



CABRERA SERVICES
RADIOLOGICAL • ENVIRONMENTAL • REMEDIATION

May 18, 2005

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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: Activities at temporary job site utilizing U.S. NRC Radioactive Material
License #06-30556-01 Amendment 01

03035316

Dear Sir or Madam:

Cabrera Services Inc. (CABRERA) is providing this written notification of its intent to utilize CABRERA Material License #06-30556-01 Amendment 01 at a temporary job site. The attached information is provided as required by license condition 17A.

We trust that this information is sufficient to grant our use of CABRERA material license # 06-30556-01 Amendment 01 at the temporary job site. This license is currently not in use at any other sites. 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 17B.

If you should have any questions regarding this notification, please contact either Henry W. Siegrist or David J. Watters at CABRERA (860) 569-0095.

Sincerely,

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

attachment

137060
NMSS/RGNI MATERIALS-002

**ATTACHMENT
GREAT LAKES NAVAL TRAINING CENTER
GREAT LAKES, IL**

Cabrera Services, Inc. (CABRERA) is providing radiological remediation, sample analysis, and final status survey (FSS) at the Great Lakes Naval Training Center (Site) located in Great Lakes, Illinois. The work entails soil sample analysis associated with remediation and FSS activities at the Site. A gamma spectroscopy system using a non-exempt radioactive source will be utilized to calibrate sample analysis equipment used to provide the FSS for the Site. This information is being transmitted to you as required by condition 17A of the CABRERA Materials License.

BACKGROUND

The Site was formerly used by the Defense Logistics Agency as a storage area for strategic quantities of monazite sands containing thorium. Areas of potentially contaminated soil may be present in the survey units being remediated. The radiological contaminant of concern is natural thorium. The work evolution is associated with outside soils.

RADIOLOGICAL WORK DETAILS

CABRERA has prepared this notification to the NRC with respect to CABRERA'S intent to utilize the CABRERA Materials License, number 06-30556-01 Amendment 01, at the Great Lakes Naval Training Center, Great Lakes, Illinois temporary job site. As required by condition 17A of the CABRERA Materials License, the following information is provided:

Surface soils will be collected and analyzed during remediation and FSS activities on the Site. The remediated areas are expected to result in the generation of approximately 400 cubic yards in-situ contaminated soil.

Collected soil samples will be dried, sieved, and placed into 1-liter marinelli containers for radiological analysis. The samples will be analyzed onsite utilizing portable gamma spectroscopy equipment. The gamma spectroscopy equipment will be calibrated using a sealed solid source geometry marinelli container maintained under CABRERA at the Site during the work evolution. Approximately 200 soil samples will be collected and analyzed onsite and up to 20 QA samples will be analyzed by an offsite laboratory licensed to perform this work.

Investigation derived wastes (IDW) will be handled in accordance with federal and state regulations. This includes onsite samples, small amounts of contaminated PPE and equipment (gloves, smears, used marinelli containers, etc.). Total IDW is expected to be several cubic feet in volume. Cabrera will not take possession of any radioactive materials derived from the Site.

A 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 1-L marinelli beaker, source number 1088-82-1. The source has an active volume of 1,000 ml and is contained in an epoxy matrix having a density of 1.5 g/cc.

The calibration source is a multinuclide gamma sealed source containing licensed material, Americium-241. Source 1088-82-1 has a total decayed activity (as of 5/6/05) of 2.14 μ Ci. No

other radioactive materials are requested for use by this notification. The isotopes and individual activities present in the marinelli source beaker is:

Source No. 1088-82-1

²⁴¹ Am	0.0892 μCi
¹⁰⁹ Cd	1.0847 μCi
⁵⁷ Co	0.0355 μCi
¹³⁹ Ce	0.0323 μCi
²⁰³ Hg	0.0339 μCi
¹¹³ Sn	0.1147 μCi
⁸⁵ Sr	0.0888 μCi
¹³⁷ Cs	0.2003 μCi
⁸⁸ Y	0.2256 μCi
⁶⁰ Co	0.2367 μCi

The marinelli source container will be shipped to the Site directly to a CABRERA Employee. Source controls and leak tests associated with the marinelli calibration source will be performed upon receipt and follow CABRERA NRC License conditions. In addition, CABRERA Radiation Safety Procedure "Use and Control of Radioactive Check Sources", OP-009, will be utilized to document the source receipt.

The radionuclide contaminant of concern potentially present in soil and samples from the Site is natural thorium and thorium progeny.

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 remediation investigation activities to ensure the absence of radioactive contamination. These values are consistent with NRC Regulatory Guide 1.86.

The project marinelli source receipt date is on or about June 13, 2005. Work within this scope of remediation activity is expected to be completed prior to August 1, 2005. Non-radiological activities may commence onsite earlier than the dates noted above.

Key project personnel and supporting information is available from:

Ms. Pat Haworth – Officer in Charge
NAVSEADET RASO NWS
PO Drawer 260
Yorktown, VA 23691-0260
Tele (757) 887-4692

Mr. John Blayne Kirsch, P.E., PG – Coordinator, Environmental Business Line
Naval Facilities Engineering command – Midwest (NAVFAC MW)
ACOS Installations & Environment
Environmental Department
201 Decatur Avenue
Great Lakes, IL 60088-5600
Tele (847) 688-5999 x 145

Mr. Tim Taylor – CABRERA Project Manager
Cabrera Services, Inc.
10 Kearney Road
Suite 301
Needham Heights, MA 02494
Tele (781) 455-8787

Mr. Henry Siegrist, P.E., CHP – CABRERA Corporate Health Physicist
Cabrera Services, Inc.
473 Silver Lane
East Hartford, CT 06118
Tele (860) 569-0095 ext 18

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 Amendment No. 1.

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

5/18/2005, 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** 137060.
When calling to inquire about this action, please refer to this control number.
You may call us on (610) 337-5398, or 337-5260.

BETWEEN: : (FOR LFMS USE)
 : INFORMATION FROM LTS
 : -----
 :
 License Fee Management Branch, ARM : Program Code: 03219
 and : Status Code: 0
 Regional Licensing Sections : Fee Category: 3N 2C 1D
 : Exp. Date: 20100630
 : Fee Comments: NOT 4A OR 4B IAW FC94-02
 : Decom Fin Assur Req'd: N
 : ::

LICENSE FEE TRANSMITTAL

A. REGION I

1. APPLICATION ATTACHED
 Applicant/Licensee: CABRERA SERVICES, INC.
 Received Date: 20050519
 Docket No: 3035316
 Control No.: 137060
 License No.: 06-30556-01
 Action Type: Notifications

2. FEE ATTACHED
 Amount: /
 Check No.:

3. COMMENTS

Signed *Rebecca Juarez*
 Date 5/14/2005

B. LICENSE FEE MANAGEMENT BRANCH (Check when milestone 03 is entered /__/))

1. Fee Category and Amount: _____
 2. Correct Fee Paid. Application may be processed for:
 Amendment _____
 Renewal _____
 License _____
 3. OTHER _____

Signed _____
 Date _____