From: Chris Grass [mailto:cgrass@alaska.net]
Sent: Thursday, June 28, 2012 2:48 PM
To: Simmons, Michelle
Subject: RE: Quality Inspection & Testing Deficiency Letter Mail Control Number 577276

Michelle,

Attached is the NUREG form from Appendix C as requested, we do not have any permanent radiography installations and do not intend to do radiography on lay barges or offshore platforms.

Thanks,

Chris

From: Simmons, Michelle [mailto:Michelle.Simmons@nrc.gov]
Sent: Thursday, June 28, 2012 10:55 AM
To: Cgrass@alaska.net
Subject: Quality Inspection & Testing Deficiency Letter Mail Control Number 577276

Docket # 03032546
License # 50-29038-01
Mail Control # 577276

You submitted a request to NRC to renew your material license. However, because your application did not conform to the guidance in NUREG 1556, Volume 2, some important information was not included in your application. Please complete Appendix C from NUREG 1556 Volume and submit it to the NRC for review. For your convenience, I have attached the NUREG to this email. Appendix C starts on page 95. Also, please review Appendix D and submit additional O&E procedures if you wish to perform industrial radiography on lay barges and/or offshore platforms.

Please submit the checklist and additional information by July 16, 2012. If you are unable to respond by this due date, please don't hesitate to contact me so we can discuss an extension to the date. Our fax number is (817) 200-1263. You may also email your response as a pdf attachment. If you have any questions regarding this email, please call me at 817-200-1590. When responding to this email, please include the license, docket and control numbers located at the top of this page.

Thanking you in advance for your cooperation, assistance, and prompt response in this matter.

Please see the attached documentation. If you have any questions, please contact me. Thanks

Michelle Simmons
Health Physicist
U.S. Nuclear Regulatory Commission
Division of Nuclear Materials Safety
Region IV
1600 East Lamar Boulevard
Arlington, TX 76011-4511
817-200-1590

QUALITY INSPECTION & TESTING, INC.
LICENSE #50-29038-01
DOCKET #03-032546

Suggested Format for Providing Information Requested in Items 5 through 11 of NRC Form 313

Item No.	Title and Criteria	Yes	Description Attached
5	**RADIOACTIVE MATERIAL** **Sealed Sources and Devices**		
	• Identify each radionuclide that will be used for performing radiography.		[✓]
	• Identify the manufacturer (or distributor) and model number of each sealed source.		[✓]
	• Identify the manufacturer (or distributor) and model number of each exposure device. Indicate if a device is only to be used in a permanent radiographic installation.		[✓]
	• Identify the manufacturer (or distributor) and model number of each source changer.		[✓]
	• If depleted uranium is used as shielding material, specify the total amount (in kilograms).		[✓]
	• Confirm that each sealed source, device, and source/device combination possessed is registered as an approved sealed source or device by the U.S. Nuclear Regulatory Commission (NRC) or an Agreement State and will be possessed and used in accordance with the conditions specified in the registration certificate.	[✓]	
	• Confirm that associated equipment is compatible with the exposure devices, source changers, and sealed sources containing byproduct material.	[✓]	
	• Confirm that only radiographic exposure devices, source assemblies or sealed sources, and associated equipment which meet the requirements specified in Title 10 of the *Code of Federal Regulations* (10 CFR) 34.20, "Performance requirements for industrial radiography equipment," will be used in radiographic operations.		[✓]
	• Identify each radionuclide and the manufacturer (or distributor) and model number of each sealed source and/or device containing byproduct material that will not be used for performing radiography.		

Item No.	Title and Criteria	Yes	Description Attached
5	**RADIOACTIVE MATERIAL** **Financial Assurance and Recordkeeping for Decommissioning** • Pursuant to 10 CFR 30.35(g), we shall maintain drawings and records important to decommissioning and to transfer these records to a new licensee before licensed activities are transferred, or to assign the records to the appropriate NRC regional office before the license is terminated. **OR** • If financial assurance is required, submit evidence following NUREG-1757, Volume 3.	[✓]	[ ]
6	**PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED** Equipment will only be used for the following: • industrial radiography • underwater radiography • lay-barge radiography (see Appendix D) • off-shore platform radiography (see Appendix D) • other than radiography	[✓] N/A N/A N/A	N/A

Item No.	Title and Criteria	Yes	Description Attached
7	**INDIVIDUALS RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING EXPERIENCE** **Radiation Safety Officer (RSO)** • The name of the proposed RSO and other potential designees who will be responsible for ensuring that the licensee's radiation safety program is implemented in accordance with approved procedures. **AND** • Demonstrate that the RSO has sufficient independence and direct communication with responsible management officials by providing a copy of an organizational chart, by position, demonstrating day-to-day oversight and coordination with management in radiation safety activities. **AND EITHER** • The specific training and experience of the RSO and other potential designees. Include the specific dates of certification and/or training in radiation safety. • Documentation to show that the RSO has a minimum of 2,000 hours of hands-on experience as a qualified radiographer in industrial radiographic operations. • Documentation to show that the RSO has obtained formal training in the establishment and maintenance of a radiation protection program. **OR** • Alternative information demonstrating that the proposed RSO is qualified by training and experience. • Documentation to show that the RSO has obtained formal training in the establishment and maintenance of a radiation protection program.		[✓] [✓] [✓] [✓] [✓] N/A N/A

Item No.	Title and Criteria	Yes	Description Attached
8	**TRAINING FOR RADIOGRAPHERS AND RADIOGRAPHER'S ASSISTANTS**		
	• Submit an outline of the training to be given to prospective radiographers and radiographer's assistants. Submit your procedures for experienced radiographers who have worked for another licensee.		[✓]
	• Provide a copy of a typical examination and the correct answers to the examination questions. Indicate the passing grade.		[✓]
	• While you do not need to provide a description of the training and examination program in the topics listed in 10 CFR 34.43(g), all other training program descriptions must still be submitted.	[✓]	
	• Specify the qualifications of your instructors in radiation safety principles and describe their experience with radiography. If training will be conducted by someone outside the applicant's organization, identify the course by title and provide the name and address of the company providing the training.		N/A
	• Describe the field (practical) examination that will be given to prospective radiographers and radiographer's assistants.		
	• Describe the annual refresher training program, including topics to be covered and how the training will be conducted.		[✓]
	• Submit your procedures for verifying and documenting the certification status of radiographers and for verifying that their certification remains valid.		[✓]
	• Submit a description of your program for inspecting the job performance of each radiographer and radiographer's assistant at intervals not to exceed 6 months, as described in 10 CFR 34.43(e).		[✓]

Item No.	Title and Criteria	Yes	Description Attached
9	**FACILITIES AND EQUIPMENT** **Permanent Radiography Installations** Provide the following information for each permanent radiography installation: • Provide an annotated sketch or drawing of the facility and its surroundings. Diagrams of facilities should be marked: "Security-related information—Withhold under 10 CFR 2.390." • Identify the scale to which the sketch or drawing is made. • Identify the type, thickness, and density of shielding materials on all sides, including the floor and the roof. • Identify the locations of entranceways and other points of access to the facility. • Describe the areas adjacent to the facility and the distance to these areas. Include information on areas adjacent to, above, and below the facility. • Describe the general location of each proposed permanent facility listed in Item 3 (e.g., located in an industrial park, an office complex) and its current use. • If a proposed permanent facility is a private residence, provide diagrams of the facility that include the building, the proposed restricted area(s), and adjacent areas, including above and below the restricted areas. (Note: Local municipalities may limit the use of radioactive material to certain zone areas.) • Restricted areas do not include residential quarters. • Explain how radiation levels in unrestricted areas will be maintained at less than 1 millisievert (mSv) (100 millirem (mrem)) per year. • Describe the visible-audible signal system or entrance control system and its locations. • Provide the results of radiation-level calculations or actual radiation measurements adjacent to, above, and below the facility.	N/A	N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A

Item No.	Title and Criteria	Yes	Description Attached
9	**FACILITIES AND EQUIPMENT** **Permanent Radiography Installations** Provide the following information to obtain approval for a variance if construction requirements preclude shielding the roof to meet the requirement not to exceed 0.02 mSv (2 mrem) in any 1 hour: • means of access to the roof • procedures for ensuring that no individual is on the roof or could gain access to the roof during radiography • a commitment that the roof will be posted with "Caution (or Danger) Radiation Area" sign(s) • steps taken to minimize radiation on the roof • limitations (if needed) on positioning of sources or type (isotope) and amount of radioactive material that may be used in the installation to ensure that areas adjacent to, above, and below the installation will be unrestricted areas during the performance of radiography Provide the following information to obtain approval for a variance if radiation levels on the radiography installation roof exceed 1.0 mSv (100 mrem) in any 1 hour: • a commitment that the roof will be posted with a "Caution (or Danger) High-Radiation Area" sign(s) • evidence of constant surveillance of the roof by closed-circuit television • a description of a control device that would automatically reduce the radiation level to 1 mSv (100 mrem) in any 1 hour at 30 centimeters from the radiation source if someone enters the roof • a description of a control device that activates a visible-audible signal so that both an individual entering the roof and the radiographer on duty are made aware of the entry	N/A N/A	N/A N/A N/A N/A N/A N/A N/A N/A N/A

Item No.	Title and Criteria	Yes	Description Attached
9	**FACILITIES AND EQUIPMENT** **Field Stations** Provide the following information for each field station: • Describe the storage location(s) at the address(es) listed in Item 3 of the application, and submit a diagram showing where the radiography camera will be stored at the field stations. • Indicate whether radiography and source exchanges will be performed at the place of business outside of a permanent facility as if the work were "in the field." • For radiography or source exchanges performed at the place of business as if the work were "in the field," provide a diagram of the location where radiography may be performed and its surroundings, including a description of adjacent property.	[✓]	N/A [✓]
10	**RADIATION SAFETY PROGRAM** **Audit Program** The applicant is not required to, and should not, submit its audit program to the NRC for review during the licensing phase. (See Appendix G for a sample radiation safety program audit). Audits will be reviewed during inspections to determine compliance with NRC regulations. **Instruments** We will possess and use calibrated and operable radiation survey meters. Calibration will be performed by an NRC or Agreement State licensee specifically authorized to perform instrument calibration. Calibration is to be performed in-house, and the model procedures in Appendix H will be followed. Calibration is to be performed in-house, and alternate procedures will be followed. The qualifications of the individuals who will perform the calibrations must be identified.	Need Not Be Submitted With Application [✓] [✓] [✓]	N/A [✓]

Item No.	Title and Criteria	Yes	Description Attached
10	**RADIATION SAFETY PROGRAM** **Material Receipt and Accountability** Physical inventories will be conducted and documented at quarterly intervals (not to exceed 3 months) to account for all sealed sources containing byproduct material and devices containing depleted uranium received and possessed under the license.	Y	
	Minimization of Contamination The applicant is <u>not</u> required to provide a response to the minimization of contamination, if the applicant's responses meet the criteria for the following sections: "Radioactive Material—Sealed Sources and Devices"; "Facilities and Equipment"; "Radiation Safety Program—Leak Tests"; "Radiation Safety Program—Operating and Emergency Procedures"; and "Waste Management—Sealed Source/DU Device Transfer and Disposal."	Need Not Be Submitted With Application	
	Leak Tests Leak tests will be performed by an organization authorized by the NRC or an Agreement State to provide leak-testing services to other licensees, or by using a leak-test kit supplied by an organization licensed by the NRC or an Agreement State to provide leak-test kits and services to other licensees, and according to the instructions provided in the leak-test kit. **OR** Leak testing will be done by the applicant. • The information in Appendix I supporting a request to perform leak testing and sample analysis is attached. • We will follow the model procedures in Appendix I. • We will follow alternate procedures.	Y N/A N/A N/A	 N/A N/A

Item No.	Title and Criteria	Yes	Description Attached
10	**RADIATION SAFETY PROGRAM** **Occupational Dosimetry** Radiography personnel will wear film, thermoluminescent dosimeter, or other personal dosimetry processed and evaluated by a processor accredited by the National Voluntary Laboratory Accreditation Program and exchanged at the required frequency. Radiographic personnel will wear the required personnel monitoring equipment, including 0-to-2-mSv (200-mrem) dosimeters or electronic personal dosimeters. All radiography personnel will wear alarming ratemeters set to alarm at ±20 percent of 500 millirem per hour (mrem/h), except those personnel at permanent radiography installations where other appropriate alarming or warning devices are in use. Pocket dosimeters and alarm ratemeters will be checked for correct response at intervals not to exceed 12 months. • If adjustment is necessary, the devices will be returned to the manufacturer. • If adjustment is necessary, in-house procedures for adjustments are described.	[✓] [✓] [✓] [✓] [✓]	[✓]
	Public Dose The applicant is not required to, and should not, submit a response to the public dose section during the licensing phase. Public dose will be reviewed during inspections to determine compliance with NRC regulations.	Need Not Be Submitted With Application	
10	**RADIATION SAFETY PROGRAM** **Quarterly Maintenance** Submit the procedures to the NRC for review and approval as operating and emergency procedures or as shipping package procedures as needed. Before using a new sealed source/device combination, we will have written inspection and maintenance procedures that address the use of the new equipment as a Type B transport package. In addition, we will provide training to radiographic personnel before using a new sealed source/device combination.	[✓]	[✓]

Item No.	Title and Criteria	Yes	Description Attached
	Operating and Emergency Procedures **Handling and Use of Sealed Sources and Radiography Exposure Devices** Submit operating and emergency procedures which provide step-by-step instructions for using each type of radiographic device. Submit operating and emergency procedures which provide instructions for performing source exchanges. **Methods and Occasions for Conducting Radiation Surveys** Submit operating and emergency procedures which, where applicable, include each of the surveys included in Table 8-1. **Methods for Controlling Access to Radiographic Areas** Submit the procedures to control access to radiographic operations and storage areas.		[✓] [✓] [✓] [✓]
10	**RADIATION SAFETY PROGRAM** **Methods and Occasions for Locking and Securing Radiographic Exposure Devices, Storage Containers, and Sealed Sources** Submit operating and emergency procedures that include procedures for locking and securing radiographic equipment. **Personnel Monitoring and the Use of Personnel Monitoring Equipment** Submit operating procedures that include instructions for proper use of personnel monitoring equipment. **Transporting Sealed Sources to Field Locations, Securing Exposure Devices and Storage Containers in Vehicles, Posting Vehicles, and Controlling Sealed Sources during Transportation** Submit operating and emergency procedures for transporting sealed sources containing byproduct material, exposure devices, and source changers.		[✓] [✓] [✓]

Item No.	Title and Criteria	Yes	Description Attached
	Daily Inspection and Maintenance of Radiographic Equipment		
	Submit operating and emergency procedures for daily inspection and maintenance of radiographic equipment.		[Y]
	Ratemeter Alarms or Off-Scale Dosimeter Readings		
	Submit operating and emergency procedures to address ratemeter alarms or off-scale dosimeters.		[Y]
	Procedure for Identifying and Reporting Defects and Noncompliance as Required by 10 CFR Part 21		[Y]
	Submit operating and emergency procedures for notifying management of equipment malfunction or defect.		
10	**RADIATION SAFETY PROGRAM**		
	Notification of Proper Persons in the Event of an Accident		
	Submit operating and emergency procedures that include appropriate instructions for notifying the RSO and other personnel in the event of an emergency.		[Y]
	Minimizing Exposure of Persons in the Event of an Accident—Emergency Procedures		
	Submit operating and emergency procedures that include instructions for minimizing exposure of persons in the event of an accident.		[Y]
	Source Retrieval		
	We will not perform source retrievals and will use the services of a person specifically licensed by the NRC or an Agreement State to perform the retrievals of our sources.	[Y]	
	Submit operating and emergency procedures that include instructions for source retrieval procedures and specific training.		N/A
	Security Program		
	Licensees must ensure the security and control of licensed material. The regulations in 10 CFR 20.1801 and 20.1802 require licensees to secure radioactive materials from unauthorized removal or access while in storage and to control and maintain constant surveillance over licensed material that is not in storage.		Need Not Be Submitted With Application

Item No.	Title and Criteria	Yes	Description Attached
11	**WASTE MANAGEMENT** **Disposal or Transfer of Radiography Sealed Sources Containing Byproduct Material or Devices Containing Depleted Uranium** The applicant does not need to provide a response to this item during the licensing process. However, the applicant should establish and include waste disposal procedures in its radiation safety program.		Need Not Be Submitted With Application

G. Grass

CHRIS GRASS
QIT
RSO