



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
245 PEACHTREE CENTER AVENUE N.E., SUITE 1200
ATLANTA, GEORGIA 30303-1200

October 19, 2021

Mr. Mathew Snider
General Manager/Operations Manager
American Centrifuge Operating, LLC
3930 U.S. Route 23 South
P.O. Box 628 Mail Stop 7560
Piketon, OH 45661

SUBJECT: AMERICAN CENTRIFUGE PLANT – NRC INSPECTION REPORT
07007004/2021008

Dear Mr. Snider:

On September 24, 2021, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at American Centrifuge Operating, LLC's Piketon facility and discussed the results of this inspection with you and other members of your staff. The results of this inspection are documented in the enclosed report.

No violations of more than minor significance were identified during this inspection.

This letter, its enclosure, and your response (if any) will be made available for public inspection and copying at <http://www.nrc.gov/reading-rm/adams.html> and at the NRC Public Document Room in accordance with Title 10 of the *Code of Federal Regulations* 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

/RA/

Cynthia D. Taylor, Chief
Projects Branch 1
Division of Fuel Facility Inspection

Docket No. 07007004
License No. SNM-2011

Enclosure:
As stated

cc w/ encl: Distribution via LISTSERV

SUBJECT: AMERICAN CENTRIFUGE PLANT – NRC INSPECTION REPORT
07007004/2021008 DATED October 19, 2021

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OFFICE	RII/DFFI/PB1	RII/DFFI/PB1			
NAME	R. Womack	C. Taylor			
DATE	10/7/2021	10/7/2021			

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**U.S. NUCLEAR REGULATORY COMMISSION
Inspection Report**

Docket Number: 07007004

License Number: SNM-2011

Report Number: 07007004/2021008

Enterprise Identifier: I-2021-008-0004

Licensee: American Centrifuge Operating, LLC

Facility: American Centrifuge Plant

Location: Piketon, Ohio

Inspection Dates: September 22, 2021 to September 24, 2021

Inspector: R. Womack, Fuel Facility Inspector

Approved By: Cynthia D. Taylor, Chief
Projects Branch 1
Division of Fuel Facility Inspection

Enclosure

SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting a NRC inspection at American Centrifuge Plant, in accordance with the fuel cycle facility inspection program. This is the NRC's program for overseeing the safe operation of licensed fuel cycle facilities. Refer to <https://www.nrc.gov/materials/fuel-cycle-fac.html> for more information.

List of Violations

No violations of more than minor significance were identified.

Additional Tracking Items

None

INSPECTION SCOPES

Inspections were conducted using the appropriate portions of the inspection procedures (IPs) in effect at the beginning of the inspection unless otherwise noted. Currently approved IPs with their attached revision (Rev.) histories are located on the public website at <http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/index.html>. Inspections were declared complete when the IP requirements most appropriate to the inspection activity were met consistent with Inspection Manual Chapter (IMC) 2600, "Fuel Cycle Facility Operational Safety and Safeguards Inspection Program." The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel to assess licensee performance and compliance with Commission rules and regulations, license conditions, site procedures, and standards.

RADIOLOGICAL CONTROLS

88030 - Radiation Protection

The inspectors evaluated selected aspects of the licensee's radiation protection (RP) program to verify compliance with selected portions of 10 Code of Federal Regulation (CFR) 20 and 70, Chapter 4, "Radiation Protection," of the facility's license application, and applicable licensee procedures. The purpose of this inspection was to review aspects of the licensee's RP program related to the requirements for possession and leak testing of sealed sources.

Instrument Calibration (IP Section 02.07)

The inspectors reviewed the licensee's calibration records for RP instruments to verify if calibrations were in compliance with 10 CFR 20.1501 and Section 4.3.4, "Radiation Protection Instrumentation," of the license application. Specifically, the inspectors reviewed the following documents:

- calibration record of one Eberline RO-20 ion chambers;
- calibration record of two Ludlum Model 12 survey meters with Geiger-Mueller detectors;
- calibration record of two Ludlum Model 12S microR survey meters; and
- calibration record of two Ludlum Model 12 survey meters with Alpha scintillation detectors.

Instruments and Equipment (IP Section 02.08)

The inspectors reviewed the licensee's use of radiation detection instruments and equipment to verify if equipment and records were in compliance with 10 CFR 20.1501 and Section 4.3.4, "Radiation Protection Instrumentation," of the license application. Specifically, the inspectors reviewed the following records:

- survey instrument capabilities are appropriate for the type and intensity of radiation measured; and
- work authorization for the radiation lab, industrial hygiene, and instrument and calibration support for services provided to American Centrifuge Operating, LLC.

Radiation Surveys (IP Section 02.14)

The inspectors reviewed the licensee's radiation protection instrumentation procedures to verify if requirements in the procedures are in accordance with 10 CFR 20.1501 and Section 4.3.4, "Radiation Protection Instrumentation," of the licensee's application. Specifically, the inspectors reviewed the following:

- requirements in Section 4.3.4 of the license application in order to verify if implementing procedures effectively execute the requirements in the license application;
- procedure, ACD2-HP-011, Operation of Ludlum Model 12 Survey Meter with Ludlum Model 44-9 or Ludlum Model 43-5 Probe, Rev. 3; and
- sealed source program management requirements listed in ACD2-HP-012, Radioactive Source Control, Rev. 3.

Sealed Sources (IP Section 02.16)

The inspectors observed sealed source storage areas and reviewed procedures related to the licensee's storage and control of NRC licensed sealed sources to verify if sealed source control was in compliance with 10 CFR 20.1903(c) and Section 4.8.3, "Radioactive Source Control," of the licensee application. Specifically, the inspectors performed the following:

- observed the sealed source storage area;
- reviewed the requirements of Section 4.8.3 of the license application in order to verify if implementing procedures effectively execute the requirements in the license application;
- reviewed the proposed quantities and types of sealed source radionuclides requested; and
- reviewed the personnel and key control requirements of procedure ACD2-HP-012, Radioactive Source Control, Rev. 3.

INSPECTION RESULTS

No issues were identified.

EXIT MEETINGS AND DEBRIEFS

The inspectors verified no proprietary information was retained or documented in this report.

- On September 22, 2021, the inspectors presented the NRC inspection results to Matt Snider, General Manager/Operations Manager, and other members of the licensee staff.
- On September 30, 2021, the inspectors presented additional inspection details to Kelly Fitch, Regulatory Affairs.

DOCUMENTS REVIEWED

Inspection Procedure	Type	Designation	Description or Title	Rev.
88030	Calibration Records	FBP-RP-PRO-00034-F01	Model 12 with Thin Window Geiger-Mueller Detector Calibration Certificate	Rev. 5
	Calibration Records	FBP-RP-PRO-00093-F01	Ludlum 12 with an Alpha Scintillation Contamination Detector Calibration Certificate	Rev. 4
	Calibration Records	FBP-RP-PRO-00094-F01	Model 12S Calibration Certificate	Rev. 5
	Calibration Records	FBP-RP-PRO-00096-F01	Eberline RO-20 Calibration Certification	Rev. 5
	Miscellaneous	RWA 905707	Radiation Laboratory and Industrial Hygiene / Instrument and Calibration Support	
	Procedures	ACD2-HP-011	Operation of Ludlum Model 12 Survey Meter with Ludlum Model 44-9 or Ludlum Model 43-5 Probe	Rev. 3
		ACD2-HP-012	Radioactive Source Control	Rev. 3