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December 4, 2011

US Nuclear Regulatory Commission, Region 1
475 Allendale Road
King of Prussia, PA
19406-1415

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RE: License Number 20-20633-02, 14 Day Prior Notification

The purpose of this memorandum is to notify the USNRC Region I Administrator that Bartlett Holdings, Inc (BHI) has been contracted by ERM for the evaluation and remediation of residual contamination that remains following the removal of High Range Well (HRW) containing a breached cesium-137 (Cs-137) source at the Thermo Fisher Scientific Inc. (Thermo Fisher) in Santa Fe, New Mexico the former Eberline Instrument Facility (the "Temporary Job Site").

Bartlett Nuclear, Inc. (Bartlett) will be subcontracted to ERM (our client). Bartlett will support the various radiological issues at the Site leading to the eventual termination of Thermo Fisher's Radiological Materials License.

The following information is being provided for your evaluation per the requirements of License Condition 18.A:

Item 1: Estimated Type, Quantity, and Physical Form of the Material

The original source contained 16 Curies of Cs-137 in a sealed source form. However, the actual source itself has been removed and disposed. The only remaining activity is very levels of Cs-137 that resulted when the source "leaked." The worst case soil sample result is 900 pCi/gram. Therefore, we are confident that the total amount of remaining Cs-137 will be well below mCi amounts.

Item 2: Specification of Site Location

The physical address of the site is, as follows:
5981 Airport Rd
Santa Fe County, NM

Item 3: Description of Project Activities Including Waste Management and Disposition

The following is a summary of the Project Plan, including waste management and disposition:

Task 1: Modify the Site HASP

Bartlett and ERM will develop a HASP for use by Thermo Fisher Scientific, ERM, and Bartlett personnel to ensure the safe execution of all on-site work activities.

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Task 2: Develop Site Specific Release Criterion

A site-specific Cs-137 release criterion corresponding to an annual dose from residual radioactivity equal to 25 mrem/y under the resident farmer scenario will be calculated using the RESRAD computer code.

Task 3: Develop Soils Characterization Sampling and Analysis Plan

Bartlett will develop a Soils Characterization Sampling and Analysis Plan. The Sample and Analysis Plan will incorporate survey specific Data Quality Objectives (DQOs), specify Quality Control (QC) requirements, survey designs, survey instrumentation, number and type of measurements, labeling convention, action levels for measurements, and include specific work instructions, documentation requirements, and survey unit measurement plots. The selection of radiation detection instrumentation will be consistent with the instrumentation described in MARSSIM and will be a key element in the Plan.

Task 4: Perform Soils Characterization Sampling and Analysis

The goal of this task will be to characterize the extent of the HRW area requiring removal and use the data to support “clean” closure assuming removal of a defined volume and based on the Cs-137 DCGL value developed in Task 2. This task will consist of the collection of samples to determine the nature and extent (lateral and vertical boundaries) of residual Cs-137 contamination remaining at the HRW location. A mini-Rotosonic drilling rig (or similar equipment) is being proposed for this task to allow for the collection of samples at depth.

Target boring locations will center on the original HRW pipe location that was used to store a Cs-137 radioactive source. The spacing and position of soil borings is intended to delineate the area of potential radiological impact, but it is anticipated that continuous cores will be available for screening. During this characterization effort it is imperative that delineation of the vertical and horizontal extents of the contamination is identified.

Information gathered from this sampling will be used to develop an estimate of the volume of soil and bulk activity levels that may require remediation. The distance, spacing and/or numbers of cores may be adjusted during the program based on subsurface utility locations and/or field screening results in order to better delineate the area of potential impact relative to background radioactivity.

A total of 4 days are anticipated for this task, with sampling being performed over a period of two days following mobilization and Site Specific Training. Onsite screening of soil collected will be performed by Bartlett will mobilize one Senior Radiological Engineer and one Radiation Control Technician (RCT) to provide sampling oversight and perform radiation surveys.

The field team will execute work in accordance with the Characterization Sampling and Analysis Plan using task specific Bartlett instrumentation, sampling, chain of custody and sample preparation procedures. Regular Health & Safety and radiological control briefings will be held. Radiological controls may be adjusted throughout this task to ensure that exposure is being maintained ALARA and that no cross contamination occurs. Management meetings will also be held with the Thermo Fisher RSO and the ERM Health & Safety Officer (HSO) prior to and

following work activities to ensure that the methods and controls in place are appropriate and effective.

Task 5: *Prepare Soil Remediation and Final Status Survey Plan (If Required)*

Upon the receipt of verified and validated characterization data and the completion of Tasks 1 – 4, ERM will develop a letter report for submittal to the RCB that will summarize the results of the soil investigation, provide the established Cs-137 DCGL (release criterion) for the site, and present a scope for the remediation work. This report will also include any additional submittals required (permits, reciprocity, work plans) necessary for ERM/Bartlett to move forward with the work.

The soils remediation plan will include:

- Pile Management during excavation
- Cross Contamination Prevention protocol

The Final Status Survey (FSS) Plan will include:

- DQOs associated with the FSS
- Decision rules for the survey
- The quantity and location of measurements needed to demonstrate the release of the license.
- QC requirements during the performance of the FSS
- General and specific instructions for the performance of the sampling and measurements
- Laboratory and instrument MDCs

Task 6: *Conduct Soil Remediation and FSS Activities (If Required)*

This task involves the removal, containment, and transport of radiologically contaminated soils from the area of the HRW. While the exact nature and extent of the remaining radiological contamination is unknown at this time, the various activities required to facilitate this task are as follows

Radiological controls will be provided and all soil removed will be placed within an appropriate shipping container following field screening by Bartlett using radiation detection instrumentation to evaluate the Cs-137 concentrations in soil samples and will use those results to guide remediation activities. The selection of radiation detection instrumentation will be consistent with the instrumentation described in the FSS Plan (developed in Task 5) to ensure detection of

Cs-137 concentrations significantly below the Cs-137 DCGL value. A summary of the survey results will be provided.

Following the removal of contaminated soils, confirmation samples will be collected from the excavation and submitted to GEL Laboratories, Inc. for analysis. At this time it is anticipated that a total of 15 samples will be obtained in accordance with data quality objectives defined in the FSS survey plan. The removal of soil and the collection of samples are expected to be performed over a 5 day period.

Waste Preparation and Shipment – Bartlett / ERM will package soils into approved shipping containers and provide Cs137 concentrations and estimated waste volume to the Waste Shipper. The Waste Shipper will use the supplied information to characterize the waste for transportation and disposal, make all necessary notifications, label in accordance with DOT regulations, generate all necessary paperwork for the shipment (i.e., NRC Forms 540, 541 and 542 for radioactive waste shipments), and schedule the shipment(s). Copies of the shipment paperwork will be provided to Thermo-Fisher.

Task 7: Prepare Project Status Report

Following the completion of Task 6 to document as left soil Cs-137 concentrations of the excavation and removal of contaminated soils greater than the soil DCGL for Cs-137. The Project Status Report will be drafted upon completion of the DQA process for Gamma spectroscopy results. ERM will provide the draft report to Thermo-Fisher for review and comment, and following the receipt of consolidated review comments; will deliver the final Project Status Report for submittal to the RCB.

Item 4: Estimated project Start date and Duration

The “field” portion of this project is estimated to begin in January 9, 2011 and the project should be completed by the end of January 2012.

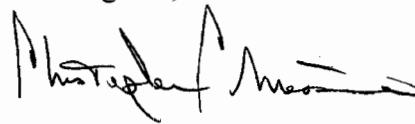
Item 5: Identification of and information on how to contact key project personnel

The Project Supervisor will be Mr. Joe Bisson, an Authorized Supervisor as stated in License Condition 11. If additional information is needed, please feel free to contact Messrs. Chris Messier, RSO or Jerry Hiatt, CHP an Authorized Supervisor of the License via the following methods:

Chris Messier, RSO
508-591-1300
Chris.messier@bartlettinc.com

Jerry Hiatt, CHP
508-591-1286
jerry.hiatt@bhienergy.com

Regards,



Christopher C. Messier
Vice President - Engineering
chris.messier@bartlettinc.com

This is to acknowledge the receipt of your letter application dated

12/4/2011, and to inform you that the initial processing which includes an administrative review has been performed.

Notification (20-20633-02) There were no administrative omissions. Your application was assigned to a technical reviewer. Please note that the technical review may identify additional omissions or require additional information.

Please provide to this office within 30 days of your receipt of this card

A copy of your action has been forwarded to our License Fee & Accounts Receivable Branch, who will contact you separately if there is a fee issue involved.

Your action has been assigned **Mail Control Number** 576484.
When calling to inquire about this action, please refer to this control number.
You may call us on (610) 337-5398, or 337-5260.