



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
REGION IV
1600 E. LAMAR BLVD.
ARLINGTON, TX 76011-4511

July 6, 2016

Mr. Robert Clark, Radiation Safety Officer
Madison Engineering, LLC
895 Technology Blvd, Suite 203
Bozeman, MT 59718

SUBJECT: NRC INSPECTION REPORT 030-38858/2016-001 AND NOTICE OF VIOLATION

Dear Mr. Clark:

This letter refers to the initial announced inspection conducted on February 24, 2016, at your Bozeman, Montana facility with in office review through June 15, 2016. This inspection examined activities conducted under your license as they relate to public health and safety, and to confirm compliance with the Nuclear Regulatory Commission's (NRC) rules and regulations and with the conditions of your license. Within these areas, the inspection consisted of selected examination of procedures and representative records, observations of activities, and interviews with personnel. An exit interview was conducted with you on June 15, 2016.

Based on the results of this inspection, the NRC has determined that three Severity Level IV violations of NRC requirements occurred. These violations were evaluated 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 violations are cited in the enclosed Notice of Violation (Notice) and the circumstances surrounding it (them) are described in detail in the subject inspection report. The violations are being cited in the Notice because they were identified by the NRC.

The NRC has concluded that information regarding: (1) the reason for the violations, (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 in your emails dated March 1, 2016 and June 15, 2016 (ML16169A288). 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 chose 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 "Agency Rules of Practice and Procedures," a copy of this letter, its enclosure(s), 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's Agencywide Documents Access and Management System (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

R. Clark

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To the extent possible, your response should not include any personal privacy or proprietary, information so that it can be made available to the Public without redaction.

Should you have any questions regarding this letter or the enclosed Notice, please contact me at 817-200-1191.

Sincerely,

/RA/

Ray L. Kellar, P.E., Chief
Nuclear Materials Safety Branch A
Division of Nuclear Materials Safety

Docket No: 030-38858
License No: 25-25360-01

Enclosure:
Notice of Violation (Notice)

cc: State of Montana, Radiation Control Manager

To the extent possible, your response should not include any personal privacy or proprietary, information so that it can be made available to the Public without redaction.

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Sincerely,

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Ray L. Kellar, P.E., Chief
Nuclear Materials Safety Branch A
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Docket No: 030-38858
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Enclosure:
Notice of Violation (Notice)

cc: State of Montana, Radiation Control Manager

DISTRUBUTION:

S. Morris, RIV DRA
M. Shaffer, D:DNMS
L. Howell, DD:DNMS
R4DNMS_MS-A
R4DNMS_MS-B

ADAMS ACCESSION NUMBER: ML16131A644

X SUNSI Review By: MRP		ADAMS X Yes <input type="checkbox"/> No		X Publicly Available <input type="checkbox"/> Non-Publicly Available		X Non-Sensitive <input type="checkbox"/> Sensitive		Keyword:
OFFICE	NMSB-A	NMSB-A	C:NMSB-A					
NAME	MRPoston	CCAldredge	RLKellar					
SIGNATURE	/RA/	/RA/	/RA/					
DATE	06/15/16	06/15/16	07/06/16					

OFFICIAL RECORD COPY

NOTICE OF VIOLATION

Madison Engineering, LLC
Bozeman, MT

Docket No: 030-38858
License No: 25-25360-01

During the Nuclear Regulatory Commission (NRC) inspection conducted on February 24, 2015, three violations of NRC requirements were identified. In accordance with the NRC Enforcement Policy, the violations are listed below:

- A. License Condition 21 of NRC License Number 25-35260-01, requires, in part, that the licensee shall conduct its program in accordance with the statements, representations and procedures contained in the documents, including any enclosures, listed in the license.

License application, dated January 29, 2015, Section 8, "Training for Individuals in or Frequenting Restricted Areas," states that before using licensed materials, authorized users will have successfully completed one of the training courses described in Criteria in the section entitled "Training for Individuals Working In Or Frequenting Restricted Areas" in NUREG-1556, Volume 1, Revision 1, "Consolidated Guidance about Materials Licenses: Program Specific Guidance about Portable Gauge Licensees," dated November 2001.

NUREG-1556, Volume 1, Revision 1, Appendix D, "Criteria for Acceptable Training Courses for Portable Gauge Users," specifies that the training include "1.5 to 2 hours of radiation safety and regulatory requirements, emphasizing practical subjects important to safe use of the gauge; radiation versus contamination; internal vs external exposure; concept of time, distance and shielding to minimize exposure; control and surveillance of gauges; location of sealed source within the portable gauge, inventory, recordkeeping; incidents; licensing and inspection by regulatory agency; need for complete and accurate information; employee protection; deliberate misconduct."

Contrary to the above, from July 31, 2015 to February 24, 2016, the licensee failed to ensure that before using licensed materials, authorized users successfully completed one of the training courses described in Criteria in the section entitled "Training for Individuals Working In Or Frequenting Restricted Areas" in NUREG-1556, Volume 1, Revision 1. Specifically, three individuals identified as authorized users for the gauge had not completed 1.5 to 2 hours of training specific to radiation safety and regulations.

This is a Severity Level IV violation (Section 6.3.d.6).

- B. License Condition 21 of NRC License Number 25-35260-01, requires, in part, that the licensee shall conduct its program in accordance with the statements, representations and procedures contained in the documents, including any enclosures, listed in the license.

License application, dated January 29, 2015, Section 10.5, "Radiation Safety Program – Occupational Dosimetry," states "either we will maintain for inspection by the NRC, documentation demonstrating that unmonitored individuals are not likely to receive a radiation dose in excess of 10% of the allowable limits in 10 CFR 20, or we will provide

dosimetry processed and evaluated by a NVLAP approved processor that is exchanged at a frequency recommended by the processor.”

Contrary to the above, from July 31, 2015 to February 24, 2016, the licensee failed to maintain documentation demonstrating that unmonitored individuals are not likely to receive a radiation dose in excess of 10% of the allowable limits of 10 CFR 20 or provide dosimetry processed and evaluated by a NVLAP approved processor that is exchanged at a frequency recommended by the processor. Specifically, the licensee did not provide dosimetry to the Radiation Safety Officer or the authorized gauge users nor did they perform any measurements or make any calculations to estimate dose to personnel.

This is a Severity Level IV (Section 6.7.d)

- C. License Condition 13 of NRC License Number 25-35260-01, requires, in part, that sealed sources be tested for leakage and/or contamination at intervals not to exceed the intervals specified in the certificate of registration issued by the U.S. Nuclear Regulatory Commission under 10 CFR 32.210 or by an Agreement State.

The certificate of registration for the Seaman Nuclear Corporation C-300 Series Portable Moisture and Density Gauge (NR-0587-D-104-S) specifies a leak test frequency of six months.

Contrary to the above, from July 31, 2015 to February 24, 2016, the licensee failed to test sealed sources for leakage and/or contamination at intervals not to exceed the intervals specified in the certificate of registration issued by the U.S. Nuclear Regulatory Commission under 10 CFR 32.210. Specifically, the licensee failed to test a sealed source in a Seaman Nuclear Corporation C-300 Series Portable Moisture and Density Gauge for seven months, a period greater than the six months specified in the certificate of registration.

This is a Severity Level IV violation (Section 6.7.d.4)

The NRC has concluded that information regarding the reason for the violations, the corrective actions taken to correct the violation and prevent recurrence, and the date when full compliance was achieved, is already adequately addressed on the docket in your emails dated March 1, 2016, and June 15, 2016. 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 (030-38858/2016-001),” and send it to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001, with a copy to the Regional Administrator, Region IV, within 30 days of the date of the letter transmitting this Notice of Violation (Notice).

If you choose to respond will be made available electronically for public inspection in the NRC Public Document Room or in 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>. Therefore, to the extent possible, the response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redaction.]

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

Dated this 6th day of July 2016