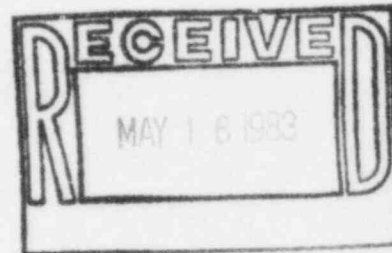


DMB

Omaha Public Power District
1623 Harney Omaha, Nebraska 68102
402/536-4000

May 13, 1983

LIC-83-123



Mr. W. C. Seidle, Chief
Reactor Project Branch 2
U. S. Nuclear Regulatory Commission
Region IV
611 Ryan Plaza Drive, Suite 1000
Arlington, Texas 76011

Reference: Docket No. 50-285

Dear Mr. Seidle:

IE Inspection Report 83-03

Please find attached the Omaha Public Power District's responses to the one violation and one deviation identified in the subject report.

Sincerely,

W. C. Jones
Division Manager
Production Operations

WCJ/TLP:jmm

Attachment

cc: LeBoeuf, Lamb, Leiby & MacRae
1333 New Hampshire Avenue, N.W.
Washington, D.C. 20036

Mr. L. A. Yandell, Senior
Resident Inspector

8307220416 830513
PDR ADOCK 05000285
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Attachment

OMAHA PUBLIC POWER DISTRICT'S RESPONSE TO NOTICE OF VIOLATION DATED APRIL 13, 1983

Notice of Violation

Based on the results of an NRC inspection conducted during the period of January 17-21, 1983, and in accordance with the NRC Enforcement Policy (10 CFR Part 2, Appendix C), 47 FR 9987, dated March 9, 1982, the following violation was identified:

Procedural Compliance

10 CFR 50, Appendix B, Section V, requires that activities affecting quality shall be documented by procedures and accomplished in accordance with these procedures. Specifically, Procedures HP-8, "Labeling and Bagging of Radioactive Materials," and RPP-14, "In-Plant Collection and Disposal of Radioactive Waste," require that hot spot stickers stating radiation levels will be attached to the bag having contact radiation readings of 100 mR/hr or greater.

Contrary to the above, on January 19, 1983, a bag containing radioactive material was observed in a noncompactible waste bin in the railroad siding area and yielded contact exposure rates of 115 to 125 mR/hr.

This is a Severity Level IV Violation (Supplement IV).

Pursuant to the provisions of 10 CFR 2.201, Omaha Public Power District is hereby required to submit to this office, within 30 days of the date of this Notice, a written statement or explanation in reply, including: (1) the corrective steps which have been taken and the results achieved; (2) the corrective steps which will be taken to avoid further violations; and (3) the date when full compliance will be achieved.

Consideration may be given to extending your response time for good cause shown.

District Response

- (1) Corrective steps which have been taken and the results achieved.

The bag of radioactive waste was resurveyed by plant personnel and found to yield a contact exposure rate of 110 mR/hr with a variety of properly calibrated and function checked doserate instruments. The bag was

immediately labeled with a hot spot sticker indicating the level of hazard in compliance with plant procedures HP-8 and RPP-14. A comprehensive resurvey of all radioactive waste and bagged radioactive materials was conducted the same day. All materials were found to be properly identified and labeled as required. All health physics personnel were made cognizant of the circumstances of this event and reminded of the specific requirements of HP-8 and RPP-14 through group discussion. Upgraded management attention was and remains directed at assuring that activities of technicians and decontamination/radioactive waste workers comply with all pertinent plant procedures and regulatory requirements. Since January 19, 1983, no potential violations have been identified.

- (2) Corrective steps which will be taken to avoid further violations.

The steps taken immediately effectively resolved the issue. No other action is necessary.

- (3) Date when full compliance will be achieved.

Full compliance was achieved on January 19, 1983.

Attachment

OMAHA PUBLIC POWER DISTRICT'S RESPONSE TO NOTICE OF DEVIATION DATED APRIL 13, 1983

Notice of Deviation

Based on the results of an NRC inspection conducted during the period of January 17-21, 1983, and in accordance with the NRC Enforcement Policy (10 CFR Part 2, Appendix C), 47 FR 9987, dated March 9, 1982, the following deviation was identified:

Adherence to Accepted Industry Standards

Section 4.4, "Professional-Technical," of ANSI N18.1-1971, states the professional-technical groups shall include individuals with the following qualifications in the indicated disciplines. Specifically, Section 4.4.3, "Radiochemistry," specifies that at the time of appointment to the active position, the responsible person shall have a minimum of 5 years experience in chemistry of which a minimum of 1 year shall be in radiochemistry. A minimum of 2 years of this 5 years' experience should be related technical training. A maximum of 4 years of this 5 years' experience may be fulfilled by related technical or academic training.

In deviation from the above, the NRC inspectors noted that the plant chemist did not appear to meet the experience and training criteria for radiochemistry supervisor. Additionally, the licensee had not developed procedures which provide definitive selection and qualification criteria for radiochemistry personnel.

Omaha Public Power District is hereby requested to submit to this office within 30 days of the date of this Notice of Deviation, a written statement or explanation in reply, including: (1) the corrective steps which have been taken and the results achieved; (2) the corrective steps which will be taken to avoid further deviation from accepted industry standards; and (3) the date when full compliance will be achieved.

Consideration may be given to extending your response time for good cause shown.

District Response

The referenced Section 4.4.3 (Radiochemistry) of ANSI N18.1-1971 has been determined in Inspection Reports 83-03 and 82-21 to describe the position of Plant Chemist at the Fort Calhoun Station. While oversight of radiochemistry is an important aspect of the Plant Chemist's duties, it is

but one part of his overall responsibilities. Attachment A (the District's position description for Plant Chemist) describes in detail the functions of the Plant Chemist. The applicable reference in ANSI N18.1-1971 for the functions performed by the Fort Calhoun Station Plant Chemist is 4.3.2, "Supervisors Not Requiring AEC Licenses". The incumbent Plant Chemist has earned a high school diploma, a bachelor's degree in chemistry from McAlester College, and 38 semester hours toward a graduate degree in chemical engineering. Prior to his appointment as Plant Chemist, he served for 2½ years as Chemical Engineer assigned to a variety of process-related tasks. Thus, the incumbent exceeds the requirements of Section 4.3.2.

The Fort Calhoun Station organization does not include a "Radiochemist" position. The requirements of Section 4.4 state the necessity of including an individual with the radiochemistry expertise described in Section 4.4.3 within professional-technical groups. The Chemical and Radiation Protection Department (C/RP) includes several individuals with the requisite radiochemistry experience and with direct responsibilities for plant radiochemical efforts. The Supervisor - Chemical and Radiation Protection is responsible for the department's radiochemical activities as described in Attachment B and is fully qualified as a radiochemist. A senior C/RP technician assigned for several years to the Plant Chemist also exceeds the radiochemistry requirements. While not serving specifically as a "radiochemist" prior to his appointment, the incumbent qualifies according to Section 4.4.3 through an amalgam of experience gained in all of the disciplines that comprise radiochemistry. He devoted 2½ years as Test Engineer to the study of and assignment to plant systems including radioactive process streams. In his academic and laboratory work, he developed a strong working knowledge of electronics as applied to chemical-radiochemical analytical systems including operational amplifiers, spectral analysis, and detection methods. His work in chemistry and chemical engineering acquainted him with the principles underlying work with radiochemical carriers, rate reactions, and decay determinations. His work with plant process and effluent radiation monitors enhanced his understanding of releases to the environment.

The Commission also expressed a concern that procedures do not exist to provide definitive selection and qualification criteria. All radiochemistry personnel have specific job descriptions developed for each job function and District policies require these personnel to meet these written examples. Accordingly, the District believes that procedures exist to ensure compliance with all existing selection and qualification criteria.

In summary, the incumbent exceeds the requirements of positions described in both Sections 4.3.2 and 4.4.3 of ANSI N18.1-1971. Prior to his appointment, he and other candidates were interviewed against these requirements and the requirements of the position description. The District believes that he satisfies all regulatory requirements for the position he holds and that the guidance provided in ANSI N18.1-1971 and the selection criteria provided through the Plant Chemist position description provides assurance that only qualified individuals are selected for Fort Calhoun assignment. Therefore, full compliance was achieved with his appointment and no corrective action was or is necessary.

- (1) Corrective steps which have been taken and results achieved.

Please see above discussion.

- (2) Corrective steps which will be taken to avoid further deviations.

Please see above discussion.

- (3) Date when full compliance will be achieved.

The District was in full compliance as of the date of the referenced appointment to Plant Chemist.



POSITION DESCRIPTION

Employee Relations Division

Date <u>October, 1980</u>	Position <u>Plant Chemist</u>
Written by <u>F. F. Franco</u>	Incumbent <u>G. Roach</u>
Approved by (1) <u>[Signature]</u>	<u>Chemistry and Radiation Protection</u>
(2) <u>[Signature]</u>	Department <u>Fort Calhoun Station</u>
	<u>Supervisor-Chemistry and</u>
	Reports to <u>Radiation Protection</u>

POSITION PURPOSE:

This position supervises the activities of the Fort Calhoun Station chemistry unit to provide optimum chemical control of all plant systems, to provide radiochemical and normal chemical analytical services to support plant operations and to coordinate controlled releases to the environment from the plant.

DIMENSIONS:

Employees: 4

Budget: \$720,000
Chemistry control for \$280,000,000 facility

NATURE AND SCOPE:

The Plant Chemist reports to the Supervisor-Chemistry and Radiation Protection, as does a Plant Health Physicist. Two chemists and two technicians report to this position.

This position was created as a part of the Chemistry and Radiation Protection Group to support the Fort Calhoun Station's operations through chemical analysis and control in compliance with Nuclear Regulatory Commission requirements. Numerous chemical analyses and related consultations are performed by the incumbent to provide services to all plant personnel relative to optimum chemical protection and to ensure material corrosion is kept at a minimum.

This position develops, implements and performs approved chemical analyses, provides analytical results and recommendations from tests performed on all chemical parameters for liquids, solids and gases. He assures waste management of effluent plant discharges through the controlled release of radioactive material to the environment as required by federal regulations.

The incumbent develops new chemistry and radiochemistry techniques and procedures to increase the efficiency, sensitivity and accuracy of the various tests, and makes recommendations regarding their adoption.

The Plant Chemist directs and coordinates the maintenance, operation and calibration of chemistry instruments and equipment. He may personally perform tests with sophisticated complex equipment and/or establish operating procedures for same.

He assists the Supervisor-Chemistry and Radiation Protection in annual, semiannual, quarterly, monthly and daily planning; and in ensuring that all chemistry requirements (Federal, state, District) are performed and reported semi-annually and annually to regulatory agencies.

This person maintains comprehensive records on the Chemistry unit's operations, in accordance with federal and state regulations.

The incumbent also assists the station's Training Supervisor in the chemistry training of both group and plant personnel. He also provides chemistry consultation to support plant operational and maintenance activities as required.

This person is responsible for making presentations to the Plant Review Committee regarding special chemistry activities.

The Plant Chemist directs the quality assurance of the chemistry lab activities by cross-checking test analyses, instrument calibrations, etc., with those of other similar facilities and nationally accepted standards.

This position achieves its accountabilities, in part, through the following positions which report directly to him:

Chemists who perform analyses of process streams and waste discharges to the environment and coordinate corrective actions with operations, to achieve optimum chemistry control and proper waste discharge rates.

Technicians who assist the chemists by performing special analytical and controlled functions routinely.

The major challenges of this position lie in the organization of the chemistry unit's activities in such a manner to ensure the timely, accurate performance of all analytical activities, especially those in the radiochemistry area; and in the proper maintenance of all sophisticated analytical instruments to ensure operation at the lowest possible sensitivity points.

This position consults daily with the Supervisor-Chemistry and Radiation Protection regarding current projects. The incumbent works largely on an independent basis, referring to his superior only those problems which are outside of the limitations of the Fort Calhoun Technical Specifications and Chemistry Manual. Working within the limits of his approved annual budget, this person makes recommendations regarding the addition of new equipment and initiates purchase actions to maintain an adequate inventory of supplies. He also makes recommendations regarding personnel actions within his unit.

This position must assure compliance with the regulatory requirements of the Nuclear Regulatory Commission, Environmental Protection Agency and other federal and state agencies and with the Fort Calhoun Technical Specifications and operating license.

The Plant Chemist communicates regularly with Fort Calhoun Station personnel, particularly with Shift Supervisors, Water Plant Operators and Engineers, to provide consultation regarding optimum chemical protection; with Technical Services and other District chemists to coordinate activities and exchange information.

The incumbent also maintains contact with analytical equipment vendors regarding purchases and maintenance; with federal and state regulatory agency representatives during on-site activities and license records inspections; and through reporting, he assures compliance with the appropriate regulations. He maintains contact with chemists at major nuclear facilities to exchange ideas and information.

This person should be a member of the American Chemical Society with a radiochemist speciality for the purpose of further personal development in his field.

Performance in this position can be measured by the lack of violations to federal and state operating regulations and by the internal inspection of plant systems indicating that scale and corrosion of equipment has been well controlled. The Plant Chemist's performance may also be measured by the proficiency of his unit's work as displayed when comparative results are submitted for split sample analyses (i.e. one sample divided into two portions; one part being analyzed at the Fort Calhoun Station, the other part at an independent outside laboratory). This proficiency certification is required at least semi-annually.

To qualify for this position, a person must hold a bachelor's degree in chemistry or chemical engineering or its equivalent. In addition, this position requires training and experience in radiochemistry. It also requires communication and supervisory skills.

PRINCIPAL ACCOUNTABILITIES:

1. Develop, implement and perform various analyses to provide chemical control for all plant systems and coordinate controlled releases to the environment in compliance with federal and state regulations.
2. Direct and coordinate the maintenance, operation and calibration of chemistry instruments and equipment to ensure operation at the optimum sensitivity.
3. Ensure chemical group operating records are maintained in compliance with NRC regulations.
4. Consult with plant operations and maintenance personnel to provide information on chemical control according to procedure.
5. Train and motivate a staff of qualified personnel to perform chemical analyses accurately and on a timely basis.
6. Assist with report preparation regarding the chemical unit's activities to assure compliance with federal and state regulations.
7. Develop and recommend improved methods of chemical analysis to provide for better accuracy, efficiency and sensitivity.

POSITION DESCRIPTION

Employee Relations Division

Date October, 1980 Position Supervisor - Chemistry and Radiation Protection
Written by F. F. Franco Incumbent Fred F. Franco
Approved by (1) [Signature] Department Chemistry and Radiation Protection, Fort Calhoun Station
(2) [Signature] Reports to Manager-Fort Calhoun Station

POSITION PURPOSE:

Plan, organize and direct the activities of the Chemistry and Radiation Protection group in order to provide for the radiological safety of the plant personnel, equipment and general public and to maintain optimum chemical control of all operating and disposal systems within the station.

DIMENSIONS:

Employees: 2 report directly
15 report indirectly

Budget: \$2,150,000

Chemistry control of \$200,000,000 facility with fuel worth \$41,000,000.

Responsible for the radiological safety of 150 regular employees and 250 temporary employees.

NATURE AND SCOPE:

This position reports to the Manager-Fort Calhoun Station as do the Supervisor-Operations, Supervisor-Maintenance, Supervisor-Technical, and Supervisor-Administrative Services. Reporting directly to this position are the Plant Chemist and Plant Health Physicist. A total of 15 technical/professional positions presently report to the Plant Health Physicist and Plant Chemist combined.

The Chemistry and Radiation Protection group was established to support operations through chemical and health physics analyses and control. It assures that proper programs are enforced to protect the plant staff and the general public from exposure to radioactive materials. This is accomplished by providing radiological programs required for nuclear operations, performing chemical analysis to ensure material corrosion is kept to a minimum and providing a service to all plant personnel in matters involving chemical and radiation protection. The incumbent plans and directs the above activities of the Chemistry and Radiation Protection group and coordinates them with operations and maintenance. He provides analytical results and recommendations from tests performed on all chemical parameters for liquids, solids and gases. He provides waste management of effluent plant discharges and solid waste. This position assures the controlled safe releases of radioactive

material to the environment. The incumbent provides radiation protection training programs, methods, and procedures to ensure that the radiation exposure of all working in the plant is as low as reasonably achievable. He maintains a record system to demonstrate compliance with State and Federal regulations concerning personnel exposures. This position controls the use, storage, and transfer of all licensed and non-licensed radioactive sources. He provides equipment for plant radiation protection programs and schedules instrument calibrations. The incumbent maintains the station emergency plan and conducts the annual emergency exercise. He evaluates all jobs with potential nuclear hazard and recommends optimum methods for performing work. He devises procedures for performing new maintenance tasks to minimize exposures. This position reports to the Nuclear Regulatory Commission on compliance with license requirements. The incumbent makes recommendations to operations concerning chemical requirements for optimum treatment of chemical systems. He initiates new analytical methods for analysis on materials.

This position achieves its accountabilities through the following directly reporting positions:

Plant Chemist who supervises the activities of the chemical unit to:

- 1) provide optimum chemical control of all plant systems;
- 2) provide radiochemical and normal chemical analytical services to support plant operations, and;
- 3) coordinate controlled releases to the environment.

Plant Health Physicist who supervises the activities of the radiation protection group to provide for:

- 1) the radiological safety of plant personnel;
- 2) waste management, and
- 3) radiological environmental protection.

This position derives its greatest challenge from the need to coordinate many groups with various training into one effective radiation protection program; to place waste effluent discharges into a programmed procedure; to reduce the volume and concentration of waste generation; and to increase analytical sensitivity of radiochemistry methods.

The incumbent reports to the Manager-Fort Calhoun Station. This position assures compliance with the Technical Specifications, NRC license, Code of Federal Regulations, Regulatory Guides, and State and Federal water regulations concerning chemical and radioactivity discharges as well as radiation exposures.

This position meets daily with the Manager-Fort Calhoun Station, Shift Supervisor and Supervisor-Operations to discuss daily operations and maintenance status of the plant. The incumbent meets weekly with the Technical Services Manager, Chemical Engineer, and the Test Engineer to discuss special analysis and problems and to exchange information on design changes. This position meets monthly with the NRC to report on compliance with licenses. He meets quarterly with the University of Nebraska Medical Center in an advisory role to the Radiation Health Center. He meets periodically with the Nebraska State Health Department and Environmental Protection Agency during inspections of the plant and verifies procedures for compliance. The incumbent meets periodically with the Nebraska Civil Defense and the Iowa Department of Planning and Programming concerning emergency procedures. He should be a member of the Health Physics Society in order to keep abreast of current developments in the field. The incumbent is a member of the Plant Review Committee and the University of Nebraska Medical Center Advisory Board.

Performance in this position may be measured by receiving no deficiencies, infractions, or non-compliance reports. Radiation exposure reports indicate when the exposure received by plant personnel is as low as reasonably achievable. Also, internal inspection of plant systems indicate whether good chemical control is used. Group performance is compared through annual reports with that of all operating facilities throughout the country.

To perform successfully in this position, the incumbent should have extensive knowledge in chemistry and health physics. He must have management and administrative skills and meet the ANSI and NRC recommendations for this position.

PRINCIPAL ACCOUNTABILITIES:

1. Direct the activities of the Chemistry and Radiation Protection group in order to provide for the radiological safety of the plant personnel, equipment and the general public.
2. Increase operating efficiency by maintaining optimum chemical control of all operating and disposal systems within the plant.
3. Responsible for the radiological procedures and monitoring to minimize contamination levels and radiation exposure to plant personnel and equipment.
4. Supervises required examinations to assure good health of plant personnel and maintains monitoring and exposure records of all personnel in compliance with Nuclear Regulatory Commission regulations.
5. Supervises the chemical and radiological analysis of processed material and radioactive waste releases. Supervises the shipment of all packaged radioactive waste material from the plant and preparation of release permits for the station waste discharges.
6. Maintains accountability of all nuclear material stored or used at the station.