

REPORT OF PROPOSED ACTIVITIES IN NON-AGREEMENT STATES, AREAS OF EXCLUSIVE FEDERAL JURISDICTION, OR OFFSHORE WATERS

(Please read the instructions before completing this form)

Estimated burden per response to comply with this mandatory collection request: 15 minutes. This notification is required so that NRC may schedule inspection of the activities to ensure that they are conducted in accordance with requirements for protection of the public health and safety. Send comments regarding burden estimate to the Records Management Branch (T-6 EB), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to bja1@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0013), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

1. NAME OF LICENSEE (Person or firm proposing to conduct the activities described below) Earth Engineering & Sciences, Inc.		2. TYPE OF REPORT <input type="checkbox"/> INITIAL <input type="checkbox"/> REVISION <input type="checkbox"/> CLARIFICATION	
3. ADDRESS OF LICENSEE (Mailing address or other location where licensee may be located) 3401 Carlins Park Drive Baltimore, MD 21215		4. LICENSEE CONTACT AND TITLE Edward H. Dalton, P.E., President	
5. TELEPHONE NUMBER (Include Area Code) 410-466-1400		6. FACSIMILE NUMBER (Include Area Code) 410-466-7371	

7. ACTIVITIES TO BE CONDUCTED UNDER THE GENERAL LICENSE GIVEN IN 10 CFR 150.20

WELL LOGGING LEAK TESTING AND/OR CALIBRATIONS TELETHERAPY/IRRADIATOR SERVICE

PORTABLE GAUGES OTHER (Specify) => _____

RADIOGRAPHY => REGISTERED AS USER OF PACKAGING (CERTIFICATES OF COMPLIANCE NUMBERS) _____

8. CLIENT NAME, ADDRESS, CITY/COUNTY, STATE, ZIP CODE Bechtel Aberdeen Bldg. E-2305-TA Bush River Road P.O. Box 222 APG-Edgewood Area, MD 21010-0222		9. ACTUAL PHYSICAL ADDRESS OF WORK LOCATION (Street and Number or other location. Give as complete an address or directions as possible) Aberdeen Chemical Agent Disposal Facility Bush River Road APG-Edgewood Area, MD 21010	
10. CLIENT TELEPHONE NUMBER (Include Area Code) 1-410-612-4435		11. WORK LOCATION TELEPHONE NUMBER (Include Area Code) 1-410-612-4419	

12. DATES SCHEDULED		13. NUMBER OF WORK DAYS	14. ADD	15. DELETE	16. LOCATION REFERENCE NUMBER
FROM 6 Mar 2002	TO 26 Aug 2002	170			NUMBER TO BE ASSIGNED BY NRC 000454

LIST ADDITIONAL WORK SITES ON SEPARATE SHEET(S) TO INCLUDE ALL INFORMATION CONTAINED IN ITEMS 9-16 ABOVE.

17. LIST RADIOACTIVE MATERIAL, WHICH WILL BE POSSESSED, USED, INSTALLED, SERVICED, OR TESTED (include description of type and quantity of radioactive material, sealed sources, or devices to be used.)

Sealed Sources - Cesium 137 8(mCi)
Americium 241BE 40(mCi)

18. AGREEMENT STATE SPECIFIC LICENSE WHICH AUTHORIZES THE UNDERSIGNED TO CONDUCT ACTIVITIES WHICH ARE THE SAME, EXCEPT FOR LOCATION OF USE, AS SPECIFIED IN ITEM 9 ABOVE. (Four copies of the specific license must accompany the initial NRC Form 241.)	LICENSE NUMBER MD-07-118-01	STATE MD	EXPIRATION DATE 31 Dec 2002
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------	-------------	--------------------------------

19. CERTIFICATION (MUST BE COMPLETED BY APPLICANT)

I, THE UNDERSIGNED, HEREBY CERTIFY THAT:

- All information in this report is true and complete.
- I have read and understand the provision of the general license 10 CFR 150.20 reprinted on the instructions of this form; and I understand that I am required to comply with these provisions as to all byproduct, source, or special nuclear material which I possess and use in non-Agreement States or offshore waters under the general license for which this report is filed with the U.S. Nuclear Regulatory Commission.
- I understand that activities, including storage, conducted in non-Agreement States under general license 10 CFR 150.20 are limited to a total of 180 days in calendar year. With the exception of work conducted in off-shore waters, which is authorized for an unlimited period of time in the calendar year.
- I understand that I may be inspected by NRC at the above listed work site locations and at the Licensee home office address for activities performed in non-Agreement States or offshore waters.
- I understand that conduct of any activities not described above, including conduct of activities on dates or locations different from those described above or without NRC authorization, may subject me to enforcement action, including civil or criminal penalties.

CERTIFYING OFFICER - RSO or Management Representative (Name and Title) Edward H. Dalton, P.E. President	SIGNATURE <i>Edward H. Dalton</i>	DATE 2-26-02
------------------------------------------------------------------------------------------------------------	--------------------------------------	-----------------

WARNING: False statements in this certificate may be subject to civil and/or criminal penalties. NRC regulations require that submissions to the NRC be complete and accurate in all material respects. 18 U.S.C. Section 1001 makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

FOR NRC USE ONLY	REVIEWING OFFICIAL (Typed/Printed Name and Title) <i>John McCreath</i>	SIGNATURE <i>John McCreath</i>	DATE 3/5/02	TOTAL USAGE - DAYS TO DATE 174
------------------	---------------------------------------------------------------------------	-----------------------------------	----------------	-----------------------------------

@ 3/5/02

RECEIVED
2002 MAR 4 PM 2:39



**DEPARTMENT OF THE ENVIRONMENT
RADIOLOGICAL HEALTH PROGRAM
RADIOACTIVE MATERIAL LICENSE**

Page 1 of 4 pages

Pursuant to the Maryland Radiation Act, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess and transfer radioactive material listed below; and to use such radioactive material for the purpose(s) and at the place(s) designated below. The license is subject to all applicable rules, regulations and orders of the Maryland State Department of the Environment, now or hereinafter in effect and to any conditions specified below.

In accordance with license application dated July 23, 1998, License MD-07-118-01 is hereby renewed.

<p>1. Name: Earth Engineering & Sciences Inc.</p>	<p>3. License No.: MD-07-118-01</p>
<p>2. Address: 3401 Carlins Park Drive Baltimore, Maryland 21215</p>	<p>4. Amendment No.: 21 (RENEWAL) CODE 03121</p>
	<p>5. Expiration Date: December 31, 2004</p>

6. Radioactive material element & mass number:	7. Chemical and/or physical form:	8. Maximum amount of radioactivity which licensee may possess at any on time:
A. Cesium-137	A. Sealed Source (Troxler dwg A102112)	A. No source to exceed 10 millicuries
B. Americium-241:Be	B. Sealed Source (Troxler dwg A102451)	B. No source to exceed 50 millicuries
C. Hydrogen-3	C. Sealed Source (Safety Light Corp. Model 508-3)	C. No source to exceed 150 millicuries

9. **Authorized Use(s):**

A&B. For use in Troxler 3400 Series moisture/density gauges to measure construction materials.

C. For use in Sentex Sensing Technology Inc. portable Scentograph for analysis of vapors in the field.



DEPARTMENT OF THE ENVIRONMENT
RADIOLOGICAL HEALTH PROGRAM
RADIOACTIVE MATERIAL LICENSE

Page 2 of 4 pages

License No.: MD-07-118-01

Amendment No.: 21

CONDITIONS

10. The authorized place of use is the licensee's address stated in Item 2 and temporary job sites of the licensee throughout Maryland. The licensee must notify the Radiological Health Program 30 days prior to vacating a permanent use address as is required by Section D.1301 of COMAR 26.12.01.01.
- 11A. The radiation protection program shall be under the supervision of Edward H. Dalton.
- 11B. Radioactive material shall be used by or under the supervision and in the physical presence of an employee who:
1. has a certificate from a licensed training course on file with the licensee; and
 2. the licensee has authorized to use radioactive material and has so notified the Radiological Health Program, in writing.
12. The licensee shall comply with all appropriate provisions of COMAR 26.12.01.01 "Regulations for Control of Ionizing Radiation."
- 13A. Each sealed source containing radioactive material, other than Hydrogen-3 with a half-life greater than thirty (30) days and in any form other than gas shall be tested for leakage and/or contamination at intervals not to exceed six (6) months. In the absence of a certificate from a transferor indicating that a test has been made within six (6) months prior to the transfer, the sealed source shall not be put into use until tested. If there is reason to suspect that a sealed source might have been damaged, or might be leaking, it shall be tested for leakage before further use.
- 13B. The test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. The test sample shall be taken from the sealed source or from the surfaces of a device in which the sealed source is permanently mounted or stored on which one might expect contamination to accumulate.
- 13C. Records of leak tests shall be kept in units of microcuries and maintained for inspection by the Department.
- 13D. If the test reveals the presence of 0.005 microcurie or more of removable contamination, the licensee shall immediately withdraw the sealed source from use and shall cause it to be decontaminated and repaired or to be disposed of in accordance with Department regulations. A report shall be filed within five (5) days of the test with the Administrator, Radiological Health Program, 2500 Broening Highway, Baltimore, Maryland 21224 describing the equipment involved, the test results, and the corrective action taken.
- 13E. Test for leakage and/or contamination shall be performed by the licensee or by other persons specifically authorized by the Department, the U.S. Nuclear Regulatory Commission or another Agreement State to perform such services.



DEPARTMENT OF THE ENVIRONMENT
RADIOLOGICAL HEALTH PROGRAM
RADIOACTIVE MATERIAL LICENSE

Page 3 of 4 pages

License No.: MD-07-118-01

Amendment No.: 21

CONDITIONS CONTINUED

14. Maintenance and repair of devices containing radioactive material and installation, replacement, and disposal of sealed sources shall be performed by Troxler or Sentex or by other persons specifically authorized by the Department, the U.S. Nuclear Regulatory Commission or another Agreement State to perform such services.
15. Sealed sources containing radioactive material shall not be opened or removed from their respective source holders by the licensee.
16. The licensee shall conduct a physical inventory every six (6) months to account for all sealed sources received and possessed under the license. The records of the inventories shall be maintained for two (2) years from the date of the inventory for inspection by the Department, and shall include the quantities and kinds of radioactive material, location of sealed sources, and the date of the inventory.
- 17A. Transportation of radioactive material in the State of Maryland shall be in compliance with Part T, Section T.5 "Transportation of Licensed Material" of COMAR 26.12.01.01.
- 17B. The licensee shall transport licensed material or deliver licensed material to a carrier for transport in accordance with the provisions of Section T.5, "Transportation of Licensed Material" of COMAR 26.12.01.01.
- 18A. The licensee shall not make any false statement, representation, or certification in any application, record, report, plan, or other document regarding radiation levels, tests performed or radiation safety conditions or practices. Additionally, the licensee shall not falsify, tamper with, or render inaccurate any monitoring device or method.
- 18B. Violation of any term, condition, or regulation could subject the licensee to administrative or civil penalty or criminal prosecution, as specified in Title 8, Radiation, of the Article Environment of the Annotated Code of Maryland.



DEPARTMENT OF THE ENVIRONMENT
RADIOLOGICAL HEALTH PROGRAM
RADIOACTIVE MATERIAL LICENSE

Page 4 of 4 pages

License No: MD-07-118-01

Amendment No.: 21

CONDITIONS CONTINUED

19. Except as specifically provided otherwise by this license, the licensee shall possess and use radioactive material authorized by this license in accordance with statements representations, and procedures contained in application dated July 23, 1998. COMAR 26.12.01.01 "Regulations for Control of Ionizing Radiation" shall govern the licensee's statements in applications or letters, unless the statements are more restrictive than the regulations.

FOR THE MARYLAND DEPARTMENT OF THE ENVIRONMENT

November 29, 1999

Roland G. Fletcher
Radiological Health Program Manager

NAO KAO 1/29/99

REM 12/20/99



DEPARTMENT OF THE ENVIRONMENT
RADIOLOGICAL HEALTH PROGRAM
RADIOACTIVE MATERIAL LICENSE

Page 1 of 1 page

License No: MD-07-118-01

Amendment No.:22 CODE 03120

Earth Engineering & Sciences, Inc.
3401 Carlins Park Drive
Baltimore, Maryland 21215

In accordance with letter dated June 22, 2000, Radioactive Material License Number MD-07-118-01 is amended as follows:

Condition 6 to add:

Radioactive Material
(Element and Mass
number)

C Cesium - 137

Condition 7 to add:

Chemical and/or physical form

C. Sealed Sources:

Amersham
Model # CDCW556
Capsule type: X.1218
Model # CDCW
Capsule type XN.30

Isotope Products
Model # HEG-137-8M
Capsule type 3024

Condition 8 to add:

Maximum amount of radioactivity which
licensee may possess at any one time

C. No source to exceed 9 millicuries

Condition 9 to add:

Authorized use

C. For use in Troxler Thin Layer Density Gauge Model 4640B

FOR THE MARYLAND DEPARTMENT OF THE ENVIRONMENT

Roland G. Fletcher
Radiological Health Program Manager

July 13, 2000

BJP -BJP 7-13-2000
REN 7/18/2000