

UNITED STATES NUCLEAR REGULATORY COMMISSION REGION I 2100 RENAISSANCE BOULEVARD, SUITE 100 KING OF PRUSSIA, PENNSYLVANIA 19406-2713

May 10, 2013

Docket No. 03015246 EA-13-057 License No. 47-17517-02

Robert E. Leigh, P.E. Vice President Mountaineer Contractors, Inc. P.O. Box 606 Kingwood, WV 26537

SUBJECT: NRC INSPECTION REPORT NO. 03015246/2013001, MOUNTAINEER CONTRACTORS, INC., KINGWOOD AND WHEELING, WEST VIRGINIA SITES

Dear Mr. Leigh:

On March 12 and 13, 2013, and continuing in-office through April 24, 2013, Scott Wilson of this office conducted a safety inspection of activities authorized by the above listed NRC license. The inspection was an examination of your licensed activities as they relate to radiation safety and to compliance with the Commission's regulations and the license conditions. The inspection consisted of observations by the inspector, interviews with personnel, and a selective examination of representative records. The findings of the inspection were discussed with you and Mike Neely of your organization, via telephone at the conclusion of the inspection on April 24, 2013. The enclosed report presents the results of this inspection.

Based on the results of this inspection, seven apparent violations were identified and are described in Section II of the enclosed report. Two of the apparent violations are being considered for escalated enforcement action in accordance with the NRC Enforcement Policy. The current Enforcement Policy is included on the NRC's Web site at http://www.nrc.gov/about-nrc/regulatory/enforcement/enforce-pol.html. The apparent violations being considered for escalated enforcement involved the failure to use two independent controls to secure portable gauges from unauthorized removal whenever the gauges were not under licensee control or constant surveillance, as required by 10 CFR 30.34(i), and the possession of radioisotopes in excess of the limits specified in Item No. 8 of the license. Immediate corrective actions were taken to comply with NRC safety and security requirements. The circumstances surrounding these apparent violations, the significance of the issues, and the need for lasting and effective corrective actions was discussed with you during the inspection exit meeting at the conclusion of the inspection. As a result, it may not be necessary to conduct a predecisional enforcement conference (PEC) in order to enable the NRC to make an enforcement decision.

In addition, since your facility has not been the subject of an escalated enforcement action within the last 2 years, and based on our understanding of your corrective actions, a civil penalty may not be warranted in accordance with Section 2.3.4 of the Enforcement Policy.

R. Leigh

Before the NRC makes its enforcement decision, we are providing you an opportunity to either (1) respond to the apparent violations addressed in this inspection report within 30 days of the date of this letter, or (2) request a PEC. If a PEC is held, it will be open for public observation and the NRC will issue a press release to announce the time and date of the conference.

Should you decide to participate in a PEC, the conference will be held within 30 days of the date of this letter. Please contact Mr. Blake Welling at (610) 337-5205 within 10 days of the date of this letter, to inform us of your decision.

If you choose to provide a written response, it should be submitted to Blake Welling, Chief, Materials Security and Industrial Branch, Division of Nuclear Materials Safety, at the Region I address above, and be clearly marked as a "Response to Apparent Violations in Inspection Report No. 03015246/2013001, EA-13-057" and should include for each apparent violation: (1) the reason for the apparent violation, or, if contested, the basis for disputing the apparent violation; (2) the corrective steps that have been taken and the results achieved; (3) the corrective steps that will be taken to avoid further violations; and (4) the date when full compliance will be achieved. Your response may reference or include previously docketed correspondence, if the correspondence adequately addresses the required response. If an adequate response is not received within the time specified or an extension of time has not been granted by the NRC, the NRC will proceed with its enforcement decision or schedule a PEC.

If you choose to request a PEC, the conference will afford you the opportunity to provide your perspective on the apparent violations and any other information that you believe the NRC should take into consideration before making an enforcement decision. The topics discussed during the conference may include the following: information to determine whether a violation occurred, information to determine the significance of a violation, information related to the identification of a violation, and information related to any corrective actions taken or planned to be taken. In presenting your corrective actions, you should be aware that the promptness and comprehensiveness of your actions will be considered in assessing any civil penalty for the apparent violations. In addition, please be advised that the number and characterization of further NRC review. You will be advised by separate correspondence of the results of our deliberations on this matter.

Current NRC regulations and guidance are included on the NRC's website at <u>www.nrc.gov</u>; select **Nuclear Materials; Med, Ind, & Academic Uses;** then **Regulations, Guidance and Communications.** The current Enforcement Policy is included on the NRC's website at <u>www.nrc.gov</u>; select **About NRC, Organizations & Functions; Office of Enforcement; Enforcement documents;** then **Enforcement Policy (Under 'Related Information').** You may also obtain these documents by contacting the Government Printing Office (GPO) toll-free at

1-866-512-1800. The GPO is open from 8:00 a.m. to 5:30 p.m. EST, Monday through Friday (except Federal holidays). To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction.

R. Leigh

The NRC's Safety Culture Policy Statement became effective in June 2011. While a policy statement and not a regulation, it sets forth the agency's *expectations* for individuals and organizations to establish and maintain a positive safety culture. You can access the policy statement and supporting material that may benefit your organization on NRC's safety culture Web site at http://www.nrc.gov/about-nrc/regulatory/enforcement/safety-culture.html. We strongly encourage you to review this material and adapt it to your particular needs in order to develop and maintain a positive safety culture as you engage in NRC-regulated activities.

Sincerely,

/RA/

Raymond K. Lorson, Director Division of Nuclear Materials Safety

Enclosure: Inspection Report No. 03015246/2013001

cc w/enclosure: Mike Neely, P.E., Radiation Safety Officer State of West Virginia R. Leigh

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Sincerely,

/RA/

Raymond K. Lorson, Director Division of Nuclear Materials Safety

Enclosure: Inspection Report No. 03015246/2013001

cc w/enclosure: Mike Neely, P.E., Radiation Safety Officer State of West Virginia

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U.S. NUCLEAR REGULATORY COMMISSION REGION I

INSPECTION REPORT

Inspection No.	03015246/2013001					
EA No.	EA-13-057					
Docket No.	03015246					
License No.	47-17517-02					
Licensee:	Mountaineer Contractors, Inc.					
Address:	ss: P.O. Box 606, Kingwood, WV 26537					
Locations Inspected:	Main Office on West Virginia Highway 26, Kingwood, WV, Field Office located at 1127 Short Creek Road, Wheeling, WV					
Inspection Dates:	March 12 – April 24, 2013					
Inspector:	/RA/	04/25/13				
	Scott Wilson Health Physicist Materials Security and Industrial Branch Division of Nuclear Materials Safety	date				
Approved Dv:	/RA/	04/26/13				
Approved By:	Blake D. Welling, Chief Materials Security and Industrial Branch Division of Nuclear Materials Safety	date				

EXECUTIVE SUMMARY

Mountaineer Contractors, Inc. NRC Inspection Report No. 03015246/2013001

Mountaineer Contractors, Inc. is a construction and engineering company that operates in the state of West Virginia. This was a routine, unannounced inspection of licensed activities involving the use of byproduct material (cesium-137 and americium-241) for measuring physical properties of materials with portable nuclear gauging devices. Based on the results of the inspection, seven apparent violations of NRC requirements were identified.

Two apparent violations are being considered for escalated enforcement action and relate to the licensee's failure: 1) to use two independent physical controls that form tangible barriers to secure two portable gauges from unauthorized removal whenever the portable gauges were not under the control and constant surveillance of the licensee, as required by 10 CFR 30.34(i); and 2) to confine its possession of byproduct material to the activity limits authorized under its license. The inspector identified that the gauges had been stored in a locked cabinet, providing one independent physical control for the portable gauges, but the storage location did not have a second independent physical control when the gauges were not under constant surveillance of the licensee. The inspector determined that the licensee possessed three gauges when the license only authorized enough activity for two.

This inspection also identified five other apparent violations of NRC requirements that are not being considered for escalated enforcement. These apparent violations were for the failure: 1) to review the radiation protection program content implementation at least annually; 2) to conduct sealed source leak tests at the required frequency; 3) to maintain a log book of gauge activities; 4) to comply with the training requirements for HAZMAT employees that transport licensed materials; and 5) to conduct physical inventories of licensed material every six months.

Immediately following the onsite inspection Mountaineer Contractors, Inc. took prompt corrective actions that included: an assessment of the licensed program and root cause of the apparent violations; amending its NRC license to name another individual as Radiation Safety Officer; the installation of an additional locking mechanism on the storage cabinet; submission of an amendment request to increase the amount of activity authorized by the license; use of Appendix F of NUREG-1556 to complete annual program reviews; ensuring sealed sources are leak tested at the required frequency; implementation of a log book for documenting gauge usage; providing Hazmat employee refresher training prior to transporting licensed material; conducting a physical inventory of all licensed material; and implementation of a system of reminders to prevent the oversight of program items in the future.

REPORT DETAILS

I. Organization and Program Overview

a. Inspection Scope

The inspector reviewed the license application, supporting documents, and other licensee records. Collectively, these documents describe the licensee's radiation safety program. The inspection was conducted using Inspection Procedure (IP) 87124, Focus Elements 1-7.

b. Observations and Findings

Mountaineer Contractors, Inc. is authorized under NRC License 47-17517-02 to use byproduct material for measuring physical properties of materials with nuclear gauging devices. Licensed material was authorized to be used at the licensee's facility located in Kingwood, West Virginia, and at temporary job sites in areas under NRC jurisdiction. Gauges were used daily for construction engineering at a number of projects in West Virginia. The licensee employed eight individuals involved in gauging operations. The Radiation Safety Officer (RSO) reports directly to the company Vice President.

c. Conclusion

No violations were identified.

II. Material Receipt, Use, Transfer and Control

a. Inspection Scope

The inspector's review of the program included interviews with licensee personnel, direct observations of licensed activities, and a review of procedures and records associated with material receipt, use, transfer and control. The inspection was conducted using IP 87124, Focus Elements 1 - 7.

b. Observations and Findings

A routine, unannounced inspection of the licensee's office located in Kingwood, and the field office in Wheeling, West Virginia, was conducted on March 12, 2013, and March 13, 2013, respectively. The Wheeling, West Virginia location is a coal processing facility where waste products are disposed of in an onsite residual landfill. The gauges are used to test compaction of the landfill. Additional information was reviewed during an in-office review following the site inspections.

The inspector interviewed individuals regarding authorized user (AU) training; and reviewed sealed source leak tests; dosimetry reports; transportation shipping papers; operating and emergency procedures; and gauge use, transportation and storage. The licensee possessed three Troxler Electronic Laboratories gauging devices, each containing cesium-137 and americium-241. One of the gauges was recently acquired by

the licensee. At the time of the inspection, two of the gauges were at the licensee's service provider for calibration.

The following seven apparent violations were identified during the inspection, two of which are being considered for escalated enforcement:

 10 CFR 30.34(i) requires, in part, that each portable gauge licensee shall use a minimum of two independent physical controls that form tangible barriers to secure portable gauges from unauthorized removal, whenever portable gauges are not under the control and constant surveillance of the licensee.

Contrary to the above, on multiple occasions between February 8, 2008, and March 11, 2013, the licensee secured portable gauges in a locked cabinet at its permanent storage location in Kingwood, West Virginia, with only one physical control that formed a tangible barrier, and the portable gauges were not under the control and constant surveillance of the licensee, an apparent violation of 10 CFR 30.34(i).

The RSO stated that he assumed the storage room door represented one barrier, and cabinet lock represented the second barrier; however, the RSO and licensee's employees frequenting the storage room stated that the door to the storage room was unlocked during working hours and that authorized individuals were not always present to prevent unauthorized individuals from accessing the storage room.

As an immediate corrective action, the licensee added another physical barrier (hasp and lock) to the storage cabinet on March 15, 2013, to prevent unauthorized access to the gauges while in storage and not under the control and constant surveillance of the licensee.

 NRC License 47-17517-02, Amendment No. 07, Item 8, specifies that the maximum sealed source activity the licensee was authorized to possess at any one time under the license was 18 millicuries of cesium-137 (Cs-137), and 88 millicuries of americium-241 (Am-241).

Contrary to the above, from November 5, 2012, to March 21, 2013, the licensee did not limit its possession of licensed materials to the quantities specified in Item 8 of NRC License 47-17517-02. Specifically, the possession limit under the license was 18 millicuries of Cs-137, and 88 millicuries of Am-241, and on November 5, 2012, the licensee received an additional gauge, which caused the licensee to exceed the possession limit for the license. This is an apparent violation of the NRC license.

The licensee stated that the violation was an oversight, as the RSO did not review the maximum amount authorized by the license prior to acquiring the additional gauge.

As an immediate corrective action, on March 13, 2013, the licensee submitted a letter requesting a license amendment. The license was amended on March 21, 2013.

3) 10 CFR 20.1101 requires, in part, that the licensee review the radiation protection program content and implementation at least annually.

Contrary to the above, for the calendar years 2009 - 2011, the licensee did not perform a review the radiation protection program content and implementation, an apparent violation of 10 CFR 20.1101. This is a repeat violation from the previous inspection.

As an immediate corrective action, the licensee committed to conduct program reviews annually, and to implement a system of reminders to remind the RSO when program reviews are due. This corrective action was completed on March 22, 2013.

4) NRC License 47-17517-02, Amendment No. 07, Condition 14-A requires, in part, that sealed sources shall be tested for leakage or contamination at intervals specified in the certificate of registration. The certificate of registration (NC-0646-D-130-S) for the sealed sources possessed by the licensee requires leak testing every 12 months.

Contrary to the above, on several occasions between February 20, 2008, and May 5, 2011, the licensee failed to leak test sealed sources at the required intervals on several occasions. Specifically, sealed sources were leak tested on February 20, 2008; October 16, 2009; and May 5, 2011; intervals greater than 12 months. This is an apparent violation of Condition 14-A of the license.

As an immediate corrective action, the licensee committed to the implementation of a system of reminders to ensure the RSO is reminded when leak tests are due. This corrective action was completed on March 22, 2013.

5) NRC License 47-17517-02, Amendment No. 07, Condition 19-A requires, in part, that the licensee comply with the terms and conditions of the licensee's application dated August 12, 2004. That includes Item #10 of the application dated August 12, 2004, "Radiation Safety Program, Operating and Emergency Procedures," which specifies that licensee personnel will implement and maintain the Operating and Emergency Procedures in Appendix H of NUREG-1556, Volume 1, Rev. 1. Specifically, the Operating and Emergency Procedures require, in part, that the licensee sign out the portable gauge in a log book including the date of use, name of the authorized user, and the temporary job site where the portable gauge will be used.

Contrary to the above, between February 8, 2008, and March 12, 2013, the licensee had used portable gauges at temporary jobsites numerous times and had not maintained a log book that included the dates of use, names of the authorized users responsible for the gauge, and the temporary job site where the portable gauge was used, an apparent violation of License Condition 19-A.

As an immediate corrective action, on March 15, 2013, the licensee implemented a log book for the purpose of logging out portable gauges in the future.

6) 10 CFR Part 71 requires, in part, that each licensee who transports licensed material outside the site of usage, as specified in the NRC license, shall comply with the applicable requirements of the Department of Transportation (DOT) regulations in 49 CFR parts 171 through 180, appropriate to the mode of transport.

49 CFR 172.704 requires, in part, that a HAZMAT employee shall receive training required by the subpart, at least once every three years.

Contrary to the above, from August 19, 2007, to March 11, 2013, a HAZMAT employee who performed functions subject to the requirements of 10 CFR 71.5, was not trained as required. Specifically, on multiple occasions from August 19, 2007, to March 11, 2013, the RSO, a HAZMAT employee, transported portable gauges containing licensed material outside the site of usage and the RSO had not received the training required by 49 CFR 172.704 since August 19, 2004, a period greater than three years. This is an apparent violation of 10 CFR 71.

The licensee stated that the requirement was not fully understood by the RSO.

As an immediate corrective action, the licensee agreed to provide HAZMAT employee training to the RSO as required prior to the RSO performing any functions related to shipping subject to the requirements of 49 CFR Part 171 - 177, and within 30 days. Also, the licensee committed to implementation of a system of reminders to notify the RSO when HAZMAT employee training is due.

7) NRC License 47-17517-02, Amendment No. 07, Condition 15, requires, in part, that the licensee conduct a physical inventory every six months, or at intervals approved by the U.S. Nuclear Regulatory Commission, to account for all sources and/or devices received and possessed under the license. Condition 15 also requires that records of inventories be maintained for 5 years from the date of each inventory and include the radionuclide, quantities, manufacturer's name and model number, and the date of the inventory.

Contrary to the above, for five years prior to March 12, 2013, the licensee had not conducted physical inventories every 6 months to account for all sources and or devices possessed under the license. Specifically, the licensee possessed portable gauge devices under the license and, as of March 12, 2013, had not conducted a physical inventory for the previous five years, a period greater than six months. This is an apparent violation of Condition 15 of the license.

As an immediate corrective action, the licensee committed to completing a physical inventory, and to implement a system of reminders to remind the RSO when future physical inventories are due. This corrective action was completed on March 22, 2013.

c. <u>Conclusions</u>

The inspection identified seven apparent violations of NRC requirements involving failures to: 1) secure portable gauges with two tangible barriers to prevent unauthorized access; 2) confine possession of licensed material to the limits authorized by the license; 3) review the radiation program content and implementation at least annually; 4) conduct sealed source leak tests at the required frequency; 5) implement the Operating and Emergency Procedures including use of a sign-out log for gauges used at temporary jobsites; 6) provide HAZMAT employee training to authorized users as required; and, 7) conduct a physical inventory to account for all sealed sources and devices every six months.

Licensee management stated that they had assessed the causes of the apparent violations and had determined that a common root cause was insufficient oversight by management. As a preventative action to improve management oversight, the licensee assigned a new individual to the position of RSO. The newly assigned RSO is a professional engineer with recent training in the use and management of portable gauges and, due to the nature of his position, is expected to have more frequent involvement with the gauge program and sufficient resources to improve and maintain management oversight. The inspector reviewed the licensee's assessment of root cause and identified no concerns.

III. Exit Meeting

A preliminary site exit briefing was conducted on March 13, 2013. On April 24, 2013, a final telephonic exit meeting was conducted with the company Vice President and the current RSO. Licensee representatives acknowledged the inspector's findings. No proprietary information was identified.

ATTACHMENT: SUPPLEMENTAL INFORMATION

PARTIAL LIST OF PERSONS CONTACTED

Licensee

#*Robert E. Leigh, Vice President
George "Fred" Cavendar, Technician (previous RSO)
*Mike Neeley, Professional Engineer (current RSO)
Terry Hayes, Technician
Curtis Nuzum, Technician
Mike Bucklew, Shop Manager

- present at entrance meeting* - present at exit meeting

INSPECTION PROCEDURES USED

NRC Inspection Procedure 87124, "Fixed and Portable Gauge Programs"

ITEMS OPEN, CLOSED, AND DISCUSSED

The following apparent violations were identified:

- 1. Failure to use a minimum of two independent physical controls to secure portable gauges from unauthorized removal, a violation of 10 CFR 30.34(i). (Section II)
- 2. Failure to confine its possession of byproduct material to the activity limits authorized in Item 8 of its license, a violation of Item 8 of the NRC License. (Section II)
- 3. Failure to review the radiation protection program content implementation at least annually, a violation of 10 CFR 20.1101. This is a repeat violation. (Section II)
- 4. Failure to conduct sealed source leak tests at the required frequency, a violation of License Condition 14-A. (Section II)
- 5. Failure to comply with the terms and conditions of the license for maintaining a log book of gauge activities, a violation License Condition 19-A. (Section II)
- 6. Failure to comply with the terms and conditions of the license for transporting licensed material, a violation of 10 CFR 71.5. (Section II)
- Failure to comply with the terms and conditions of the license for conducting a physical inventory of licensed material every six months, a violation of License Condition 15. (Section II)