete Plant Access Training, including a written test, on an annual basis. Plant Access Training instructs personnel to immediately notify the Control Room upon discovering a leak or spill, report improper operating practices and deteriorating storage conditions that could lead to a spill, and that the SPCC Plan contains information and measures necessary to ensure that spills are minimized at the site.

**B. Site-Specific Personnel Training [40CFR112.7(f)(1)]**

- The site procedures listed in this Plan are utilized at the RBS site for the operation and maintenance of oil-related and chemical equipment. Department personnel involved with these type activities receive training on these procedures.
- The Haz-Mat Response Team, made up of site-specific employees from different departments, responds to all site spills and receives more in-depth training annually.
- Personnel involved in hazardous waste activities are trained on a yearly basis.

**C. Spill Prevention Designee [40CFR112.7(f)(2)]**

The General Manager, Plant Operations is designated as having the responsibility for oil and chemical spill prevention at RBS.

**D. Spill Prevention Briefings [40CFR112.7(f)(3)]**

- Spill prevention briefings consisting of SPCC Plan revisions, spill events or failures, or malfunctioning components when applicable are included as part of the environmental training module discussed in Step 4.7.A above to this plan.
- Additional spill briefings may also be conducted by any of the following methods:

- ◆ Spill incidents and response actions are critiqued by the HAZ-MAT response team.
- ◆ During peer group meetings consisting of environmental representatives from different nuclear sites.
- ◆ Periodic newsletters to site employees via Inside Entergy or site broadcasts outlining spill events and spill prevention requirements.
- ◆ Documented spill events utilizing the Condition Reporting system with plant management/department reviews.

#### 4.8 Security [40CFR112.7(g)]

##### A. Tanks

- Chain link fences, with one of the fences topped with barbed wire, enclose the operating plant.
- The owner controlled area is patrolled and/or monitored routinely by plant security.

##### B. Valves

Drain valves and any other valves permitting direct outward flow of a diked area's contents to the surface have adequate security measures so that they remain in the closed position when in non-operating or non-standby status. Drainage from diked areas is restrained by a manually operated valve to prevent a discharge from entering the facility drainage system. The valves are normally sealed closed, except when draining the secondary containment structure. The content of the secondary containment dike is inspected by facility personnel prior to draining to ensure that only oil-free water is allowed to enter the facility storm water drainage system. The drain valve is opened and resealed under direct personnel supervision. Drainage events are recorded in the log maintained by Environmental in the LPDES Weekly Sample Sheet or equivalent.

##### C. Oil Pumps

RBS plant operating procedures listed in Sections 4.2.C and 4.6.C above to this Plan ensure that starter control on oil pumps are either locked in the off position or located at a site accessible only to authorized personnel when the pumps are in a non-operating or non-standby status.

##### D. Loading/Unloading Connections

- Should a piping system be out of service for an extended period of time, RBS would ensure that the terminal connections at the transfer point (fill point) be blank flanged and capped, as well as have the piping marked as to its origin and its "out of service" status in accordance with NMM Procedure EN-OP-102, Protective and Caution Tagging.
- Unloading and tank transfers are performed in accordance with Section 4.2.C above to this Plan.

**E. Facility Lighting**

- The RBS site is provided with numerous floodlights and other lighting fixtures, which provide satisfactory illumination for visual detection of significant releases during hours of darkness.
- The lighting described above, along with 24-hours per day security surveillance, discourages any attempts of vandalism.

**4.9 Loading/Unloading Procedures [40CFR112.7(h)]**

- A. Sumps and curbed areas are utilized at the site to contain discharges from unloading activities associated with large quantities of oils, gasoline and chemicals. For areas where sumps or curbing does not exist, the management practices identified in Section 4.2.C of this Plan are followed during unloading activities. **[40CFR112.7(h)(1)]**
- B. During unloading activities, flagging is placed around the truck to prevent premature departure of the truck and/or the wheels are chocked. **[40CFR112.7(h)(2)]**
- C. Prior to filling and departure, the fill pipe of the truck is verified to be disconnected and not leaking in accordance with the management practices identified in Section 4.2.C above to this Plan. In addition, truck drivers are required to comply with the unloading requirements specified in Section 4.2.C above to this Plan. **[40CFR112.7(h)(3)]**

**4.10 Field-Constructed Aboveground Tanks [40CFR112.7(i)]**

- A. RBS does not have any field-constructed tanks on-site. Therefore, this issue is not applicable.

**4.11 Additional Prevention Standards [40CFR112.7(j)]**

- A. The State of Louisiana accepts a SPCC Plan that has been prepared in accordance with 40CFR112 per LAC33:IX.903.H. However, in accordance with LAC33:IX.903.A, the State of Louisiana does require that the Spill Prevention and Control (SPC) Plan address those chemicals listed in LAC33:I.3931, 40CFR117.3 and 40CFR302.4, if present on-site. Therefore, the RBS SPCC Plan addresses those chemicals that are present on-site. Chemicals added supporting the SPC do not require a Professional Engineering review.
- B. Diagrams for applicable tank piping are contained in the P&ID drawings in Table 1.

**4.12 Facility Drainage [40CFR112.8(b)]**

**A. Diked Storage Areas [40CFR112.8(b)(1)]**

- The only bulk storage containers (as defined in 40CFR112.2) that are exposed to rainwater are the portable diesel fuel oil auxiliary tankers, which are utilized on as-needed basis. All other bulk storage containers are either covered or located inside a building. Drainage from all diked storage areas (inside & outside) is restrained



by a valve, and/or drain to sumps or oil water separators that are designed to handle such leakage.

- Secondary containment drainage from the outside areas is checked by Chemistry or Operations personnel to ensure that it meets appropriate water quality standards prior to discharging to either East or West Creek. A log of these drainage events is maintained by Environmental in the LPDES Weekly Sample Sheet or equivalent.

**B. Drainage Valves [40CFR112.8(b)(2)]**

- Where applicable, only valves of manual and open-and-closed design are used for drainage of diked areas.
- As shown in Tables 1 through 3 to this Plan, drainage from secondary containment either enters an oil water separator or sump prior to final discharge, or is contained within the containment and checked prior to final discharge as discussed in Section 4.12.A above to this Plan.
- For secondary containment areas that do not drain into a separator or sump prior to discharge, the contents are checked by Chemistry or Operations personnel to ensure water quality standards are met as discussed in Section 4.12.A above to this Plan.

**C. Undiked Areas**

- There is no aboveground piping located outside secondary containment as it relates to bulk storage containers and spill prevention measures are implemented during unloading activities as discussed in Section 4.2.C above to this Plan. [40CFR112.8(b)(3)]
- For the one undiked area associated with the 200 gallon Field Administration Diesel Generator Fuel Tank, a diversionary curb structure is in place to prevent any discharge from reaching navigable waters. In addition, absorbent materials are readily available if needed. [40CFR112.8(b)(4)]

**D. Facility Drainage System Treatment [40CFR112.8(b)(5)]**

RBS has several onsite oil water separators that receive facility drainage. However, no pump transfer operations are associated with these systems.

**4.13 Bulk Storage Containers [40CFR112.8(c)]**

**A. Tank Construction [40CFR112.8(c)(1)]**

Bulk storage tanks used at the RBS facility are compatible with the materials stored within them and with the conditions of storage, such as pressure and temperature. 55-gallon containers are DOT approved and rated for storage of petroleum derived oils.

**B. Secondary Containment Structures [40CFR112.8(c)(2)]**

Secondary containment structures exposed to rainwater are designed to provide

containment for the entire tank contents plus sufficient freeboard for rainfall.

C. Secondary Containment Drainage [40CFR112.8(c)(3)]

- Management of drainage from secondary structures is discussed Section 4.12 above to this Plan.

RBS personnel examine diked areas prior to draining to ensure that it meets appropriate water quality standards prior to discharging to either East or West Creek. A log of these drainage events is maintained by Environmental in the Weekly LPDES Sample Sheet.

- As discussed in Section 4.12.A of this Plan, the only bulk storage containers with secondary containment exposed to rainwater is where portable diesel fuel oil auxiliary tankers would be stored. Should there be a significant quantity of rainwater collected, drainage from these areas would flow into West Creek after the rainwater had been examined to ensure that it meets appropriate water quality standards.

D. Buried or Partially Buried Tanks [40CFR112.8(c)(4) – 40CFR112.8(c)(5)]

RBS has no buried or partially buried metallic tanks (corrosion protection and tank testing).

E. Aboveground Tank Testing [40CFR112.8(c)(6)]

- RBS has several stationary oil tanks located inside buildings and covered structures that act as a back-up spill containment mechanism and that are not exposed to weather conditions. Any leaks associated with these tanks would be promptly identified in accordance with the procedures listed in Section 4.6.A above to this Plan and corrective actions taken as needed in accordance with NMM Procedure EN-LI-102, Corrective Action Process. As a result of the location of these tanks, it is highly unlikely that a tank failure would result in oil reaching navigable waters. Therefore based on best professional engineering judgment, RBS will continue to rely on visual observations to verify the integrity of these tanks in accordance with the process described in Section 4.6.A of this Plan and the procedures listed in Section 4.6.C of this Plan.
- The 6,000 gallon gasoline and diesel fuel oil tanks at the Vehicle Maintenance Shop are the only two stationary tanks at RBS that are exposed to the ambient temperature and humidity elements whose foundation is situated flush against the secondary containment floor. These tanks are under a covered roof. RBS will conduct integrity tests on these two tanks on a 10-year interval. The type of integrity test to be conducted will be based on recognized API, STI or other industry testing standards.
- 55-gallon containers are placed on pallets and typically stored under covered areas. These containers are periodically visually observed during site rounds conducted by Chemistry and inspections conducted in accordance with Section 4.6 of this SPCC.

**F. Internal Heating Coils [40CFR112.8(c)(7)]**

There are no internal heating coils at RBS.

**G. Fail-Safe Engineering [40CFR112.8(c)(8)]**

- Automatic tank gauges, high level alarms, and/or visual observation during filling operations are utilized, where appropriate, to minimize the risk of spills.
- Where applicable, liquid level sensing devices are periodically tested to ensure operability in accordance with RBS's Preventative Maintenance Program utilizing the procedures listed in Sections 4.2.C and 4.6.C of this Plan.

**H. Effluent Treatment Facilities [40CFR112.8(c)(9)]**

- Plant design is such that leaks or spills from a majority of the bulk storage tanks are contained in sumps or oil water separators.
- The onsite oil water separators are on a periodic maintenance schedule and RBS personnel routinely conducts visual inspections of the LPDES stormwater outfalls as a means to detect possible system upsets that could cause a discharge.

**I. Visible Oil Leaks [40CFR112.8(c)(10)]**

- Visible leaks that result in a loss of material from tank seams, gaskets, rivets or bolts is documented in accordance with NMM Procedure EN-LI-102, Corrective Action Process. The condition would typically result in the initiation of a work request in accordance with NMM Procedure EN-WM-100, Work Request (WR) Generation, Screening and Classification,
- Any accumulation of waste spilled material is managed in accordance with NMM Procedure EV-106, Waste Management Program.

**J. Mobile or Portable Oil or Chemical Storage Containers [40CFR112.8(c)(11)]**

- RBS will position or locate mobile or portable storage containers to prevent a discharge (containers of 55 gallons or greater in capacity).
- Except for mobile refuelers and other non-transportation-related tank trucks, a secondary means of containment, such as a dike or catchment basin, must be furnished and be sufficient to contain the capacity of the largest single compartment or container with sufficient freeboard to contain precipitation.

**4.14 Facility Transfer Operations [40CFR112.8(d)]**

**A. Buried Piping [40CFR112.8(d)(1)]**

There has been no underground piping with a protective wrapping or coating installed or replaced after August 16, 2002 at the RBS site. However should any deficiencies associated with existing buried piping be identified, the condition would tracked and trended in accordance with NMM Procedure EN-LI-102, "Corrective Action Process"

and appropriate actions taken.

4.15 B. Out-of-Service Pipeline [40CFR112.8(d)(2)]

Whenever an oil piping system is out of service for an extended period of time, RBS would ensure that the terminal connections at the transfer point (fill point) are blank flanged and capped, as well as have the piping marked as to its origin and its “out of service” status in accordance with NMM Procedure EN-OP-102, Protective and Caution Tagging.

4.16 C. Pipe Supports [40CFR112.8(d)(3)]

RBS pipe supports are limited to indoor locations and are designed to minimize abrasion and corrosion and allow for expansion and contraction. In addition, any potential problems associated with abrasion or corrosion would be identified during the plant tour process that is discussed in Section 4.6.A above to this Plan.

4.17 D. Aboveground Valves and Pipelines [40CFR112.8(d)(4)]

Valves and pipelines located in indoor locations are periodically inspected visually in accordance with the site procedures and practices listed in Sections 4.6.A, 4.6.B and 4.6.C above to this Plan. As a note, the majority of aboveground pipelines for transporting petroleum products are located indoors

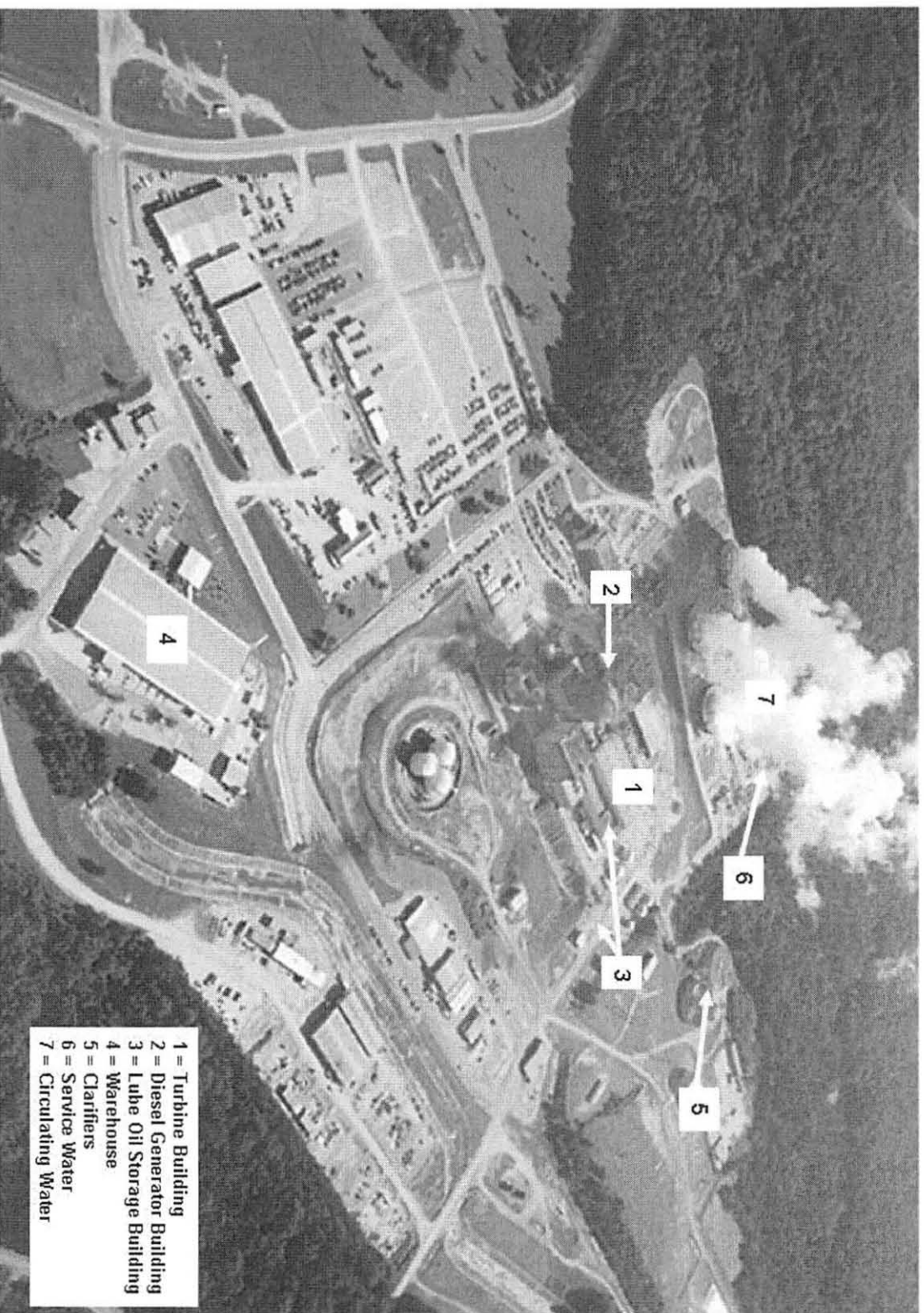
E. Vehicular Traffic [40CFR112.8(d)(5)]

All oil transfer lines are protected from vehicular traffic due to their location. Where applicable, protection of valves from vehicular traffic is accomplished either through the use of curbs, guardrails, stanchions, signs, or through the use of facility personnel accompanying the delivery trucks while at RBS.

**5.0 FACILITY RESPONSE PLAN APPLICABILITY [40CFR112.20(e)]**

- 5.1 Based on screening criteria shown in Attachment 3, RBS does not represent a substantial harm to the environment by discharging oil into or upon navigable waters or adjoining shorelines, and therefore, is not required to develop a facility response plan.

Figure 1 - RBS Facility Layout





**Table 1 - Oil and Gasoline Storage Locations**

*Changes to oil storage locations do not require a mandatory revision to the SPCC provided a log of the location changes are kept. These changes will be incorporated in the next revision.*

<b>Description</b>	<b>Volume Gallons</b>	<b>Location (Refer to Figure 2)</b>	<b>Drainage</b>	<b>Rate of Flow</b>	<b>Containment/ Diversionary</b>	<b>Remarks</b>
1. Fire Protection Diesel Fuel Tank "1A" PID-15-1E	500	Fire Protection Pump House	Through oil water separator #2 into East Creek	Variable	Yes	Inside metal enclosed building
2. Fire Protection Diesel Fuel Tank "1B" PID-15-1E	500	Fire Protection Pump House	Through oil water separator #2 into East Creek	Variable	Yes	Inside metal enclosed building
3. Standby Diesel Generator Division I Fuel Tank * PID-08-09A	50,000	Diesel Generator Building	Through oil water separator #1 into sewage treatment plant	Variable	Yes	Inside concrete underground vault
4. Standby Diesel Generator Division II Fuel Tank * PID-08-09A	50,000	Diesel Generator Building	Through oil water separator #1 into sewage treatment plant	Variable	Yes	Inside concrete underground vault
5. HPCS Diesel Generator Division III Fuel Tank * PID-08-09A	50,000	Diesel Generator Building	Through oil water separator #1 into sewage treatment plant	Variable	Yes	Inside concrete underground vault
6. Standby Diesel Generator Division I Fuel Oil Day Tank PID-08-09A	535	Diesel Generator Building	Through oil water separator #1 into sewage treatment plant	Variable	Yes	Inside concrete enclosed building
7. Standby Diesel Generator Division II Fuel Oil Day Tank PID-08-09A	535	Diesel Generator Building	Through oil water separator #1 into sewage treatment plant	Variable	Yes	Inside concrete enclosed building
8. HPCS Diesel Generator Division III Fuel Oil Day Tank PID-08-09A	535	Diesel Generator Building	Through oil water separator #1 into sewage treatment plant	Variable	Yes	Inside concrete enclosed building

**\* Unloading area associated with this location. Any spills during unloading would be contained in a sump covered with grating.**

**Table 1 (continued)**

**Oil and Gasoline Storage Locations**

<b>Description</b>	<b>Volume Gallons</b>	<b>Location (Refer to Figure 2)</b>	<b>Drainage</b>	<b>Rate of Flow</b>	<b>Containment/ Diversionary</b>	<b>Remarks</b>
9. Standby Diesel Generator Division I Lube Oil Sump Tank PID-08-09C	514	Diesel Generator Building	Through oil water separator #1 into sewage treatment plant	Variable	Yes	Inside concrete enclosed building
10. Standby Diesel Generator Division II Lube Oil Sump Tank PID-08-09C	514	Diesel Generator Building	Through oil water separator #1 into sewage treatment plant	Variable	Yes	Inside concrete enclosed building
11. HPCS Diesel Generator Division III Lube Oil Sump Tank PID-08-09D	514	Diesel Generator Building	Through oil water separator #1 into sewage treatment plant	Variable	Yes	Inside concrete enclosed building
12. Station Blackout Diesel Generator Fuel Tank #2	350	North of Diesel Generator Building	Through stormwater drain into East Creek	Variable	Yes	
13. Field Administration Diesel Generator Fuel Tank	200	East of Field Administration Building	On ground	Variable	No	Diversionary curb & absorbent materials
14. Backup Air Compressor Diesel Generator Fuel Tank "C6"	244	Southwest of Turbine Building	Through stormwater drain into East Creek	Variable	Yes	Sorbent materials (Outside a building)
15. Auxiliary Diesel Fuel Tanker	2,750	South of ISFSI Crawler Building	On ground into West Creek	Variable	Yes	



**Table 1 (continued)**

**Oil and Gasoline Storage Locations**

<b>Description</b>	<b>Volume Gallons</b>	<b>Location (Refer to Figure 2)</b>	<b>Drainage</b>	<b>Rate of Flow</b>	<b>Containment/ Diversionary</b>	<b>Remarks</b>
16. Vehicle Gasoline Fuel Tank *	6,000	Vehicle Maintenance Shop	On ground into West Creek	Variable	Yes	Covered by roof
17. Vehicle Diesel Fuel Tank *	6,000 (portable 100, 250, 500)	Vehicle Maintenance Shop/Additional portable tanks occasionally utilized onsite for maintenance activities	On ground into West Creek or East Creek or other areas of property depending on location	Variable	Yes	Covered by roof/ Temporary portable tanks are not covered by a roof
18. Drummed Oil	11,550 (varies)	Warehouse Oil Storage Building	On ground into West Creek	Variable	Yes	Covered by roof
19. Drummed Used Oil	Varies	Hazmat Building	On ground into West Creek	Variable	Yes	Inside enclosed building
20. Drummed EHC Fluid	Varies	Hazmat Building	On ground into West Creek	Variable	Yes	Inside enclosed building
21. Electrohydraulic Fluid (Plant Systems)	1,100 (Varies)	Turbine Building	Turbine Building sump	Variable	Yes	Inside concrete enclosed building
22. Lube Oil Containers & Drums	1,600 (Varies)	Lube Oil Storage Facility	Into a sump and then drummed for offsite disposal	Variable	Yes	Inside enclosed building
23. Lube Oil Containers	1,440 (Varies)	Turbine Lube Oil Storage Facility	Into a sump and then drummed for Radwaste processing	Variable	Yes	Inside enclosed building
24. Drummed Used Oil	990 (varies)	Turbine Lube Oil Storage Facility	Into a sump and then drummed for Radwaste	Variable	Yes	Inside enclosed

			processing			building
--	--	--	------------	--	--	----------

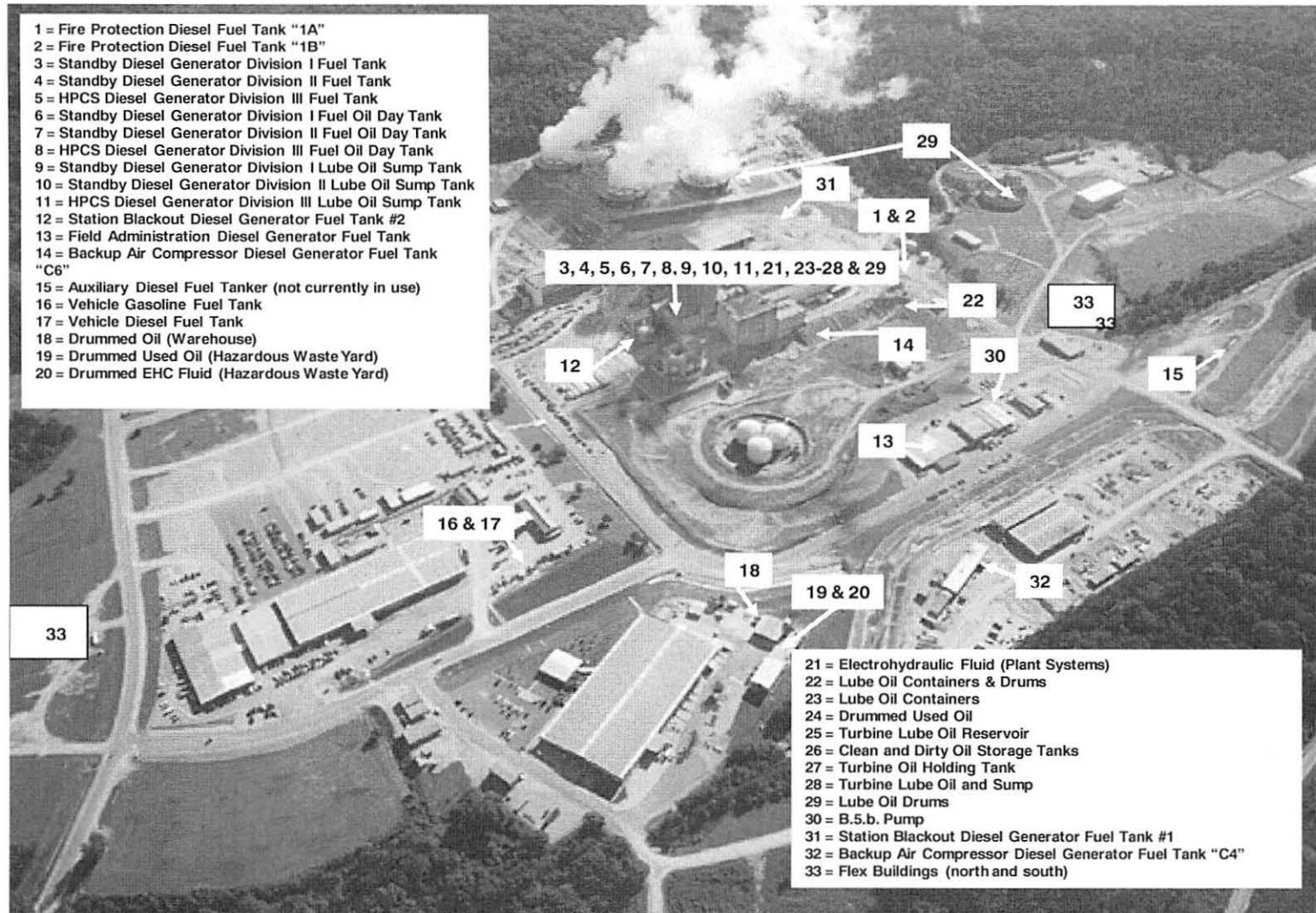
**\* Unloading area associated with this location. Any spills during unloading would be contained in a sump covered with grating.**

**Table 1 (continued)****Oil and Gasoline Storage Locations**

<b>Description</b>	<b>Volume Gallons</b>	<b>Location (Refer to Figure 2)</b>	<b>Drainage</b>	<b>Rate of Flow</b>	<b>Containment/ Diversionary</b>	<b>Remarks</b>
25. Turbine Lube Oil Reservoir PID-16-03A	10,095	Turbine Building	Into a Sump	Variable	Yes	Inside enclosed building
26. Clean & Dirty Oil Storage Tanks PID-16-03A	12,000 (Each)	Turbine Building	Into a Sump	Variable	Yes	Inside enclosed building
27. Turbine Oil Holding Tank PID-16-03A	750	Turbine Building	Into a Sump	Variable	Yes	Inside enclosed building
28. Turbine Lube Oil Sump PID-16-12A	1,000	Turbine Building	Into Waste Drums	Variable	Yes	Inside enclosed building
29. Lube Oil Drums	55 (each)	Clarifiers, CWS Cooling Towers	Portable sump	Variable	Yes	
30. (Reserved)						
31. Station Blackout Diesel Generator Fuel Tank #1	180	Various	On Ground	Variable	Yes	
32. Backup Air Compressor Diesel Generator Fuel Tank "C4"	160	Various	On Ground	Variable	Yes	Portable Berm
33. North Flex Building**	1400	North Flex Building	Sump in Building	Variable	Yes	Contained in building
34. South Flex Building**	1900	South Flex Building	Sump in Building	Variable	Yes	Contained in building

**\*\* - the quantities for the FLEX Buildings are estimates based on the inventory of equipment stored inside**

Figure 3 - Oil and Gasoline Storage Locations



**Table 2 - Transformer Locations**

*Changes to transformer locations do not require a mandatory revision to the SPCC provided a log of the location changes are kept. These changes will be incorporated in the next revision.*

<b>Description</b>	<b>Volume Gallons</b>	<b>Location (Refer to Figure 3)</b>	<b>Drainage</b>	<b>Rate of Flow</b>	<b>Containment / Diversionary</b>	<b>Remarks</b>
1. Transformer 1STX-XNS1A	3,951	East Wall of Turbine Building	Through oil water separator #3 into East Creek	Variable	Yes	Non-PCB (<5 ppm)
2. Transformer 1STX-XNS1B	3,951	East Wall of Turbine Building	Through oil water separator #3 into East Creek	Variable	Yes	Non-PCB (<5 ppm)
3. Transformer 1STX-XNS1C	3,405	East Wall of Turbine Building	Through oil water separator #3 into East Creek	Variable	Yes	Non-PCB (<5 ppm)
4. Transformer 1RTX-XSR1C	7,900	East Wall of Turbine Building	Through oil water separator #3 into East Creek	Variable	Yes	Non-PCB (<5 ppm)
5. Transformer 1RTX-XSR1E	15,300	East Wall of Turbine Building	Through oil water separator #3 into East Creek	Variable	Yes	Non-PCB (<1 ppm)
6. Transformer 1MTX-XM1	16,733	East Wall of Turbine Building	Through oil water separator #3 into East Creek	Variable	Yes	Non-PCB (<5 ppm)
7. Transformer 1MTX-XM2	16,733	East Wall of Turbine Building	Through oil water separator #3 into East Creek	Variable	Yes	Non-PCB (<5 ppm)
8. Transformer 1RTX-XSR1F	15,300	Southwest of Turbine Building	Through oil water separator #3 into East Creek	Variable	Yes	Non-PCB (<2 ppm)
9. Transformer 1RTX-XSR1D	7,900	Southwest of Turbine Building	Through oil water separator #3 into East Creek	Variable	Yes	Non-PCB (<5 ppm)

**Table 2 (continued)**

**Transformer Locations**

<b>Description</b>	<b>Volume Gallons</b>	<b>Location (Refer to Figure 3)</b>	<b>Drainage</b>	<b>Rate of Flow</b>	<b>Containment / Diversiary</b>	<b>Remarks</b>
10. Transformer 1NJS-X2A	234	Cooling Tower A	Into a sump, and then on ground into East Creek	Variable	Yes	Non-PCB (<5 ppm)
11. Transformer 1NJS-X2B	234	Cooling Tower A	Into a sump, and then on ground into East Creek	Variable	Yes	Non-PCB (<5 ppm)
12. Transformer 1NJS-X2C	234	Cooling Tower C	Into a sump, and then on ground into East Creek	Variable	Yes	Non-PCB (<5 ppm)
13. Transformer 1NJS-X2D	234	Cooling Tower C	Into a sump, and then on ground into East Creek	Variable	Yes	Non-PCB (<5 ppm)
14. Transformer 1NJS-X2E	234	Cooling Tower B	Into a sump, and then on ground into East Creek	Variable	Yes	Non-PCB (<5 ppm)
15. Transformer 1NJS-X2F	234	Cooling Tower B	Into a sump, and then on ground into East Creek	Variable	Yes	Non-PCB (<5 ppm)
16. Transformer 1NJS-X2G	234	Cooling Tower D	Into a sump, and then on ground into East Creek	Variable	Yes	Non-PCB (<5 ppm)
17. Transformer 1NJS-X2H	234	Cooling Tower D	Into a sump, and then on ground into East Creek	Variable	Yes	Non-PCB (<5 ppm)
18. Transformer 1NJS-X3A	197	Clarifiers	Into a sump, and then on ground into East Creek	Variable	Yes	Non-PCB (<1 ppm)

**Table 2 (continued)****Transformer Locations**

<b>Description</b>	<b>Volume Gallons</b>	<b>Location (Refer to Figure 3)</b>	<b>Drainage</b>	<b>Rate of Flow</b>	<b>Containment / Diversionary</b>	<b>Remarks</b>
19. Transformer 1NJS-X3B	197	Clarifiers	Into a sump, and then on ground into East Creek	Variable	Yes	Non-PCB (<1 ppm)
20. Transformer 1NJS-X3C	200	Service Water Area (Hypochlorite System)	Into a sump, and then on ground into East Creek	Variable	Yes	Non-PCB (<1 ppm)
21. Transformer 1NJS-X3D	200	Service Water Area (Hypochlorite System)	Into a sump, and then on ground into East Creek	Variable	Yes	Non-PCB (<1 ppm)
22. Transformer 1NJS-X4A	241	Service Water Area (Closed Loop System)	Into a sump, and then through Outfall 005 into Grant Bayou	Variable	Yes	Non-PCB (<2 ppm)
23. Transformer 1NJS-X4B	241	Service Water Area (Closed Loop System)	Into a sump, and then through Outfall 005 into Grant Bayou	Variable	Yes	Non-PCB (<2 ppm)
24. Transformer 1RCS-X1A	1,260	West Wall of Fuel Building (Recirculating MG Set Room)	Into a sump, and then through a stormwater drain into East Creek	Variable	Yes	Non-PCB (<2 ppm)
25. Transformer 1RCS-X1B	1,260	West Wall of Fuel Building (Recirculating MG Set Room)	Into a sump, and then through a stormwater drain into East Creek	Variable	Yes	Non-PCB (<2 ppm)
26. Transformer 1STX-XS2A	1,490	Circulating Water House	Into a sump, and then on ground into East creek	Variable	Yes	Non-PCB (<2 ppm)
27. Transformer 1STX-XS2B	1,490	Circulating Water House	Into a sump, and then on ground into East Creek	Variable	Yes	Non-PCB (<2 ppm)

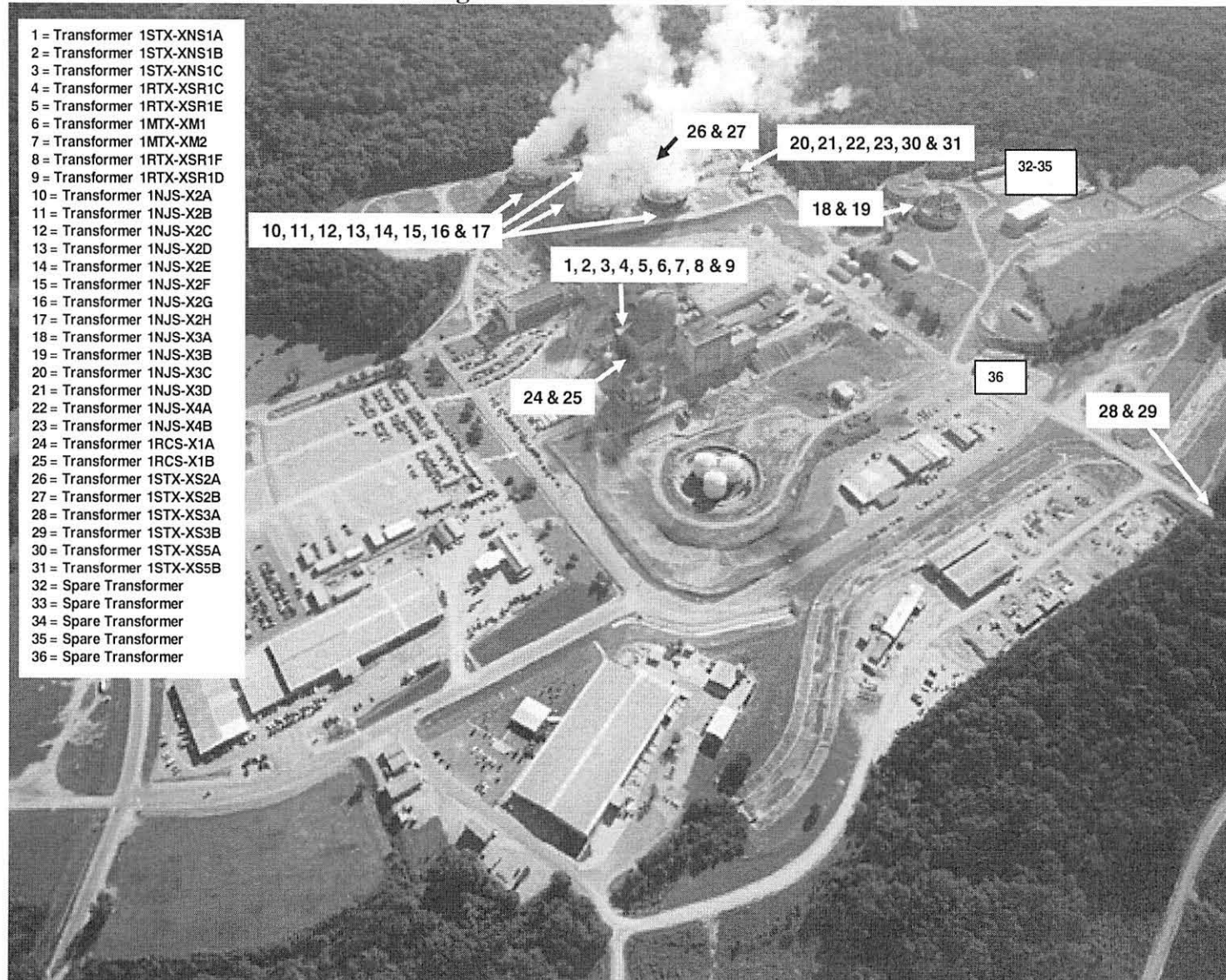


**Table 2 (continued)****Transformer Locations**

<b>Description</b>	<b>Volume Gallons</b>	<b>Location (Refer to Figure 3)</b>	<b>Drainage</b>	<b>Rate of Flow</b>	<b>Containment / Diversiary</b>	<b>Remarks</b>
28. Transformer 1STX-XS3A	620	River Intake	On ground into Mississippi River	Variable	Yes	Non-PCB (<2 ppm)
29. Transformer 1STX-XS3B	620	River Intake	On ground into Mississippi River	Variable	Yes	Non-PCB (<2 ppm)
30. Transformer 1STX-XS5A	1,270	Service Water Area (Closed Loop System)	Into a sump, and then through Outfall 005 into Grant Bayou	Variable	Yes	Non-PCB (<2 ppm)
31. Transformer 1STX-XS5B	1,270	Service Water Area (Closed Loop System)	Into a sump, and then through Outfall 005 into Grant Bayou	Variable	Yes	Non-PCB (<2 ppm)
32. Spare Transformer #1* Moloney S/N 2059031	~1555	Laydown Area (Behind Clarifiers)	Into curbed area, and then on ground into East Creek	Variable	Yes	Non-PCB (<2 ppm)
33. Spare Transformer #2* Westinghouse (1RTX-XSR1A)	~10384	Laydown Area (Behind Clarifiers)	Into curbed area, and then on ground into East Creek	Variable	Yes	Non-PCB (<2 ppm)
34. Spare Transformer #3* ABB; S/N HB09707-01	~1097	Laydown Area (Behind Clarifiers)	Into curbed area, and then on ground into East Creek	Variable	Yes	Non-PCB (<2 ppm)
35. Spare Transformer #4* Westinghouse S/N VCS6505	~11144	Laydown Area (Behind Clarifiers)	Into curbed area, and then on ground into East Creek	Variable	Yes	Non-PCB (<2 ppm)
36. Spare Main Transformer	14,400	Bermed Area East of ISFSI Crawler	Into secondary containment, and then on ground to West Creek	Variable	Yes	Non-PCB (<2 ppm)

\* - Spare transformers may be moved offsite which will not invoke a revision to the SPCC. Actual spare transformer inventories will be documented during routine inspections on Attachment 2.

Figure 4 - Transformer Locations



**Table 3 - Chemical Storage Locations**

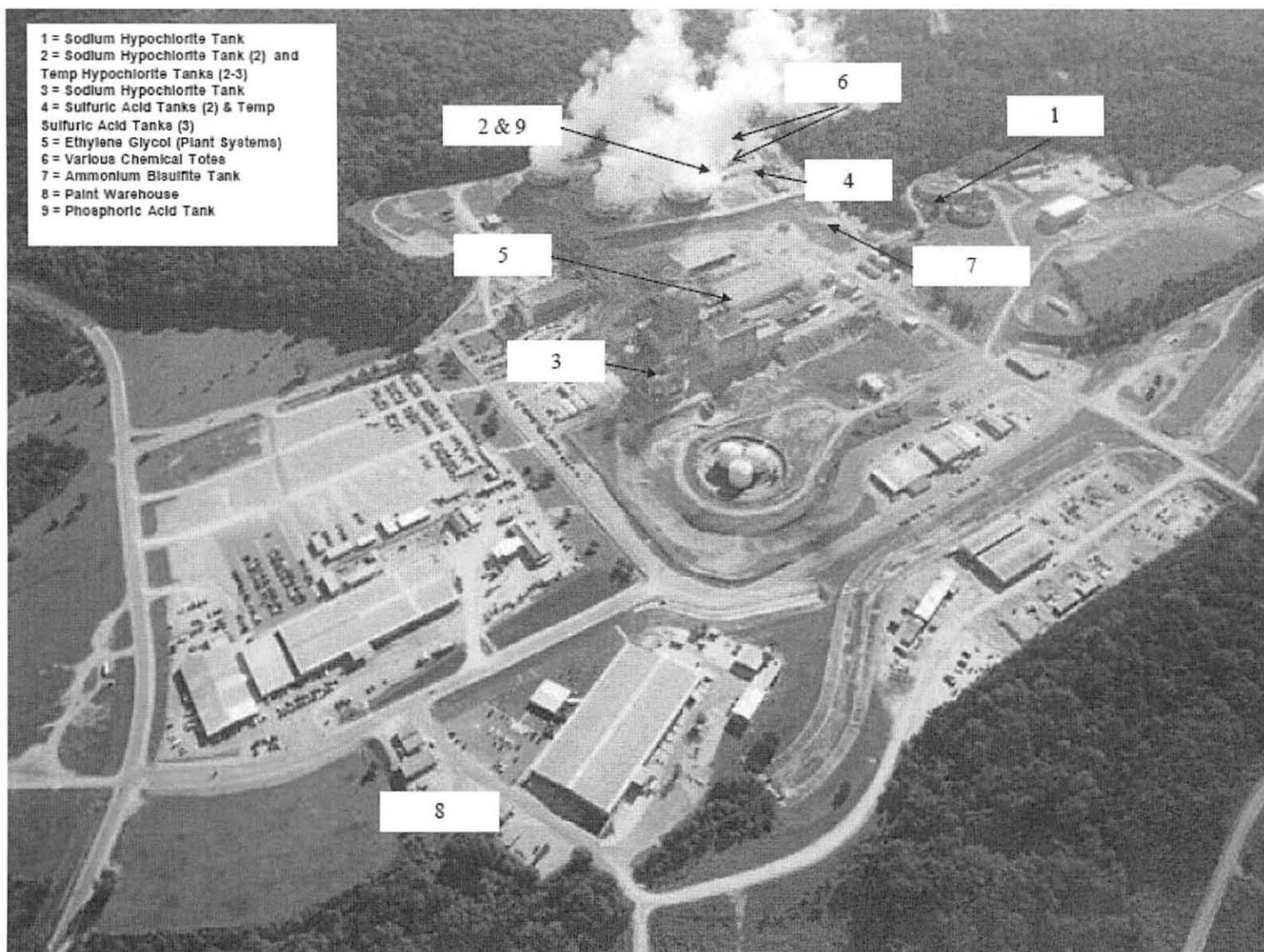
*The below list shall be amended whenever there is a modification in facility design, construction, storage capacity, operation or maintenance involving substances listed in LAC 33:I.3931 which renders the existing plan inadequate. The amendment shall be implemented prior to or concurrent with the facility modification. Not all substances listed below are covered by LAC 33:I.3931.*

<b>Description</b>	<b>Volume Gallons</b>	<b>Location (Refer to Figure 4)</b>	<b>Drainage</b>	<b>Rate of Flow</b>	<b>Containment/ Diversionary</b>	<b>Remarks</b>
1. Sodium Hypochlorite Tank (WTH-TK-12)	5,600	Clarifiers	Through stormwater drain into East Creek	Variable	Yes	Containment with sump area
2. Sodium Hypochlorite Tanks (2) (TK14A & TK14B)	7,600 (Each)	Circulating Water Flume	Through stormwater drain into East Creek	Variable	Yes	Concrete containment with sump area
3. Sodium Hypochlorite Tank (WTH-TK6)	1,000	Standby Cooling Tower	Into Cooling Tower	Variable	Yes	
4. Sulfuric Acid Tanks (2) (WTA-TK1A & WTA-TK1B)	48,000 (Each)	Circulating Water Flume	Through stormwater drain into East Creek	Variable	Yes	Concrete containment area
5. Ethylene Glycol (Plant Systems)	3,000	Turbine Building	Turbine Building sump	Variable	Yes	Inside enclosed building
6. Various Chemical Totes for Water Treatment (ex: Zinc Chloride, Sodium Hydroxide, Sodium Molybdate, Sodium Nitrite, Sodium Hydroxide (normally 1 on site with an occasional backup	~4200	Circulating Water Flume and Service Water Cooling Basin	Through stormwater drain into East Creek	Variable	Yes	Concrete floors and walls
7. Ammonium Bisulfite Tank (1-CWS-TK20)	3,800	West of Sulfuric Acid Tank	Through stormwater drain into East Creek	Variable	Yes	Concrete containment with sump area

8. Paint Warehouse – Various hazardous paints. Total volume could at times be greater than 1320 gallons	Varies but can be greater than 1320	Across from Main Warehouse	Ground	Variable	Yes	No drainage is expected from this location.
9. Phosphoric Acid Tank CWS-TK2 (Nalco 3DT177)	2,500	Circulating Water Flume	Through stormwater drain into East Creek Pumped back into flume	Variable	Yes	Concrete containment with sump area
10. Temporary Sulfuric Acid Tanks (3 Tanks)*	4900 (each)	Circulating Water Flume	Ground	Variable	Yes	Containment with pump
11. Temporary Sodium Hypochlorite Tanks (3 Tanks)*	3500 (each)	Circulating Water Flume	Ground	Variable	Yes	Containment with pump

\* - Removal of the temporary chemical feed systems from service will not invoke a revision to the SPCC. Actual status of the temporary chemical feed systems will be documented during routine inspections on Attachment 2 or equivalent. Locations 10 and 11 are not updated on Figure 5 as they are near Location 2 and Location 4.

Figure 5 - Chemical Storage Locations



### Attachment 1- Product Unloading Verification Checklist (Typical)

Item	Verified (Initials)
Measures to prevent movement of the truck established (i.e., emergency brake, flagging or cones around unloading area, wheels chocked, etc.).	
Storm drains near the vicinity of the unloading area covered or blocked or non-existent.	
Spill material such as absorbent blankets readily accessible.	
Receiving tank has available capacity to receive the volume of product to be transferred.	
Bucket or other secondary containment device placed beneath hose fittings during filling and disconnecting operations.	
Tank valves properly aligned prior to transfer.	
Fittings disconnected and properly capped prior to departure of the truck.	
Unloading pad free of product.	

Signature: \_\_\_\_\_ / \_\_\_\_\_  
 Designated Department Individual Date

**Note: Submit this form to Chemistry/Environmental after the transfer is completed.**

## Attachment 2 – SPCC Inspection Checklist (Typical)

	YES	NO	Description and Comments
<b>Storage tanks</b>			
<i>Tank surfaces show signs of leakage</i>			
<i>Tanks are damaged, rusted or deteriorated</i>			
<i>Bolts, rivets, or seams are damaged</i>			
<i>Tank supports are deteriorated or buckled</i>			
<i>Tank foundations have eroded or settled</i>			
<i>Level gauges or alarms are inoperative</i>			
<i>Vents are obstructed</i>			
<i>Secondary containment is damaged or stained</i>			
<i>Water/product in interstice of double-walled tank</i>			
<i>Dike drainage valve is open or is not locked</i>			
<b>Piping</b>			
<i>Valve seals, gaskets, or other appurtenances are leaking</i>			
<i>Pipelines or supports are damaged or deteriorated</i>			
<i>Joints, valves and other appurtenances are leaking</i>			
<i>Buried piping is exposed</i>			
<b>Loading/unloading and transfer equipment</b>			
<i>Loading/unloading rack is damaged or deteriorated</i>			
<i>Connections are not capped or blank-flanged</i>			
<i>Secondary containment is damaged</i>			
<i>Berm drainage valve is open</i>			
<b>Security</b>			
<i>Fencing, gates, or lighting is non-functional</i>			
<b>Response Equipment</b>			
<i>Response equipment inventory is complete</i>			

Comments:

---



---



---



---



---

PRINT / SIGN

DATE

### Attachment 3 - Certification of Substantial Harm Determination

#### Certification of Substantial Harm Determination

**Facility Name:** River Bend Station

**Facility Address:** 5485 U.S. Highway 61  
St. Francisville, Louisiana 70775

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

Yes ☐ No ☒

Although RBS has an oil storage capacity of 42,000 gallons, the facility does not transfer oil over water to or from vessels.

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

Yes ☐ No ☒

Based on quantities shown in Tables 1 and 2 of the RBS SPCC Plan and assuming the two tankers that are typically empty contains diesel fuel, onsite oil storage capacity would be less than ~327,953 gallons (includes diesel fuel oil, lube oil, gasoline, electrohydraulic fluid, drummed oil and drummed used oil). Therefore maximum storage capacity is less than 1 million gallons.

Although the second part of Item 2 does not apply since maximum storage capacity is less than 1 million gallons, secondary containment is provided for each aboveground tank and is large enough to contain the capacity of the largest tank within the storage area plus sufficient freeboard for rainfall (where applicable).

3. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in Attachment C-III of Appendix C to 40CFR112 or a comparable formula) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments?

Yes ☐ No ☒

As discussed in Item 2, the maximum storage capacity at RBS is less than 1 million gallons. Therefore the second part of Item 3 is not applicable.



### Attachment 3

#### Certification of Substantial Harm Determination

4. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in Attachment C-III of Appendix C to 40CFR112 or a comparable formula) such that a discharge from the facility would shut down a public drinking water intake?

Yes \_\_\_\_ No X

As discussed in Item 2, the maximum storage capacity at RBS is less than 1 million gallons. Therefore the second part of Item 4 is not applicable.

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

Yes \_\_\_\_ No X

As discussed in Item 2, the maximum storage capacity at RBS is less than 1 million gallons. Therefore the second part of Item 5 is not applicable. However based on review of past spill records, no reportable spills greater than or equal to 10,000 gallons have occurred within the past five years.

#### CERTIFICATION

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

**Signature:** *Ricky N. Buckley*

**Name:** Ricky N. Buckley, CHMM

**Title:** Sr. Project Manager – Entergy Nuclear

**Date:** June 1, 2004