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

October 29, 2019

EN 54218
EN 54255

Mr. John A. Stewart
President
Nuclear Fuel Services, Inc.
P.O. Box 337, MS 123
Erwin, TN 37650-0337

SUBJECT: NUCLEAR FUEL SERVICES, INC. – U. S. NUCLEAR REGULATORY COMMISSION INTEGRATED INSPECTION REPORT NUMBER 70-143/2019-004

Dear Mr. Stewart:

This letter refers to the inspections conducted from July 1 through September 30, 2019, at the Nuclear Fuel Services, Inc. (NFS) facility in Erwin, TN. The enclosed report presents the results of the inspections. The findings were discussed with members of your staff at the exit meetings held on August 15 and September 18, 2019, and after the end of the quarter on October 28, 2019.

During the inspections, the Nuclear Regulatory Commission (NRC) staff examined activities conducted under your license, as related to public health and safety and to confirm compliance with the Commission's rules and regulations and with the conditions of your license. The inspections covered the following areas: safety operations, radiological controls, facility support, and other areas. Within these areas, the inspections consisted of selected examination of procedures and representative records, observations of activities, and interviews with personnel.

Based on the results of these inspections, no violations of more than minor significance were identified.

In accordance with Title 10 of the *Code of Federal Regulations,* Section 2.390 of the NRC's "Rules of Practice and Procedure," a copy of this letter and 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), accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html.

Should you have any questions concerning these inspections, please contact Joel Rivera-Ortiz of my staff at 404-997-4825.

Sincerely,

/RA/

Robert E. Williams Jr., Chief
Projects Branch 1
Division of Fuel Facility Inspection

Docket No. 70-143
License No. SNM-124

Enclosure:
NRC Inspection Report 70-143/2019-004
w/Attachment: Supplemental Information

cc: (See page 3)

cc:

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SUBJECT: Nuclear Fuel Services, Inc. – U. S. Nuclear Regulatory Commission Integrated Inspection Report Number 70-143/2019-004, October 29, 2019

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ADAMS: ☒ Yes **ACCESSION NUMBER**: **ML19302F283** ☒ SUNSI REVIEW COMPLETE ☒ FORM 665 ATTACHED

OFFICE	RII:DFFI	RII:DFFI	RII:DFFI	RII:DFFI	RII:DFFI	RII:DIFF	RII:DFFI	RII:DFFI
NAME	LHarris	JRivera Ortiz	RGibson	TSippel	PStartz	NPeterka	GGoff	RWilliams
DATE	10/22/2019	10/18/2019	10/18/2019	10/18/2019	10/18/2019	10/22/2019	10/21/2019	10/29/2019

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U. S. NUCLEAR REGULATORY COMMISSION
REGION II

Docket No.:	70-143
License No.:	SNM-124
Report No.:	70-143/2019-004
Enterprise Identifier:	I-2019-004-0032
Licensee:	Nuclear Fuel Services, Inc.
Facility:	Nuclear Fuel Services, Inc.
Location:	Erwin, TN 37650
Dates:	July 1, 2019 through September 30, 2019
Inspectors:	L. Harris, Senior Resident Inspector (Sections A.1-A.3, A.5, B.1, C.1-C.3, D.1-D.3) J. Rivera Ortiz, Senior Fuel Facility Project Inspector (Sections C.5, D.2, and D.3) R. Gibson, Jr., Senior Fuel Facility Project Inspector (Section B.4) N. Peterka, Fuel Facility Inspector (Section C.5) G. Goff, Fuel Facility Inspector (Section C.5) T. Sippel, Fuel Facility Inspector (Section B.2) P. Startz, Fuel Facility Inspector (Sections B.3)
Approved by:	R. Williams, Jr., Chief Projects Branch 1 Division of Fuel Facility Inspection

Enclosure

EXECUTIVE SUMMARY

Nuclear Fuel Services, Inc.
NRC Integrated Inspection Report 70-143/2019-004
July 1 – September 30, 2019

Inspections were conducted by the resident and regional inspectors during normal and off-normal hours in safety operations, radiological controls, facility support, as well as other areas. 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 licensee performed plant operations safely and in accordance with license requirements. The licensee properly implemented and maintained the intended safety function of the selected items relied on for safety. No violations of more than minor significance were identified. (Sections A.1 and A.2)

- The nuclear criticality safety program was implemented in accordance with license application and regulatory requirements. No violations of more than minor significance were identified. (Section A.3)

- The fire protection program and systems were adequately maintained in accordance with the license application and regulatory requirements. No violations of more than minor significance were identified. (Section A.4)

Radiological Controls

- The radiation protection program was implemented in accordance with the license application and regulatory requirements. No violations of more than minor significance were identified. (Sections B.1 and B.2)

- The environmental protection program was implemented in accordance with the license application and regulatory requirements. No violations of more than minor significance were identified (Section B.3)

- The inspectors reviewed a sample of activities in the transportation area to verify compliance with conditions of the license and regulatory requirements. No violations of more than minor significance were identified. (Section B.4)

Facility Support

- The post-maintenance testing and surveillance programs were implemented in accordance with the license application and regulatory requirements for work control and safety-related equipment testing. No violations of more than minor significance were identified. (Sections C.1 and C.2). The licensee adequately identified, evaluated, and entered adverse conditions into the Problem Identification Resolution and Correction System. No violations of more than minor significance were identified. (Section C.3)

- The plant modifications program was implemented in accordance with the license application and regulatory requirements. No violations of more than minor significance were identified. (Section C.4)

- The inspectors observed portions of the planning stage and the conduct of the biennial emergency exercise. No violations of more than minor significance were identified. (Section C.5)

Other Areas

- No violations of more than minor significance were identified during Resident Inspector observations of security force and material control and accounting personnel. (Section D.1)

- The inspectors reviewed Event Notification 54218, "Criticality Accident Alarm System Speaker Failure in Building 333 LEU" and the associated 30-day written event report. This item remains open pending the review of licensee's corrective actions and will be included in the scope of routine inspections for closure (Section D.2)

- The inspectors reviewed Event Notification 54255, "Unplanned Contamination Event," which was later retracted. This item is opened and closed in this report (Section D.3)

Attachment:

Supplemental Information

REPORT DETAILS

Summary of Plant Status

The following facility process areas were operating during the inspection period: Naval Fuel Manufacturing Facility (FMF) and the Blended Low Enriched Uranium (BLEU) Preparation Facility (BPF), which includes the Uranium (U)-Metal, U-Oxide, Solvent Extraction and the down-blending lines.

A. Safety Operations

1. Plant Operations Routine (Inspection Procedures 88135 and 88135.02)

   a. Inspection Scope

   The inspectors performed routine tours of the fuel manufacturing areas housing special nuclear material (SNM) and reviewed log sheets to verify the status of plant operations. The inspectors also interviewed operators, front-line managers, maintenance mechanics, radiation protection (RP) staff, laboratory managers, and process engineering personnel to discuss issues regarding plant equipment. The inspectors observed operational and shift turnover meetings throughout the inspection period to gain insight into safety and operational issues.

   During the inspection period, the inspectors interviewed operators, front-line managers, maintenance technicians, engineers, RP technicians, and nuclear materials control technicians to verify that each of the individuals demonstrated adequate knowledge of the nuclear criticality safety (NCS) posting requirements, hazards, and the operations procedures associated with their assigned duties.

   The routine tours included walk-downs of the FMF, BPF, commercial development line areas, miscellaneous storage areas, the Waste Water Treatment Facility (WWTF), and Building 440. During routine tours, the inspectors verified that operators were knowledgeable of their duties and attentive to any alarms or annunciators at their respective stations. The inspectors observed activities during normal and upset conditions to verify that operators complied with procedures and material station limits.

   The inspectors verified that safety controls, including items relied on for safety (IROFS), were in place, properly labeled, and functional to ensure proper control of SNM. The inspectors verified the adequacy of communications between supervisors and operators within the operating areas.

   The inspectors reviewed operator log books, standard operating procedures (SOPs), maintenance records, and Letters of Authorization (i.e., temporary procedures) to obtain information concerning operating trends and activities. The inspectors verified that the licensee actively pursued corrective actions for conditions requiring temporary modifications and compensatory measures.

   The inspectors performed periodic tours of the outlying facility areas to determine that equipment and systems were operated safely and in compliance with the license. The inspectors focused on potential wind-borne missile hazards, potential fire hazards with combustible material storage and fire loading, hazardous chemical storage, the physical

condition of bulk chemical storage tanks and piping, storage of compressed gas containers, as well as potential degradation of plant security features. The inspectors attended various plan-of-the-day meetings and met daily with the Plant Shift Superintendent throughout the inspection period to determine the overall status of the plant. The inspectors evaluated the adequacy of the licensee's response and approach to resolve safety-significant plant issues during these meetings.

b. Conclusion

No violations of more than minor significance were identified.

2. Safety System Walkdown Inspection (Inspection Procedure 88135.04)

a. Inspection Scope

The inspectors performed walkdowns of safety-significant systems involved with the processing of SNM. As part of the walkdowns, the inspectors verified that as-built configurations matched approved plant drawings.

The inspectors interviewed operators to confirm that plant personnel were familiar with the assumptions and controls associated with the IROFS systems and instrumentation for maintaining plant safety. The inspectors also verified that IROFS assumptions and controls were properly implemented in the field.

The inspectors reviewed integrated safety analyses (ISAs) for selected plant systems to verify that their safety functions were not affected by outstanding design issues, temporary modifications, operator workarounds, adverse conditions, or other system-related issues.

The inspectors also verified that there were no conditions that degraded plant performance and the operability of IROFS, safety-related devices, or other support systems essential to safety system performance. The inspectors selected safety-significant functions, tests, and inspections that were established to assure operability of the safety systems in the Area LA and Building 333 in the production area.

For Area LA, the inspectors reviewed IROFS identified as: FAL-1, FAL-4, FAL-6, FAL-8, FAL-11, FAL-12, FAL-15, FAL-16, FAL-17, FAL-20, FAL-25, FAL-26, FAL-29, FAL-31, FAL-32, FAL-33, FAL-34, and FAL-55.

For Building 333, the inspectors reviewed IROFS identified as: BDB-1, BDB-2, BDB-3, BDB-9, BDB-10, BDB-12, BDB-13, BDB-14, BDB-15, BDB-16, BDB-17, BDB-19, BDB-20, BDB-21, and BDB-22.

To determine the correct system alignment, the inspectors reviewed procedures, drawings, related sections of the ISA, and regulatory requirements such as Title 10 of the *Code of Federal Regulations* (10 CFR), Section 70.61, "Performance Requirements." During the walkdowns, the inspectors verified the following attributes on a sampling basis, as applicable:

- controls in place for potential criticality, chemical, radiological, and fire safety hazards

- process vessel configurations maintained in accordance with NCS Evaluations
- correct valve position and potential functional impacts such as leakage
- electrical power availability
- major system components correctly aligned, labeled, lubricated, cooled, and ventilated
- hangers and supports correctly installed
- functional lockout/tag-put program appropriately implemented
- cabinets, cable trays, and conduits correctly installed and functional
- visible cabling in good material condition
- no interference with system performance from ancillary equipment or debris

b. Conclusion

No violations of more than minor significance were identified.

3. Nuclear Criticality Safety (Inspection Procedure 88135.02)

a. Inspection Scope

During daily production area tours, the inspectors verified that various criticality controls were in place, that personnel followed criticality station limit cards, and that containers were adequately controlled to minimize potential criticality hazards. The inspectors reviewed several criticality-related IROFS for operability. The inspectors interviewed operators to verify that they were knowledgeable of the requirements associated with IROFS. The inspectors performed tours inside various process areas when SNM movements were taking place within the facility.

As part of routine day-to-day activities on-site, the inspectors reviewed entries in the licensee's Problem, Identification, Resolution, and Correction System (PIRCS) associated with criticality safety aspects. The inspectors evaluated the licensee's response to such entries and held discussions with NCS engineers and production personnel to determine their safety significance and compliance with procedures.

b. Conclusion

No violations of more than minor significance were identified.

4. Fire Protection Quarterly (Inspection Procedure 88135.05)

a. Inspection Scope

During routine plant tours, the inspectors verified that transient combustibles were being adequately controlled and minimized in selected process areas. The inspectors reviewed active fire impairments in selected process areas to determine if they were implemented per site procedures.

The inspectors conducted a walk-down of the 310 Warehouse and reviewed the Pre-Fire plan drawing to verify it matched the as-found condition for various fire protection components like extinguishers and postings.

The inspectors reviewed the material condition of fire protection components to verify they were adequately maintained. The inspectors reviewed a sample of fire-related PIRCS entries to verify that corrective actions were appropriate and that appropriate compensatory actions were implemented, as applicable.

b. Conclusion

No violations of more than minor significance were identified.

B. Radiological Controls

1. Radiation Protection Quarterly (Inspection Procedure 88135.02)

a. Inspection Scope

During tours of the production areas, the inspectors observed RP controls and practices implemented during various plant activities including the proper use of personnel monitoring equipment, required protective clothing, and frisking methods for detecting radioactive contamination on individuals exiting contamination-controlled areas. The inspectors verified that plant workers properly wore dosimetry and used protective clothing in accordance with applicable Special Work Permits (SWPs). The inspectors also verified that radiation area postings complied with plant procedures and included radiation maps with up-to-date radiation levels. The inspectors monitored the operation of RP instruments and verified calibration due dates.

The inspectors performed partial reviews of select SWPs in effect during the inspection period in different operational areas and conducted a more thorough review for the following SWPs and associated posted radiologically controlled areas:

- SWP 19-34-012, “300 Complex”
- SWP 19-12-009, “304 Area”
- SWP 17347, “301 RCPT”
- SWP 19-15-029, “Building 302”

b. Conclusion

No violations of more than minor significance were identified.

2. Radiation Protection (Inspection Procedure 88030, Appendix B)

a. Inspection Scope

The inspectors evaluated selected aspects of the licensee’s RP program to verify compliance with selected portions of 10 CFR 20, the facility’s license, and applicable procedures.

The inspectors reviewed records and interviewed licensee RP staff to verify that the licensee monitored employees, likely to receive an annual dose in excess of the 10 CFR 20.1502(a) levels, for occupational exposure to radiation. The inspectors reviewed common dosimetry types, the exchange periods, and the licensee's system for evaluating personnel monitoring data to verify whether these aspects accounted for occupational radiation exposure. The inspectors reviewed the National Voluntary Laboratory Accreditation Program (NVLAP) Certificate of Accreditation to verify that the personnel dosimeter processor was accredited in accordance with 10 CFR 20.1501(c). The inspectors observed operators during walk-downs to verify that they were properly wearing dosimetry.

The inspectors interviewed licensee RP staff, reviewed bioassay records, technical basis documentation, calibration records and dose assignment records and procedures for monitoring individuals for internal radiation exposure. The inspectors also toured the whole body counting and bioassay facilities. The inspectors conducted these reviews to verify that the bioassay and whole body (in vivo) counting programs complied with license requirements for routine and special in vivo measurements in Sections 4.7.2 and 4.7.5 of the license application. The inspectors also reviewed NFS-HS-A-06, “Determining Bioassay Frequencies,” to verify that bioassay and in vivo measurements were conducted at the required frequencies.

The inspectors reviewed the methodology and programmatic assumptions made by the licensee in the calculation of dose, including those related to the level of natural dietary uranium, the form of the uranium, and the excretion and biological decay factors used, to verify that the licensee calculated the dose to workers using conservative assumptions. The inspectors reviewed procedures and selected calibration records of analytical equipment (including, air samplers and detectors) and verification records for software used to evaluate internal exposures to verify that the internal dose was monitored in accordance with 10 CFR 20.1502(b) and subsequent results were determined in accordance with 10 CFR 20.1204.

The inspectors interviewed RP staff and reviewed air sampling records and procedures, including 21T-14-0811, “Technical Basis for the NFS Internal Dosimetry Program.” The inspectors also observed the storage and use of lapel air samplers, the location of stationary air samplers, and storage of high-volume air samplers. The inspectors conducted these reviews and observations to verify that the air sampling program complied with the license requirements for internal dose calculations, including addressing solubility class, mixtures, and aerosol size. The inspectors verified whether the licensee used airborne radioactive material concentrations, time in area, respirator information, and lapel air sample results in the dose calculations in accordance with the license requirements.

The inspectors interviewed staff and walked down areas to verify that the licensee maintained a program to identify and post areas as “Airborne Radioactivity Areas” per 10 CFR 20.1902(d).

The inspectors interviewed licensee RP staff and reviewed procedures (including NFS-HS-A-30, NFS-HS-B-17, and NFS-HS-B-32) to verify that the licensee used access controls to limit access to personnel with respiratory protection for high potential airborne radioactivity areas where process or engineered controls were not practical.

The inspectors reviewed procedures (including NFS-HS-B-44, “Process Enclosure Face Air Velocity Measurements”), interviewed RP staff and observed RP technicians conduct face velocity measurements to verify that the licensee was in compliance with procedures and license requirements in Section 4.6 of the license application for ventilation.

The inspectors reviewed NFS-GH-908, “Radiation Protection Program,” NFS-HS-B-17, “Radiological Lapel Air Sample Surveys,” and interviewed RP staff to verify that the respiratory protection program complied with Section 4.6.4 of the license application, “Respiratory Protection Program,” and 10 CFR 20.1703. The inspectors’ review included procedures and interviews with staff to verify that the program adequately identified potential hazards and that users were properly qualified in the use of respiratory protection equipment as required by Section 4.6.4.1 of the license application.

The inspectors reviewed procedures and observed fit tests to verify that the licensee gave respirator users a medical exam and fit test prior to issuing respirators and required that respirators were operationally tested prior to each use. The inspectors reviewed selected respirator types used to limit intake of particulate uranium to verify that the respirators were certified by the National Institute for Occupational Safety and Health for use in reducing exposure to particulates in accordance with 10 CFR 20.1703(a).

The inspectors reviewed records of dose to workers contained in the REMCon System to verify that the dose results included the Total Effective Dose Equivalent, the lens dose equivalent, and the shallow dose equivalent; and were less than the limits in 10 CFR 20.1201.

The inspectors interviewed RP staff and reviewed the licensee’s analysis of exposures to verify that the assumptions used in that analysis (e.g., uranium solubility, particulate size) were supported by data and that the licensee maintained dose records in accordance with 10 CFR 20.2106.

The inspectors reviewed “as low as reasonably achievable” (ALARA) performance reports for the fourth quarter of 2018 and the first quarter of 2019 and interviewed licensee RP staff and managers to determine if the ALARA program complied with 10 CFR 20.1101(b) and the requirements in Section 4.2 of the license application. The inspectors also reviewed the ALARA Goals for 2018 and 2019, and Safety and Safeguards Review Council (SSRC) Meeting Minutes to determine whether the ALARA program set goals monitored, trended, and where practical, addressed adverse exposure trends as required by Section 4.2 of the license application. The inspectors walked down facility changes and interviewed licensee RP staff and management to determine whether modifications were made to reduce exposures at a reasonable cost, and if ALARA was considered during the engineering phase of changes.

The inspectors reviewed recent PIRCS, interviewed RP staff, and conducted walk-downs to determine whether the licensee was entering RP events into its correction action program as required by Section 11.6.1 of the license application. The inspectors also reviewed licensee PIRCS entries and records of quarterly audits and monthly inspections conducted by the licensee’s RP staff to verify that findings and observations were placed into the licensee’s correction action program as per license

application, Section 11.5. The inspectors also evaluated selected events to verify that the licensee correctly determined the reportability of those events under the requirements of 10 CFR Part 20 and Part 70.

b. Conclusion

No violations of more than minor significance were identified.

3. Effluent Control and Environmental Protection (Inspection Procedure 88045)

a. Inspection Scope

The inspectors discussed changes to the environmental protection program described in Chapter 9 of the license application with licensee staff. The inspectors verified that program changes since the last NRC inspection in this area, including selected procedure revisions, were implemented in accordance with Safety Condition S-2 of Materials License SNM-124. The inspectors reviewed samples of environmental program documentation to determine whether program functions remained independent from operations and in accordance with license conditions.

The inspectors reviewed the biannual effluent reports for 2018 to determine if the licensee was in compliance with the radiological reporting requirements and radiological limits specified in 10 CFR 70.50 and 10 CFR 20, Appendix B, Table 2, respectively. The inspectors also reviewed radiological records to verify that the licensee was complying with the record retention requirements in 10 CFR 20.2107.

The inspectors observed environmental technician activities including the collection of filter disks from air sampling systems for gaseous discharge stacks and ambient environment air monitors to verify that licensee actions were performed in accordance with approved procedures. The inspectors verified that air monitoring equipment was calibrated and functional. The inspectors also reviewed the basis for air flow set points incorporated into the air samplers. Specifically, the inspectors reviewed procedure NFS-HS-A-78, “Field Measurements of Effluent Stack/Duct Velocities” and performed calculations to verify the accuracy of the set points.

The inspectors reviewed a sample of records for liquid effluents discharges in 2019 to verify all results did not exceed the effluent concentration values in 10 CFR 20, Appendix B, Table 2. The inspectors also reviewed samples of recent monthly records for liquid effluent discharges from the WWTF to the Nolichucky River to verify that the radioactive concentration in these discharges did not exceed regulatory limits and licensee action levels.

The inspectors observed sewer outfall sampling protocols at the West Ditch, flow meter checks at this location, and flow meter checks at the Banner Spring location to determine if the licensee’s activities were being conducted in accordance with procedures NFS-HS-B-16, “Routine Sampling of Sanitary Sewer” and NFS-HS-B-73, “Analysis of Environmental Liquid and Environmental Air Samples.” The inspectors also reviewed recent sewer sample radiological results to determine compliance with 10 CFR 20.2003 limits.

The inspectors reviewed the licensee's public dose assessment performed with the CAP88-PC Computer Code, Revision 4, to verify that 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 2018. The inspectors reviewed the airborne portion of the public dose assessment to verify that the result was in compliance with the ALARA constraint required by 10 CFR 20.1101(d). The inspectors also reviewed a sample of the radiological results for soil, surface water, sediment/silt, and vegetation to verify compliance with license requirements and procedures.

The inspectors reviewed samples of radiological results for ground water to determine if the sampling periodicity and analysis were in compliance with license requirements and procedure NFS-HS-B-41, "Routine Groundwater Sampling Procedure."

The inspectors reviewed selected entries from the PIRCS to verify that environmental-related conditions were promptly identified and entered into the program. For the selected PIRCS records, the inspectors verified that the licensee performed the required level of investigation and resolved the conditions consistent with license commitments and procedures.

b. Conclusion

No violations of more than minor significance were identified.

4. Inspection of Transportation Activities – (Inspection Procedure 86740)

a. Inspection Scope

The inspectors evaluated whether the licensee had established, maintained, and implemented an effective management-controlled program to ensure radiological and nuclear safety in the receipt, packaging, delivery to a carrier, and as applicable, to private carriage of licensed radioactive materials. The inspectors evaluated whether observed transportation activities were in compliance with the applicable NRC (10 CFR Parts 20 and 71), and U.S. Department of Transportation (DOT) (49 CFR Parts 171-178) regulations. The inspectors observed shipping coordinators prepare transport unit packages (LR-230) containing liquid uranyl nitrate (licensed material) for shipment to a Westinghouse Electric Company (WEC) facility. The observed activities also included the preparation of packages for shipment of fresh fuel in ES-3100 containers to a BWXT facility, and the preparation of packaging for shipment of intermodals to a Waste Control Specialists facility.

The inspectors walked down the overflows for Tank 4F01 and Tank 4G01 in Building 440, which provide uranium solution to the LR-230 containers shipped to the WEC facility. The inspectors verified that the overflows were sufficiently sized to provide an adequate open path to prevent an atmospheric dispersion of uranium solution upon failure of the plant air system in accordance with the ISA Summary. The inspectors verified that IROFS BDB -19, 20, 21, and 22 in Building 440 were inspected and tested in accordance with the Safety Related Equipment (SRE) test.

The inspectors reviewed several shipping records involving the shipment and receipt of licensed material and the shipment of waste materials for disposal to verify compliance with the applicable provisions of 49 CFR Parts 171 through 178. The inspectors verified that the licensee recorded the required information on the packaging and shipping orders such as the transportation index, criticality safety index, package activity, labeling, and placards in accordance with procedure NFS-ACC-033, "Shipping Procedure for Nuclear Material," Revision 46.

The inspectors reviewed training records of material handlers and shippers to ensure that the licensee had administered hazardous materials transportation training to applicable personnel as required by DOT 49 CFR 172.704, and Section 11.3 of the license application. The inspectors observed the material handlers prepare for the shipment of LR-230 units containing uranium solution, observed the shippers prepare intermodals containing radioactive low-level waste, and observed the material handlers prepare the shipment of ES-3100 containers with fresh fuels to verify the shipments were prepared in accordance with the applicable procedures.

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 audits of the transportation program and verified that the licensee was performing periodic audits of the program as required by Section 11.5 of the license application. The inspectors verified that the results of the audits were appropriately addressed in the licensee's PIRCS. The inspectors also reviewed the PIRCS entries in the area of transportation for the past 24 months to verify if deviations from procedures and unforeseen process changes affecting transportation were documented and investigated promptly.

b. Conclusion

No violations of more than minor significance were identified.

C. Facility Support

1. Post-Maintenance Testing (Inspection Procedure 88135.19)

a. Inspection Scope

The inspectors reviewed records and observed a sample of post-maintenance tests (PMTs) to verify that procedures and test activities confirmed safety systems and components (SSCs) operability and functional capability following the described maintenance.

The inspectors reviewed the licensee's completed test procedures for the selected PMTs to verify that any of the SSC safety function(s) that may have been affected were adequately tested, that the acceptance criteria were consistent with information in the applicable licensing basis and/or design basis documents, and that the procedure had been properly reviewed and approved.

The inspectors also observed and/or reviewed the test data to verify that test results adequately demonstrated restoration of the affected safety function(s). The inspectors

verified that PMT activities were conducted in accordance with applicable work order instructions or licensee procedural requirements. Furthermore, the inspectors verified that problems associated with PMTs were identified and entered into the licensee's PIRCS. The safety related equipment (SRE) tests selected for review were:

- SRE Test: N303XIGNTBSS671
- SRE Test: N303XIGNTBSS672
- SRE Test: N303XIGNTBSS673
- SRE Test: N333DISSLVLSYSA
- SRE Test: N33D9ISSLVL545B

b. Conclusion

No violations of more than minor significance were identified.

2. Surveillance Testing (Inspection Procedure 88135.22)

a. Inspection Scope

The inspectors observed portions of and reviewed completed test data for the surveillance tests of risk-significant and/or safety-related systems listed below to verify that the tests met the requirements of the ISA, commitments, and licensee procedures. The inspectors observed and reviewed testing to determine if the SSCs were operationally capable of performing their intended safety functions and fulfilling the intent of the associated SRE test requirement. The inspectors discussed surveillance testing requirements with operators performing the associated tasks to determine the adequacy of their procedural knowledge. The inspectors reviewed the calibration of test equipment or standards used to conduct the tests and observed the communications between personnel performing these tests to verify adherence to plant procedures. The SRE tests selected for review were:

- SRE Test: N303XXC02SYSTEM
- SRE Test: N333XN0XDET3X18

b. Conclusion

No violations of more than minor significance were identified.

3. Problem Identification Resolution and Correction System Review (Inspection Procedure 88135)

a. Inspection Scope

The inspectors reviewed the PIRCS to ensure that items adverse to safety were being identified and tracked to closure in accordance with program procedures. The inspectors routinely attended daily PIRCS screening committee meetings and periodic Corrective Action Review Board meetings to evaluate site management's response and assignment of corrective actions or investigations to various issues. The inspectors also performed daily screenings of items entered into the PIRCS to identify repetitive equipment failures or specific human performance issues for follow-up. The inspectors

reviewed PIRCS entries that occurred during the inspection period to assess and evaluate the safety significance of issues. For items identified to be more safety significant, the inspectors conducted an additional evaluation to verify the licensee was adequately addressing and correcting the issues to prevent recurrence.

b. Conclusion

No violations of more than minor significance were identified.

4. Permanent Plant Modifications (Inspection Procedure 88135.17)

a. Inspection Scope

The inspectors reviewed records, work packages, and supporting documentation associated with the 302/303 process off gas (POG) duct replacement to verify that the changes had not affected system operability or availability. The inspectors reviewed licensee procedures NFS-CM-002, "Identification and Control of Configuration Items," and NFS-2M-001-1, "Work Management Program Description", and selected ongoing and completed work activities to verify that the change was consistent with the design control documents and requirements. The inspectors verified that operational details associated with the changes had been incorporated into appropriate operating procedures as needed. The inspectors performed field observations to verify that the as-built configuration was in accordance with design documents. The inspectors observed and reviewed activities associated with the change and assessed the impact on interfacing operating systems. The inspectors verified that post system changes were operational. Specifically, the inspectors reviewed the following:

- Scope Documentation
- Change Authorization – POG Line
- Safety and Regulatory Review Routing Form – POG Line Replacement
- Change Control Package – ECR 20181302
- Lock Out/Tag Out Instructions – POG Line Replacement

b. Conclusion

No violations of more than minor significance were identified.

5. Evaluation of Exercises and Drills (Inspection Procedure 88051)

a. Inspection Scope

On September 18, 2019, the NFS staff conducted a biennial emergency exercise in accordance with the emergency plan and the provisions of 10 CFR 70.22(i)(3)(xii). Prior to the exercise, the inspectors reviewed the proposed emergency scenario submitted to the NRC on July 11, 2019 and discussed the objectives with the emergency preparedness program manager to determine whether the exercise included a type of scenario that was postulated as most probable for the site. The inspectors also assessed whether the exercise scenario was adequate to test the elements of the emergency plan. The inspectors discussed the administrative controls in place to prevent disclosure of the exercise scenario to the participants with the exercise's lead

controller. Prior to the exercise, the inspectors conducted a tour of the NFS facility to verify that there was no pre-staged equipment or markings that could reveal hints of the planned emergency scenario. Additionally, the inspectors reviewed the list of offsite responders that were planning to participate in the exercise to verify that the licensee had invited the appropriate offsite response organizations as required in 10 CFR 70.22(i)(3)(xii).

The inspectors observed and evaluated the emergency exercise, which consisted of a fire that caused damage to part of a building structure containing licensed material. The simulated fire was of significant size and duration to eventually elevate the incident to a Site Area Emergency. In addition to the fire emergency, the scenario included the rescue and medical treatment of various victims with different degrees of injuries and radiological contamination.

At the initiation of the emergency exercise, the inspectors observed the participant's actions to follow up on the fire alarm indications and the reporting of the Emergency Control Director (ECD), On-scene Coordinator (OSC), and onsite fire brigade staff to the Emergency Response Facility. The inspectors observed the initial coordination between the ECD and the OSC to verify that all required positions were fully staffed in accordance with the emergency plan. The inspectors evaluated whether the OSC maintained proper command and control of the emergency response team and coordinated actions with the offsite emergency responders.

The inspectors evaluated if the on-scene emergency response activities were appropriate to meet the objectives of the exercise scenario. The inspectors observed the fire brigade's search and rescue activities for the simulated victims. The inspectors observed the establishment of barriers and a triage area to provide urgent medical care to the victims. The inspectors observed the licensee's practices for identifying and controlling the spread of simulated contamination. The inspectors also observed the on-scene coordination with offsite ambulance services, including Wings Air Rescue, to transport the victims to local hospitals. The inspectors also observed the coordination with the Erwin Fire Department to authorize and execute fire mitigation actions.

The inspectors observed the activation of the Emergency Control Center (ECC) under the leadership of the ECD and verified that all required positions were fully staffed within the required timeframe in accordance with the emergency plan. At the ECC, the inspectors evaluated whether the licensee assessed the accident scenario, analyzed the plant conditions, and classified the event in accordance with the emergency response procedures. The inspectors observed the radiologically assessment staff perform offsite dose assessment and evaluated whether the licensee used dose assessment results to inform its emergency response decisions, particularly for protective action recommendations (PARs).

The inspectors reviewed the initial offsite notifications to verify these met the timeliness requirements specified in the emergency plan and were accurate in content. The inspectors reviewed the press releases issued by the ECC communicators to verify these were approved by the ECD prior to issuance and were in accordance with the emergency plan. The inspectors also verified that the onsite communications to the occupational workers were consistent with the PARs approved by the emergency response organization.

The inspectors observed the staff critiques of the emergency exercise and verified if the critiques were effective at evaluating the appropriateness of the emergency plan, along with emergency procedures, facilities, equipment, training of personnel, and overall effectiveness of the response. The inspectors also verified whether the critiques used individuals not having direct implementation responsibility for the emergency plan. The inspectors verified if the licensee documented any deficiencies in the PIRCS. The licensee documented the critique results in PIRC 76385, "2019 NRC Graded Biennial Exercise EP Critique," dated September 18, 2019.

b. Conclusion

No violations of more than minor significance were identified.

D. Other Areas

1. Quarterly Resident Inspector Observations of Security and Material Control and Accounting (MC&A) Personnel and Activities

a. Inspection Scope

During the inspection period, the inspectors conducted observations of security and MC&A personnel and activities to ensure the activities were consistent with applicable license, procedure, and regulatory requirements. These observations took place during normal and off-normal plant working hours.

These quarterly resident inspectors' observations of security force personnel and activities did not constitute any additional inspection samples. Rather, they were considered an integral part of the inspectors' normal plant status reviews and inspection activities.

b. Conclusion

No violations of more than minor significance were identified.

2. Written Event Report 2019-001, Criticality Accident Alarm System Speaker Failure in Building 333 LEU (Event Notification 54218)

a. Inspection Scope

On August 13, 2019 the licensee identified that a speaker in the low-enriched uranium (LEU) area of Building 333 was not operating when a series of public address announcements were made. The licensee implemented compensatory measures to limit access in the affected area to only those personnel with radio communication with the alarm room. The licensee also tested the system and confirmed that the criticality accident alarm system (CAAS) and the Fire Alarm system were not audible in the Building 333 LEU area. There were no other areas of the plant affected. On the same day, the licensee replaced the affected speaker and restored the system to normal operation. The event did not result in actual consequences to plant workers or the public.

On August 14, 2019, the licensee submitted event notification (EN) 54218 to the NRC followed by a 30-day written event report (WER) on September 12, 2019 (ADAMS ML19262D347). The inspectors reviewed the information provided in the reports and interviewed licensee staff to assess the level of NRC response for the reported condition in accordance with the guidance of Management Directive 8.3, "NRC Incident Investigation Program."

b. Conclusion

This item remains open pending the review of licensee's corrective actions and will be included in the scope of routine NCS inspections for closure.

3. (Retracted) Event Notification 54255, Unplanned Contamination Event

a. Inspection Scope

On September 4, 2019, the licensee reported via EN 54255 that a glass component used for a licensed process had failed, resulting in an unplanned contamination event. The release was limited to an area inside of the Radiologically Controlled Area designed for radiological work. The licensee reported that airborne radioactivity samples were below action levels. The licensee also reported that cleanup and decontamination activities were safely and promptly initiated, but due to the complexity and space constraints of the system components, there was a chance that normal access to the area would not be restored within 24 hours. The event did not result in personnel contamination, exposures to the public, or releases to the environment.

On September 16, the licensee retracted the event on the basis that the unplanned contamination event was decontaminated to levels that did not require access to be restricted by imposing additional radiological controls for more than 24 hours. Thus, the licensee concluded that the event did not require a report per 10 CFR 70.50(b)(1)(i).

The inspectors interviewed licensee staff and conducted walk-downs of the affected area to follow up the licensee's response to the event. The inspectors also reviewed the information provided in the reports and the licensee's corrective actions to assess the level of NRC response for the reported condition in accordance with the guidance of Management Directive 8.3, "NRC Incident Investigation Program." The inspectors also verified that the licensee provided a valid basis for retracting the event notification.

b. Conclusion

No violations of more than minor significance were identified. This item is considered closed.

E. Exit Meetings

The inspection scope and results were presented to members of the licensee's staff at various meetings throughout the inspection period and were summarized on August 15 and September 18, 2019, and at the end of the quarter on October 28, 2019, to J. Stewart and staff. Proprietary and classified information were discussed, but not included in this report.

SUPPLEMENTAL INFORMATION

1. KEY POINTS OF CONTACT

Name	Title
N. Auman	Technical Services Unit Manager, Transportation & Waste Management
S. Barron	Program Manager, Emergency Preparedness
C. Buchanan	Physicist, Environmental Safety
M. Chase	Specialist, Waste Management
D. Coulter	Senior Health Physicist, Health Physics
R. Dotson	Director, Transportation & Waste Management Program
T. Evans	Security Director
J. Faddis	Unit Manager, Environmental Safety
R. Freudenberger	Director, Safety & Safeguards
J. Griffith	Environmental Scientist 4, Environmental Safety
J. Hagemann	Operations Director
C. Hale	Specialist, Environmental Safety
J. Hensley	Radiation Technician, Radiation Monitoring Program
M. Jones	Radiation Technician, Radiation Monitoring Operations
T. Knowles	Licensing Manager, Licensing and Compliance
G. Lambert	Radiation Technician, Radiation Monitoring Program
L. Ledford	Program Administrator, Transportation & Waste Management Shipping
R. Lind	Unit Manager, Transportation & Waste Management Shipping
J. May	Operations Unit Manager, Transportation & Waste Management
B. McAlister	Environmental Scientist 3, Environmental Safety
M. McKinnon	Director, Program Management
B. Montgomery	Nuclear Process Operator, Downblending Operations, Building 440
M. Moore	Section Manager, Environmental Protection & Industrial Safety
R. Rice	Unit Manager, Radiation Protection & Health Physics
D. Rogers	Operations Section Manager, Manufacturing Operations
G. Rood	Senior Health Physicist, Health Physics
K. Ryan	Clerical, Transportation & Waste Management Operations
R. Shackleford	Section Manager, Nuclear Safety & Licensing
C. Shelton	Nuclear Process Operator, Downblending Operations, Building 440
J. Sisson	Program Field Office, Fuel
J. Stewart	President, Nuclear Fuel Services

2. LIST OF REPORT ITEMS

Item Number	Title	Type	Status
WER 2019-001 (EN 54218)	Criticality Accident Alarm System Speaker Failure in Building 333 LEU	Written Event Report	Opened
EN 54255	(Retracted) Unplanned Contamination Event	Event Notification	Opened and Closed

3. INSPECTION PROCEDURES USED

86740 Transportation
88030 Radiation Protection (Appendix B)
88045 Effluent Control and Environmental Protection
88051 Evaluation of Exercises and Drills
88135 Resident Inspection Program for Category I Fuel Cycle Facilities
88135.02 Resident Inspection Program Plant Status Activities
88135.04 Resident Inspection Program Operational Safety
88135.05 Resident Inspection Program Fire Protection
88135.17 Permanent Plant Modifications
88135.19 Post Maintenance Testing
88135.22 Surveillance Testing

4. DOCUMENTS REVIEWED

Records:
2018 First 24-Hour Sewer Composite Sample Analyses and Erwin Utilities Industrial Report
2018 Second Quarter 24-Hour Sewer Composite Sample Analyses and Erwin Utilities Report
21T-14-0811, Technical Basis for the NFS Internal Dosimetry Program, Revision (Rev.) 5
21T-18-0804, HP Audit for Unrestricted Release, Third Quarter 2018, dated September 26, 2018
21T-18-0805, HP Inspection for 303/304 Process Support Line, September 2018, dated September 26, 2018
21T-18-0837, Radiation Safety Policies and Procedures Quarterly Audit, dated October 11, 2018
21T-18-0867, October Monthly Inspection – Buildings 110 / 131 / 330, dated October 23, 2018
21T-18-0929, HP Inspection for 333 NU Dissolution/Raffinate Treatment Areas, dated November 30, 2018
21T-19-0009, HP Inspection for Building 306 Waste Packaging/Storage, December 2018, dated January 2, 2019
21T-19-0323, Safety and Safeguards Review Council (SSRC) Meeting Minutes, dated March 7, 2019
21T-19-0406, ALARA Goals for January 1, 2019 through December 31, 2019, dated March 5, 2019
21T-19-0489, HP Audit of the Radiation Protection program, First Quarter, 2019, dated April 14, 2019
21T-19-0513, HP Audit for SWP Program, Q1, 2019, dated April 5, 2019
21T-19-0606, Safety and Safeguards Review Council (SSRC) Meeting Minutes, dated June 6, 2019
44T-97-0440, MEZ-02-004, Phase II EDMS Environmental Data Management System (EDMS), computer code validation, T. Houston, dated June 3, 1999
Assessment of Radioactive Liquid and Gaseous Effluents Dose
Biannual Effluent Monitoring Report, January – June 2018, dated August 24, 2018
Biannual Effluent Monitoring Report, July – December 2018, dated February 20, 2019
Bill of Lading No. P23394
Calibration of stack status, dated August 5, 2019
Calibration records for daily pH meter calibration, January & February 2019

Calibration Records of Flow Measurement Device and Sensor in Sanitary Sewer, March 2019
Certificate of Compliance #9291 – LR 230
Certificate of Compliance #9315 – ES-3100
Flow Meter Calibration Records:
TSI Velocicalc 9535, dated April 5, 2019
Alnoor AXD620, dated April 4, 2019
WC-812-PC Digital Calibrator dated December 4, 2018
Hazardous Material Checklist Peer Review
LR-230 Secondary Lid Torque Instructions
Monthly Discharge Monitoring Report, WWTF batches
Monthly Radioactive Airborne Effluent Reports, October 2018 – June 2019
Monthly Sewer Equipment, Monthly Banner Spring Equipment and Monthly Northwest Storm:
January – June 2019,
Third Quarter 2018, dated October 22, 2018
First Quarter 2019, dated April 29, 2019
NVLAP Certificate of Accreditation to ISO/IEC 17025:2005, NVLAP Lab Code: 100555-0, Mirion Technologies (GDS), Inc, Effective July 1, 2019 through June 30, 2020
QA-18-11, dated July 20, 2018, Quality Assurance Plan for Environmental Safety
Quality Assurance Plans Audits (QAP-19-08 and 19-09)
Quarterly Assessment of Radioactive Liquid and Gaseous Effluents (Third Quarter 2018, Fourth Quarter 2018, and First Quarter 2019)
Receipt Inspection Checklist
Runsheet RS-409-45B-440, Rev. 11
Shipping Approved Vendors List (AVL) for the LR-230 and the ES-3100 containers
Special Safety Work Permit #17330
Stacks Building Ventilation Velocity Measurements
Surveys of LR-230 Shipping Containers
Tennelec Calibration, Verified for Environmental Counting, dated October 25, 2018

Procedures:
FM-WST-008, LR-230 Trailer Receipt Inspection Checklist, Rev. 3
FM-WST-010, Checklist for Returning Empty Shipping Containers, Rev. 4
FM-WST-011, ES-3100 Inspection Checklist, Rev. 6
FM-WST-012, ES-3100 Inspection/Maintenance Checklist, Rev. 4
NFS VNIT00100, Glovebox Installations Guide, dated December 4, 2017
NFS-ACC-033, Shipping Procedure for Nuclear Material, Rev. 46
NFS-CM-002, Identification and Control of Configuration Items, Rev 009A
NFS-DC-103, Decommissioning Sampling Procedure
NFS-ENG-028, Operation of the Vanta XRF Analyzer, Rev. 0
NFS-GH-08, Collection of Bioassay Samples, Rev. 10
NFS-GH-16, External Dosimetry Program, Rev. 18
NFS-GH-27, Impairments to Fire Protection Systems, Rev 14.
NFS-GH-40, Gaseous Effluent Action Points
NFS-GH-900, Safety and Safeguards Review Council (SSRC) Program, Rev. 22
NFS-GH-908, Radiation Protection Program, Rev. 7
NFS-GH-909, Environmental Protection Program, Rev. 11, November 20, 2018
NFS-GH-917, Quality Assurance Plan for Environmental Safety, July 29, 2018, Rev. 8
NFS-GH-932, ALARA Program, Rev. 11, dated January 8, 2018
NFS-HS-A-01, Plant Action Limits & Investigation for Bioassay Measurements, Rev. 8

NFS-HS-A-06, Determining Bioassay Frequencies, Rev. 11
NFS-HS-A-10, Determining Gaseous Effluent Flow Rates and Demonstrating Isokinetic Sampling, Rev. 10, dated December 4, 2017
NFS-HS-A-110, Calibration of Flow Measurement Device and Sensor in Sanitary Sewer, Rev. 3, dated September 14, 2017
NFS-HS-A-114, Calibration of Flow Measurement Device and Sensor in Banner Spring and North West Ditch, Rev. 3, dated July 10, 2019
NFS-HS-A-27, Routine Estimation of Offsite Dose from Radioactive Gaseous Effluents, Rev. 11, dated November 27, 2017
NFS-HS-A-30, Review and Investigation of Elevated Airborne Radioactivity, Rev. 13
NFS-HS-A-54, Effluent Control & Environmental Monitoring Action Levels and MDC Requirements, Rev., dated 15, June 5, 2019
NFS-HS-A-78, Field Measurements of Effluent Stack/Duct Velocities, Rev. 9, dated February 15, 2018
NFS-HS-A-82, Routine Estimation of Offsite Dose from Ambient Radiation
NFS-HS-B-10, Routine Air and Stack Sampler Calibration, Rev. 15, date May 1, 2019
NFS-HS-B-16, Rev. 34, Attachment D
NFS-HS-B-16, Routine Sampling of Sanitary Sewer, Rev. 34, dated August 7, 2017
NFS-HS-B-17, Radiological Lapel Air Sample Surveys, Rev. 18
NFS-HS-B-18, Collection and Analysis of NFS Stack Sample, Rev. 26
NFS-HS-B-18, Collection and Analysis of NFS Stack Samples, Rev. 27
NFS-HS-B-20, Routine Sampling of Environmental Media
NFS-HS-B-32, High Volume Air Samples and Loss of Ventilation, Rev. 12
NFS-HS-B-41, Routine Groundwater Sampling Procedure, Rev. 30, dated March 5, 2018
NFS-HS-B-44, Process Enclosure Face Air Velocity Measurements, Rev. 14A
NFS-HS-B-73, Analysis of Environmental Liquid and Environmental Air Samples, Rev. 15, dated May 1, 2019
NFS-HS-B-97, Sampling of Banner Spring Branch and North West Storm Water Ditch, Rev. 2, dated April 3, 2017
NFS-HS-E-07, On-Site Radiological Emergency Assessment, Rev. 35, dated September 12, 2018
NFS-HS-E-11, Radiological Scene and Contamination Control, Rev. 25, dated August 1, 2019
NFS-HS-E-15, Emergency Medical Response, Rev. 18, dated August 1, 2019
NSF-WM-001-1, Work Management Program Description, Rev. 005
NFS-WST-026, Handling/Shipping Instruction for the ES-3100 Containers
NFS-WST-030, Guidelines for Receiving Radioactive Materials
Nuclear Fuel Services Emergency Plan, Rev. 25, dated August 2019
SOP 401-11, Fuel Manufacturing Facility – Monitoring and Servicing of Area Process Ventilation Systems, Rev. 25A
SOP 409, Building 440 Dilution of LEU, Rev. 16
SOP-335-J, Waste Packaging for NNSS Disposal, Rev. 13

Other Documents
2019 Biennial Exercise Packet dated August 21, 2019
First Quarter 2019 ALARA Performance Report for Occupational Exposures, dated June 6, 2019
Fourth Quarter 2018 ALARA Performance Report for Occupational Exposures, dated March 7, 2019
High Volume Air Sampler Calibration records (Various)

Ludlum #2929, calibration records (Various)
Maps: 2018 Semi-Annual Site-wide Remediation Report:
Dissolved Uranium Concentrations in Groundwater 2018, color map
Groundwater Remediation, North Site-Former RBG
Groundwater Remediation, 200 Complex Area
Groundwater Remediation, Maintenance Shop Area
Organizational Chart for the Environmental Safety Department, 2019
Radiation Protection Program 2018 Audit & Inspection Schedule
Radiation Protection Program 2019 Audit & Inspection Schedule
REMCon System – Dose Accounting Year Dose Summary – NFS-Erwin, for Act Year: 2018, printed on July 25, 2019
REMCon System – Dose Accounting Year Dose Summary – NFS-Erwin, for Act Year: 2019, printed on July 25, 2019
Submittal of 2019 Exercise Objectives and Scenario Detail dated July 11, 2019

Problem, Identification, Resolution, and Correction System (PIRCS) Documents Reviewed:
67202. 67516, 71656, 75138, 75171, 75311, 75334, 75353, 75356, 75367, 75387, 75392, 75395, 75412, 75418, 75423, 75424, 75428, 75448, 75470, 75558, 75582, 75624, 75693, 75772, 75787, 76219, 76261, 76264, 76284, 76291, 7629, 76385

PIRCS Written as a Result of the Inspections:
75587, 75754, 75821, 75873, 75821, 76031, and 76076