

**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)

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

**2. TYPE OF REPORT**  
☒ INITIAL ☐ REVISION ☐ CLARIFICATION

**3. ADDRESS OF LICENSEE (Mailing address or other location where licensee may be located)**  
2219 Plantside Drive  
Louisville, KY 40299

**4. LICENSEE CONTACT AND TITLE**  
Michael C. Ronayne, VP  
Radiation Safety Officer

**5. TELEPHONE NUMBER (Include Area Code)**  
(502) 493-7100

**6. FACSIMILE NUMBER (Include Area Code)**  
(502) 493-8190

**7. ACTIVITIES TO BE CONDUCTED UNDER THE GENERAL LICENSE GIVEN IN 10 CFR 150.20**  
☐ WELL LOGGING ☐ LEAK TESTING AND/OR CALIBRATIONS ☐ TELETHERAPY/RADIATOR SERVICE  
☒ PORTABLE GAUGES ☐ OTHER (Specify) ☐ RADIOGRAPHY ☐ REGISTERED AS USER OF PACKAGING (CERTIFICATES OF COMPLIANCE NUMBERS)

**8. CLIENT NAME, ADDRESS, CITY/COUNTY, STATE, ZIP CODE**  
Intersteel, inc.  
P.O. Box 4206  
Lexington, KY. 40503  
Attn: Jeff Dowell

**9. ACTUAL PHYSICAL ADDRESS OF WORK LOCATION (Street and Number or other location. Give as complete an address or direction as possible.)**  
West Harrison St. approximately  
2 1/2 miles south of Stansifer Ave.  
in Clarksville, IN.

**10. CLIENT TELEPHONE NUMBER (Include Area Code)**  
(262) 703-1588

**11. WORK LOCATION TELEPHONE NUMBER (Include Area Code)**  
(507) 727-8918

**12. DATES SCHEDULED**  
FROM 8-14-03 TO 12-31-03

**13. NUMBER OF WORK DAYS**  
180

**14. ADD**

**15. DELETE**

**16. LOCATION REFERENCE NUMBER**  
NUMBER TO BE ASSIGNED BY NRC  
000 947

**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 (Indicate description of type and quantity of radioactive material, sealed sources, or devices to be used.)**  
Moisture/density gauges containing no more than 10mCi Cs-137 and 50mCi Am-241: Be per single source

**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 17 ABOVE. (Four copies of the specific license must accompany the initial NRC Form 241.)**

**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)**  
Michael C. Ronayne, RSO

**SIGNATURE**  
Michael C. Ronayne

**DATE**  
8-14-03

**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)**  
David J. Collins, Health Physicist

**SIGNATURE**  
David J. Collins

**DATE**  
8/14/2003

**TOTAL USAGE - DAYS TO DATE**  
140

**NRC FORM 241 (7-1999)**  
Division of Nuclear Materials Safety  
USNRC Region II

**PRINTED ON RECYCLED PAPER**

USNRC Region II - Atlanta GA FAX (404) 562-4723 VERIFY (404) 562-4723

CABINET FOR HEALTH SERVICES  
COMMONWEALTH OF KENTUCKY  
RADIOACTIVE MATERIAL LICENSE**RECEIVED APR 17 2003**

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## 1. LICENSEE AND 2. ADDRESS

GEM ENGINEERING, INC.  
2219 PLANTSIDE DRIVE  
LOUISVILLE, KY 40299ATTENTION: G.T. "JERRY" VANDEVELDE, PRESIDENT  
TELEPHONE: 502-493-7100

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PURSUANT TO KRS 211.842 ET SEQ., THE KENTUCKY CABINET FOR HUMAN RESOURCES REGULATIONS, 902 KAR 100, AND IN RELIANCE ON STATEMENTS AND REPRESENTATIONS HERETOFORE MADE BY THE LICENSEE, A LICENSE IS HEREBY ISSUED TO RECEIVE, ACQUIRE, OWN, POSSESS AND TRANSFER RADIOACTIVE MATERIAL LISTED BELOW; AND TO USE SUCH RADIOACTIVE MATERIAL FOR THE PURPOSE(S) AND AT THE PLACE(S) DESIGNATED BELOW. THIS LICENSE IS SUBJECT TO ALL APPLICABLE RULES, REGULATIONS, AND ORDERS OF THE CABINET FOR HEALTH SERVICES, NOW OR HEREINAFTER IN EFFECT AND TO ANY CONDITIONS SPECIFIED BELOW.

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3. LICENSE NUMBER: 201-642-51  
AMENDMENT NO. 3

4. EXPIRATION DATE: APRIL 30, 2004

5. REVIEWER: 44

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6. LICENSED MATERIAL	7. FORM	8. POSSESSION LIMIT
A. AMERICIUM 241	A. SEALED SOURCE (TROXLER DRAWING #A-102451)	A. NO SINGLE SOURCE TO EXCEED 44 MILLI- CURIES
B. CESIUM 137	B. SEALED SOURCE (TROXLER DRAWING #A-102112)	B. NO SINGLE SOURCE TO EXCEED 9 MILLI- CURIES
C. AMERICIUM 241	C. SEALED SOURCE (CPN MODEL 131)	C. NO SINGLE SOURCE TO EXCEED 50 MILLI- CURIES

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D. CESIUM 137

D. SEALED SOURCE  
(CPN MODEL 131)D. NO SINGLE SOURCE TO  
EXCEED 10 MILLI-  
CURIES

## 9. AUTHORIZED USE

~~A. AND B. TO BE USED IN TROXLER MODEL 3400 SERIES MOISTURE/DENSITY GAUGE TO MEASURE PROPERTIES OF CONSTRUCTION MATERIALS.~~

A. AND B. TO BE USED IN TROXLER MODEL 3400 SERIES MOISTURE/DENSITY GAUGE TO MEASURE PROPERTIES OF CONSTRUCTION MATERIALS.

C. AND D. TO BE USED IN CAMPBELL PACIFIC NUCLEAR INC. MODEL MC SERIES MOISTURE/DENSITY GAUGES TO MEASURE PROPERTIES OF CONSTRUCTION MATERIALS.

## CONDITIONS:

10. THE LICENSEE SHALL COMPLY WITH THE PROVISIONS OF THE KENTUCKY CABINET FOR HEALTH SERVICES ADMINISTRATIVE RADIATION REGULATIONS, 902 KAR 100.

11. RADIOACTIVE MATERIAL MAY BE STORED AT:  
SAME AS ITEM #2.

RADIOACTIVE MATERIAL MAY BE USED AT TEMPORARY JOB SITES, IN AREAS NOT UNDER EXCLUSIVE FEDERAL JURISDICTION, ANYWHERE IN THE COMMONWEALTH OF KENTUCKY WHERE THE CABINET MAINTAINS JURISDICTION FOR REGULATING THE USE OF RADIOACTIVE MATERIAL. (THIS CONDITION DOES NOT PROHIBIT USE IN OTHER STATES UNDER RECIPROCITY PRIVILEGES WHICH MAY BE GRANTED BY THE REGULATORY AGENCY HAVING JURISDICTION.)

12. RADIOACTIVE MATERIAL SHALL BE USED BY, OR UNDER THE DIRECT SUPERVISION AND IN THE PHYSICAL PRESENCE OF:

JAMES G. ALEXANDER  
JAMES W. BREWER  
MELISA DAUMEN  
CHRISTY GARRETT

JOHN NEAL  
MICHAEL C. RONAYNE  
RICHARD L. TINGLE  
G.T. VANDEVELDE

13. THE RADIATION SAFETY OFFICER FOR THE ACTIVITIES AUTHORIZED BY THIS LICENSE IS MICHAEL RONAYNE .

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14. THIS LICENSEE IS AUTHORIZED TO COLLECT LEAK TEST SAMPLES IN ACCORDANCE WITH THE PROCEDURES DESCRIBED IN THE LICENSEE'S APPLICATION DATED APRIL 3, 2000 FOR ANALYSIS BY PACIFIC NUCLEAR TECHNOLOGY .  
ALTERNATIVELY, LEAK TEST SAMPLES MAY BE COLLECTED AND/OR ANALYZED BY OTHER PERSONS SPECIFICALLY AUTHORIZED BY THE CABINET, U.S. NUCLEAR REGULATORY COMMISSION OR AN AGREEMENT STATE.
15. SEALED SOURCES CONTAINING RADIOACTIVE MATERIAL SHALL NOT BE OPENED OR REMOVED FROM THEIR RESPECTIVE SOURCE HOLDERS BY THE LICENSEE.
16. ANY CLEANING, MAINTENANCE OR REPAIR OF THE GAUGE(S) INVOLVING REMOVAL OF THE SOURCE ROD FROM THE DEVICES OR REMOVAL OR DISMANTLING OF SHIELDING SHALL BE PERFORMED ONLY BY THE MANUFACTURER OR BY OTHER PERSONS SPECIFICALLY AUTHORIZED BY THE CABINET, THE U.S. NUCLEAR REGULATORY COMMISSION OR AN AGREEMENT STATE TO PERFORM SUCH SERVICES.
17. EACH PORTABLE GAUGE SHALL HAVE A LOCK OR OUTER LOCKED CONTAINER DESIGNED TO PREVENT UNAUTHORIZED OR ACCIDENTAL REMOVAL OF THE SEALED SOURCE FROM ITS SHIELDED POSITION. THE GAUGE OR ITS CONTAINER MUST BE LOCKED WHEN IN TRANSPORT, STORAGE OR WHEN NOT UNDER THE DIRECT SURVEILLANCE OF AN AUTHORIZED USER.
18. 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 FIVE (5) YEARS FROM THE DATE OF THE INVENTORY FOR INSPECTION BY THE CABINET, AND SHALL INCLUDE THE RADIONUCLIDES, QUANTITIES, MANUFACTURER'S NAME AND MODEL NUMBERS, LOCATION OF SEALED SOURCES, AND THE DATE OF THE INVENTORY.
19. THE LICENSEE MAY TRANSPORT RADIOACTIVE MATERIAL, OR DELIVER RADIOACTIVE MATERIAL TO A CARRIER FOR TRANSPORT, IN ACCORDANCE WITH THE PROVISIONS OF 902 KAR 100:070, AND OTHER DEPARTMENTS OF THE COMMONWEALTH OF KENTUCKY HAVING JURISDICTION.
20. IN ADDITION TO THE POSSESSION LIMITS IN ITEM 8, THE LICENSEE SHALL FURTHER RESTRICT THE POSSESSION OF RADIOACTIVE MATERIAL TO QUANTITIES BELOW THE MINIMUM LIMIT SPECIFIED IN 902 KAR 100:042, SECTION 11, FOR ESTABLISHING DECOMMISSIONING FINANCIAL ASSURANCE.

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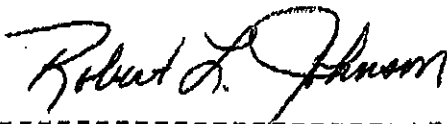
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21. EXCEPT AS SPECIFICALLY PROVIDED OTHERWISE IN THIS LICENSE, THE LICENSEE SHALL CONDUCT ITS PROGRAM IN ACCORDANCE WITH THE STATEMENTS, REPRESENTATIONS, AND PROCEDURES CONTAINED IN THE DOCUMENTS, INCLUDING ANY ENCLOSURES, LISTED BELOW. THE CABINET FOR HEALTH SERVICES REGULATIONS, 902 KAR 100, SHALL GOVERN UNLESS STATEMENTS, REPRESENTATIONS, AND PROCEDURES IN THE LICENSEE'S APPLICATION AND CORRESPONDENCE ARE MORE RESTRICTIVE THAN THE REGULATION.

A. APPLICATION DATED APRIL 3, 2000, SIGNED BY G.T. VANDEVELDE, P.E., PRESIDENT.

B. LETTERS DATED:

1. APRIL 17, 2000, SIGNED BY MICHAEL C. RONAYNE, P.E., VICE-PRESIDENT.
2. APRIL 19, 2000, FAX FROM MICHAEL C. RONAYNE, P.E., VICE-PRESIDENT.
3. APRIL 26, 2000, SIGNED BY MICHAEL C. RONAYNE, P.E., VICE-PRESIDENT.



MANAGER  
RADIATION HEALTH & TOXIC  
AGENTS BRANCH

MARCIA R. MORGAN

SECRETARY  
CABINET FOR HEALTH SERVICES

DATE ISSUED APRIL 15, 2003