UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-4005

September 12, 2003

Paul D. Hinnenkamp
Vice President - Operations
River Bend Station
Entergy Operations, Inc.
P.O. Box 220
St. Francisville, Louisiana 70775

SUBJECT: RIVER BEND STATION - NRC RADIATION SAFETY TEAM INSPECTION REPORT 05000458/2003-09

Dear Mr. Hinnenkamp:

On August 22, 2003, the NRC completed the onsite portion of the radiation safety team inspection at your River Bend Station. The enclosed report documents the inspection findings which were discussed on August 22, 2003, with yourself and other members of your staff.

This inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The team reviewed selected procedures and records, observed activities, and interviewed personnel. Specifically, the team evaluated the inspectable areas within the Radiation Protection Strategic Performance Area that are scheduled for review every two years. These areas are:

- Radiation Monitoring Instrumentation
- Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems
- Radioactive Material Processing and Transportation
- Radiological Environmental Monitoring Program and Radioactive Material Control Program

This inspection report documents one NRC identified finding and one self-revealing finding of very low safety significance (Green). However, because of their very low safety significance and because the findings were entered into your corrective action program, the NRC is treating these findings as noncited violations (NCVs) consistent with Section V1.A of the NRC Enforcement Policy. Additionally, a licensee-identified violation which was determined to be of very low safety significance is listed in Section 4OA7 in this report. If you contest the violation's or significance of these NCVs, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001, with copies to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region IV, 611 Ryan Plaza Drive, Suite 400, Arlington, Texas 76011; the Director, Office of Enforcement, U.S. Nuclear

Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector at the River Bend Station facility.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response will be made available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

//RA//

Troy W. Pruett, Chief
Plant Support Branch
Division of Reactor Safety

Docket: 50-458
License: NPF-47

Enclosure:
NRC Inspection Report 050000458/2003-09

cc w/enclosure:
Senior Vice President and
Chief Operating Officer
Entergy Operations, Inc.
P.O. Box 31995
Jackson, Mississippi 39286-1995

Vice President
Operations Support
Entergy Operations, Inc.
P.O. Box 31995
Jackson, Mississippi 39286-1995

General Manager
Plant Operations
River Bend Station
Entergy Operations, Inc.
P.O. Box 220
St. Francisville, Louisiana 70775

Director - Nuclear Safety
River Bend Station
Entergy Operations, Inc.
P.O. Box 220
St. Francisville, Louisiana 70775

Wise, Carter, Child & Caraway
P.O. Box 651
Jackson, Mississippi 39205

Mark J. Wetterhahn, Esq.
Winston & Strawn
1401 L Street, N.W.
Washington, DC 20005-3502

Manager - Licensing
River Bend Station
Entergy Operations, Inc.
P.O. Box 220
St. Francisville, Louisiana 70775

The Honorable Richard P. Ieyoub
Attorney General
Department of Justice
State of Louisiana
P.O. Box 94005
Baton Rouge, Louisiana 70804-9005

H. Anne Plettinger
3456 Villa Rose Drive
Baton Rouge, Louisiana 70806

President
West Feliciana Parish Police Jury
P.O. Box 1921
St. Francisville, Louisiana 70775

Michael E. Henry, State Liaison Officer
Department of Environmental Quality
Permits Division
P.O. Box 4313
Baton Rouge, Louisiana 70821-4313

Brian Almon
Public Utility Commission
William B. Travis Building
P.O. Box 13326
1701 North Congress Avenue
Austin, Texas 78701-3326

Electronic distribution by RIV:
Acting Regional Administrator **(TPG)**
DRP Director **(ATH)**
Acting DRS Director **(GMG)**
Senior Resident Inspector **(PJA)**
Branch Chief, DRP/B **(DNG)**
Senior Project Engineer, DRP/B **(RAK1)**
Staff Chief, DRP/TSS **(PHH)**
RITS Coordinator **(NBH)**
DRS/PSB/Senior Health Physicist **(LTR)**
DRS/PSB/Senior Health Physicist **(MPS1)**
DRS/PSB/Health Physicist **(BDB1)**
DRD/PSB/Health Physicist **(DRC)**
W. A. Maier, RSLO **(WAM)**
D. Berean **(DMB)**
D. Thatcher **(DFT)**
RBS Site Secretary **(LGD)**
Jeff Clark **(JAC),** OEDO RIV Coordinator

ADAMS: ■ Yes ☐ No Initials: _TWP_____
■ Publicly Available ☐ Non-Publicly Available ☐ Sensitive ■ Non-Sensitive

DOCUMENT NAME: R:_RB\RBS2003-009RP-DRC-TEAM.WPD

RIV:DRS/PSB	PSB	PSB	PSB(TL)	C:DRP/Branch B
DRCarter:jlh	LTRicketson	BDBaca	MPShannon	DNGraves
/RA/	/RA/	/RA/	/RA/	RAK for
9/03 /03	9/10 /03	9/03 /03	9/03 /03	9/12 /03

C:PSB			
TWPruett			
MPShannon for			
9/12/03			

OFFICIAL RECORD COPY

T=Telephone E=E-Mail F=Fax

ENCLOSURE

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

Docket:	50-458
License:	NPF-47
Report No.:	50-458/03-09
Licensee:	Entergy Operations, Inc.
Facility:	River Bend Station
Location:	5485 U.S. Highway 61 St. Francisville, Louisiana
Dates:	August 18- 22, 2003
Inspectors:	D. R. Carter, Health Physicist, Plant Support - Team Leader B. D. Baca, Health Physicist, Plant Support L. T. Ricketson, P.E., Senior Health Physicist, Plant Support M. P. Shannon, Senior Health Physicist, Plant Support
Accompanied:	B.K. Tharakan, Health Physicist, Plant Support
Approved By:	T. W. Pruett, Chief, Plant Support Branch
ATTACHMENT:	Supplemental Information

SUMMARY OF FINDINGS

River Bend Station
NRC Inspection Report 05000458/2003-09

IR 05000458/2003-09; 08/18 - 22/2003; River Bend Station; Radioactive Material Processing and Transportation; Radioactive Material Control Program; Radiation Safety Team Inspection

The report covered a one week period of inspection on site by a team of four region-based health physics inspectors. Two findings of very low safety significance (Green) were identified. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using IMC 0609, "Significance Determination Process," (SDP). Findings for which the SDP does not apply may be "Green" or be assigned a severity level after NRC management review. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 3, dated July 2000.

A. NRC- Identified and Self-Revealing Findings

Cornerstone: Occupational Radiation Safety

- Green. The team identified a non-cited violation of Technical Specification 5.4.1a because the licensee failed to post a radiological hazard (hot spot). Station Procedure RP-109, "Hot Spot Program," Revision 0, Step 5.2.1, required that hot spots are identified with a hot spot tag to alert workers of the hazard. However, on August 19, 2003, the team identified a hot spot on an accessible drain line from the radwaste sample sink reading 200 millirem per hour on contact and 50 millirem per hour at one foot from the source. The licensee performed a survey 11 days earlier that identified the radiation levels, however, the technician and the survey reviewer failed to tag the hot spot to warn workers of the hazard.

  The finding was more than minor because it was associated with the Occupational Radiation Safety cornerstone attribute (Program and Process) and affected the associated cornerstone objective. The finding involved the potential for a workers unplanned or unintended dose resulting from actions contrary to procedures. When processed through the Occupational Radiation Safety Significance Determination Process the team determined that the finding had very low safety significance because the finding did not involve as low as is reasonably achievable (ALARA) planning or work controls, no individual received an overexposure or a substantial potential for overexposure, and the ability to assess dose was not compromised. (Section 2PS2)

  Cornerstone: Public Radiation Safety

- Green. A self-revealing non-cited violation of Technical Specification 5.4.1a was reviewed by the team because the licensee did not prevent the release of detectable licensed radioactive material from the controlled access area. Specifically, Section 5.1.1 of Procedure RSP-213, "Control and Handling of Radioactive Materials," Revision 16, stated, in part, that material can be unconditionally released from the controlled access area if there is no detectable loose surface and fixed contamination above background radiation levels. However, on March 31, 2003, the licensee failed to evaluate an item, against their procedural criteria, prior to it being unconditionally released from the

controlled access area and subsequently released from the protected area. Fixed contamination levels were as high as 1,000 corrected counts per minute per probe area.

The finding was more than minor because it was associated with the Public Radiation Safety cornerstone attribute (Program and Process) and affected the associated cornerstone objective. The finding involved an occurrence in the radioactive material control program that was contrary to licensee procedures. When processed through the Public Radiation Safety Significance Determination Process, the team determined the finding had very low safety significance because the public exposure associated with the item was less than 5 millirem and there were not more than 5 occurrences. (Section 2PS3).

B. Licensee Identified Violation

A violation of very low safety significance (Green) which was identified by the licensee was reviewed by the team. Corrective actions taken or planned by the licensee have been entered into the licensee's corrective action program. This violation and corrective action tracking number is listed in Section 4OA7.

Report Details

2. RADIATION SAFETY

Cornerstone: Occupational Radiation Safety [OS]

2OS3 Radiation Monitoring Instrumentation (71121.03)

a. Inspection Scope

This area was inspected to determine the accuracy and operability of radiation monitoring instruments used for the protection of occupational workers and the adequacy of the program to provide self-contained breathing apparatus (SCBA) to personnel entering unknown atmospheres. The team conducted an in-office review of the licensee's annual reports and self-assessments, and corrective action documents. Onsite, the team interviewed cognizant licensee personnel and compared the following items with regulatory and procedural requirements:

- Calibration, operability, and alarm setpoints of selected area radiation monitors (RMS-RE140, RMS-RE141, and RMS-RE193) and emergency assessment instrumentation (RMS-RE16A, RMS-RE16B, and RMS-RE21B)

- Calibration and operability of portable radiation detection instrumentation used for job coverage of high radiation area and contaminated area work, whole body counters, and personnel contamination monitors (BC-4, PCM-1B, PM-7, SAC-4, and tool contamination monitor)

- Calibration expiration and source response check currency on selected portable radiation detection instruments staged for use (AMP-100, AMS-4, ASP-1, and WR telepole), to include the observation of instrument source response checks (L-144 and RSO-50E)

- The status of SCBA's staged and ready for use in the plant and associated surveillance and maintenance records

- The licensee's capability for refilling and transporting SCBA air bottles to and from the control room and operations support center during emergency conditions

- Training and qualifications of personnel who may use SCBA's during an emergency (control room operators and emergency response personnel), perform maintenance and repair of SCBA's, and refill air bottles

- Periodic air cylinder hydrostatic testing results

- Audits, surveillances, and self-assessments related to the radiation monitoring instrumentation and self-contained breathing apparatus programs performed since the last inspection

- Summary of corrective action documents written since the last inspection and selected documents related to radiation monitoring instruments, self-contained breathing apparatus equipment, repetitive, and significant individual deficiencies

Because of the lack of opportunity or the lack of occurrence, the team did not observe instrument calibrations.

b. Findings

No findings of significance were identified.

2PS1 Radioactive Gaseous And Liquid Effluent Treatment And Monitoring Systems (71122.01)

a. Inspection Scope

This area was inspected to ensure that the gaseous and liquid effluent processing systems were maintained so that radiological releases were properly mitigated, monitored, and evaluated with respect to public exposure. The team conducted an in-office review of the licensee's annual reports and self-assessments, and corrective action documents. Onsite, the team examined procedures and representative records, walked down the major components of the gaseous and liquid release systems, and interviewed cognizant personnel. The following items were reviewed and compared with regulatory requirements and commitments in the Updated Safety Analysis Report:

- 2001 and 2002 Radiological Effluent Release Reports
- Changes to the Offsite Dose Calculation Manual and to the radioactive waste system design and operation.
- Selected radioactive liquid waste release permits and associated projected doses to members of the public.
- Projected dose calculations to members of the public associated with continuous gaseous effluent releases
- Monthly, quarterly, and annual dose calculations
- Air cleaning system surveillance test results
- Surveillance test results for the stack and vent flow rates
- Records of instrument calibrations performed since the last inspection for effluent radiation monitors and flow measurements devices at each point of discharge
- Calibration records of counting room instrumentation associated with effluent monitoring and release activities

- Quality control records for the counting room instruments
- Interlaboratory comparison program and results
- Audits and self-assessments related to the radioactive effluent treatment and monitoring program and the licensee's ability to meet the Radiological Effluent Technical Specification/Offsite Dose Calculation Manual requirements
- Summary of corrective action documents written since the last inspection and selected documents related to the radioactive effluent treatment and monitoring program, and the engineered-safety-feature air cleaning systems

Because of the lack of opportunity or the lack of occurrence, the team did not review the sampling of the liquid or gaseous radioactive effluents by licensee personnel, anomalous results which would have been reported in the radiological effluent release reports, and performance indicator incidents. Previously, a potential unmonitored release from the condensate storage tank was reviewed and documented in Inspection Report 50-458/02-07, Section 3.3.

b. Findings

No findings of significance were identified.

2PS2 Radioactive Material Processing and Transportation (71122.02)

a. Inspection Scope

The team conducted an in-office review of the licensee's annual reports and self-assessments, and corrective action documents. Onsite, the team interviewed radiation workers and radiation protection personnel involved in radioactive material processing and transportation activities and walked down the liquid and solid radioactive waste processing systems to verify that the current system configuration and operation agreed with the descriptions contained in the Updated Safety Analysis Report and in the Process Control Program. The team also reviewed radioactive waste processing equipment that was not operational or abandoned in place for material condition, potential unmonitored release pathways, and unnecessary personnel exposure.

The team observed the packaging and shipment of a container of liquid radioactive waste resin (shipment 2003-099) made during the inspection to verify that the licensee's transportation program complied with Department of Transportation regulations contained in 49 CFR Parts 170-189. In addition, the team reviewed the licensee's overall transportation program to ensure that it complied with the requirements of 10 CFR Parts 20, 61, and 71 and Department of Transportation regulations. The following items were reviewed and compared with regulatory requirements:

- The adequacy of any changes made to the radioactive waste processing systems since the last inspection

- Waste stream determination and sampling procedures
- Radioactive waste transfer and sampling procedures and waste classification methodology
- Radio-chemical sample analysis results and changes to operational parameters affecting the results for each of the licensee's radioactive waste streams
- Scaling factors and calculations used to account for difficult-to-measure radionuclides
- 10 CFR Part 20, Appendix G, quality assurance program
- Applicable transport cask Certificates of Compliance
- Transferee licenses
- Procedures for cask loading and closure
- Training of personnel responsible for the conduct of radioactive waste processing and radioactive material shipment preparation activities
- Documentation for five non-excepted package shipments which demonstrated shipment packaging, surveying, labeling, marking, placarding, vehicle checks, emergency instructions, disposal manifest, shipping papers provided to the driver, and licensee verification of shipment readiness
- Audits and self-assessments related to the radioactive material and transportation programs performed since the last inspection
- Summary of corrective action documents written since the last inspection and selected documents involving the radioactive material and shipping programs, and repetitive and significant individual deficiencies.

b. Findings

Introduction. A Green non-cited violation was identified by the team for the failure to post a radiological hazard (hot spot) in accordance with a Technical Specification required procedure.

Description. On August 19, 2003, during a tour of the 106 foot elevation of the radwaste building, the team identified elevated radiation levels on an accessible drain pipe from the radwaste sample sink that was not tagged as a hot spot. Health Physics personnel verified contact radiation levels of 200 millirem per hour and 50 millirem per hour at one foot. From discussion with radiation protection personnel the inspector noted that the licensee had performed a survey 11 days earlier that indicated contact dose rates on the pipe of 310 millirem per hour with a one foot reading of 32 millirem per hour; however, the technician and the survey reviewer failed to tag the hot spot to warn workers of the hazard.

Analysis. The team determined that the licensee's failure to properly tag a radiological hazard is a performance deficiency. The finding was more than minor because it was associated with the Occupational Radiation Safety Cornerstone attribute (program and process) and affected the cornerstone objective to ensure the adequate protection of a worker's health and safety from exposure to radiation. The finding involved the potential for a workers unplanned or unintended dose resulting from actions contrary to procedures. When processed through the Occupational Radiation Safety Significance Determination Process the finding was determined to be of very low safety significance (Green) because the finding did not involve ALARA planning or work controls, no individual received an overexposure or a substantial potential for overexposure, and the ability to assess dose was not compromised.

Enforcement. Technical Specification 5.4.1.a requires written procedures be established, implemented, and maintained covering the activities referenced in Appendix A of Regulatory Guide 1.33, Revision 2, February 1978. Appendix A, Section 7, references procedures for control of radioactivity and limiting personnel exposure. Station Procedure RP-107, "Radiation Protection Glossary," Revision 2, Step 3.63, defined a hot spot as an area of a valve, pipe or drain which have contact radiation levels greater than 100 millirem per hour and 4 times the one foot reading. Station Procedure RP-109, "Hot Spot Program," Revision 0, Step 5.2.1, stated in part, that hot spots are identified with a hot spot tag to alert workers of the hazard. However, on August 19, 2003, the licensee did not post a hot spot to alert workers of the radiological hazard as required by procedure. Because the failure to identify a radiological hazard was of very low safety significance and has been entered into the corrective action program as Condition Report CR-RBS-2003-2955, this violation is being treated as a noncited violation, consistent with Section VI.A of the NRC Enforcement Policy: NCV 50-458/0309-01, Failure to post a radiological hazard.

2PS3 Radiological Environmental Monitoring Program and Radioactive Material Control Program (71122.03)

a. Inspection Scope

The team conducted an in-office review of the licensee's annual reports and self-assessments, and corrective action documents. Onsite, the team interviewed members of the licensee's staff responsible for implementing the radiological environmental, meteorological monitoring, and radioactive material control programs. The team observed the following activities and equipment with respect to the Final Safety Analysis Report (FSAR), Offsite Dose Calculation Manual (ODCM), Technical Requirements Manual, and Technical Specification requirements:

- Preparation of airborne particulate, and charcoal samples for analysis
- Meteorological primary and back-up instrumentation at the meteorological tower and data displays in the control room and emergency operation facility
- The survey of materials for release from the controlled access area

The following items were reviewed and compared with the FSAR, ODCM, and regulatory requirements to determine whether the licensee had an adequate program

to verify the impact of radioactive effluent releases to the environment and to ensure that the licensee's surveys and controls were adequate to prevent the inadvertent release of licensed materials into the public domain:

- Implementing procedures for the radiological environmental monitoring program
- Environmental sample analytical results
- Two environmental air sampling stations (AP1 and AQS2, located in Emergency Planning Sector's P and Q, respectively) and four thermoluminescent dosimetry stations (TA1, TP1, TQS1, and TQS2 located in Emergency Planning Sector's A, P, Q and Q, respectively) specified in the Offsite Dose Calculation Manual
- Calibration and maintenance records of selected environmental air sampling equipment
- Calibration, maintenance, and quality control records of environmental sample analytical instrumentation
- 2001 and 2002 land use census results and changes to the radiological environmental monitoring program (no changes where identified)
- 2001 and 2002 Annual Radiological Environmental Operating Report
- The environmental laboratory's performance in the interlaboratory comparison program
- Implementing procedures for the meteorological monitoring program
- Meteorological instrument operability, reliability, and annual meteorological data recovery
- Procedures, methods, and instruments used to survey, control, and release materials from the controlled access area
- Calibration procedures and records for instruments used to perform radiological surveys prior to material release
- Detection sensitivities and counting parameters of radiation survey instruments used for the release of potentially contaminated materials from the controlled access area
- Criteria used for the unrestricted release of potentially contaminated material from the controlled access area
- Audits and self-assessments related to the radiological environmental, meteorological monitoring, and radioactive material control programs performed since the last inspection

- Summary of corrective action documents written since the last inspection and selected documents involving radiological environmental monitoring, meteorological monitoring, and release of radioactive material programs.

Because of the lack of opportunity, the team did not observe the collection of environmental media.

b. Findings

Introduction. The team reviewed the circumstances related to a self-revealing non-cited violation for the failure to control radioactive material in accordance with a Technical Specification required procedure.

Description. On March 31, 2003, the licensee was notified by Tri-Tool Incorporated of Houston, Texas that two pieces of clam shell equipment used on the Leading Edge Flow Meter project was sent to Tri-Tools shop. Tri-Tools personnel surveyed the items and found fixed contamination levels as high as 450 corrected counts per minute per probe area. Surveys conducted by the licensee on April 1, 2003, determined that fixed contamination levels were as high as 1,000 corrected counts per minute per probe area. (The licensee identified three additional examples in which detectable licensed radioactive material was not properly controlled. These examples are discussed in Section 4OA7.)

Analysis. The team determined that the licensee's failure to control radioactive material in accordance with a Technical Specification required procedure is a performance deficiency. The finding is greater than minor because it is associated with the Public Radiation Safety Cornerstone attribute (program and process) and affected the cornerstone objective to protect public health and safety from exposure to radioactive materials released into the public domain. The finding involved an occurrence in the radioactive material control program that was contrary to licensee procedures. This isssue was evaluated using the Public Radiation Safety Significance Determination Process and was determined to be a finding of very low safety significance (Green) because public exposure associated with each item was less than 5 millirem and there were not more than 5 occurrences.

Enforcement. Technical Specification 5.4.1.a requires written procedures be established, implemented, and maintained covering the activities referenced in Appendix A of Regulatory Guide 1.33, Revision 2, February 1978. Appendix A, Section 7, references procedures for control of radioactivity. Section 5.1.1 of Procedure RSP-213, "Control and Handling of Radioactive Materials," Revision 16, stated, in part, that material can be unconditionally released from the controlled access area if there is no detectable loose surface and fixed contamination above the background radiation levels for the particular counting system. However, on March 31, 2003, the licensee failed to evaluate an item that was unconditionally released from the controlled access area, against its' procedural criteria, and subsequently released radioactive material from the protected area. Because the release of radioactive material was of very low safety significance and has been entered into the corrective action program as Condition Report CR-RBS-2003-1540,

this violation is being treated as a noncited violation, consistent with Section VI.A of the NRC Enforcement Policy: NCV 50-458/0309-02, Failure to control radioactive material.

4. OTHER ACTIVITIES

4OA2 Problem Identification and Resolution

Annual Sample Review

a. Inspection Scope

The team evaluated the effectiveness of the licensee's problem identification and resolution process with respect to the following inspection areas:

- Radiation Monitoring Instrumentation (Section 2OS3)
- Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems (Section 2PS1)
- Radioactive Material Processing and Transportation (Section 2PS2)
- Radiological Environmental Monitoring Program and Radioactive Material Control Program (Section 2PS3)

b. Findings and Observations

No findings of significance were identified**.**

4OA6 Management Meetings

Exit Meeting Summary

On August 22, 2003, the team presented the inspection results to Mr. P. Hinnenkamp, Vice-President, Operations, and other members of his staff who acknowledged the findings. The team confirmed that proprietary information was not provided or examined during the inspection.

4OA7 Licensee-Identified Violations

The following findings of very low safety significance were identified by the licensee as violations of NRC requirements which meet the criteria of Section VI of the NRC Enforcement Policy, NUREG-1600, for being dispositioned as NCVs.

Technical Specification 5.4.1.a requires written procedures be established, implemented, and maintained covering control of radioactivity. Section 5.1.1 of Procedure RSP-213, "Control and Handling of Radioactive Materials," Revision 16, stated, in part, that material can be unconditionally released from the controlled access area if there is no detectable loose surface and fixed contamination above background radiation levels. On November 1 and 9, 2002, and April 10, 2003, the licensee identified a total of three examples in which detectable licensee radioactive material was found outside the controlled access area. These events are described in the licensee's corrective action program as Condition Reports (CR)-RBS-2002-1714,

CR-RBS-2002-1769 and CR-RBS-2003-1779, respectively. Because public exposure associated with each item was less than 5 millirem and there were not more than 5 occurrences, this violation is of very low significance.

PARTIAL LIST OF PERSONS CONTACTED

Licensee

R. Biggs, Coordinator, Licensing
C. Fantacci, Technical Specialist, Radiation Protection
D. Heath, Supervisor, Radiation Protection
P. Hinnenkamp, Vice-President, Operations
V. Huffstatler, Supervisor, Radiation Protection
K. Huffstatler, Technical Specialist, Licensing
J. Leavines, Manager, Licensing
G. Morrison, Senior HP/Chem Specialist, Radiation Protection
B. Olinde, Manager, I&C
P. Page, Supervisor, Radiation Protection
J. Parker, Engineer, Digital Radiation Monitoring System
W. Spell, Senior Environmental Specialist, Chemistry
T. Trepanier, General Manager, Plant Operations

NRC

M. Miller, Resident Inspector

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

NONE

Opened and Closed During this Inspection

05000458/2003009-01	NCV	Failure to post a radiological hazard (Section 2PS2)
05000458/2003009-02	NCV	Failure to control radioactive material (Section 2PS3)

Previous Items Closed

NONE

LIST OF DOCUMENTS REVIEWED

Quality Assurance Documents:

QA-6-2001-RBS-1	Quality Assurance Audit of Effluent and Environmental Monitoring
QA-2-2001-RBS-1	Quality Assurance Audit of Chemistry, Effluents, and Environmental
QA-15-2001-RBS-1	Audit of Radwaste
QA-14-2001-RBS-1	Audit of Radiation Protection Program
QA-14-2003-RBS-1	Audit of Radiation Protection Program
QS-2001-RBS-023	Surveillance of Audit QA-15-2000-RBS-1
QS-2003-RBS-009	RF-11 Radiation Protection Surveillance

QS-2002-RBS-011	Surveillance of Audit QA-2-2001-RBS-1
LO-RLO-2001-00004	Assessment of Radiation Protection (2000)
LO-RLO-2001-00011	Assessment of Radiation Protection Radioactive Waste (RP-07)
LO-RLO-2003-00107	Assessment of Radioactive Material Control
RPG-M-2002-034	Review of the Whole Body Count Libraries

Inspection Procedure 71121.03

Condition Reports

CR-RBS-2002-1244, CR-RBS-2002-1363, CR-RBS-2003-0234, CR-RBS-2003-0378, CR-RBS-2003-0615, CR-RBS-2003-1189, CR-RBS-2003-1507, CR-RBS-003-2334, CR-RBS-2003-2617, CR-RBS-2003-2748, CR-RBS-2003-2863

Procedures

08-S-10-03	Calibration of Portable Area Radiation Monitors: Non-safety Relate, Revision 2
08-S-10-04	Calibration of Portable Dose Rate Instruments: Non-safety Related, Revision 2
08-S-10-06	Calibration of Extendable Dose Rate Instruments: Non-safety Related, Revision 2
08-S-10-08	Calibration of Portable Count Rate Instruments: Non-safety Related, Revision 1
08-S-10-11	Calibration of Portable Scalers, Revision 2
MCP-4201	DRMS Low Range Area Monitor Calibration, Revision 3J
RHP-0105	Operation of the Canberra Accuscan II and Fastscan Whole Body Counters, Revision 5
RHP-0106	Calibration of the Canberra Fastscan Whole Body Counter, Revision 1
RP-104	Personnel Contamination Events, Revision 3
RP-202	Personnel Monitoring, Revision 1
RP-203	Dose Assessment, Revision 2
RP-30	Source Checking of Radiation Protection Instrumentation, Revision 2
RP-304	Operation of Counting Equipment, Revision 1
RP-306	Operation and Calibration of the Eberline PM-7, Revision 0
RP-307	Operation and Calibration of Eberline Personnel Contamination Monitors (PCM), Revision 2
RP-308	Operation of Gamma Scintillation Tool Monitors, Revision 1
RP-310	Operation and Initial Setup of the Eberline AMS-4 Continuous Air Monitor, Revision 0
RPP-0074	Refilling SCBA Cylinders, Revision 8
RSP-0201	Respiratory Protection Program for River Bend Station, Revision 9A
STP-511-4202	RMS-Primary Containment Purge Isolation Radiation- High Activity Monitor Channel Calibration Test and LSFT (RMS-RE21B), Revision 13
STP-511-4249	RMS-Primary Containment Area Radiation Monitor, Channel Calibration RMS-RE16A, Revision 9A
STP-511-4250	RMS-Primary Containment Area Radiation Monitor, Channel Calibration RMS-RE16B, Revision 9

Inspection Procedure 71122.01

Condition Reports

CR-RBS-2001-0310, CR-RBS-2001-0975, CR-RBS-2003-2290, CR-RBS-2003-2432, CR-RBS-2003-2493, CR-RBS-2003-2529, and CR-RBS-2003-2722

Calibration Data
Effluent Release and Flow Rate Instrumentation

MAI 353369, MAI 355309, MAI 357659, MAI 363095, MAI 365724, MAI 367333, MAI 372163

Effluent Radiation Monitors and Flow Measurements Device Calibrations

RMS-FE126, RMS-FE5A, RMS-FE6A, RMS-RE126, RMS-RE5A, RMS-RE6A, RMS-RE107

Procedures

CSP-0110	Radioactive Liquid Effluent Batch Discharge, Revision 16
RP-304	Operation of Counting Equipment, Revision 1
RPP-0027	Gaseous Effluents Monitor Setpoints Determination, Revision 3A
RPP-0102	Dose Calculations from Gaseous Effluents, Revision 6A
STP-511-4205	SCIS/RMS Fuel Building Ventilation Exhaust Radiation - High Channel Calibration Test RMS-RE5A, Revision 7F
STP-511-4215	RMS-Main Plant Exhaust Duct Noble Gas Activity Channel Calibration RMS-RE-126, Revision 8
STP-511-4216	RMS-Radwaste Building Ventilation Exhaust Duct Noble Gas Activity Monitor Channel Calibration RMS-RE6A, Revision 7B
STP-511-4231	RMS-Main Plant Exhaust Duct Monitoring System Effluent System Flow Rate Monitor Channel Calibration RMS-FE126, Revision 6B
STP-511-4233	Fuel Building Exhaust Duct Monitoring System Flow Rate Monitor Channel Calibration RMS-FE5A, Revision 5C
STP-511-4239	RMS-Radwaste Building Ventilation Exhaust Duct Monitoring System Flow Rate Monitor Channel Calibration RMS-FE6A, Revision 5A
STP-511-4280	RMS-Liquid Radwaste Effluent Line Radiation Monitor Channel Calibration RMS-RE107, Revision 9C

Radioactive liquid waste release permits

2003-164
2003-175
2003-176

Inspection Procedure 71122.02

Condition Reports

CR-RBS-2000-1016, CR-RBS-2000-1826, CR-RBS-2000-1827, CR-RBS-2000-1232, CR-RBS-2000-1165, CR-RBS-2001-0585, CR-RBS-2001-1473, CR-RBS-2001-1496, CR-RBS-2001-1566, CR-RBS-2002-2041, and CR-RBS-2003-0904,

Procedures

RW-101	Radioactive Waste Management, Revision 0
RW-102	Radioactive Shipping Procedure, Revision 1
RW-105	Process Control Program, Revision 1
RP-109	Hot Spot Program, Revision 0

RWS-336 Set-Up and Operation of the RDS-1000 Dewatering Unit, Revision 8

Shipment Packages

2001-012, 2002-011, 2002-016, 2002-024, 2003-075

Inspection Procedure 71122.03

Condition Reports

Radiological Environmental Monitoring Program
CR-RBS-2001-00329, CR-RBS-2001-00334, CR-RBS-2001-00976, CR-RBS-2001-00977, CR-RBS-2001-00983, CR-RBS-2001-00984, and CR-RBS-2003-01877

Release of Radioactive Material
CR-RBS-2002-00747, CR-RBS-2002-01079, CR-RBS-2002-01714, CR-RBS-2002-01769, CR-RBS-2002-01895, and CR-RBS-2002-01943,

Meteorological Monitoring
CR-RBS-2001-00481, CR-RBS-2001-00573 and CR-RBS-2002-01793

Procedures

Radiological Environmental Monitoring Program
ESP-8-001 Organization and Responsibilities of RBS Environmental Services Group, Revision 8
ESP-8-005 Assessment of the Reliability of Results of the Radiological Environmental Monitoring Program, Revision 9
ESP-8-023 Sampling of Airborne Radioiodine and Particulates for Radiological Environmental Monitoring, Revision 13
ESP-8-050 Conduct of the Radiological Environmental Monitoring Program, Revision 12

Meteorological Monitoring
ESP-8-012 Routine Performance Checks of Meteorological Monitoring Equipment, Revision 13

Calibration Data
Radiological Environmental Monitoring Program
Air Sample Pump Serial Number 0235, Dated February 27, 2003
Air Sample Pump Serial Number 0512, Dated February 27, 2003