



**CABRERA SERVICES**  
RADIOLOGICAL • ENGINEERING • REMEDIATION

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REGION 1

2009 SEP 21 AM 10:11

September 18, 2009

Br. 4

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

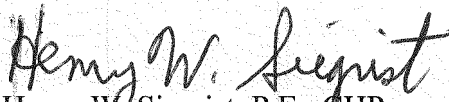
Dear Sir or Madam:

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 18A.

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 in use at 2 other sites (MO, CA). 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 either Henry W. Siegrist or David J. Watters at CABRERA (860) 569-0095.

Sincerely,



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

attachment

**ATTACHMENT**  
**Kirtland AFB**  
**New Mexico, 87117**  
**(September 2009)**

Cabrera Services, Inc. (CABRERA) is providing radiological characterization, excavation, remediation as well as transport for proper disposal and Final Status Surveys (FSS) at the Kirtland Air Force Base (AFB) located in Albuquerque, NM. The work entails the characterization of soil and soil like material, the removal (excavation) of contaminated soil and waste in 55 gallon drums, packaging for proper transport and disposal, a well as FSS surveys of remediated areas. A gamma spectroscopy system using a non-exempt radioactive source will be utilized to calibrate sample analysis equipment used to provide the characterization and FSS analysis at the site. This information is being transmitted to you as required by condition 18A of the CABRERA Materials License.

**BACKGROUND**

Radioactive materials were disposed in trenches at the Kirtland AFB in a number of radioactive burial sites on the facility. This particular location, known as RW-06, includes trenches containing drummed animal carcasses and associated waste. These materials included a mix of radionuclides from fallout, primarily ( $^{137}\text{Cs}$  and  $^{90}\text{Sr}$ ) and may contain other wastes from 91B activities.

**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 Kirtland AFB, Albuquerque, NM temporary job site. As required by condition 18A of the CABRERA Materials License, the following information is provided:

Surface and subsurface soil samples will be collected for characterization and FSS purposes. The remediated areas are expected to result in the excavation and examination of approximately 2300 cubic yard of soil, of which 1400 cubic yards is anticipated to require disposal as contaminated material.

Samples will be collected, prepared, and placed into 1-liter marinelli containers for radiological analysis. The samples will be analyzed onsite utilizing portable high purity germanium (HPGe) gamma spectroscopy equipment. The gamma spectroscopy equipment will be calibrated using a solid source geometry marinelli container maintained under CABRERA control at the Site during the work evolution. Up to approximately 400 soil samples will be collected and analyzed onsite and up to 40 to 50 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 approximately 80 cubic feet in volume. Cabrera will not take possession of any radioactive materials derived from the Site. CABRERA will also utilize portable radiological detection instruments and exempt check sources for radiological surveys and instrument QA/QC performance checks.

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. The source has an active volume of 1,000 ml and is contained in a solid epoxy matrix.

The calibration source is a multi-nuclide gamma source containing licensed material, Americium-241. The source has a total activity of approximately of 3.1  $\mu\text{Ci}$ . No other licensed radioactive materials are requested for use by this notification. The radionuclides and approximate individual activities present in the marinelli source beaker are:

Marinelli 1 L Epoxy Source

<sup>241</sup> Am	0.091 $\mu\text{Ci}$
<sup>109</sup> Cd	1.260 $\mu\text{Ci}$
<sup>57</sup> Co	0.045 $\mu\text{Ci}$
<sup>139</sup> Ce	0.058 $\mu\text{Ci}$
<sup>203</sup> Hg	0.180 $\mu\text{Ci}$
<sup>113</sup> Sn	0.215 $\mu\text{Ci}$
<sup>85</sup> Sr	0.299 $\mu\text{Ci}$
<sup>137</sup> Cs	0.208 $\mu\text{Ci}$
<sup>88</sup> Y	0.475 $\mu\text{Ci}$
<sup>60</sup> Co	0.250 $\mu\text{Ci}$

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.

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 and 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 October 2, 2009. Work within this scope of characterization, remediation and FSS activity is expected to be completed prior to December 31, 2009. Transportation of the material for proper disposal is expected to be completed prior to June 30, 2010. Non-radiological activities may commence onsite earlier than the date noted above.

Key project personnel and supporting information is available from:

Wayne Bitner, Chief, Restoration  
2050 Wyoming Blvd, SE  
Kirtland AFB, NM 87117  
Direct: 505-853-3484

Mr. Mark Tepperman - Cabrera Project Manager  
Cabrera Services, Inc.  
12000 Crownpoint Dr., Suite 150  
San Antonio, TX 78233  
Tel 210.967.4300

Mr. Henry Siegrist, P.E., CHP – CABRERA Corporate Health Physicist  
Cabrera Services, Inc.  
473 Silver Lane  
East Hartford, CT 06118  
Tel (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.



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**CABRERA TRAINING FORM**

**Procedure/Guidance**

**Title/Number/Name:** Cabrera Radiation Awareness Safety Training

**Rev.** 2009

**Date of Training:** 7/7/09

**Type of Training (check all that apply):**

Classroom  Read and Sign  Hands-On/OJT

**Frequency:** Once  Yearly  Other (specify)  Site Specific

**Trainer(s):** Cabrera - R. Racina

*Trainer: Attach any training handouts/materials used with this training document*

**Attendees:**

**Print Name:** Tony Lee (AEC) **Sign:** [Signature]

MAT (AEC) (EDCO) [Signature]

DAVID COX (EDCO) [Signature]

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This is to acknowledge the receipt of your letter/application dated 9/18/09, 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 144175.  
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