NRC FORM 241 (7-1999) — U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0013 EXPIRES: 07/31/2002
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 E6), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to bjs1@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.

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

(Please read the instructions before completing this form)

1. NAME OF LICENSEE *(Person or firm proposing to conduct the activities described below)*
Ecology Services, Inc.

2. TYPE OF REPORT
[X] INITIAL [ ] REVISION [ ] CLARIFICATION

3. ADDRESS OF LICENSEE *(Mailing address or other location where licensee may be located)*
10220 Old Columbia Rd.
Columbia, MD 21046

4. LICENSEE CONTACT AND TITLE
Timothy W. Osborne, CHP
RSO

5. TELEPHONE NUMBER *(Include Area Code)*
(410) 381-2600

6. FACSIMILE NUMBER *(Include Area Code)*
(410) 381-2602

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 [X] OTHER (Specify) ⇒ Package, Pick-up and Transport for Disposal

[ ] RADIOGRAPHY ⇒ REGISTERED AS USER OF PACKAGING (CERTIFICATES OF COMPLIANCE NUMBERS)

8. CLIENT NAME, ADDRESS, CITY/COUNTY, STATE, ZIP CODE
Carnegie Mellon University
4400 Fifth Ave.
Pittsburgh, PA 15213

Attn: Megan Marks

9. ACTUAL PHYSICAL ADDRESS OF WORK LOCATION *(Street and Number or other location. Give as complete an address or directions as possible.)*
Same as 8.

10. CLIENT TELEPHONE NUMBER *(Include Area Code)*
(412) 268-3221

11. WORK LOCATION TELEPHONE NUMBER *(Include Area Code)*
(412) 268-3221

RECEIVED MAY 24 REGION 1

12. DATES SCHEDULED		13. NUMBER OF WORK DAYS	14. ADD	15. DELETE	16. LOCATION REFERENCE NUMBER
FROM	TO				NUMBER TO BE ASSIGNED BY NRC
5/27/04	5/28/04	2			000789

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.)*
2.3 Ci 60Co sealed source, Mfr by Brookhaven Labs, 12" x 2" stainless steel annulus.

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	STATE	EXPIRATION DATE
	MD-27-061-01	MD	8/31/2007

19. CERTIFICATION *(MUST BE COMPLETED BY APPLICANT)*

I, THE UNDERSIGNED, HEREBY CERTIFY THAT:

a. All information in this report is true and complete.

b. 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.

c. 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.

d. 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.

e. 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)*	SIGNATURE	DATE
Timothy W. Osborne, CHP, CEO		5/21/2004

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)*	SIGNATURE	DATE	TOTAL USAGE – DAYS TO DATE
	E. Ullrich		5/25/04	2

NRC FORM 241 (7-1999) PRINTED ON RECYCLED PAPER

State of Maryland

DEPARTMENT OF THE ENVIRONMENT

RADIOLOGICAL HEALTH PROGRAM

RADIOACTIVE MATERIAL LICENSE

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.

1. Name: Ecology Services, Incorporated	**3. License No.:** MD-27-061-01
2. Address: 10220 Old Columbia Road, Suite F Columbia, Maryland 21046	**4. Amendment No.:** **11** Code (03223) **5. Expiration Date:** August 31, 2007

6. Radioactive material (element and mass number)	**7. Chemical and/or physical form**	**8. Maximum amount of activity which licensee may possess at any one time**
A. Any radioactive material	A. Any sealed source	A. As found in leak testing
B. Any radioactive material	B. Any	B. 50 millicuries, with no sample to exceed 1 millicurie
C. Plutonium-239	C. Sealed source (EIC model SD-3)	C. 0.005 microcuries
D. Strontium-90	D. Sealed source (EIC model SD-3)	D. 0.007 microcuries
E. Iodine-129	E. Sealed source (NEN model NES-9999)	E. 0.023 microcuries
F. Hydrogen-3	F. Sealed source (IPL#EAB003)	F. 4.970 microcuries
G. Iodine-129	G. Sealed source (IPL#EAB129)	G. 0.1055 microcuries
H. Carbon-14	H. Sealed source (IPL#EAB014)	H. 0.1086 microcuries
I. Silicon-32	I. Sealed source (IPL#EAB032)	I. 0.0255 microcuries
J. Nickel-63	J. Sealed source (IPL#EAB063)	J. 6.690 microcuries

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RADIOLOGICAL HEALTH PROGRAM

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License Number: MD-27-061-01	**Amendment Number: 11** (CODE 03223)	
K. Barium-133	K. Sealed source (IPL#EAB133)	K. 0.1063 microcuries
L. Lead-210	L. Sealed source (IPL#EAB210)	L. 0.1111 microcuries
M. Cesium-137	M. Sealed source (J.L Shepherd model 28-5A Calibrator)	M. 200 millicuries
N. Any radioactive material	N. Any	N. 50 millicuries
O. Any radioactive material	O. Any	O. 50 Curies

LICENSE CONDITIONS

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

   A. Leak testing services for sealed sources and devices which contain such sources.

   B. For evaluation of samples of soil, ash, water effluent, biological contamination or type and/or quantity of radionuclides.

   C-L. Calibration standards for quality assurance and calibration of counting equipment and survey instruments.

   M. For calibration of survey instruments.

   N. For the performance of various services for other licensees at customer sites. The services include spill clean up, decontamination services, waste characterization and packaging.

   O. Ecology Services, Inc. will package and/or pick up and receive radioactive materials from persons and companies authorized to possess and dispose of such materials. The storage time will not exceed one (1) week for packages to be transferred to other processors to licensed burial sites. Ecology Services, In. will serve as a broker for the processing or disposal of these materials for transporting and transferring such materials to properly licensed processors or burial sites.

License Number: MD-27-061-01	Amendment Number: 11 (CODE 03223)

LICENSE CONDITIONS, CONTINUED

10. The authorized place of use is the licensee's address stated in Item 2 **and 10220 Old Columbia Road, Suite I, Columbia, Maryland 21046**. 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 Timothy W. Osborne, CHP.

11B. Radioactive material shall be used by, or under the supervision of :

Authorized User	Type and Quantity of Licensed Material to be Used
Timothy W. Osborne, CHP	Items 6A through 6O
Kalliope Kelepesis	Items 6A through 6O
Brenda J. Klug	Items 6A, 6B, 6N, 6O
Paul A. Stokely	Items 6A, 6B, 6N, 6O
Gregory E. Keck	Items 6A, 6B, 6N, 6O
Joseph A. Voegtli, RRPT	Items 6A, 6B, 6N, 6O
J. Scott Bradley	Items 6A through 6O
Gregory M. Howett	Items 6A through 6O

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.

License Number: MD-27-061-01	Amendment Number: 11 (CODE 03223)

LICENSE CONDITIONS, CONTINUED

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, 1800 Washington Boulevard, Suite 750, Baltimore, Maryland 21230, describing the equipment involved, the test results, and the corrective action taken.

13E. Test for leakage and/or contamination shall be performed by. or by other persons specifically authorized by the Department, the U.S. Nuclear Regulatory Commission or another Agreement State to perform such services.

13F. Notwithstanding the periodic leak test required by this condition, any licensed sealed source is exempt from such leak tests when the source contains 100 microcuries or less beta and/or gamma emitting material or 10 microcuries or less of alpha emitting material.

13G. Except for alpha sources, the periodic leak test required by this condition does not apply to sealed sources that are stored and not being used. The sources excepted from this test shall be tested for leakage prior to any use or transfer to another person unless they have been tested within six months prior to the date of use or transfer.

14. Sealed sources shall not be opened.

15. 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.

16. Food and beverage containers shall not be discarded in radioactive or normal trash containers in licensee's areas utilizing radioactive materials.

State of Maryland

DEPARTMENT OF THE ENVIRONMENT

RADIOLOGICAL HEALTH PROGRAM

RADIOACTIVE MATERIAL LICENSE

License Number: MD-27-061-01	**Amendment Number: 11** (CODE 03223)

LICENSE CONDITIONS, CONTINUED

17A. 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.

17B. 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.

18. 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:

- Renewal application dated March 22, 2002
- Letter and attachments dated June 19, 2002
- Two facsimiles dated July 2, 2002
- **Letter with attachments dated December 19, 2003**

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

Roland G. Fletcher

January 8, 2004

Roland G. Fletcher
Radiological Health Program Manager

BJP 1/8/04

RF 1/14/04