



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
REGION I
2100 RENAISSANCE BLVD.
KING OF PRUSSIA, PA 19406-2713

March 25, 2022

Randy Rainwater,
Senior Project Manager
S&ME, Inc.
1413 Topside Road
Louisville, TN 37777

SUBJECT: S&ME, INC. - NRC INSPECTION NO.99990006/2022001 AND NOTICE OF VIOLATION

Dear Mr. Rainwater:

This letter refers to an NRC inspection conducted remotely on February 2, 2022, and continued in-office until March 7, 2022. This inspection examined activities conducted under your license as they relate to public health and safety, and to confirm compliance with the Commission's rules and regulations and with the conditions of your license. Within these areas, the inspection consisted of selected examination of procedures and representative records and interviews with personnel.

Based on the results of this inspection, the NRC has determined that one Severity Level IV violation of NRC requirements occurred. The violation was evaluated in accordance with the NRC Enforcement Policy. The current Enforcement Policy is included on the NRC's Web site at <https://www.nrc.gov/about-nrc/regulatory/enforcement/enforce-pol.html>. The violation is cited in the enclosed Notice of Violation (Notice) because the violation was identified by the NRC.

The violation occurred when you received uranium mill tailings samples without an NRC license. The NRC obtained regulatory authority over uranium mill tailings, commonly referred to as Atomic Energy Act 11e.(2) byproduct material, under the Uranium Mill Tailings Radiation Control Act (UMTRCA) of 1978. After UMTRCA passed, Agreement States had to amend their agreements with NRC to maintain authority over 11e.(2) byproduct material, otherwise the NRC maintained regulatory authority over 11e.(2) byproduct material in the State. The State of Tennessee did not amend their agreement with NRC to regulate 11e.(2) byproduct material; therefore, NRC has regulatory authority over 11e.(2) byproduct material in the State of Tennessee. Thus, your receipt, possession, use, and transfer of the byproduct material was required to be authorized by an NRC license.

The NRC has concluded that information regarding: (1) the reason for the violation(s); (2) the corrective actions that have been taken and the results achieved; and (3) the date when full compliance was achieved is already adequately addressed on the docket and include: returning the byproduct material to the originator, and informing your clients and staff regarding NRC requirements for the possession and use of mill tailings samples. Therefore, you are not required to respond to this letter unless the description herein does not accurately reflect your corrective actions or your position. In that case, or if you choose to provide additional information, you should follow the instructions specified in the enclosed Notice.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and your response, if you choose to provide one, will be made available electronically for public inspection in the NRC Public Document Room or from the NRC document system (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>. To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redaction.

If you have any questions regarding this matter, please contact Randolph Ragland of my staff at 610-337-5083 or via electronic mail at Randolph.Ragland@nrc.gov.

Thank you for your cooperation.

Sincerely,

Chris G. Cahill, Chief
Commercial, Industrial, R&D
and Academic Branch
Division of Radiological Safety and Security
Region I

Docket No. 99990006
License No. R-05016

Enclosure:
Notice of Violation

cc w/ enclosure
State of Tennessee
State of Wyoming

S&ME, INC. - NRC INSPECTION NO. S&ME, INC. - NRC INSPECTION
NO.99990006/2022001 AND NOTICE OF VIOLATION DATED MARCH 25, 2022

DOCUMENT NAME: https://usnrc-my.sharepoint.com/personal/rcr1_nrc_gov/Documents/Documents/RR-05016.2022001.Letter.docx

<input checked="" type="checkbox"/> SUNSI Review		<input checked="" type="checkbox"/> Non-Sensitive <input type="checkbox"/> Sensitive		<input checked="" type="checkbox"/> Publicly Available <input type="checkbox"/> Non-Publicly Available	
OFFICE	RI:DRSS	RI:DRSS			
NAME	RRagland RCR	CCahill CGC			
DATE	3/25/2022	3/25/2022			

OFFICIAL RECORD COPY

NOTICE OF VIOLATION

S&ME, Inc.
Louisville, TN

Docket No. 99990006
License No. R-05016

During an NRC inspection conducted remotely on February 2, 2022, and continued in-office until March 7, 2022, one violation of NRC requirements was identified. In accordance with the NRC Enforcement Policy, the violation is listed below:

10 CFR 40.3 requires, in part, that any licensee subject to the requirements of 10 CFR 40, shall not receive, possess, use, or transfer byproduct material as defined in 10 CFR Part 40.4 unless authorized by a specific license authorized by the Commission.

10 CFR 40.4, defines, in part, byproduct material as tailings or wastes produced by the extraction or concentration of uranium from any ore processed primarily for its source material content.

Contrary to the above, from April 28, 2021, to June 30, 2021, S&ME, Inc. received, possessed, used, and transferred byproduct material, as defined in 10 CFR 40.4, without a specific license issued by the Commission. Specifically, S&ME received four 5-gallon buckets containing byproduct material in the form of uranium mill tailings and carried out geotechnical testing on the material.

This is a Severity Level IV violation (Enforcement Policy Section 6.3).

The NRC has concluded that information regarding the reason for the violation, the corrective actions taken and planned to correct the violation and prevent recurrence and the date when full compliance will be achieved is already adequately addressed on the docket. However, you are required to submit a written statement or explanation pursuant to 10 CFR 2.201 if the description therein does not accurately reflect your corrective actions or your position. In that case, or if you choose to respond, clearly mark your response as a "Reply to a Notice of Violation," and send it to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555 with a copy to the Regional Administrator, Region I, within 30 days of the date of the letter transmitting this Notice of Violation (Notice).

If you contest this enforcement action, you should also provide a copy of your response to the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, any response which contests an enforcement action shall be submitted under oath or affirmation.

Your response will be placed in the NRC Public Document Room (PDR) and on the NRC Web site. To the extent possible, it should, therefore, not include any personal privacy, proprietary, or safeguards information so that it can be made publically available without redaction. However, if you find it necessary to include such information, you should clearly indicate the specific information that you desire not to be placed in the PDR, and provide the legal basis to support your request for withholding the information from the public.

In accordance with 10 CFR 19.11, you may be required to post this Notice within two working days of receipt.

Dated This 25th day of March 2022

U.S. NUCLEAR REGULATORY COMMISSION
REGION I

INSPECTION REPORT

Inspection Nos. 2022001
Docket No. 99990006
License No. R-05016
Licensee: S&ME, Inc.
Location(s): 1413 Topside Road
Louisville, TN 37777

Inspector: _____
Randolph C. Ragland, Jr.,
Senior Health Physicist
Commercial, Industrial, R&D, and
Academic Branch
Division of Radiological Safety & Security
_____ date

Approved By: _____
Chris G. Cahill, Chief
Commercial, Industrial, R&D, and
Academic Branch
Division of Radiological Safety & Security
_____ date

EXECUTIVE SUMMARY

S&ME, Inc.

NRC Inspection Report No. 99990006/2022002

In late 2021, NRC was informed that S&ME, Inc., (S&ME) a Louisville, Tennessee, construction company, that specializes in geotechnical engineering, received two mill tailings samples for geotechnical testing without an NRC license. In response, NRC opened an inspection of S&ME Inc. (S&ME) and contacted the S&ME site radiation safety officer (RSO) on February 2, 2022. The purpose of the inspection was to review the circumstances associated with S&ME's April 28, 2021, receipt of uranium mill tailings sample without authorization of an NRC license.

The inspection determined that one violation of NRC requirements occurred between April 28, 2021 - June 30, 2021, when S&ME, Inc. received two uranium mill tailings samples without authorization by NRC license.

The NRC obtained regulatory authority over uranium mill tailings, commonly referred to as Atomic Energy Act 11e.(2) byproduct material, under the Uranium Mill Tailings Radiation Control Act (UMTRCA) of 1978. After UMTRCA passed, Agreement States had to amend their agreements with NRC to maintain authority over 11e.(2) byproduct material, otherwise the NRC maintained regulatory authority over 11e.(2) byproduct material in the State. The State of Tennessee did not amend their agreement with NRC to regulate 11e.(2) byproduct material; therefore, NRC has regulatory authority over 11e.(2) byproduct material in the State of Tennessee. Thus, S&ME's receipt, possession, use, and transfer of the byproduct material was required to be authorized by an NRC license.

During a February 2, 2022, telephone call, the SM&E radiation safety officer acknowledged the violation and stated that the violation occurred because he misinterpreted the scope of the SM&E State of Tennessee license. S&ME came back into compliance on June 30, 2021, when they returned the byproduct material samples back to the originator. Actions taken to prevent recurrence included informing S&ME clients and staff regarding NRC requirements for the possession and use of mill tailings samples.

Because S&ME handled the radioactive material in accordance with radioactive material handling procedures utilized for S&ME's State of Tennessee license, there was no spread of radiological contamination and no measurable radiation exposures. Based on our review, we determined that the significance of the violation is low, and we assessed the violation at the severity level IV level.

REPORT DETAILS

1. **S&ME's Receipt of Mill Tailings Samples.**

a. Inspection Scope

The inspector reviewed the circumstances associated with S&ME's receipt of mill tailings for geotechnical testing without an NRC license. Information was gathered through a review of S&ME's State of Tennessee radioactive material license number R-05016-F24 and through interviews with S&ME's site radiation safety officer (RSO).

b. Observations and Findings

In late 2021, NRC was informed that S&ME, Inc., a Louisville, Tennessee, construction company, that specializes in geotechnical engineering, received two mill tailings samples for geotechnical testing without an NRC license. In response, NRC opened an inspection of S&ME and contacted the S&ME site RSO on February 2, 2022.

The RSO reported that S&ME maintains a State of Tennessee radioactive materials license number R-05016-F24 which authorizes possession and use of a broad scope of radionuclides. In 2021, S&ME was contacted by an engineering firm to determine if S&ME could perform compaction and strength analysis on two mill tailing samples from a site in Wyoming. S&ME's site RSO stated that he checked his State of Tennessee license and concluded that it authorized the possession and use of the mill tailings samples.

On April 28, 2021, S&ME received two samples of mill tailings contained in four 5-gallon buckets with a total weight of approximately 148 pounds. S&ME performed the requested compaction and strength testing which did not include any radionuclide analysis. On June 30, 2021, S&ME returned the samples to the owner including any floor sweepings. No residual contamination was identified following the tests. The RSO reported that later in 2021, he was notified that his license did not authorize the receipt, possession, use, or transfer mill tailing samples (i.e., Atomic Energy Act Section 11e.(2) byproduct material). Upon notification, the RSO confirmed that the mill tailings were shipped back to the originator, including any floor sweepings, and no contamination was detected, and no measurable radiation exposures were received. He stated that to prevent recurrence, he informed his clients and S&ME staff members, including a self-acknowledgement, regarding NRC license requirements for the possession and use of mill tailings.

The NRC obtained regulatory authority over uranium mill tailings, commonly referred to as Atomic Energy Act 11e.(2) byproduct material, under the Uranium Mill Tailings Radiation Control Act (UMTRCA) of 1978. After UMTRCA passed, Agreement States had to amend their agreements with NRC to maintain authority over 11e.(2) byproduct material, otherwise the NRC maintained regulatory authority over 11e.(2) byproduct material in the State. The State of Tennessee did not amend their agreement with NRC to regulate 11e.(2) byproduct material; therefore, NRC has regulatory authority over 11e.(2) byproduct material in the State of Tennessee. Thus, S&ME's receipt,

possession, use, and transfer of the byproduct material was required to be authorized by an NRC license.

c. Conclusions

During an NRC inspection conducted remotely on February 2, 2022, and continued in-office until March 7, 2022, one violation of NRC requirements was identified. In accordance with the NRC Enforcement Policy, the violation is listed below:

10 CFR 40.3 requires, in part, that any licensee subject to the requirements of 10 CFR 40, shall not receive, possess, use, or transfer byproduct material as defined in 10 CFR Part 40.4 unless authorized by a specific license authorized by the Commission.

10 CFR 40.4, defines, in part, byproduct material as tailings or wastes produced by the extraction or concentration of uranium from any ore processed primarily for its source material content.

Contrary to the above, from April 28, 2021, to June 30, 2021, S&ME, Inc. received, possessed, used, and transferred byproduct material, as defined in 10 CFR 40.4, without a specific license issued by the Commission. Specifically, S&ME received four 5-gallon buckets containing byproduct material in the form of uranium mill tailings and carried out geotechnical testing on the material.

This is a Severity Level IV violation (Enforcement Policy Section 6.3).

2. Exit Meeting

On March 7, 2022, the inspector conducted an inspection exit meeting with S&ME's Senior Project Engineer/RSO. The RSO acknowledged the inspection finding and stated that the violation occurred due to a misinterpretation of his State of Tennessee license, that the mill tailings samples were sent back to the originator on June 30, 2021, and that he informed his clients and applicable NRC staff of NRC requirements for the possession and use of mill tailings.

ATTACHMENT

PARTIAL LIST OF PERSONS CONTACTED

Individual(s) present at entrance meeting on February 2, 2022

* Individual(s) present at exit meeting on March 7, 2022

#* Randy Rainwater, Senior Project Engineer, Radiation
Safety Officer

INSPECTION PROCEDURES USED

IP 87126, Industrial Academic Research Programs

LIST OF ACRONYMS USED

NRC: Nuclear Regulatory Commission

R&D: Research and Development

RCC: Radiation Control Committee

RSO: Radiation Safety Officer

SLIV: Severity Level IV

TN: Tennessee

UMTRCA: Uranium Mill Tailings Radiation Control Act of 1978