



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
REGION II
245 PEACHTREE CENTER AVENUE NE, SUITE 1200
ATLANTA, GEORGIA 30303-1257

July 29, 2015

EN 50970

Mr. B. Joel Burch
Vice President and General Manager
BWXT Nuclear Operations Group, Inc.
P.O. Box 785
Lynchburg, VA 24505-0785

SUBJECT: BABCOCK AND WILCOX NUCLEAR OPERATIONS GROUP – NUCLEAR
REGULATORY COMMISSION INTEGRATED INSPECTION REPORT 70-27/2015-
003

Dear Mr. Burch:

This refers to the inspections conducted from April 1 through June 30, 2015, at the BWXT Nuclear Operations Group (NOG), Inc., facility in Lynchburg, VA. The inspections were conducted to determine whether activities authorized under the license were conducted safely and in accordance with U.S. Nuclear Regulatory Commission (NRC) requirements. The enclosed report presents the results of these inspections. The results were discussed with you and members of your staff at exit meetings held on April 23 and July 8, 2015 for this integrated inspection report.

During the inspections, the NRC staff examined activities conducted under your license, as they related to public health and safety, to confirm compliance with the Commission's rules and regulations and with the conditions of your license. Areas examined during the inspections are identified in the enclosed report. Within these areas, the inspections consisted of selected examinations of procedures and representative records, observations of activities, and interviews with personnel. Based on the results of these inspections, no violations were identified.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be made available electronically for public inspection in the NRC Public Document Room, or from the NRC's Agencywide Documents Access and Management System (ADAMS), which is accessible from the NRC Website at <http://www.nrc.gov/reading-rm/adams.html>.

If you have any questions concerning these inspections, please contact me at 404-997-4555.

Sincerely,

/RA/

Eric C. Michel, Chief
Projects Branch 2
Division of Fuel Facility Inspection

Docket No. 70-27
License No. SNM-42

Enclosure:
NRC Inspection Report 70-27/2015-003
w/Attachment: Supplementary Information

cc:
Joseph G. Henry
Chief Operating Officer
BWXT Nuclear Operations Group, Inc.
2016 Mount Athos Road
Lynchburg, VA 24505

Charles A. England, Manager
Licensing and Safety Analysis
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Lynchburg, VA 24505-0785

Steve Harrison, Director
Division of Radiological Health
Department of Health
109 Governor Street, Room 730
Richmond, VA 23219

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ADAMS: ☒

ACCESSION

NUMBER:

ML15210A695

☒ SUNSI REVIEW COMPLETE ☒ FORM 665 ATTACHED

OFFICE	RII:DFFI/PB2	RII:DFFI/PB2	RII:DFFI/SB	RII:DFFI/PB2	RII:DC		
SIGNATURE	/RA/	/RA/	M. Thomas for	/RA/	/RA/		
NAME	SSubosits	MThomas	RGibson	GGoff	MCrespo		
DATE	7/27/2015	7/27/2015	7/27/2015	7/28/2015	7/28/2015		
E-MAIL COPY	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

OFFICIAL RECORD COPY DOCUMENT NAME: G:\DFFI\REPORTS\DRAFT INSPECTION REPORT FOLDER\BWXT
NOG\2015 FEEDERS\BWXT NOG IR 2015-003 (PUBLIC).DOCX

Letter to Mr. B. Joel Burch from Eric C. Michel dated July 29, 2015

SUBJECT: BABCOCK AND WILCOX NUCLEAR OPERATIONS GROUP – NUCLEAR
REGULATORY COMMISSION INTEGRATED INSPECTION REPORT 70-27/2015-
003

DISTRIBUTION:

PUBLIC

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S. Subosits, RII

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N. Pitoniak, RII

R. Johnson, NMSS

M. Baker, NMSS

T. Naquin, NMSS

U. S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket No: 70-27

License No: SNM-42

Report No: 70-27/2015-003

Licensee: BWXT

Facility: Nuclear Operations Group (NOG)

Location: Lynchburg, VA 24505

Dates: April 1 through June 30, 2015

Inspectors: S. Subosits, Senior Resident Inspector, RII/DFFI/PB2
R. Gibson, Senior Fuel Facility Projects Inspector, RII/DFFI/SB
M. Thomas, Senior Fuel Facility Projects Inspector, RII/DFFI/PB2
G. Goff, Fuel Facilities Inspector, RII/DFFI/PB2

Approved by: E. Michel, Chief
Projects Branch 2
Division of Fuel Facility Inspection

Enclosure

EXECUTIVE SUMMARY

BWXT Nuclear Operations Group
NRC Integrated Inspection Report 70-27/2015-003
April 1 – June 30, 2015

Inspections were conducted by the senior resident inspector and regional staff during normal and back shifts in the areas of safety operations, radiological controls, and facility support. The inspectors performed a selective examination of licensee activities that were accomplished by direct observation of safety-significant activities and equipment, tours of the facility, interviews and discussions with licensee personnel, and a review of facility records.

Safety Operations

- The items relied on for safety (IROFS) reviewed during this period were properly maintained in order to perform their intended safety function in accordance with the license application and regulatory requirements. (Section A.1)
- The facility was operated safely in accordance with operating procedures, nuclear criticality safety (NCS) postings and regulatory requirements. (Section A.2)
- Fire protection systems were maintained in accordance with site procedures. (Section A.3)

Radiological Controls

- The Radiation Protection program elements reviewed were implemented in accordance with the license and regulatory requirements. (Sections B.1 and B. 2)
- The Environmental Protection program was implemented in accordance with the license application and regulatory requirements. (Section B.3)
- Shipments of radioactive materials were prepared and shipped in accordance with applicable regulations and plant procedures. Certificates of compliance were maintained current. Shipping records were properly completed and maintained in accordance with applicable regulations. (Section B.4)

Facility Support

- The post maintenance testing, preventive maintenance and surveillance testing observed for IROFS and other safety controls were implemented in accordance with the license and applicable procedure requirements. (Sections C.1 and C.2)
- Reports for tracking and resolution of safety-related issues included corrective actions to prevent recurrence. Extent of condition and extent of cause reviews were conducted when required by the governing corrective action program procedure. (Section C.3)

Other Areas

- Event Notification 50970 / Licensee Event Report (LER) 70-27/2015-003-01 was reported to the NRC on April 9, 2015 following an Occupational Safety and Health Administration (OSHA) reportable event at the site. (Section D.2)

Attachment

Key Points of Contact

List of Items Opened, Closed, and Discussed

List of Inspection Procedures Used

Documents Reviewed

REPORT DETAILS

Summary of Plant Status

During the inspection period, routine fuel manufacturing operations and maintenance activities were conducted in the fuel processing areas and in the Research Test Reactors and Targets (RTRT) facility. Routine operations and maintenance activities were conducted in the Uranium Recovery (UR) facility.

A. Safety Operations

1. Plant Operations (Inspection Procedure (IP) 88135)

a. Inspection Scope and Observations

The inspectors performed routine tours of the fuel manufacturing areas housing special nuclear material (SNM), reviewed shift turnover log sheets, and observed two shift turnover exchanges in UR. The inspectors interviewed operators, front-line managers (FLMs), maintenance mechanics, radiation protection (RP) staff, and process engineering personnel regarding issues with plant equipment and to verify the status of the process operations.

The inspectors observed operations in progress in the UR, Filler, Wastewater Treatment Facility, Machine Shop, and RTRT areas throughout the inspection period. The inspectors determined that the SNM processes and workstations in service at the time of walk-downs were operated in accordance with applicable procedures.

During the inspection period, the inspectors interviewed seven operators, five FLMs, and three nuclear materials control (NMC) technicians and determined that each of the individuals demonstrated adequate knowledge of the nuclear criticality safety (NCS) posting requirements, and the operations procedures associated with their assigned duties.

b. Conclusion

No violations of NRC requirements were identified.

2. Safety System Walk-down (IP 88135.04)

a. Inspection Scope and Observations

The inspectors performed walk-downs of two safety-significant systems involved with the processing of SNM. As part of the walk-down, inspectors reviewed the NCS postings associated with the Specialty Fuels Facility (SFF) Dry-End process area and the Conventional Filler process area. The inspectors verified that items relied on for safety (IROFS) were available and reliable to perform their intended functions when needed to comply with the performance requirements of 10 CFR 70.61. No conditions that degraded plant equipment, the availability, or reliability of IROFS were identified.

To determine if plant equipment was installed correctly, the inspectors reviewed the relevant drawings, as well as Integrated Safety Analysis (ISA)/Safety Analysis Reports (SAR) 15.18 for the SFF Dry-End process and SAR 15.34 for the Conventional Filler process. During the walk-downs, the inspectors verified some of the following as appropriate:

- Controls in place for potential criticality, chemical, and fire hazards;
- Process vessel configurations maintained in accordance with Nuclear Criticality Safety Evaluations (NCSEs);
- Correct valve position and material condition;
- Electrical power availability;
- Adequate lighting in and around workstations; and
- Hangers and supports correctly installed and functional.

b. Conclusion

No violations of NRC requirements were identified.

3. Nuclear Criticality Safety (IP 88135)

a. Inspection Scope and Observations

During daily tours of the Filler, UR, RTRT, and the general shop floor areas, the inspectors verified that NCS controls and postings were in place and available to perform their intended functions. The inspectors reviewed the field implementation of NCS-related administrative IROFS - one in the shop floor area and three in the UR area. During these observations, the inspectors noted that the IROFS were properly implemented and that operations personnel complied with NCS posting requirements in their work areas. The inspectors reviewed the accuracy of one mass log tracking sheet in the RTRT area and verified that the mass log entries matched the as-found inventories of the corresponding workstation.

b. Conclusion

No violations of NRC requirements were identified.

4. Fire Protection Quarterly (IP 88135.05)

a. Inspection Scope and Observations

During daily plant tours, the inspectors verified that transient combustibles were being adequately controlled and minimized in Bay 3T, BC Bay, Bays 1A – 3A, Bays 7A-10A, and Bay 12A. The inspectors conducted fire safety tours of these areas and reviewed the fire detection and suppression capabilities in those areas. No compliance or regulatory issues were noted with respect to fire protection equipment. The inspectors also verified that housekeeping in the areas reviewed was sufficient to minimize the risk of fire.

b. Conclusion

No violations of NRC requirements were identified.

B. Radiological Controls

1. Radiation Protection Quarterly (IP 88135)

a. Inspection Scope and Observations

The inspectors toured the UR, Filler, and RTRT areas and verified that radiological signs and postings accurately reflected radiological conditions within the posted areas. The inspectors observed plant personnel as they removed protective clothing at controlled area step-off pads. The inspectors also observed plant employees as they performed exit monitoring at the Filler controlled area exit and verified that monitoring instructions were followed at the exit point.

The inspectors reviewed two radiological work permits (RWP) in the UR controlled area. The inspectors verified the RWP contained appropriate instructions, were posted in the work areas for employees' review, and that workers signed the applicable RWP. The inspectors noted that for the portions of work activities observed, plant workers wore the required respiratory protection and dosimetry; and performed tasks in accordance with the RWP requirements.

b. Conclusion

No violations of NRC requirements were identified.

2. Radiation Protection (IP 88030)

a. Inspection Scope and Observations

The inspectors reviewed the Radiation Protection Program and determined that the program performance was reviewed, at least annually to comply with 10 Code of Federal Regulations (CFR) 20.1101. The inspectors reviewed the RP organization chart and interviewed staff. The inspectors determined that the radiation protection program responsibilities and functions were independent from operations and maintenance. The inspectors reviewed a sample of radiological procedures and determined that changes in these procedures, made since the last inspection, were consistent with regulations and license requirements.

The inspectors reviewed selected personnel exposure data to verify that exposures were maintained as low as reasonably achievable (ALARA) and within the limits of 10 CFR 20.1201. The inspectors reviewed the Total Effective Dose Equivalent results and determined that they were less than regulatory limit of 5 Roentgen equivalent man (rem)/yr. The inspectors verified that the licensee's dosimeter provider was certified by the National Voluntary Laboratory Accreditation Program (NVLAP).

The inspectors reviewed the licensee's bioassay program and the adequacy of personnel internal exposure assessments. The inspectors reviewed procedures and documentation associated with bioassay exposure calculations. Personnel were knowledgeable of the procedures for preparing and processing Breathing Zone (BZ) air samples for internal uranium analysis. The inspectors interviewed the individual responsible for the review and maintenance of bioassay exposure records and found the individual to be knowledgeable of the program requirements.

The inspectors reviewed the implementation of the respiratory protection program. The inspectors interviewed employees on the preparation and use of respirators in the plant and reviewed respiratory protection training and procedures. The inspectors determined that the licensee conducted medical evaluation of respirator users, fit testing, and user seal checks in accordance with 10 CFR 20.1703. The inspectors examined a random sampling of respirators and filter cartridges at the laundry facility for deterioration and defects and determined that the equipment was in adequate condition. The inspectors also determined that the licensee was using respirators were tested and certified by the National Institute for Occupational Safety and Health. The inspectors concluded that the Respiratory Protection Program was adequate.

The inspectors reviewed air monitoring and smear data to determine if surveys were effective in the identification of airborne particulates and surface contamination. The inspectors reviewed and determined that the licensee had established schedules for periodic surveys of work areas. The inspectors reviewed a selected sample of survey records since the last inspection. The inspectors determined that the survey program was effective and was in accordance with requirements of 10 CFR 20.1501 and the license.

The inspectors reviewed the licensee's As Low as Reasonably Achievable (ALARA) program to determine if the program and ALARA goals were developed and implemented in accordance with the license. On a quarterly basis, the licensee conducted ALARA Committee meetings detailing ALARA goals and exposure summaries to identify undesirable trends. The inspectors interviewed the manager responsible for the ALARA evaluations and assessments and determined that the evaluations and assessments to be adequate. The inspectors determined that the licensee utilized procedures and engineering controls to achieve occupational doses which were ALARA as required by 10 CFR 20.1101.

b. Conclusion

No violations of NRC requirements were identified.

3. Effluent Control and Environmental Protection (IP 88045)

a. Inspection Scope and Observations

The inspectors interviewed licensee staff on program changes and verified that there were no significant program changes within the last 12 months. The inspectors also determined that there were no significant personnel changes during this same time period.

The inspectors verified that the environmental program functions remained independent from operations in accordance with license requirements. The inspectors reviewed revisions to procedures revised since the last inspection and determined that changes complied with procedural requirements and did not reduce safety.

The inspectors reviewed recent audits and verified that that these audits were performed within the correct frequency; within the appropriate scope; and satisfied the quality assurance requirements of Chapter 11 of the license application. Findings were submitted into the corrective action program.

The inspectors reviewed program requirements in the license application and determined that the quality control of laboratory measurements was implemented in accordance with procedures. The inspectors also verified the techniques used to verify the accuracy of measurements were in compliance with procedures.

The inspectors reviewed the calendar year 2014 semi-annual effluent reports and determined that the licensee was in compliance with the reporting requirements of 10 CFR 70.59. The inspectors reviewed records of airborne effluents and found all results to be below 10 CFR 20 requirements. The inspectors accompanied the licensee into the field to observe air filter collections for stacks, impingers, and fixed/stationary air monitors and determined that licensee actions were in compliance with approved procedures. During the above accompaniments, the inspectors noted that licensee staff demonstrated adequate knowledge about the systems and sampling activities. Additionally, the inspectors confirmed that air monitoring and air filter analyzing equipment were within calibration and functioned properly. Licensee staff checked and adjusted air flow meters as necessary in accordance with the procedure.

The inspectors reviewed records of liquid effluents discharges and verified results were below 10 CFR 20 Appendix B limits. The inspectors viewed the in-line gamma monitors in the liquid effluent retention tank room. These monitors were operating normally and were within the proper calibration dates in accordance with 10 CFR 20.1501 and procedures. The inspectors also observed the routine sampling of liquid effluent and subsequently reviewed the results which were well below licensee action levels.

The inspectors reviewed the most recently available soil, sediment, and vegetation results and found them to be below licensee action levels. Based on these results, inspectors determined that the licensee was in compliance with Chapter 9 of the license application for license SNM-42. The inspectors also witnessed the licensee obtaining soil, sediment, and vegetation samples in accordance with procedures.

The inspectors reviewed the public dose assessment and determined that the average annual effluent concentrations released from January 2014 through December 2014 did not exceed the values specified in Table 2 of Appendix B of 10 CFR Part 20. Also, the total dose to the hypothetical, public individual likely to receive the highest dose from licensed operations did not exceed the 10 CFR 20.1301(a)(1) limit for 2014. The inspectors reviewed the airborne portion of the public dose assessment and verified that result was in compliance with the ALARA constraint required by 10 CFR 20.1101(d).

Inspectors reviewed corrective actions related to the environmental program entered in calendar year 2014 and during the first quarter of 2015. Inspectors confirmed that the corrective actions were adequate to address the issues.

The inspectors also toured the on-site environmental laboratory at the Lynchburg Technology Center (LTC) and found environmental samples securely stored and organized. Laboratory analysis equipment was in use during the inspection found to be in adequate working condition and within calibration.

b. Conclusion

No violations of NRC requirements were identified.

4. Inspection of Transportation Activities (IP 86740)

a. Inspection Scope and Observations

The inspectors evaluated whether the licensee had established and was maintaining an effective program to ensure radiological and nuclear safety during the receipt, packaging, delivery, and private carriage of licensed radioactive materials. The inspectors also evaluated whether transportation activities were in compliance with the applicable transportation regulations.

The inspectors observed personnel perform the required routine determinations before each shipment. The inspectors observed the loading of packages for a radioactive material shipment. The personnel loading the packages followed the appropriate procedures. The inspectors also observed the inspection of empty shipping containers before loading. The personnel loading and inspecting the packages followed the appropriate procedures.

The inspectors reviewed a number of shipping records involving the shipment and receipt of special nuclear material products. The inspectors verified the storage of shipping records as required by 10 CFR 71.91. The licensee ensured that the appropriate documentation accompanied the packages being shipped. The licensee recorded the required information on the packaging and shipping orders including the transportation index, package activity, labeling, and placards.

The inspectors reviewed the training records to ensure that the licensee had administered 49 CFR 172.704 hazardous materials transportation training to personnel as required by the United States Department of Transportation (DOT) and their license. The inspectors also interviewed the transportation personnel and carrier personnel to ensure they were knowledgeable of NRC and U.S. DOT requirements.

The inspectors verified that the licensee met the 10 CFR 71.21 conditions required to use the general license provision for transport of licensed material. The inspectors reviewed the licensee's Quality Assurance Program for packages, observed that it included control of non-conforming packages, and confirmed the control of non-conforming packages in the field. The inspectors reviewed audits of the transportation program and determined the licensee was performing periodic audits of the program as required. Deficiencies identified during audits were appropriately addressed in the corrective action program.

b. Conclusion

No violations of NRC requirements were identified.

C. Facility Support

1. Post Maintenance Testing (IP 88135.19)

a. Inspection Scope and Observations

The inspectors witnessed one post-maintenance test (PMT) per work order (WO) documentation. The inspectors witnessed performance of a post maintenance leak check of a condensate transfer pump and tests of associated pump interlocks associated with the process annular tank operation. No evidence of leaks were found and, as a result, the surveillance check acceptance criteria were met. The inspectors also verified that PMT activities were conducted in accordance with applicable WO instructions for five corrective maintenance WOs.

b. Conclusion

No violations of NRC requirements were identified.

2. Surveillance Testing (IP 88135.22)

a. Inspection Scope and Observations

The inspectors observed a preventive maintenance calibration on a combustible gas sensor in the SFF area. The inspectors observed a periodic surveillance of ventilation duct work and filters for the detection of SNM accrual in the UR furnace process area. The inspectors also observed a periodic no load test on a diesel generator which supports IROFS equipment. Each of the PM activities conducted met the acceptance criteria in the work order instructions. The inspectors reviewed completed preventive maintenance work orders for ten surveillance test and inspection work orders of safety-related systems and verified that the tests were suitable to confirm the availability and reliability of any associated IROFS and licensee operating procedure requirements.

b. Conclusion

No violations of NRC requirements were identified.

3. Management Organization and Controls (IP 88135)

a. Inspection Scope and Observations

The inspectors reviewed a sample of 42 items entered into the licensee's CA system during the inspection period to ensure that items pertinent to safety, security, and non-conforming conditions were identified, investigated as necessary, and tracked to closure. The inspector verified that the issues of high safety significance were properly identified and reviewed for apparent causes. The inspectors noted that, for those issues requiring extent of condition/extent of cause reviews, the reviews were completed and

documented in the applicable CAs. The inspectors verified that appropriate CAs to prevent recurrence were identified in the CA system, and were reviewed and tracked to completion in accordance with the licensee's CA system implementing procedure, Quality Work Instruction (QWI) 14.1.1, "Preventive/Corrective Action System."

The inspectors reviewed a summary of the routine RP audits and routine NCS audits for the first quarter of 2015. The inspectors also reviewed three internal audits of safety program areas for the inspection period. The internal audits reviewed were the licensee's assessments of the RP Respiratory Protection Program (258-3C), Emergency Preparedness Facilities and Equipment (259-4B), and Licensing Safety Analysis Report 15.44 Research and Test Reactor Uranium Molybdenum Foil Production (256-1B).

b. Conclusion

No findings of significance were identified.

D. Other Areas

1. Follow-up on Previously Identified Issues

None

3. Event Follow-up (IP 88135.02)

a. Event Notification (EN) 50970: Licensee Event Report (LER) 70-27/2015-003-01: Off-Site Notification Due to On-Site Employee Fatality

On April 9, 2015 the licensee made a notification under the reporting requirements of 10 CFR 70 Appendix A, (c)(4) for a concurrent notification made to the Occupational Safety and Health Administration for a fatality that occurred on-site. A licensee employee collapsed shortly after reporting to work on April 9, 2015. The site emergency team responded immediately and administered cardio pulmonary resuscitation (CPR) to the individual. The employee was transported to Lynchburg General by ambulance where he was pronounced dead from an apparent heart attack. This item will be closed as LER 70-27/2015-003-01.

E. Exit Meeting

On April 23 and July 8, 2015, the inspectors presented the inspection results to B.J. Burch and members of the staff. No dissenting comments were received from the licensee. Proprietary information was discussed but not included in the report.

SUPPLEMENTARY INFORMATION

1. KEY POINTS OF CONTACT

<u>Name</u>	<u>Title</u>
B.J. Burch	Vice President and General Manager
K. Conway	Unit Manager, Radiation Protection
N. Coles	Front Line Manager, Specialty Fuels Facility
J. Calvert	Unit Manager, Industrial Health and Safety
D. Spangler	Section Manager, Nuclear Safety and Licensing
C. England	Unit Manager, Licensing and Safety Analysis
D. Faidley	Unit Manager, Nuclear Criticality Safety
K. Kirby	Front Line Manager, Nuclear Materials Control
W. Lemon	Section Manager, Filler Manufacturing Operations
D. Miller	Unit Manager, Uranium Processing and Research Reactors
H. Shaffer	Dept. Manager, Uranium Processing and Research Reactors
D. Ward	Dept. Manager, Environmental, Safety Health and Safeguards
C. Yates	Section Manager, Uranium Processing and Research Reactors
R. Johnson	Licensing Engineer
G. Pritchett	Health Physicist
B. Stratton	Front Line Manager for Radiation Control
J. Wright	Radiation Control Environmental Technician

2. LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Closed

70-27/2015-003-01	LER	Event Notification 50970: Off-Site Notification Due to On-Site Employee Fatality (Paragraph D.2.a)
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3. LIST OF INSPECTION PROCEDURES USED

86740	Inspection of Transportation Activities
88030	Radiation Protection
88045	Effluent Control and Environmental Protection
88135	Resident Inspection Program For Category I Fuel Cycle Facilities
88135.04	ISA Implementation
88135.05	Fire Protection
88135.17	Permanent Plant Modifications
88135.19	Post Maintenance Testing
88135.22	Surveillance Testing

4. DOCUMENTS REVIEWED

Records:

Audit 256-1B, Safety Analysis Report 15.44 "Research and Test Reactor Uranium Molybdenum Foil Production", dated February 2015
Audit 258-3C,"Radiation Protection (Respiratory Protection)", dated January 2015

Audit 259-4B, "Emergency Preparedness (Facilities and Equipment)", dated January 2015
 Letter GWP-2015-002, "RP Audits, Inspections, 1st Quarter 2015"
 "NCS Violation & Observation Summary – 1st Quarter 2015"
 RWP 15-0029 Radiological Work Permit 15-0029
 RWP 15-0039, Radiological Work Permit 15-0039
 SAR 15.18, "SFF Dry-End Processing - SFF Operation", Rev. 113
 SAR 15.34, "Conventional Filler Operations", Rev. 58
 SAR 15.44, "Research and Test Reactor Uranium Molybdenum Foil Production", Rev. 1
 Calibration of Flow Meters Results 2014 & 2015 (Fixed and Stacked)
 DOP Testing Log Book (HP Log Book #108)
 Final Liquid Effluent Composite Analysis Results, December 2014 & January-February 2015
 In-Line Monitor Calibration Records, Rev. 6, 2014-2015 (February)
 LTC Stack Airflow Measurements, October 2014- April 2015
 Quality Control (QC) Internal Audit Summary Report, 2nd – 4th quarters of 2014
 Stack Airflow Measurements 2015

Procedures:

RP-05-001, Respirator Issuance, Rev. 18
 RP-06-001, Radiation Protection Responsibilities of a Radiation Work Permit, Rev. 12
 RP-05-011, Respiratory Protection Selection and ALARA Evaluations, Rev. 5
 RP-05-003, Respirator Cleaning, Inspection, and Maintenance, Rev. 13
 RP-02-007, Enclosure Air Flow Measurements in Controlled Areas, Rev. 8
 RP-04-008, Fixed Air Sampling, Rev. 27
 RP-05-006, Qualification of Personnel Use of Respiratory Protection Equipment, Rev. 15
 RP-07-004, Worksheet for Calibration of B&W NOG-L Stack Flow Meters, Rev. 91, dated April 17, 2015
 RP-07-09, Environmental Air Sampler Flow Meter Calibration, 2014-2015
 RP-07-079, Calibration and Operation of the Canberra In-Line Liquid Waste Monitors, Rev. 6, dated September 10, 2012
 RP-07-105, Canberra LB4200 Calibration and Operation, Rev. 1, dated October 13, 2014
 RP-08-001, Collection & Analysis of Environmental Soil, Surface Water, Sediment, Vegetation, & Fallout Samples, Rev. 18, dated May 26, 2014
 RP-08-002, Environmental Air Sample Collection and Analysis, Rev. 13, dated September 10, 2012
 RP-08-003, Sample Collection from Exhaust Stacks and Their Analysis, Rev. 27, dated September 1, 2014
 RP-08-04, Exhaust Stack Velocity and Filter Pressure Differential Measurements, Rev. 13, dated September 7, 2009
 OP-0061141, Low Level Leach Hood Operation, Cleaning LLD Trays, Rev. 61OP-0061167, "Spill and Leak Handling Emergency Procedure," Rev. 30
 OP-0061234, "Maintenance in UPRR", Rev. 49
 OP-0061450, "General Safety and Safeguards Guidelines-UPRR Area," Rev. 35
 OP-1019574, Control of Item/Container Entry into CCA (U), Rev.5
 OP-1041311, (Classified Title), Rev. 1
 OP-1041242, (Classified Title), Rev. 2
 Quality Work Instruction 14.1.1, Preventive/Corrective Action System, Rev. 30
 Quality Work Instruction 17.1.2, Internal Quality Audits, Rev. 18

Corrective Action (CA) Reports Review:

CA201300832, CA201400208, CA201400607, CA201400754, CA201401256
 CA201401317, CA201401812, CA201401925, CA201500038, CA201500039,

CA201500136, CA201500165, CA201500264, CA201500436, CA201500446,
 CA201500452, CA201500465, CA201500483, CA201500533, CA201500556,
 CA201500561, CA201500566, CA201500572, CA201500607, CA201500615,
 CA201500632, CA201500705, CA201500708, CA201500719, CA201500720,
 CA201500721, CA201500756, CA201500758, CA201500825, CA201500826,
 CA201500832, CA201500848, CA201500852, CA201500855, CA201500860,
 CA201500874, CA201500878, CA201500917, CA201500922, CA201500923,
 CA201500931, CA201500936, CA201500936, CA201500941, CA201500942,
 CA201500970, CA201500976, CA201500977, CA201500922, CA201500923,
 CA201500931, CA201500936

Work Orders:

NPDM 20180904, NPDM 20180918, NPDM 20181969, NPDM 20182687, NPDM 20183751,
 NPDP 20177993, NPDP 20178181, NPDP 20178837, NPDP 20178841, NPDP 20180378,
 NPDP 20180832, NPDP 20181307, NPDP 20180374, NPDP 20180544, NPDP 20180831,
 NPDP 20181760, NPDP 20182789, NPDP 20183372, NPDP 20183678

Other Documents:

NCS Posting 15-18-004, Rev. 1
 NCS Posting CRF-087, Rev. 1
 NCS Posting 15-35-004, Rev. 4
 NCS-2005-230, dated August 31, 2005
 NCS-1996-083, dated April 17, 1996
 NCS-2015-057, dated June 3, 2015
 Drawing LT-6140, "Conventional Insert for Vacuum Storage Chest," Rev. 0
 Drawing LT-6997, "Vertical Storage Insert," Rev. 0
 Drawing CRF-316, "Titrator/Scrubber Flow Diagram, Rev. 26
 Drawing CRF-810, Rev. 0
 SAP Maintenance Plan, MP# 1886
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