



CABRERA SERVICES

RADIOLOGICAL • ENGINEERING • REMEDIATION

Br. 4

November 4, 2011

RECEIVED
REGION I
2011 NOV -7 AM 10:24

Regional Administrator
U.S. Nuclear Regulatory Commission
Region I
475 Allendale Road
King of Prussia, PA 19406
ATTN: Director, Division of Nuclear Materials Safety

RE: AMENDMENT to Activities at Temporary Job Site Utilizing U.S. NRC
Radioactive Material License #06-30556-01 Amendment 04

Temporary Location: Former United Nuclear Corporation Naval Products
Manufacturing Facility, New Haven CT

03035316

Cabrera Services Inc. (CABRERA) is providing this written notification of its intent to utilize CABRERA Material License #06-30556-01 at a temporary job site. The attached information is an amendment to information previously transmitted to NRC on August 1, 2011 (Control No. 575745) and is provided as required by license condition 18A.

We trust that this information is sufficient to grant our use of CABRERA material license #06-30556-01 Amendment 04 at the temporary job site. This license or reciprocity is currently in use at 4 other sites (CT, HI, NY, PA). No activity exceeding license limitations will be conducted. CABRERA will notify the Regional Administrator, U.S. Nuclear Regulatory Commission, within 30 days of termination of activities at this job site in keeping with license condition 18B.

If you should have any questions regarding this notification, please contact Henry W. Siegrist at CABRERA (860) 569-0095 (voice) or (860) 569-0277 (fax).

Sincerely,

Henry W. Siegrist, P.E., CHP
RSO, Corporate Health Physicist
Attachment

576332
NMSS/RGN1 MATERIALS-002

**ATTACHMENT
FORMER UNITED NUCLEAR CORPORATION
NAVAL PRODUCTS MANUFACTURING FACILITY
NEW HAVEN, CT
(Amendment November 2011
to Control No. 575745)**

Cabrera Services, Inc. (CABRERA) is providing a Final Status Survey Plan (FSSP) for the former United Naval Products located in New Haven Connecticut. The site was decontaminated and decommissioned during 1973 through 1976 when work was transferred to a new facility in Montville, CT.

This amendment addresses emergent characterization work associated with elevated readings found on the site. The elevated readings were discovered during preparations to a planned laydown area supporting the original work at the site.

No other changes, except to remove reference to expectations that all decontamination and decommissioning soils and debris will result in less than 20 percent uranium bulk enrichment, are made by this amendment from the original scope of work provided to the NRC by Cabrera notification, August 1, 2011, Control No. 575745.

This information is being transmitted to you as required by condition 18A of the Cabrera Materials License.

BACKGROUND

CABRERA personnel found an approximate 15 square foot area of elevated gamma activity during a gamma walkover survey (GWS) of a planned laydown area of concrete, asphalt, and soil in a parking lot north of Building 3H. Composite soil sample from the two most elevated locations were collected with measured uranium-235 and total uranium in excess of the current site release criteria. This information was passed on to the customer. The customer agreed to further investigate and characterization the area.

Radiologically-contaminated soil and debris will be removed from the site as part of the characterization, extent of contamination, and decontamination and decommissioning process detailed by this amendment request. The materials are contaminated with diffuse special nuclear material (SNM) from previous work at the site when it was operational. The soil and debris removed from the site contains small amounts of dispersed SNM. Any removed SNM material is expected to be diffuse and hence bulk enrichments are also expected to be low. No other SNM is present. The site is located at 71 Shelton Avenue, New Haven, CT.

WORK DETAILS

Cabrera has prepared this notification to the NRC with respect to Cabrera's intent to utilize the Cabrera NRC Materials License, number 06-30556-01, at the site of the former United Nuclear Corporation Naval Products Manufacturing Facility. As required by condition 18A of the Cabrera Materials License, the following information is provided for this amendment:

The radionuclide contaminant of concern potentially present in soil and debris originating from the site is enriched U-235 previously used during the manufacture of fuel for the Navy.

Characterization is expected to consist of approximately 1,000 m² of additional area approximately 50 feet north of the Decon Pit. The area is outside the building and contains two catch basins. A gamma walkover survey using NaI scintillation equipment will be used to provide the lateral extent of surface and subsurface elevated readings. Additional asphalt and subsurface evaluations will be provided by Geoprobe® analyses and soil sampling. Bias soil samples will be collected as well as sludge samples from the catch basins.

Site decontamination and remediation of soil and debris will be performed to ensure that remaining soils are below survey design limits for total uranium. An onsite gamma spectroscopy system will be utilized to provide the removed bulk soil and debris uranium enrichment determination and to permit processing of NRC Form 741 Nuclear Material Transaction Reports.

The information from the onsite gamma spectroscopy system will be used to ensure that CABRERA does not handle and possess U-235 SNM in excess of the license limit of 350 grams at this site. The remediated material will be packaged in intermodal containers and sent to a transload facility where the intermodal containers are loaded onto a rail car for transport to the disposal facility. Completion of the shipping manifest portion and removal of the intermodal containers from the site will terminate Cabrera's accumulation of the SNM per Cabrera's license requirements and result in removal of all SNM associated with the subject train-loaded intermodals.

An NRC licensed quantity calibration source will be utilized during this work evolution. The calibration source to be controlled under CABRERA NRC Materials License (No. 06-30556-01) is an Isotope Products (Eckert & Ziegler) Mixed Gamma GF Custom source. The source is a "button" type source and is contained in a solid epoxy matrix. This source will be controlled under the CABRERA NRC Materials License. This source is currently onsite and being used for the current ongoing work evolutions.

The calibration source is a mixed gamma source containing licensed material, Americium-241. The source has a total activity of approximately of 3.1 uCi. No other licensed radioactive materials are requested for use by this amendment. The radionuclides and approximate individual activities present in the mixed gamma source are:

Mixed Gamma Button Source (5/1/2010)

²⁴¹ Am	1.021 μCi
⁶⁰ Co	1.039 μCi
¹³⁷ Cs	1.052 μCi

Daily QC of radiation detection instrumentation will be with NRC exempt sources. These sources will be controlled under the CABRERA NRC Materials License. These sources are currently onsite and being used for the current ongoing work evolutions.

Site remediation activities are expected to produce approximately 400 cubic yards soil and debris per foot of soil/asphalt removed. In addition, Investigation Derived Wastes (IDW) will be produced during the work evolution. This includes onsite samples, small amounts of contaminated PPE and equipment (gloves, smears, used containers, air filters, etc.). This IDW will be handled in accordance with federal and state regulations. Total IDW is expected to be less than the equivalent of 2 55-gallon drums. Cabrera will not take permanent possession of any radioactive materials derived from the Site in excess of our license limits.

CABRERA NRC Materials License (No. 06-30556-01) requirements, including previously submitted procedures, will be adhered to with respect to the duration of this work evolution. Radiological surveys of affected work areas, and decontamination of equipment used for the work effort will be conducted after completion of sampling activities to ensure the absence of radioactive contamination. These values are consistent with NRC Regulatory Guide 1.86.

Work within the scope of characterization and potential remediation activity described by this amendment is expected to commence on November 14, 2011 with a completion date of February 29, 2012. Current work activities set forth by the Cabrera Aug 1, 2011 notification (Control No. 575745) continue but now follow this revised completion date of February 29, 2012.

Key project personnel and supporting information:

Mr. Rob Flowers – CABRERA Project Manager
Cabrera Services, Inc.
9413 Willow Grove Court
Chesterfield, VA 23832
Cell (804) 833-7948

Mr. John Uruskyj – UNC GE Project Manager
UNC GE
319 Great Oaks Blvd
Albany, NY 12203
Tele (518) 862-2717
Cell (518) 527-2943

Mr. Henry Siegrist, P.E., CHP – CABRERA RSO
Cabrera Services, Inc.
473 Silver Lane
East Hartford, CT 06118
Tele (860) 569-0095
Cell (860) 416-0196

Please contact Henry Siegrist (CABRERA) at (860) 569-0095 should you have any questions regarding this CABRERA notification of intent to utilize NRC Materials License, number 06-30556-01.

This is to acknowledge the receipt of your letter/application dated

11/4/2011, and to inform you that the initial processing which includes an administrative review has been performed.

Notification (06-30556-01)
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** 576332
When calling to inquire about this action, please refer to this control number.
You may call us on (610) 337-5398, or 337-5260.

NRC FORM 532 (RI)
(6-96)

Sincerely,
Licensing Assistance Team Leader