

UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV  
1600 EAST LAMAR BOULEVARD  
ARLINGTON, TEXAS 76011-4511

May 15, 2013

Ron J.P. Caron, Vice President  
Northern Geotechnical Engineering, Inc.  
11301 Olive Lane  
Anchorage, Alaska 99515

SUBJECT: RESPONSE TO NRC INSPECTION REPORT 030-34741/2013-001 AND  
NOTICE OF VIOLATION

Dear Mr. Caron:

Thank you for your letter dated May 7, 2013, in response to the violations identified in our letter and Notice of Violation (Notice) dated April 24, 2013. We have reviewed your letter and find it responsive to the concerns raised in our Notice. We will review the implementation of your corrective actions during a future inspection to determine that full compliance has been achieved and will be maintained.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

Sincerely,

G. Michael Vasquez, Chief  
Nuclear Materials Safety Branch A  
Division of Nuclear Materials Safety

Docket: 030-34741  
License: 50-29121-01

cc w/copy of licensee's letter dated  
May 7, 2013:  
Director, Alaska Radiation Control Program

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Sincerely,

**/RA Anthony D. Gaines Acting for/**

G. Michael Vasquez, Chief  
Nuclear Materials Safety Branch A  
Division of Nuclear Materials Safety

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**DISTRIBUTION w/copy of licensee's letter:**

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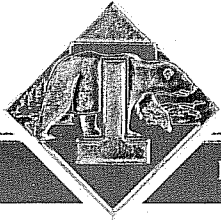
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JLThompson	GMVasquez		
/RA/	<b>/RA ADGaines acting for/</b>		
05/15/2013	05/15/2013		

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# NORTHERN GEOTECHNICAL ENGINEERING, INC. / TERRA FIRMA TESTING

Laboratory Testing   Geotechnical Engineering   Instrumentation   Construction Monitoring Services   Thermal Analysis

May 7, 2013

United States Nuclear Regulatory Commission  
Attn: Document Control Desk  
Quality Assurance Branch  
Division of Construction Inspection and Operational Program  
Washington, DC 20555-0001

NORTHERN GEOTECHNICAL ENGINEERING, INC.

NRC Document Number: 030-34741

Subject:      REPLY TO NOTICE OF VIOLATION  
                 NRC INSPECTION REPORT NO. 030-34741/2013-001

Reference:    1. Letter from J. Thompson (NRC) to R. Caron (NGE) NRC Inspection Report No.  
                         030-34741/2013-001 and Notice of Violation, dated April 24, 2013  
  
                 2. Email to J. Thomspson (NRC) from R. Caron (NGE) Re: Corrective Action  
                         Report No. 030-34741/2013-001 sent on March 14, 2013

Dear Mr. Thompson

In response to the Ref. 1 NRC Notice of Violation (NOV), herewith provides the enclosed Reply (Enclosure). The Reply addresses Examples A-D of NOV of the notice.

NGE understands the feedback received from the NRC during the inspection and in the published inspection report, including the findings. NGE has completed comprehensive actions to address the specific observations provided in an effort to remedy and prevent their recurrence.

NGE recognizes that an effective corrective action program is a critical aspect of a nuclear safety program. As such, NGE has continued to implement process, procedure, and program improvements and has enhanced employee skills through additional relevant training. We are confident that progress has been made in our corrective action program and we understand that continued improvements are necessary. The findings outlined in the NRC inspection report and notice of violation indicates that additional improvements and oversight of the program is necessary. NGE is committed to building an effective and compliant program and has implemented immediate corrective actions.

**RECEIVED**

MAY 10 2013

Pursuant to the NRC's corresponding instructions specified in the notice, the enclosure addresses for each of the examples of notice of violation: 1) the reason for the non-conformance; 2) the corrective steps that have been taken and the results achieved; 3) the corrective steps that will be taken to avoid non-compliances; and 4) date when corrective actions were completed.

Should you have any questions or comments, please feel free to contact me.

Sincerely

A handwritten signature in black ink, appearing to read 'Ron J.P. Caron', with a stylized flourish at the end.

Ron J.P. Caron  
Vice President  
Northern Geotechnical Engineering, Inc.

Enclosure: Reply to Notice of Violation 030-34741/2013-001

CC      United States Nuclear Regulatory Commission  
         Regional IV  
         1600 East Lamar Blvd.  
         Arlington, TX 76011-4511

## Notice of Violation

An unannounced U.S. Regulatory Commission (NRC) inspection was conducted at Northern Geotechnical Engineering, Inc.(NGE) facility in Anchorage, Alaska on March 5, 2013. The inspection was an examination of activities conducted as they relate to safety and compliance of the conditional rules and regulations of our license.

### Notice of Violation Discussion and Associated Corrective Actions

#### Issue/ Condition A:

NRC License 50-29121-01 Condition 21: The operation procedures in Appendix H to NUREG-1556, Volume 1 states, in part, that the gauge shall be placed in a transport case, and the case shall be locked prior to transporting the gauge to a temporary job site.

#### Root Cause for the Violation:

The operator of the gauge reason for removing the unit from its transportation case was to ensure the gauge electronics would be kept warm and functional prior to performing measurements in adverse climatic condition (sub-freezing temperatures). The gauge handle was pad locked but not in the transportation case.

#### Associated Corrective Action:

Upon discovery of the violation condition, the operator was contacted by his supervisor and informed to pull into a parking lot and await the appropriate transport case prior to any roadway travel. The supervisor delivered the transport case to the parked operator and the gauge was placed into the container, the exterior double locked and securing to the bed of the truck prior to commencing travel. If a gauge is transported in cold temperature and measurements are to be made the transportation case shall be placed and secured in the extended cab portion of a pickup truck to keep the electronics of the gauge warm.

Corrective Action Completed: March 5, 2013

The operator of the gauge was directed to take the hazardous material requirements for general safety/familiarization function specific, safety and security awareness training course as related to the transportation of nuclear gauges per 49 CFR 172 subpart H and IATA 1.5.2

Corrective Action Completed: March 13, 2013.

### Notice of Violation Discussion and Associated Corrective Actions

#### Issue/ Condition B:

NRC License 50-29121-01 Condition 21: The operation procedures in Appendix H of NUREG-1556, Volume 1 states, in part, that the licensee shall sign out the gauge in a log out book, including the date of use, name of the authorized user who will be responsible for the gauge, and the temporary job site where the gauge is to be used.

#### Root Cause for the Violation:

The operator failed to record the information on the sign out log as per the rules and regulations of the license. The log did have an accurate accounting of two other gauges that were properly checked out on the inspection date by other authorized users.

**Associated Corrective Action:**

During the inspection the sign out log was filled out to record the gauge, operator and temporary job site location. All operators will record on the sign out log the date, unit number, and temporary job site location on a daily basis. The information will be reviewed periodically during the day by the supervisor to ensure accountability of all gauges in use or stored at the facility.

Corrective Action Completed: March 5, 2013.

**Issue/ Condition C:**

NRC License 50-29121-01 Condition 17: Each portable gauge shall have a lock or outer locked container designed to prevent accidental removal of the sealed source from its shielded position. The gauge must be locked when in storage.

**Root Cause for the Violation:**

Misinterpretation of the requirements was the root cause of the keys being left in the transportation container. It was the understanding that if the gauges were stored in a secure double locked storage area it would prevent any individual from being able to remove the sealed source.

**Associated Corrective Action:**

All transport cases were inspected and the pad locks/ keys removed. The pad locks were installed on the outside of the transport cases and the keys to the units moved to an area away from the secure storage area.

Corrective Action Completed: March 5, 2013.

**Issue/ Condition D:**

NRC License 50-29121-01 Condition 17: the licensee is authorized to transport licensed material only in accordance with the provisions of 10 CFR 71 "Packaging and Transportation of Radioactive Material" and shall comply with the applicable requirements of the DOT regulations in 49 CFR parts 171 through 180. 49 CFR 172.702 states that each hazmat employee is trained and tested in accordance with Subpart H of 49 CFR Part 172. As per 49 CFR 172.704(c)(2) requires a hazmat employee must receive training at least once every three years.

**Root Cause for the Violation:**

Management had failed to accurately monitor and verify the hazmat training status on seasonal and full time employees.

**Associated Corrective Action:**

An online hazmat training course has been completed by the two full time operators. Management will review the hazmat training records of operators for compliance prior to working with the gauges. If an operator's training record shows a period in excess of three years has elapsed re-training will be required.

Corrective Action Completed: March 7, 2013 and March 13, 2013.