

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

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

*(Please read the instructions before completing this form)*

**APPROVED BY OMB: NO. 3160-0013** **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 Et), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to b1e1@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-d013), 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)  
**EA ENGINEERING SCIENCE AND TECHNOLOGY**

2. TYPE OF REPORT  
 INITIAL  REVISION  CLARIFICATION

3. ADDRESS OF LICENSEE (Mailing address or other location where licensee may be located)  
**15 LOVETON CIRCLE  
 SPARKS, MD 21152.**

4. LICENSEE CONTACT AND TITLE  
**Christy S. Parks, B.S.O.**

5. TELEPHONE NUMBER (Include Area Code)  
**410 771 4950**

6. FACSIMILE NUMBER (Include Area Code)  
**410 771 4204**

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  
**U.S. Army Corps of Engineers  
 BALTIMORE DISTRICT  
 CITY CRESCENT BUILDING  
 10 SOUTH HOWARD STREET  
 BALTIMORE, MD 21201  
 Attn: Ed YAKUSHEV**

9. ACTUAL PHYSICAL ADDRESS OF WORK LOCATION (Street and Number or other location. Give as complete an address or directions as possible.)  
**Vicinity of St. Georges Bridge, New Castle County, Delaware. On-site XRF OPERATOR is Mr. Mark ROSTAFIN**

10. CLIENT TELEPHONE NUMBER (Include Area Code)  
**410-962-6727**

11. WORK LOCATION TELEPHONE NUMBER (Include Area Code)  
**410-627-1734**

12. DATES SCHEDULED		13. NUMBER OF WORK DAYS	14. ADD	15. DELETE	16. LOCATION REFERENCE NUMBER
FROM	TO				NUMBER TO BE ASSIGNED BY NRC
May 22, 2002	June 28, 2002	30			000155

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

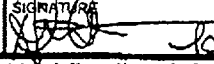
17. LIST RADIOACTIVE MATERIAL WHICH WILL BE POSSESSED, USED, INSTALLED, SERVICED, OR TESTED (Include description of type and quantity of radioactive material, sealed sources, or devices to be used.)  
**Cadmium-109 sealed source (ISOTOPE PRODUCTS XFB SERIES CAPSULE 3005)  
 NO SOURCE TO EXCEED 10 millicuries. DEVICE USED: Niton 700 SERIES**

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-05-1A-01	MD	3/31/2006


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) **Christy S. Parks, B.S.O.** SIGNATURE  DATE **5/15/02**

**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)	SIGNATURE	DATE	TOTAL USAGE - DAYS TO DATE
	<b>John D. Kimema</b>		<b>5-21-2002</b>	<b>106</b>



# MARYLAND DEPARTMENT OF THE ENVIRONMENT

2500 Broening Highway • Baltimore, Maryland 21224

(410) 631-3000 • 1-800-633-6101 • <http://www.mde.state.md.us>

Parris N. Glendening  
Governor

Jane T. Nishida  
Secretary

APR 26 2002

Christy Shannon Parks, Radiation Safety Officer  
EA Engineering Science and Technology  
15 Loveton Circle  
Sparks MD 21152

**RE: Radioactive Material License #MD-05-179-01**

Dear Ms. Parks:

Your requested amendment to radioactive materials license number **MD-05-179-01** is enclosed. Please review it carefully to ensure that it reflects all modifications included in your facsimile received in this office on April 5, 2002.

Should you require further assistance, please contact Messrs. Carl E. Trump Jr. or Raymond E. Manley at (410) 631-3301. You may also reach our office toll-free (in Maryland only) by dialing 1-800-633-6101 and requesting extension 3301. Also, you may contact this office via facsimile at (410) 631-3198.

Sincerely,

Roland G. Fletcher, Program Manager III  
Radiological Health Program

*RG*  
RGF/REM/NAO/cc

Enclosures: License amendment (02)  
Code (03126)



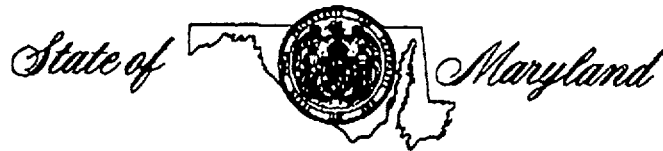
**DEPARTMENT OF THE ENVIRONMENT  
RADIOLOGICAL HEALTH PROGRAM  
RADIOACTIVE MATERIAL LICENSE**

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.

<p><b>1. Name:</b> EA Engineering Science and Technology</p> <p><b>2. Address:</b> 15 Loveton Circle Sparks, Maryland 21152</p>	<p><b>3. License No.:</b> MD-05-179-01</p> <p><b>4. Amendment No.:</b> 02 Code (03126)</p> <p><b>5. Expiration Date:</b> March 31, 2006</p>
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<p><b>6. Radioactive material (element and mass number)</b></p> <p>A. Cadmium-109</p> <p>B. Nickel-63</p> <p>C. Nickel-63</p>	<p><b>7. Chemical and/or physical form</b></p> <p>A. Sealed Source (Isotope Products XFB Series Capsule 3205)</p> <p>B. Sealed Source (Photovac 200155)</p> <p>C. Sealed Source (Varian 3380)</p>	<p><b>8. Maximum amount of activity which licensee may possess at any one time</b></p> <p>A. No source to exceed 10 millicuries</p> <p>B. No source to exceed 15 millicuries</p> <p>C. No source to exceed 15 millicuries</p>
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- 9. Authorized Use(s):**
- A. For use in NITON Model XL-309 and XL700 Series X-Ray Fluorescence Analyzer to measure lead in paint in situ.
  - B. For used in Photovac Voyager Portable Digital Gas Chromatograph to analyze samples.
  - C. For use in portable digital gas chromatograph to analyze soil, ground water and air samples.



DEPARTMENT OF THE ENVIRONMENT  
RADIOLOGICAL HEALTH PROGRAM  
RADIOACTIVE MATERIAL LICENSE

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License Number: MD-05-179-01

Amendment Number: 02 (CODE 03126)

LICENSE 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 Christy Shannon Parks.
- 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.



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RADIOLOGICAL HEALTH PROGRAM  
RADIOACTIVE MATERIAL LICENSE

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License Number: MD-05-179-01

Amendment Number: 02 (CODE 03126)

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, 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.
- 14A. Each chromatography detector containing Nickel-63 shall be tested for leakage and/or contamination at intervals not to exceed six months. In the absence of a certificate from a transferor indicating that a test has been made within six months prior to the transfer, the detector shall not be put into use until tested.
- 14B. 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 surfaces of the device in which the foil is mounted or stored on which one might expect contamination to accumulate. Records of leak test results shall be kept in units of microcuries and maintained for inspection by the Department.
- 14C. If the test reveals the presence of 0.005 microcurie or more of removable contamination, the licensee shall immediately withdraw the foil 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 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.
- 14D. 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.
15. Sealed sources containing radioactive material shall not be opened or removed from their respective source holders by the licensee.



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

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License Number: MD-05-179-01

Amendment Number: 02 (CODE 03126)

**CONDITIONS CONTINUED**

16. Maintenance and repair of devices containing radioactive material and installation, replacement, and disposal of sealed sources shall be performed by NITON, Photovac or by other persons specifically authorized by the Department, the U.S. Nuclear Regulatory Commission or another Agreement State to perform such services.
17. 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.
18. 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.
- 19A. 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.
- 19B. 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**

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License Number: MD-05-179-01

Amendment Number: 02 (CODE 03126)

CONDITIONS CONTINUED

20. 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:

1. application dated August 28, 2000.
2. facsimile dated May 3, 2001
3. facsimiles dated April 5, 2002

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

April 12, 2002

Roland G. Fletcher  
Radiological Health Program Manager III

NAO  
NAO 4/12/2002  
RGA 4/12/2002  
P.07/08