

APPENDIX

U.S. NUCLEAR REGULATORY COMMISSION  
REGION IV

NRC Inspection Report: 50-285/88-30

Operating License: DPR-40

Docket: 50-285

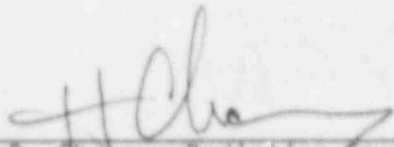
Licensee: Omaha Public Power District (OPPD)  
1623 Harney Street  
Omaha, Nebraska 68102

Facility Name: Fort Calhoun Station (FCS)

Inspection At: FCS, Fort Calhoun, Washington County, Nebraska

Inspection Conducted: August 29 through September 2, 1988

Inspector:

  
\_\_\_\_\_  
H. D. Chahey, Radiation Specialist, Facilities  
Radiological Protection Section

9/21/88  
Date

Approved:

  
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R. E. Baer, Chief, Facilities Radiological  
Protection Section

9/21/88  
Date

Inspection Summary

Inspection Conducted August 29 through September 2, 1988 (Report 50-285/88-30)

Areas Inspected: Routine, unannounced inspection of the licensee's radiation protection program for external and internal radiation exposure control programs, surveys, monitoring and control of radioactive materials, radiological facilities, and preparation for the forthcoming reactor refueling outage.

Results: Within the areas inspected, no violations or deviations were identified.

BB10050091 BB0927  
PDR ADOCK 05000285  
G PNU

DETAILS1. Persons ContactedOP&D

- \*W. Gates, Manager, FCS
- \*R. Jaworski, Manager, Station Engineering
- F. Franco, Section Manager, Radiological Health and Emergency Preparedness
- \*R. Kellogg, Supervisor, Special Services
- \*J. Gasper, Manager, Training
- \*S. Gebers, Supervisor, Radiological Services
- K. Stultz, Supervisor, Technical Services
- A. Bilau, Radioactive Waste Coordinator
- D. Jacobson, Supervisor, Chemistry and Radiation Protection Training
- R. Cords, Radiation Protection Technician
- J. Fisicaro, Supervisor, Nuclear Regulatory and Industry Affairs
- C. Crawford, Respiratory Protection Specialist
- C. Williams, Senior ALARA Technician
- \*D. Matthews, Supervisor, Nuclear Licensing
- \*L. Gundrum, Nuclear Licensing Engineer
- G. Krieser, Supervisor, Corporate Quality Assurance (QA) Audits
- \*A. Richard, Manager, QA and Quality Control (QC)
- K. Steele, Radiation Protection Group Special Services Coordinator
- \*A. Christensen, Field Health Physicist (HP)
- M. Hawes, Dosimetry Specialist

Others

- D. Neely, Radiation Protection Program Consultant, Hydro Nuclear Services, Inc.
- \*P. Harrell, NRC Senior Resident Inspector
- \*J. Bobba, Consultant, Temporary Radiation Protection Manager

The NRC inspector also interviewed other licensee and contractor employees including operations, administrative, security, maintenance, and QA/QC personnel.

- \*Denotes those individuals present during the exit interview on September 2, 1988.

2. Followup on Previous Inspection Findings

(Closed) Violation (285/8716-01): Testing of Friskers and Xetex Monitors - This item was previously discussed in NRC Inspection Report 50-285/87-16 and involved the licensee's failure to perform the required daily response check of the instruments. The NRC inspector

examined the licensee's implementation of the corrective actions committed to in their September 15, 1988, (LIC-87-628) response to the violation. The licensee's corrective actions appear to be adequate to prevent a recurrence of the violation in the future. This item is considered closed.

(Closed) Violation (285/8716-02): Failure to Report Inoperable Radiation Monitors - This item was previously discussed in NRC Inspection Report 50-285/87-16 and involved the licensee's failure to submit a special report to the NRC concerning inoperable noble gas monitors, as required by Technical Specification (TS) 2.21. The NRC inspector examined the licensee's implementation of the corrective actions committed to in their September 15, 1988 (LIC-87-628) response to the violation and Licensee Event Report (LER) 87-23. The licensee's corrective actions appear to be adequate to prevent a recurrence of the violation in the future. This item is considered closed.

(Closed) Violation (285/8721-01): Failure to Control Access to a Very High Radiation Area (VHRA) - This item was previously discussed in NRC Inspection Reports 50-285/87-21 and 88-05 and involved the licensee's failure to properly control access to VHRAs per the requirements of TS 5.11.2. The NRC inspector reviewed the licensee's corrective actions committed to in their February 18, 1988 (LIC-88-116) response to the violation and those in LER 87-26. The licensee's corrective actions appear to be adequate to prevent a recurrence of the violation in the future. The licensee's more comprehensive corrective actions to their VHRA problems are being tracked via corrective actions to the similar VHRA violations (285/8805-02 and -03) and the corrective actions referenced in LER 88-01. This item is considered closed.

(Closed) Violation (285/8721-04): Failure to Report Very High Radiation Area Door Incident - This item was previously discussed in NRC Inspection Report 50-285/87-21 and involved the licensee's failure to submit an LER on an incident involving an unlocked VHRA door (TS 5.11.2). The licensee submitted LER 87-26 in response to the violation. The NRC inspector examined the licensee's corrective actions committed to in their February 18, 1988 (LIC-88-116) response to the violation. The licensee's corrective actions appear to be adequate to prevent a recurrence of the violation in the future. This item is considered closed.

(Closed) Violation (285/8805-04): Failure to Observe the Two-Man Rule - This item was previously discussed in NRC Inspection Report 50-285/88-05 and involved the licensee's failure to effectively implement VHRA controls that were designed to prevent the recurrence of a previous VHRA violation (285/8721-01). The NRC inspector interviewed personnel and examined training records to verify the implementation of the corrective actions committed to in the licensee's June 3, 1988 (LIC-88-393) response to the violation. This item is considered closed.

(Closed) Violation (285/8805-05): Failure to Properly Post a Contaminated Area - This item was previously discussed in NRC Inspection

Report 50-285/88-05 and involved the licensee's failure to maintain radiological posting required by plant procedures. The NRC inspector examined the licensee's corrective actions committed to in their June 3, 1988 (LIC-88-393) response to the violation. The NRC inspector also inspected existing contaminated area posting and observed work related identification of contaminated areas and the subsequent posting of those areas. The licensee's corrective actions appear to be adequate to prevent a recurrence of the violation in the future. This item is considered closed.

(Closed) Violation (285/8805-06): Respiratory Protection Equipment Use Policy - This item was previously discussed in NRC Inspection Report 50-285/88-05 and involved the licensee's failure to implement a management policy concerning the use of respiratory protection equipment (RPE) as required by 10 CFR Part 20.103(c)(3). The NRC inspector interviewed personnel and examined training records to verify the implementation of the corrective actions committed to in the licensee's June 3, 1988 (LIC-88-393) response to the violation. The licensee's corrective actions appear to be adequate to prevent a recurrence of the violation in the future. This item is considered closed.

(Closed) Violation (285/8813-02): Portal Alarm Response - This item was previously discussed in NRC Inspection Report 50-285/88-13 and involved the licensee's failure to implement procedures, required by TS 5.8.1, for the radiological monitoring of personnel and equipment leaving the site and the subsequent control of personnel found contaminated by such monitoring. The NRC inspector examined procedures, policies, and training documents to verify the licensee's implementation of the commitments contained in the licensee's July 25, 1988 (LIC-88-580) response to the violation. The licensee's corrective actions appear to be adequate to prevent a recurrence of the violation in the future. This item is considered closed.

(Closed) Open Item (285/8734-01): Semiannual Effluent Release Reports - This item was previously discussed in NRC Inspection Report 50-285/87-34 and involved excessive technical and editorial errors in the TS 5.9.4.a required Semiannual Effluent Release Reports. The NRC inspector reviewed the licensee's corrective actions in regard to the NRC identified concerns and consider them to be satisfactory. This item is considered closed.

(Closed) Open Item (285/8805-11): Backup Radiation Protection Manager (RPM) - This item was previously discussed in NRC Inspection Report 50-285/88-05 and involved the NRC's concern regarding the qualifications of the person selected as the backup to the Supervisor, Chemistry, and Radiation Protection (NRC Regulatory Guide 1.8, RPM equivalent). The licensee has established a list of "Designated Alternates" for backup to selected key individuals, including the RPM, within the FCS Radiological Protection Group (Memorandum OPPD FC-C-260-88,

dated August 10, 1988) that resolves the NRC concerns in this area. This item is considered closed.

3. Open Items Identified During This Inspection

An open item is a matter that requires further review and evaluation by the NRC inspector. Open items are used to document, track, and ensure adequate followup on matter of concern to the NRC inspector. The following open item was identified:

<u>Open Item</u>	<u>Title</u>	<u>See Paragraph</u>
285/8830-01	Dosimetry System Reliability	5

4. Organization and Management Controls - Radiation Protection (83522/83722)

The licensee's organization and staffing of the radiation protection group was examined to determine agreement with: commitments in Section 12 of the Updated Safety Analysis Report (USAR); compliance with the requirements of Operating License Technical Specifications; and the recommendations of NUREG-0731 and 0761.

The NRC inspector examined the licensee's organization, staffing, assignment of responsibilities, and radiation protection program implementing procedures. The licensee had made several changes to the staffing of the radiation protection group since the last inspection of this area in February 1988 (50-285/88-05). These changes involved the reassignment of the former Supervisor of Chemistry and Radiation Protection (RPM) to a corporate office support group and the hiring of a consultant to fill the vacant RPM position. The licensee had also appointed an individual to the position of field HP and added positions of Special Services Coordinator and Respiratory Protection specialist to the Radiation Protection Group. The licensee had contracted with a consultant to provide an assessment of the FSC radiation protection program, the development of new radiation protection program implementing procedures, and other activities aimed at strengthening the FSC radiation protection program.

The NRC inspector examined audits and surveillances of the FSC radiation protection program. The licensee's corrective action for identified deficiencies appeared to be timely. The NRC inspector also noted that the licensee's QA department audit group had undergone a significant reduction of personnel with HP experience. The licensee had hired a consultant with HP experience to maintain the quality of the audits involving the radiation protection program.

Procedures and documents examined are listed in the Attachment to this report.

No violations or deviations were identified.

5. External Exposure Control and Personal Dosimetry (83524/83724)

The licensee's external radiation exposure control program was examined to determine agreement with: the commitments in Section 12 of the USAR; compliance with the requirements contained in the TS, 10 CFR Parts 19.12, 19.13, and 20.101, 20.102, 20.104, 20.105, 20.202, 20.203, 20.205, 20.206, 20.405, 20.407, 20.408, and 20.409; and the recommendation of NRC Inspection and Enforcement Information Notices (IEIN) 86-23, 87-39, 88-63, NRC Regulatory Guides (RGs) 8.8, 8.13, 8.14, and 8.28, and industry standard ANSI N13.11-1983.

The NRC inspector reviewed personnel exposure records, record storage facilities, exposure control procedures, dosimetry processing procedures, dosimetry QC methods, data processing and report generation. Emergency preparedness instructions on radiation exposure control were examined and found to be in agreement with industry standards. Training and qualification programs for both licensee and contract personnel were examined. National Voluntary Laboratory Accreditation of the licensee's dosimetry processing program was verified. The licensee's on hand stock of extremity dosimeters and spare thermoluminescent dosimeters (TLD) personnel monitoring devices was inspected.

During the end-of-the-month preparations for exchanging FCS personal dosimeters (TLDs), the licensee's TLD processing equipment experienced a failure and almost caused the required monthly changeout to be cancelled. The licensee's TLD processing system has experienced numerous failures during the past year due to its age. According to licensee representatives during the period of August 22-30, 1988, repair personnel responded to TLD system equipment failures five times. The NRC inspector discussed, with licensee representatives, the need to review their maintenance program involving the TLD system and evaluate whether a suitable preventative maintenance program has been implemented for the TLD processing system. This is considered an open item pending licensee actions to improve the reliability of the TLD processing system (285/8830-01).

The NRC inspector noted that the licensee has adopted the use of the VARSKIN computer program for calculation of skin doses from hot particles and that a revised and updated hot particle control program was being developed by onsite consultants. The licensee's hot particle program was previously discussed in NRC Inspection Report 50-285/87-16 and found deficient in several areas. The NRC inspector discussed with licensee representatives the need to inform radiation workers of the industry's hot particle problems and what the worker can do to minimize exposure to hot particles.

Facility inspections and independent measurements were conducted of posted hot spots and high radiation areas. The licensee's very high radiation area controls, including locking, escorts, and control of keys, were examined. The NRC inspector discussed with licensee representatives the



controls to be used in handling incore detectors and cables during the upcoming refueling outage. The licensee was currently evaluating the information on personnel exposure problems encountered by other utilities during incore detector work, as referenced in IEIN 88-63.

No violations or deviations were identified.

6. Internal Radiation Exposure Control and Assessment (83525/83725)

The licensee's internal radiation exposure control program was examined for agreement with: commitments in Section 12 of the USAR; compliance with the requirements contained in the TS, 10 CFR Parts 19.13, and 20.103, 20.108, 20.203, 20.206, 20.401, 20.405; and the recommendations of NRC RGs 8.8, 8.13, 8.15, 8.20, 8.26, and 8.28, NUREG-0041, and industry standards ANSI 13.1-1969 and N343-1978.

The NRC inspector reviewed the licensee's implementing procedures, management policies governing use of RPE, programs and activities involving the routine and emergency aspects of the internal dosimetry, air sampling and analysis, and posting of airborne radioactivity areas. The licensee's plans for implementing a program for monitoring and evaluation of tritium uptakes were discussed with the licensee. The licensee discharges approximately 225 curies of tritium per year in liquid effluents. The NRC inspector noted that in preparation for the upcoming refueling outage, the licensee had leased an additional whole body counter to speed the processing of personnel during the outage. The licensee's inventory of RPE was examined and personnel responsible for training and issuance of RPE were interviewed. The NRC inspector noted that the licensee had obtained a technical expert in respiratory protection and industrial hygiene programs to provide the licensee guidance in the development of their own industrial and radiological respiratory protection programs. The licensee appears to have initiated actions to resolve the NRC concerns regarding the respiratory protection program at FCS which were identified in NRC Inspection Report 50-285/88-05. The licensee assigned one person as the FCS respiratory protection expert, provided professional RPE program training to selected HP and Training Department staff members, and hired a consultant to help revise and update the respiratory protection program.

No violations or deviations were identified.

7. Control of Radioactive Materials (RAM) and Contamination, Surveys, and Monitoring (83526/83726)

The licensee's programs for the control of RAM and contamination, radiological surveys, and monitoring were examined for agreement with: commitments in Section 12 of the USAR; compliance with the requirements of TS 3.13, 10 CFR Parts 19.12, 20.5, 20.201, 20.203, 20.205, 20.207, 20.301, 20.401, 20.402, and NUREG-0737, Item III.D.3.3; and the recommendations of IEINs 86-23, 86-43, 87-39, and 88-63.

The NRC inspector toured FCS facilities, conducted independent gamma radiation dose rate measurements and loose surface contamination surveys. Licensee work operations, within the reactor and turbine buildings, were reviewed. Radiation Work Permits, radiation, airborne, and surface contamination surveys were examined for accuracy and supervisory review. The NRC inspector noted that the licensee's smear and air sample survey analyses equipment provides for low level beta and alpha radioactivity analysis, and that air samples were evaluated for iodine and other fission products when a significant indication of airborne activity was present.

The NRC inspector examined the licensee's procedures for the control of radioactive material, monitoring of radiation levels within and outside of the radiologically controlled facilities, source inventory and survey practices, air sample analysis and reporting of results, and posting of radiological areas. The licensee QA surveillances of radioactive material receipt inspections had identified licensee procedural compliance violations. Corrective actions appear to be satisfactory to prevent a recurrence. No violations of 10 CFR Part 20.205 were identified.

The licensee has not identified any significant hot particles in contamination surveys of facility waste streams or internals surfaces of major reactor system components. The NRC inspector discussed with licensee representatives the need to maintain a vigilance in the form of special loose surface contamination surveys, especially during the upcoming refueling outage, to ensure that areas requiring increased radiological controls due to a potential for hot particle exposure are promptly identified.

No violations or deviations were identified.

#### 8. Radiological Control Facilities and Equipment/Instruments

The licensee's facilities for radiological protection activities during routine and emergency situations were reviewed for agreements with the commitments contained in Section H of the Radiological Emergency Response Plan (RERP) - FCS, and the recommendations of RGs 8.8 and 8.25, NUREG-0041, and NUREG-0654/FEMA-REP-1.

The NRC inspector reviewed: training facilities; respirator decontamination and maintenance facilities; counting laboratories; the calibration facility; the radioactive source storage; locker and toilet facilities for workers; the radioactive controlled area access control point; first aid facilities; the machine shop for radioactive materials; decontamination facilities for personnel and equipment; and emergency equipment inventories such as radiation protection survey equipment, respiratory protection equipment, and protective clothing at the onsite Operations Support Center and Technical Support Center. Selected equipment referenced in FCS Surveillance Test ST-RM-3 was verified to be present and operational. Operation of the portal monitors at the exit to



the protected area was verified. Instructions were posted as to actions to be taken if the portal monitors were to alarm.

No violations or deviations were identified.

9. Scheduled Outage Advance Planning and Preparations (83529)

The NRC inspector examined the licensee's preparations for a 77-day refueling outage, tentatively scheduled to start on September 24, 1988. Licensee advanced staffing, personnel selection criteria and testing, site specific training and qualification of HP, and radwaste workers were reviewed. The licensee's contractor qualification program ensures contract HP and radwaste technicians are properly qualified to perform specific tasks. The NRC inspector examined licensee organizational staffing for the outage and HP coverage of selected areas and jobs. The licensee has established an ALARA goal of approximately 227 person-rem for the outage. The licensee's procurement of additional radiation protection instrumentation and expendable supplies was examined. The NRC inspector noted that the licensee was revising their dosimetry issuance procedures for extremity and multiple whole body monitoring into for the outage and establishing an onsite dosimetry processing capability.

The licensee has scheduled steam generator primary side eddy current inspections, secondary side sludge lancing, and inspection of the reactor vessel thermal shields after full fuel off-load, among other activities, during this outage.

No violations or deviations were identified.

9. Followup on Licensee Event Reporting (92700)

(Closed) LER 285/87-26: Failure to Control a Very High Radiation Area - The event the LER describes involves the failure of a licensee employee to properly lock a door to a VHRA as required by TS 5.11.2. Subsequent to this LER, the licensee has experienced several other incidents involving VHRA control (LERs 88-01 and 88-03) that have resulted development of a comprehensive plan on modification door locking systems and revisions to the VHRA control procedures. The licensee's corrective actions for this incident were examined and found to have been implemented. Further licensee actions concerning modification of locking systems for VHRA doors will be tracked via licensee commitments in their response to Notice of Violation 285/8805-03 and LER 88-01.

(Closed) LER 285/88-03: Inadequate Key Control to a VHRA - The event described in the LER was addressed as a Notice of Violation in NRC Inspection Report 50-285/88-05 (285/8805-03) and involved the licensee's failure to adequately control issuance of keys to VHRAs. The licensee has implemented a new key control program that satisfies the commitments contained in the LER. Long term corrective actions involving the

modification of all door locking hardware and VHRA key control will be monitored via the licensee's commitments contained in LER 88-01.

10. Exit Interview

The NRC inspector met with licensee representatives identified in paragraph 1 at the conclusion of the inspection on September 2, 1988. The NRC inspector summarized the scope and findings of the inspection.

ATTACHMENT  
TO NRC INSPECTION REPORT  
50-285/88-30

DOCUMENTS REVIEWED

TITLE	REVISION	DATE
<u>Standing Orders</u>		
G-41, Station First Aid	06	04-21-88
G-50, ALARA Radiation Exposure Program	07	07-25-88
G-52, Plant Staff Working Hours	02	07-25-88
G-57, Installation of Temporary Lead Shielding	05	07-25-88
G-64, Medical Examination Program for Worker Qualification	12	07-25-88
G-76, Use of Gamma-10 Portal Monitors	00	04-29-88
T-01, Radiation Procedure Manual	04	07-25-88
T-10, Personnel Exposure Records	31	07-25-88
T-11, Respiratory Protection Program Policy Statement	01	07-25-88
R-03, Reportable Occurrences	09	03-18-87
R-04, Operating Incident Reports	16	06-09-88
<u>Radiation Protection Manual</u>		
Section 2, Personnel Protection and Control	38	04-28-88
2.3, Personnel Exposure Monitoring and Records		
2.4, Radiation Exposure Registration		
2.5, TLD Issuance		
2.9, TLD/Dosimetry Discrepancy Comparisons		
2.15, Fort Calhoun Administrative Exposure Limits		
2.20, Radiation Work Permits		
2.27, MPC Hour Accountability		
2.30, Use of Respiratory Equipment		
Section 3, Area Control	22	08-17-88
3.1, Definitions		
3.2, Radiation Controls		
3.3, Airborne Radioactivity Controls		
Section 4, Radioactive Material Control	22	08-17-88
4.1, Receiving Radioactive Material		
4.2, Storage of Radioactive Material		
4.3, Receiving Radioactive Material Trailer Shipments		

TITLE	REVISION	DATE
Section 7. Operational ALARA Program	08	07-01-88
Section 8. Radiation Protection Procedures (RPP)	07	08-17-88
RPP-1. Controlled Area Emergencies	09	08-17-88
RPP-6. Protective Clothing and Respiratory Equipment Monitoring	13	04-22-88
RPP-6A. Rad Clean Dry Cleaners	00	08-27-87
RPP-6B. Laundry Washer and Dryer	00	08-27-87
RPP-6C. Respiratory Washer and Dryer	00	08-24-87
RPP-13. Recharging SCBA Cylinders	01	09-18-79
RPP-17. Radioactive Source Log Maintenance and Use	04	08-17-88
RPP-18. Instrument Selection	07	07-07-88
RPP-20. Radiation Work Permits (RWP)	10	08-17-88
RPP-21. Use of Multiple Whole Body and Extremity TLD with Direct Reading Dosimeters	02	03-09-87
RPP-22. Control and Use of Respiratory Equipment	01	02-23-87
Section 9. Operating Procedures for Health Physics Personnel (HP)		
HP-01. Whole Body Counting	07	05-05-88
HP-01A. Whole Body Count Evaluations	02	08-10-87
HP-02. Respirator Fit Test Quantitative Polydispersed Aerosol Test	07	07-21-88
HP-04. Radioactive Source Control Log	02	09-23-83
HP-05. Collection and Analysis of Air Samples	06	09-19-85
HP-07. Vitalograph Testing and Operation	08	07-25-88
HP-08. Labeling and Bagging of Radioactive Materials	04	12-17-87
HP-09. Area Contamination Control	04	06-29-88
HP-11. Whole Body Frisking	01	09-27-85
HP-13. Continuous Air Monitoring Instrument Operation	03	04-27-88
HP-14. Counting Instrument Operation	06	05-25-88
HP-15. Portable Dose Instrument Operation	06	08-13-85
HP-16. Selection of Contract Health Physics Technician	01	07-13-83
HP-18. Personnel Decontamination	04	04-28-88
HP-20. Compressed Breathing Air Quality Surveillance	01	02-28-84
HP-23. Controlled Area Visitor Briefing	01	12-14-87
HP-25. Radiation Hot Spot Verification/ Update	01	03-29-88
Emergency Plan Implementing Procedures (EPIP)		
EPIP-DSC-13. Onsite Radiological Monitoring	02	03-12-87
EPIP-DSC-16. Emergency Team	06	07-06-87

TITLE	REVISION	DATE
EPIP-EDF-03, Emergency Operation Facility Emergency Instruments and Equipment	09	10-28-87
EPIP-EDF-11, Dosimetry and Records	06	02-12-88
EPIP-RR-03, Re-entry into Evacuated Area	02	04-30-86
EPIP-RR-09, Re-entry and Recovery Equipment Procurement	05	01-07-88
<u>Calibration Procedures - Health Physics</u>		
HP-22, Fast Scan Whole Body Counter	02	07-02-87
HP-23, Personnel Contamination Monitor	00	07-01-85
HP-25, Canberra HP-Ge System	01	07-07-88
<u>Radiation Monitoring Equipment Calibration Procedures by Instrument</u>		
E-530, Portable Radiation Monitor	05	03-02-87
RD-2, Portable Radiation Monitor	06	01-05-87
RD-2A, Portable Radiation Monitor	05	01-05-87
RD-4A, Portable Radiation Monitor	04	02-09-84
RD-7, Digital Ion Chamber Portable Radiation Monitor	02	02-04-87
RM-14, Portable Radiation Monitor	06	02-22-88
RAS, Portable Air sampling Pump	04	01-21-87
SAM-2, Portable Radiation Monitor	03	05-07-85
SAS-1, Staplex Air Sampler	01	11-03-83
091A, Containment High Range Monitor	05	05-04-87
<u>Chemistry Manual Procedures (CMP)</u>		
CMP-2.8, Asbestos Air Sampling	00	03-25-87
CMP-3.10, Determination of Radioactive Particulates and Iodine in Air Samples	04	12-09-86
CMP-3.75, Compressed Air Analysis for Oil, Water and Particulate Content	01	03-20-84
CMP-3.77, Determination of Selected Gases and Vapors Using Mine Safety Appliance Detector Tubes	01	09-30-85
CMP-3.78, Determination of Combustible and Toxic Gases in Sampled Atmospheres	00	04-06-84
<u>Audits</u>		
Health Physics and ALARA	SERIAL NO. 58	DATE 11-02-87
<u>Surveillance Reports</u>		
Waste Gas Release	03-88-1	03-09-88
Personnel Exposure Records	03-88-2	03-21-88
Radiation Protection/RWF	03-88-3	03-21-88
Respiratory Equipment	04-88-7	04-14-88

TITLE	REVISION	DATE
ALARA	C4-88-4	05-03-88
Radiation Protection Surveillance Tour	C5-88-1	05-23-88
Contamination Control	C5-88-5	06-07-88
Controlled Area Surveillance Tour	C6-88-1	06-20-88
HP Counting Instrument Operations	C7-88-1	07-18-88

#### Surveillance Test

ST-RM-3, Emergency Plan Radiation Instruments and Equipment	37	06-22-87
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#### Internal Communications (Memorandum, Orders, etc.,)

Proper TLD Placement	FC-C-252-88	08-05-88
Status of 1988 ALARA Goals	FC-C-229-88	07-20-88
Synopsis of Steam Generator Nozzle Dam Installation	FC-381 Supl.	03-21-87
RRD 870442 Response (NRC-TLD Concern)	TS-FC-87-549	09-22-87
Designated Alternates (RF Group Order 88-RP-01)	FC-C-260-88	08-10-88
Control of Very High Radiation Area Access (Group Order 88-01)	FC-C-093-88	03-10-88
Use of Junior Technician in the Field Health Physics Area (Group Order 88-4)	FC-C-213-88	06-29-88
Response to NRV 50-285/8813-02	LIC-88-580	07-25-88
Security Bulletin	88-11	04-13-88
Standing Order No. 6-76 (Memorandum)	FC-818-88	04-29-88

#### QPPD Technical Services Operating Procedures

	REVISION	DATE
N-TSDP-3, Calibration of the Cesium 137 Source	07	08-87
N-TSDP-4, Calibration of the Harshaw Model 2271 TLD Reader	01	07-87
N-TSDP-5, Dosimetry Technician Training Guidelines	02	04-88
N-TSDP-12, Quality Control/Test Badges	03	06-87
N-TSDP-13, Determining TLD Gamma Sensitivities	03	06-87
N-TSDP-14, Dose Calculation for TLD Specials	02	06-87
N-TSDP-15, Reading TLD Cards	04	06-87
N-TSDP-16, Monthly Exposure Report	03	06-87
N-TSDP-19, Initial Quality Check of New TLD	00	07-87
N-TSDP-20, Hand Calculation Worksheets	00	07-87

#### Training Department Handouts and Documents

Course History for Selected Students (47)
C/RP Training for a Selected HP/RW Technician



TITLE	REVISION	DATE
Respiratory Protection Training Lesson Plan	10-27-31	05-31-88
Respiratory Protection Training Handout	00	05-18-88
Senior Contract Radwaste Technician Qualification Guide	01	08-04-88
Junior Contract Radwaste Technician Qualification Guide	01	08-04-88
Senior Contract Health Physics Field Technician Qualification Guide	01	08-04-88
Junior Contract Health Physics Field Technician Qualification Guide	01	08-04-88
Senior Contract ALARA Technician Qualification Guide	01	08-04-88