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

October 19, 2004

R. T. Ridenoure
Vice President
Omaha Public Power District
Fort Calhoun Station FC-2-4 Adm.
P.O. Box 550
Fort Calhoun, NE 68023-0550

SUBJECT: FORT CALHOUN STATION - NRC RADIATION SAFETY TEAM INSPECTION REPORT 05000285/2004007

Dear Mr. Ridenoure:

On September 24, 2004, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Fort Calhoun Station facility. The enclosed report documents the inspection findings, which were discussed at the conclusion of the inspection with Mr. Mark Frans and other members of your staff.

The 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 inspection 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 self-revealing, noncited violation of very low safety significance (Green). However, because of its very low safety significance and because the finding was entered into your corrective action program, the NRC is treating this finding as a noncited violation consistent with Section VI.A of the NRC Enforcement Policy. If you contest this noncited violation, 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 76011-4005; the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington DC 20555-001; and the NRC Resident Inspector at the Fort Calhoun Station facility.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response (if any) 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//

Michael P. Shannon, Chief
Plant Support Branch
Division of Reactor Safety

Docket: 50-285
License: DPR-40

Enclosure:
NRC Inspection Report 05000285/2004007
w/attachment: Supplemental Information

cc
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Electronic distribution by RIV:
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DRS Director **(DDC)**
Senior Resident Inspector **(JGK and JDH1)**
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Senior Project Engineer, DRP/C **(WCW)**
Staff Chief, DRP/TSS **(PHH)**
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FCS Site Secretary (vacant)

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

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RIV:PSB\SHP	PSB\HP	PSB\HP	DRP\PE	
LTRicketson:	BDBaca	BKTharakan	DLStearns	
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C:PSB	DRP\C	C:PSB		
MPShannon	KMKennedy	MPShannon		
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U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

Dockets:	50-285
Licenses:	DPR-40
Report:	05000285/2004007
Licensee:	Omaha Public Power District
Facility:	Fort Calhoun Station
Location:	Fort Calhoun Station FC-2-4 Adm. P.O. Box 399, Hwy. 75 - North of Fort Calhoun Fort Calhoun, Nebraska
Dates:	September 20-24, 2004
Inspectors:	Larry Ricketson, P.E., Senior Health Physicist, Plant Support Branch Louis C. Carson II, Senior Health Physicist, Plant Support Branch Bernadette Baca, Health Physicist, Plant Support Branch Binesh Tharakan, Health Physicist, Plant Support Branch Donald Stearns, Project Engineer, Branch E, Division of Reactor Projects
Approved By:	Michael P. Shannon, Chief, Plant Support Branch Division of Reactor Safety

Enclosure

SUMMARY OF FINDINGS

IR 05000285/2004007; 09/20/2004 - 09/24/2004; Fort Calhoun Station; Radioactive Material Control Program

The report covered a one week period of inspection on site by a team of four region-based inspectors. A finding of very low safety significance (Green) was identified. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using IMC 0609, "Significance Determination Process". Findings for which the Significance Determination Process 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: Public Radiation Safety

- Green. The team reviewed a self-revealing, non-cited violation of Technical Specification 5.8.1 that resulted from the licensee's failure to properly survey and control an item contaminated with radioactive material. Fixed contamination on a shackle released from the protected area was measured at approximately 19,000 disintegrations per minute/100 centimeters squared. The finding was entered into the licensee's corrective action program as Condition Report 2003-5480.

  The finding was more than minor because it was associated with the cornerstone attribute (material release) and it affected the associated cornerstone objective (to ensure adequate protection of public health and safety from exposure to radioactive materials released into the public domain). The team used the Public Radiation Safety Significance Determination Process and determined that the finding was of very low safety significance because (1) the finding was a radioactive material control issue (2) it was not a transportation issue, and (3) it did not result in a dose to the public greater than 0.005 rem. This finding also had cross-cutting aspects associated with human performance in that licensee personnel failed to implement the established survey requirements designed to prevent the release of radioactive material (Section 2PS3).

REPORT DETAILS

2. RADIATION SAFETY
Cornerstones: Occupational Radiation Safety [OS] and Public Radiation Safety [PS]

2OS3 Radiation Monitoring Instrumentation and Protective Equipment (71121.03)

a. Inspection Scope

This area was inspected to determine the accuracy and operability of radiation monitoring instruments that are used for the protection of occupational workers and the adequacy of the program to provide self-contained breathing apparatus (SCBA) to workers. The team used the requirements in 10 CFR Part 20 and the licensee's procedures required by technical specifications as criteria for determining compliance. The team interviewed licensee personnel and reviewed:

- Calibration of area radiation monitors associated with transient high and very high radiation areas and post-accident monitors used for remote emergency assessment
- Calibration of portable radiation detection instrumentation, electronic alarming dosimetry, and continuous air monitors used for job coverage
- Calibration of whole body counting equipment and radiation detection instruments utilized for personnel and material release from the radiologically controlled area
- Self-assessments and audits
- Corrective action program reports since the last inspection
- Calibration expiration and source response check currency on radiation detection instruments staged for use
- The licensee's capability for refilling and transporting SCBA air bottles to and from the control room and operations support center during emergency conditions, status of SCBA staged and ready for use in the plant and associated surveillance records, and personnel qualification and training
- Qualification documentation for onsite personnel designated to perform maintenance on the vendor-designated vital components, and the vital component maintenance records for SCBA units

Either because the conditions did not exist or an event had not occurred, no opportunities were available to review the following items:

- Licensee Event Reports
- Licensee action in cases of repetitive deficiencies or significant individual deficiencies

The inspector completed 9 of the required 9 samples.

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 are maintained so that radiological releases are properly mitigated, monitored, and evaluated with respect to public exposure. The team used the requirements in 10 CFR Part 20, 10 CFR Part 50 Appendices A and I, the Offsite Dose Calculation Manual (ODCM), and the licensee's procedures required by technical specifications as criteria for determining compliance. The team interviewed licensee personnel and reviewed:

- The most current radiological effluent release reports, changes to radiation monitor setpoint calculation methodology, anomalous sampling results, effluent radiological occurrence performance indicator incidents, self-assessments, audits, and licensee event reports
- Gaseous and liquid release system component configurations
- Routine processing, sample collection, sample analysis, and release of gaseous effluent; radioactive liquid and gaseous effluent release permits and dose projections to members of the public
- Changes made by the licensee to the ODCM, the liquid or gaseous radioactive waste system design, procedures, or operation since the last inspection
- Monthly, quarterly, and annual dose calculations
- Surveillance test results involving air cleaning systems and stack or vent flow rates
- Instrument calibrations of discharge effluent radiation monitors and flow measurement devices, effluent monitoring system modifications, effluent radiation monitor alarm setpoint values, and counting room instrumentation calibration and quality control
- Interlaboratory comparison program results
- Audits, self-assessments, and corrective action reports performed since the last inspection

Either because the conditions did not exist or an event had not occurred, no opportunities were available to review the following items:

- Abnormal releases
- Licensee event reports and special reports

The inspector completed 10 of the required 10 samples.

b. Findings

No findings of significance were identified.

2PS2 Radioactive Material Processing and Transportation (71122.02)

a. Inspection Scope

This area was inspected to verify that the licensee's radioactive material processing and transportation program complies with the requirements of 10 CFR Parts 20, 61, and 71 and Department of Transportation regulations contained in 49 CFR Parts 171-180. The team interviewed licensee personnel and reviewed:

- The radioactive waste system description, recent radiological effluent release reports, and the scope of the licensee's audit program
- Liquid and solid radioactive waste processing systems configurations, the status and control of any radioactive waste process equipment that is not operational or is abandoned in place, changes made to the radioactive waste processing systems since the last inspection, and current processes for transferring radioactive waste resin and sludge discharges
- Radio-chemical sample analysis results for radioactive waste streams and use of scaling factors and calculations to account for difficult-to-measure radionuclides
- Shipping records for non-excepted package shipments
- Audits, state agency reports, self-assessments, and corrective action reports performed since the last inspection

Either because the conditions did not exist or an event had not occurred, no opportunities were available to review the following items:

- Observation of a shipment during the inspection
- Licensee event reports and special reports

The inspector completed 6 of the required 6 samples.

b. Findings

No findings of significance were identified.

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

a. Inspection Scope

This area was inspected to ensure that the REMP verifies the impact of radioactive effluent releases to the environment and sufficiently validates the integrity of the radioactive gaseous and liquid effluent release program; and that the licensee's surveys and controls are adequate to prevent the inadvertent release of licensed materials into the public domain. The team used the requirements in 10 CFR Part 20, 10 CFR Part 50, Appendix I, the ODCM, and the licensee's procedures required by technical specifications as criteria for determining compliance. The team interviewed licensee personnel and reviewed

- Annual environmental monitoring reports and licensee event reports
- A sampling of five air sampling stations and eight thermoluminescence dosimeter (TLD) monitoring stations
- Collection and preparation of environmental samples
- Operability, calibration, and maintenance of meteorological instruments
- Each event documented in the Annual Environmental Monitoring Report which involved an inoperable sampler or anomalous measurement
- Significant changes made by the licensee to the ODCM as the result of changes to the land census or sampler station modifications since the last inspection
- Calibration and maintenance records for air samplers, quality control program, interlaboratory comparison program results, and vendor audits
- Locations where the licensee monitors potentially contaminated material leaving the radiological controlled area and the methods used for control, survey, and release from these areas
- Type of radiation monitoring instrumentation used to monitor items released, survey and release criteria of potentially contaminated material, radiation detection sensitivities, procedural guidance, and material release records
- Audits, self-assessments, and corrective action reports performed since the last inspection

Either because the conditions did not exist or an event had not occurred, no opportunities were available to review the following items:

- Each event documented in the Annual Environmental Monitoring Report which involved a missed sample or lost TLD

- Licensee event reports and special reports performed since the last inspection

The inspector completed 10 of the required 10 samples.

b. Findings

Introduction. The team reviewed a self-revealing, non-cited violation of Technical Specification 5.8.1 that resulted from the licensee's failure to properly control radioactive material in accordance with procedural requirements. The violation was found to have very low safety significance.

Description. On December 3, 2003, Fort Calhoun Station received a call from Wolf Creek Generating Station stating that it had received a shipment from Fort Calhoun Station of a supposedly empty, non-radioactive sea/land container. However, in the container was a radioactive material posting and shackle with fixed, radioactive contamination. The contamination level on the shackle equaled approximately 19,350 disintegrations per minute/100 centimeters squared, beta/gamma (assuming a 10 percent instrument efficiency and a 15.5 centimeters squared probe area).

Fort Calhoun Station investigated and concluded that an unconditional release survey of the sea/land container was not performed. The failure to survey the shipping container for unconditional release led to the licensee's failure to identify and control the shackle. The container was subsequently released from the licensee's protected area and shipped as non-radioactive material. The licensee's dose calculation demonstrated that the maximum annual dose to a member was approximately 3 millirems.

Analysis. The failure to survey and control radioactive material is a performance deficiency. The finding was more than minor because it was associated with the cornerstone attribute (material release) and it affected the associated cornerstone objective (to ensure adequate protection of public health and safety from exposure to radioactive materials released into the public domain). The team used the Public Radiation Safety Significance Determination Process and determined that the finding was of very low safety significance because (1) the finding was a radioactive material control issue (2) it was not a transportation issue, and (3) it did not result in a dose to the public greater than 0.005 rem. This finding also had cross-cutting aspects associated with human performance in that licensee personnel failed to implement the established survey requirements designed to prevent the release of radioactive material.

Enforcement. Technical Specification 5.8.1.a. requires procedures listed in Regulatory Guide 1.33, Revision 2, Appendix A, 1978. Regulatory Guide 1.33, Appendix A, Section 7(e),

requires procedures for radiation surveys. Procedure RP-202, "Radiological Surveys," Revision 20, Section 7.2.9. requires that items be surveyed before being unconditionally released. Section 7.2.9.C. states, "If any detectable radioactivity is indicated on any internal or external surface, the material or equipment shall not be unconditionally released." The licensee violated this requirement when it failed to perform a survey and subsequently unconditionally released a shackle with fixed radioactive contamination. Because this example of a failure to perform a radiological survey and control radioactive material was of very low safety significance and was entered into the licensee's corrective action program (as Condition Report 2003-5480), this violation is being treated as an non-cited violation (NCV), consistent with Section VI.A of the NRC Enforcement Policy: NCV 05000285/2004007-01, Failure to survey and control radioactive material.

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.

4OA4 Cross-Cutting Aspects of Findings

Section 2PS3 describes an issue with a human performance cross-cutting aspect which involved the failure of workers to follow programmatic requirements to survey and control items contaminated with radioactive material.

4OA6 Management Meetings

Exit Meeting Summary

On September 24, 2004, the team presented the inspection results to Mr. M. Frans, Assistant Plant Manager, and other members of the staff who acknowledged the findings. The team confirmed that proprietary information was not provided or examined during the inspection.

ATTACHMENT

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee personnel

M. Anderson, Senior Technician, Radioactive Waste
D. Bannister, Plant Manager
M. Breuer, Senior Technician, Radioactive Waste
S. Confal, ALARA Health Physicist, Radiation Protection
D. Conn, Technician, Radioactive Waste
A. Costanzo, Environmental Specialist, System Chemistry
P. DeAngelis, Radiological Equipment Supervisor, Radiation Protection
S. Dixon, Health Physicist, Radiation Protection
D. Dryden, Specialist, Licensing
T. Dukarski, Supervisor, System Chemistry
S. Gebers, Corporate Health Physicist
B. Glover, Technician, Radiation Protection
R. Haug, Manager, Chemistry
M. Hawes, Chemistry Technician, System Chemistry
T. Jamieson, Supervisor, Radioactive Waste
E. Jun, System Engineer (HVAC), System Engineering
S. Kalra, System Engineer (Meteorological Tower), System Engineering
T. Maine, Supervisor, Radiation Protection Operations
T. Nguyen, System Engineer (Radiation Monitoring), Systems Engineering
M. Puckett, Manager, Radiation Protection
C. Sarnowski, Clerk, Radiation Protection

NRC

J. Hanna, Senior Resident Inspector
L. Willoughby, Resident Inspector

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

NONE

Opened and Closed During this Inspection

05000285/2004007-01 NCV Failure to survey and control radioactive material.

LIST OF DOCUMENTS REVIEWED

Section 2OS3: Radiation Monitoring Instrumentation and Protective Equipment

Condition Reports
200400933, 200400252, 200400260

Procedures

IC-CP-02-0212	Calibration of Eberline RO2 and RO2A Survey Meter, Centimeters squared 0.
IC-RP-07-0006	Calibration of the NE Technology Small Articles Monitor, SAM II, Centimeters squared 1.
IC-ST-RM-0001	Quarterly Function Test of Area Radiation Monitors,, Centimeters squared 10
IC-ST-RM-0048	Calibration of Containment Operating Level South Radiation Monitor, RM-091A,
IC-ST-RM-5001	Quarterly Function Test of Process Radiation Monitors,, Centimeters squared 10
RP-402	Calibration and Test Requirements for Radiation Protection Equipment, Centimeters squared 8
RP-403	Instrument Response Testing, Centimeters squared 16
RP-446	Operation of Source Calibrator Systems, Centimeters squared 7
RP-450	Operation and Response Testing of Portable Counting Equipment, Centimeters squared 12
RP-507	Inspection and Maintenance of Respiratory Protection Equipment, Revision17
RP-513	Baron II SCBA Fill Station, Revision 10
RP-658	Operation of the Canberra Whole Body Counters, Centimeters squared 10
RP-CP-07-0201	Calibration Verification of Source Calibrator Systems, Centimeters squared 6

Audits and Self-Assessments
SA 04-0333 - Self-Assessment of Radiation Monitoring Instrumentation and Respiratory Protection - July 2004

Calibration Packages
Vendor Calibration Records for Neutron Monitoring Instruments, ASP-1,NRD #825/722715, 838/728657, 849/729424, and 1046/726123.

Calibration of the Canberra Whole Body Counters, RP-CP-07-0207, dated 8/30/04 for Plant FastScan.

Calibration of the Canberra Whole Body Counters, RP-CP-07-0207, dated 8/02/04 for FastScan

Calibration of the Canberra Whole Body Counters, RP-CP-07-0207, dated 8/16/04 for AccuScan-II.

Instrument Corrective Action Reports, FC-RP-402-1, generated in 2004

Work Order Package 8912, Surveillance Test CH-ST-RM-5700, Condenser Off-Gas Radiation Monitor RM-057 Primary Calibration, dated 6/22/01

Work Order Package 0014542401, Electronic and Secondary Calibration of Radiation Monitors Rm-050 and RM-051, dated 9/20/03

Work Order Package 0014439301, Electronic and Secondary Calibration of Radiation Monitor RM-052, dated 3/15/04

Work Order Package 0017513601, Electronic and Secondary Calibration of Radiation Monitor RM-062, dated 9/13/04

Work Order Package 157184, Electronic and Secondary Calibration of Radiation Monitor RM-055, dated 10/12/03

Work Order Package 0017703201, Quarterly Functional Test of Process Radiation Monitors, dated 8/13/04

Work Order Package 0017993501, Quarterly Functional Test of Area Radiation Monitors, dated 9/16/04

Miscellaneous
Self-Contained Breathing Apparatus Instructor Guide (Lesson Plan 102750R, Revision 2)
Respiratory Protection Qualifications and GET Level 1/Level 2.

Section 2PS1: Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems

Condition Reports
200203941, 200300782, 200301662, 200303881, 200305226, 200400393, 20041409, 200401745

Procedures

CH-AD-0021	Containment Release Permit and Summary, Revision 19
CH-AD-0022	Waste Liquid Release Permit and Summary, Revision 18
CH-AD-0027	Waste Gas Decay Tank Release Permit and Summary, Revision 9
CH-AD-0030	Quality Control of Chemistry Equipment, Revision 17
CH-SMP-RE-0013	Auxiliary Building Exhaust Stack Samplimng, Revision 15
CH-SMP-RE-0018	Laboratory and Radioactive Waste Processing Building Exhaust Stack Sampling, Revision18
SO-T-25	Quality Control Program for Evaluating Chemistry Laboratory Performance, Revision 8

Audits and Self-Assessments
Quality Assurance Audit Report No. 49 - Chemistry Control

Surveillance Test Results/Work Order Package No.
SE-ST-VA-0004/00173028
Freon Test of SI Pump Room Charcoal Filter Adsorber VA-26A/26B (4/23/04)

SE-ST-VA-0005/0015280201
Safety Injection Pump Room Charcoal Filter VA-26A/26B Elemental Iodine Removal Efficiency Test, Revision 4 (12/16/03)

SE-ST-VA-0005/0010240401
Safety Injection Pump Room Charcoal Filter VA-26A/26B Elemental Iodine Removal Efficiency Test, Revision 4 (6/17/02)

Effluent release packages

Containment Release Permit - 2003034
Waste Gas Decay Tank Release - 2004012
Waste Liquid Tank Release - 2003110
Auxiliary Building Exhaust Stack Release 2004025
Auxiliary Building Exhaust Stack Release 2004038
Auxiliary Building Exhaust Stack Release 2004040
Laboratory and Radioactive Waste Processing Building Exhaust Stack Release 2004038

Miscellaneous

2002 and 2003 Annual Effluent Release Report

Section 2PS2: Radioactive Material Processing and Transportation

Condition Reports
200201009, 200203302, 200204176, 200302876, 200305480, 200400154, 200401297

Procedures
RW-200, Process Control Program
RW-207, Operation of the Fix Radwaste Liquid Processing System
RW-218, 10 CFR 61 Classification
RW-219, DOT Quantification
RW-221, 10 CFR 61 Sampling
RW-300, Shipping Radwaste and Radioactive Materials

Audits and Assessments
03-QUA-011, SARC Audit Report No. 56/63, Radiological Effluent Technical Specifications, Radiological Environmental Monitoring Program, Process Control Program, and Radiological Material Packaging and Shipping

03-QUA-102, Nuclear Safety Review Group, Review of 2003 Refueling Outage Performance
04-QUA-006, Rad Waste Control
SA-26, Radiation Protection Program, 2003 Self Assessment Report

Shipment Packages (Shipment #)
FCS RW 02-53
FCS RW 03-06
FCS RW 03-09
FCS RW 03-11
FCS RW 03-56
FCS RW 04-02

Section 2PS3: Radiological Environmental Monitoring Program (REMP) And Radioactive Material Control Program

Audits, Surveillances, and Calibrations

03-QUA-011	SARC Radiological Effluent Technical Specifications, Radiological Environmental Monitoring Program (REMP)/Process Control Program Audit, January 17, 2003
04-QUA-012	Surveillance Report - Environmental Monitoring, January 26, 2004
M&TE Calibration Package	Air pump MT-04231, December 1, 2003
M&TE Calibration Package	Air pump MT-04236, August 15, 2003
M&TE Calibration Package	Air pump MT-04239, July 18, 2002
NUPIC Audit 18192 & 18729	Transnuclear, Inc., March 24, 2003
NUPIC Audit 18558	Environmental, Inc., June 3, 2003
NUPIC Audit 18558	Environmental, Inc., Document Corrections to the Audit, December 8, 2003
Work Order 0012443201	CH-ST-RV-006, Environmental Land Use Survey, August 30, 2002
Work Order 0016047801	IC-CP-01-6289, Calibration of Meteorological Instrumentation, April 13, 2004
Work Order 0017322101	CH-ST-RV-006, Environmental Land Use Survey, August 20, 2004

Condition Reports

2002-3263, 2002-3276, 2002-3283, 2002-3457, 2002-3984, 2002-4292, 2003-0072, 2003-0093, 2003-0177, 2003-0551, 2003-1290, 2003-1434, 2003-1812, 2003-1658 2003-1813, 2003-3100, 2003-3775, 2004-1066, 2004-1369, 2004-1488, 2004-1795

Procedures

CH-SMP-RV-0004	Environmental Sewage Lagoon Sludge/Wastewater Sample Collection, Revision 5
CH-ST-RV-0001	Environmental Sample Collection - Water, Revision 6
CH-ST-RV-0002	Environmental Sample Collection - Milk or Equivalent, Revision 9
CH-ST-RV-0008	Environmental Sample Collection - Air Monitoring, Revision 15

CH-ODCM-0001	Off-Site Dose Calculation Manual (ODCM), Revision 14
IC-CP-01-6289	Calibration of Meteorological Instrumentation, Revision 6
QAM-10	Conduct of Internal Audits, Revision 28
QAM-11	Conduct of QA Surveillances, Revision 19
QAP-11.1	Radioactive Material Control, Revision 1
QAP-11.4	Chemistry Control, Revision 4
RP-202	Radiological Surveys, Revision 20
RP-206	Radioactive Material Handling, Revision 14
RP-AD-200	Radiation Protection Surveillance Program - Administrative Procedure, Revision 27
RW-506	Storage of Radioactively Contaminated Items, Revision 4

Miscellaneous

2003 Fort Calhoun Tower Data - Joint Frequency Distribution

2002 and 2003 Environmental Inc., Midwest Laboratory Interlaboratory Comparison Program Results

2002 and 2003 Fort Calhoun Radiological Environmental Operating Report - Technical Specification 5.9.4.b

50.59 Procedure Change Request, Off-Site Dose Calculation Manual, February 20, 2002

Environmental Incorporated Midwest Laboratory Monthly Progress Report - Radiological Environmental Monitoring Program for Fort Calhoun, August 31, 2004

SUMMARY OF FINDINGS

IR 05000285/2004007; 09/20/2004 - 09/24/2004; Fort Calhoun Station; Radioactive Material Control Program

The report covered a one week period of inspection on site by a team of four region-based inspectors. A finding of very low safety significance (Green) was identified. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using IMC 0609, "Significance Determination Process". Findings for which the Significance Determination Process 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: Public Radiation Safety

B. Baca (4640)
PIM SELF NCV PRS September 24, 2004 71122.03
Failure to survey and control radioactive material

- Green. The team reviewed a self-revealing, non-cited violation of Technical Specification 5.8.1 that resulted from the licensee's failure to properly survey and control an item contaminated with radioactive material. Fixed contamination on a shackle released from the protected area was measured at approximately 19,000 disintegrations per minute/100 centimeters squared. The finding was entered into the licensee's corrective action program as Condition Report 2003-5480.

  The finding was more than minor because it was associated with the cornerstone attribute (material release) and it affected the associated cornerstone objective (to ensure adequate protection of public health and safety from exposure to radioactive materials released into the public domain). The team used the Public Radiation Safety Significance Determination Process and determined that the finding was of very low safety significance because (1) the finding was a radioactive material control issue (2) it was not a transportation issue, and (3) it did not result in a dose to the public greater than 0.005 rem. This finding also had cross-cutting aspects associated with human performance in that licensee personnel failed to implement the established survey requirements designed to prevent the release of radioactive material (Section 2PS3).