



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

November 16, 2016

EA-16-232

Mr. Cole Morehead  
Owner/Radiation Safety Officer  
XCEL NDT, LLC  
P.O. Box 146  
Clifton, KS 66937

SUBJECT: NRC INSPECTION REPORT 150-00026/2016-001

Dear Mr. Morehead:

This letter refers to the unannounced inspection conducted on September 22, 2016, at a temporary job site in Cheyenne, Wyoming. The purpose of the inspection was to examine activities conducted under your U.S. Nuclear Regulatory Commission (NRC) general license, which was granted under Title 10 of the *Code of Federal Regulations* (10 CFR) 150.20, "Recognition of Agreement State licenses," to ensure that activities were being performed in accordance with NRC rules and requirements and in a manner that ensured protection of public health and safety. Within these areas, the inspection consisted of an examination of selected procedures and representative records, observations of activities, and interviews with personnel. XCEL NDT, LLC was granted a general license, as noted above, to conduct the same activities authorized under its state of Nebraska license in areas of exclusive Federal jurisdiction during Calendar Year 2016 for a period not to exceed 180 days.

The inspectors discussed the preliminary inspection findings with members of your staff at the conclusion of the on-site portion of the inspection on September 22, 2016, and later with you on September 26, 2016. A final exit briefing was conducted telephonically with you on November 3, 2016. The enclosed report presents the results of this inspection.

Based on the results of this inspection, two apparent violations were identified and 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 concern a failure to ensure that a radiographer's assistant received the minimum training described in 10 CFR 34.43(c) prior to conducting radiographic operations, and a failure to ensure two qualified individuals were present during industrial radiographic operations performed at a temporary job site on September 22, 2016, as described above. The circumstances surrounding the apparent violations, the significance of the issues, and the need for lasting and effective corrective action were discussed with you during the telephonic exit briefing on November 3, 2016.

In addition, since XCEL NDT, LLC has not been the subject of escalated enforcement actions within the last two 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. The final decision will be based on you confirming on the license docket (i.e., in writing) that the corrective actions previously described to the NRC staff have been or are being taken.

Before the NRC makes its enforcement decision, we are providing you an opportunity to (1) respond, in writing, to the apparent violations addressed in this inspection report within 30 days of the date of this letter; (2) request a Pre-decisional Enforcement Conference (PEC); or (3) request Alternative Dispute Resolution (ADR). 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. If you decide to participate in a PEC or pursue ADR, please contact Mr. Ray L. Kellar, P.E., Chief, Nuclear Materials Safety Branch A, at 817-200-1191, within 10 days of the date of this letter to notify us of your intentions. A PEC should be held within 30 days and an ADR session within 45 days of the date of this letter.

If you choose to provide a written response, it should be clearly marked as a "Response to an Apparent Violation in NRC Inspection Report 150-00026/2016-001; EA-16-232," and should include for the apparent violations: (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; 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 responses. Additionally, your response should be sent to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001, with a copy to the Director, Division of Nuclear Materials Safety, U.S. Nuclear Regulatory Commission, Region IV, 1600 East Lamar Blvd., Arlington, TX 76011-4511 within 30 days of the date of this letter. If an adequate response is not received within the time specified and 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 these matters and any other information that you believe the NRC should take into consideration before making an enforcement decision. The decision to hold a PEC does not mean that the NRC has determined that a violation has occurred or that enforcement action will be taken. This conference would be conducted to obtain information to assist the NRC in making an enforcement decision. The topics discussed during the conference may include 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.

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. The guidance in NRC Information Notice 96-28, "Suggested Guidance Relating to Development and Implementation of Corrective Action," may be helpful. You can find an updated excerpt from NRC Information Notice 96-28 on the NRC Web site at <http://www.nrc.gov/docs/ML0612/ML061240509.pdf>.

In lieu of a PEC, you may request Alternative Dispute Resolution (ADR) with the NRC in an attempt to resolve this issue. ADR is a general term encompassing various techniques for resolving conflicts using a neutral third party. The technique that the NRC has decided to employ is mediation. Mediation is a voluntary, informal process in which a trained mediator works with parties to help them reach resolution. If the parties agree to use ADR, they select a mutually agreeable neutral mediator who has no stake in the outcome and no power to make decisions. Mediation gives parties an opportunity to discuss issues, clear up misunderstandings, be creative, find areas of agreement, and reach a final resolution of the issues. Additional information concerning the NRC's program can be obtained at <http://www.nrc.gov/about-nrc/regulatory/enforcement/adr/post-investigation.html>. The Institute on Conflict Resolution (ICR) at Cornell University has agreed to facilitate the NRC's program as a neutral third party. Please contact Cornell at 877-733-9415 within 10 days of the date of this letter if you are interested in pursuing resolution of this issue through ADR.

In addition, please be advised that the number and characterization of the apparent violations described in the enclosed report may change as a result of further NRC review. You will be advised by separate correspondence of the results of our deliberations on this matter.

In accordance with 10 CFR 2.390, of the NRC's "Agency Rules of Practice and Procedure," a copy of this letter and the enclosed inspection report 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>. 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

If you have any questions concerning this matter, please contact Mr. Ray L. Kellar of my staff at 817-200-1191.

Sincerely,

***/RA by LLHowell Acting For/***

Mark R. Shaffer, Director  
Division of Nuclear Materials Safety

Docket No. 150-00026  
License No. 10 CFR 150.20

Enclosure: NRC Inspection Report 150-00026/2016-001

cc w/enclosures:

Wyoming Radiation Control Program Director  
Nebraska Radiation Control Program Director  
Kansas Radiation Control Program Director

**U.S. Nuclear Regulatory Commission  
Region IV**

Docket No.: 150-00026

License No.: General License under 10 CFR 150.20

Report No.: 150-00026/2016-001

EA No.: EA-16-232

Licensee: XCEL NDT, LLC

Location Inspected: Magellan Midstream  
1112 S. Parsley Blvd  
Cheyenne, WY

Inspection Date: September 22, 2016

Exit Meeting Date: November 3, 2016

Inspectors: James L. Thompson, Senior Health Physicist  
Nuclear Materials Safety Branch A

Jason E. vonEhr, Health Physicist  
Nuclear Materials Safety Branch A

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

Attachment: Supplemental Inspection Information

Enclosure

## EXECUTIVE SUMMARY

### **XCEL NDT, LLC NRC Inspection Report 150-00026/2016-001**

This was an unannounced inspection performed on September 22, 2016, of a state of Nebraska licensee working under reciprocity at a temporary job site in Cheyenne, Wyoming. The licensee was performing industrial radiographic operations with a crew consisting of a radiographer and another individual acting as a radiographer's assistant. This report describes the results of this inspection.

#### Program Overview

XCEL NDT, LLC (XCEL) is authorized to possess and use byproduct material for industrial radiographic operations at temporary jobsites in areas of exclusive Federal jurisdiction under a Nuclear Regulatory Commission (NRC) general license granted under Title 10 of the *Code of Federal Regulations* (CFR) 150.20, "Recognition of Agreement State licenses." Under this general license, XCEL is authorized to perform the same activities granted under XCEL's state of Nebraska license.

#### Inspection Findings

During this unannounced inspection conducted at a temporary job site at the Magellan Midstream tank farm in Cheyenne, Wyoming on September 22, 2016, two apparent violations of NRC requirements were identified. The apparent violations involved failures to: (1) ensure that a radiographer's assistant received the minimum training required by 10 CFR 34.43(c) prior to performing radiographic operations; and (2) ensure that two qualified individuals were present during radiographic operations, as required by 10 CFR 34.41(a).

#### Corrective Actions

The licensee's staff at the temporary job site, after their discussion with the Radiation Safety Officer (RSO) during the inspection, committed to ceasing all licensed activities at the temporary job site immediately. The licensee further committed to returning to perform licensed activities at the temporary job site with a radiographer and a qualified radiographer's assistant (in addition to a radiographer) who met the minimum requirements described in 10 CFR 34.43(c).

Additionally, during the final telephonic exit briefing performed on November 3, 2016, the licensee provided the following long term corrective actions:

- Company-wide refresher training regarding assignments for trainees, with an emphasis that they are not allowed to act as part of the two-person radiography crew.
- Only trainees that have completed a written exam and practical exam can be allowed to participate in radiographic operations.

## REPORT DETAILS

### **1. Program Overview (87121)**

#### **1.1. Program Scope**

XCEL NDT LLC's (XCEL) general license was granted under Title 10 of the *Code of Federal Regulations* (CFR) 150.20, "Recognition of Agreement State licenses," and authorizes the same activities and materials as those granted under its state of Nebraska license. XCEL filed for initial calendar year 2016 authorizations on March 4, 2016, and filed a 'change' form to add the Cheyenne, Wyoming address on September 16, 2016.

XCEL has not been inspected by the Nuclear Regulatory Commission (NRC) since first filing for a general license under 10 CFR 150.20 on April 17, 2015. During Calendar Year 2016 up to the date of the inspection, XCEL filed thirteen NRC Form 241's to perform licensed activities in five cities in Wyoming.

#### **1.2. Observations and Findings**

The inspectors observed licensed activities related to the conduct of industrial radiography at the licensee's temporary job site in Cheyenne, Wyoming on September 22, 2016. The licensee was using a Delta 880 (S/N D13777) exposure device containing a 50.7 curie source of iridium-192. The inspectors reviewed records, procedures, and documents maintained by the licensee at the temporary job site and interviewed licensee personnel. Collectively, the activities observed, interviews conducted, and documents reviewed described the licensee's implementation of its radiation safety program.

### **2. Inspection Findings (87121)**

#### **2.1. Inspection Scope**

An unannounced inspection was conducted by the NRC on September 22, 2016, at the licensee's temporary jobsite in Cheyenne, Wyoming at the Magellan Midstream tank farm. At this jobsite, the inspectors reviewed the licensee's use of personnel dosimetry, survey instruments, radiography equipment, and records and documents related to the licensee's implementation of its radiation safety program. Records reviewed included the licensee's Operating and Emergency procedures, required regulations and copies of the license under which the licensee was operating. Interviews with the employees covered their activities conducted on the day of the inspection, planned and previously conducted activities, and previous radiography experience and training.

#### **2.2. Observations and Findings**

The inspection identified two apparent violations as follows:

10 CFR 34.43(c)(2)-(3) requires, in part, that a licensee may not permit any individual to act as a radiographer's assistant until the individual has developed competence to use, under the personal supervision of the radiographer, the radiographic exposure

devices, sealed sources, associated equipment, and radiation survey instruments that the assistant will use; and has demonstrated understanding of this by successfully completing a written test on the subjects covered and has demonstrated competence in the use of this hardware by successful completion of a practical examination on the use of such hardware.

The radiographer on site was experienced, having worked as a radiographer for over ten years. The radiographer's assistant, however, was new to XCEL and new to the radiography industry. The assistant was on his second day of the job with XCEL, and he had worked with the radiographer the previous day at this Cheyenne, Wyoming job site.

The assistant explained that he would be undergoing a 40-hour course online in radiation safety, but had not yet taken this training. Additionally, the written test and practical examination demonstrating competence in the use of radiography devices and associated equipment, survey meters, instruction in NRC regulations and requirements and the licensee's operating and emergency procedure had not been started. In addressing this shortfall, the radiographer explained that the assistant was undergoing on-the-job training. The radiographer indicated that he thought that if the assistant did not crank out the source, that they would be in compliance with this rule.

The licensee's use of an individual to act as a radiographer's assistant who had not completed a written test or a practical examination on the use of radiographic equipment during industrial radiographic operations was identified as an apparent violation of 10 CFR 34.43(c). (150-00026/16001-01)

10 CFR 34.41(a) requires, in part, that whenever radiography is performed at a location other than a permanent radiographic installation, the radiographer must be accompanied by at least one other qualified individual who has at a minimum met the requirements of 10 CFR 34.43(c). Radiography may not be performed if only one qualified individual is present.

As a direct result of the licensee's use of a radiographer's assistant on September 21-22, 2016, who failed to meet the minimum training requirements mentioned above, the crew did not have two qualified individuals present when radiography was performed at the temporary job site in Cheyenne, Wyoming.

The licensee's failure to ensure that a radiographer was accompanied by at least one other qualified individual who had at a minimum met the requirements of 10 CFR 34.43(c) during the performance of radiography at the temporary job site on September 21-22, 2016, was identified as an apparent violation of 10 CFR 34.41(a). (150-00026/16001-02)

Radiography had been completed for the morning when the inspectors arrived, and given the identification of the apparent violations, the licensee's RSO directed the radiography crew to return to the office to correct the deficiencies identified as a result of this inspection.

### 2.3. Conclusions

Two apparent violations of NRC requirements were identified involving failures to: (1) ensure that a radiographer's assistant received the minimum training required by 10 CFR 34.43(c) prior to engaging in radiographic operations; and (2) ensure that two qualified individuals were present during radiographic operations, as required by 10 CFR 34.41(a).

### 3. **Corrective Actions**

While on-site in Cheyenne, Wyoming, the radiographer made contact with the Corporate RSO (based in Clifton, Kansas) of XCEL. The radiographer and the RSO agreed that the crew was to return to their field office in Fort Collins, Colorado and not to return to the Cheyenne facility until they had a qualified individual to accompany the radiographer.

Additionally, during the telephonic exit meeting, the RSO explained that long-term corrective actions included the performance of company-wide refresher training on the use of trainees at temporary job sites. Specifically, the training emphasized that trainees are not to be considered radiographer's assistants and are not to be used as part of the required two-person radiography crew until they have had a written exam and a practical exam.

### 4. **Exit Meeting Summary**

A final exit meeting was conducted on November 3, 2016, with the XCEL Corporate RSO, Mr. Cole Morehead. During the exit meeting, the licensee acknowledged the inspection findings and discussed the corrective actions completed and those planned to be taken to address the inspection findings.



**Supplemental Inspection Information**

**PARTIAL LIST OF PERSONS CONTACTED**

Kenneth Hookes, Radiographer  
Ian Spendel, Radiographer's Assistant  
Cole Morehead, Radiation Safety Officer

**INSPECTION PROCEDURES USED**

87121                      Industrial Radiography Programs

**ITEMS OPENED, CLOSED, AND DISCUSSED**

**Opened**

150-00026/16001-01    APV                      Failure to ensure that a radiographer's assistant received the minimum training. (10 CFR 34.43(c))

150-00026/16001-02    APV                      Failure to ensure that two qualified individuals were present during radiographic operations. (10 CFR-34.41(a))

**Closed**

None

**Discussed**

None

**LIST OF ACRONYMS USED**

ADAMS    Agencywide Documents Access and Management System  
ADR        Alternative Dispute Resolution  
APV        Apparent Violation  
CFR        *Code of Federal Regulations*  
DNMS     Division of Nuclear Materials Safety  
EA         Enforcement Action  
ICR        Institute on Conflict Resolution  
NRC        Nuclear Regulatory Commission  
PEC        Predecisional Enforcement Conference  
RSO        Radiation Safety Officer  
S/N        Serial Number  
XCEL      XCEL NDT LLC

In lieu of a PEC, you may request Alternative Dispute Resolution (ADR) with the NRC in an attempt to resolve this issue. ADR is a general term encompassing various techniques for resolving conflicts using a neutral third party. The technique that the NRC has decided to employ is mediation. Mediation is a voluntary, informal process in which a trained mediator works with parties to help them reach resolution. If the parties agree to use ADR, they select a mutually agreeable neutral mediator who has no stake in the outcome and no power to make decisions. Mediation gives parties an opportunity to discuss issues, clear up misunderstandings, be creative, find areas of agreement, and reach a final resolution of the issues. Additional information concerning the NRC's program can be obtained at <http://www.nrc.gov/about-nrc/regulatory/enforcement/adr/post-investigation.html>. The Institute on Conflict Resolution (ICR) at Cornell University has agreed to facilitate the NRC's program as a neutral third party. Please contact Cornell at 877-733-9415 within 10 days of the date of this letter if you are interested in pursuing resolution of this issue through ADR.

In addition, please be advised that the number and characterization of the apparent violations described in the enclosed report may change as a result of further NRC review. You will be advised by separate correspondence of the results of our deliberations on this matter.

In accordance with 10 CFR 2.390, of the NRC's "Agency Rules of Practice and Procedure," a copy of this letter and the enclosed inspection report 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>. 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

If you have any questions concerning this matter, please contact Mr. Ray L. Kellar of my staff at 817-200-1191.

Sincerely,

***/RA by LLHowell Acting For/***

Mark R. Shaffer, Director  
Division of Nuclear Materials Safety

Docket No. 150-00026  
License No. 10 CFR 150.20

Enclosure: NRC Inspection Report 150-00026/2016-001

cc w/enclosures: See next page

DISTRIBUTION: See next page

ADAMS ACCESSION NUMBER: ML16299A226

<input checked="" type="checkbox"/> SUNSI Review By: <b>JEV1</b>		ADAMS <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		<input checked="" type="checkbox"/> Publicly Available <input type="checkbox"/> Non-Publicly Available		<input checked="" type="checkbox"/> Non-Sensitive <input type="checkbox"/> Sensitive		Keyword: EA-16-232
OFFICE	NMSB-A	NMSB-A	C:NMSB-A	RIV:ACES	TL:ACES	RC	D:DNMS	
NAME	JEvonEhr	JLThompson	RLKellar	JGKramer	MCHay	KSFuller	MRSshaffer	
SIGNATURE	<b>/RA/</b>	<b>/RA/</b>	<b>/RA/</b>	<b>/RA/</b>	<b>/RA/</b>	<b>/RA/</b>	<b>/RA/</b>	
DATE	11/3/16	11/3/16	11/3/16	11/9/16	11/9/16	11/9/16	11/16/16	

**OFFICIAL RECORD COPY**

Letter to C. Morehead from M. Shaffer dated November 16, 2016

SUBJECT: NRC INSPECTION REPORT 150-00026/2016-001

cc w/enclosures:

Wyoming Radiation Control Program Director  
Nebraska Radiation Control Program Director  
Kansas Radiation Control Program Director

DISTRIBUTION:

Kriss.Kennedy@nrc.gov;  
Scott.Morris@nrc.gov;  
Karla.Fuller@nrc.gov;  
Patricia.Holahan@nrc.gov;  
Bill.Maier@nrc.gov;  
Francis.Peduzzi@nrc.gov;  
Mark.Shaffer@nrc.gov;  
Linda.Howell@Nrc.gov;  
Jeremy.Bowen@nrc.gov;  
Nick.Hilton@nrc.gov;  
Michael.Vasquez@nrc.gov;  
Michael.Hay@nrc.gov;  
S.Woods@nrc.gov;  
John.Kramer@nrc.gov;  
Leela.Sreenivas@nrc.gov;  
Victor.Dricks@nrc.gov;  
Kerstun.Norman@nrc.gov;  
Binesh.Tharakan@nrc.gov;  
Randy.Erickson@nrc.gov;  
Russell.Arrighi@nrc.gov;  
Jenny.Weil@nrc.gov;  
Michele.Burgess@nrc.gov;  
Sophie.Holiday@nrc.gov;  
Angel.Moreno@nrc.gov;

EDO\_Managers;  
RidsOcfoMailCenter Resource;  
RidsOiMailCenter Resource;  
RidsRgn1MailCenter Resource;  
RidsRgn3MailCenter Resource;  
R4DNMS\_MS-A;  
R4DNMS\_MS-B;  
RidsOeMailCenter Resource;  
RidsNmssOd Resource;  
RidsOgcMailCenter Resource;  
RidsSecyMailCenter Resource;  
RidsOcaMailCenter Resource;  
RidsOigMailCenter Resource;  
RidsEdoMailCenter Resource;