NRC FORM 591M PART 1
(10-2003) 10 CFR 2.201

U.S. NUCLEAR REGULATORY COMMISSION

SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION

1. LICENSEE/LOCATION INSPECTED:	2. NRC/REGIONAL OFFICE
High Energy Devices, LLC 26 Hollenberg Court Bridgeton, Missouri 63044 **REPORT NUMBER(S)** 2009-001, 2009-001	**Region III** **U.S. Nuclear Regulatory Commission** **2443 Warrenville Road, Suite 210** **Lisle, Illinois 60532-4351**

3. DOCKET NUMBER(S)	4. LICENSEE NUMBER(S)	5. DATE(S) OF INSPECTION
030-32563, 030-33623	24-26366-01, 24-26366-02E	Sept. 22, 2009

LICENSEE:

The inspection was an examination of the activities conducted under your license as they relate to radiation safety and to compliance with the Nuclear Regulatory Commission (NRC) rules and regulations and the conditions of your license. The inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observations by the inspector. The inspection findings are as follows:

- [x] 1. Based on the inspection findings, no violations were identified.
- [ ] 2. Previous violation(s) closed.
- [ ] 3. The violation(s), specifically described to you by the inspector as non-cited violations, are not being cited because they were self-identified, non-repetitive, and corrective action was or is being taken, and the remaining criteria in the NRC Enforcement Policy, NUREG-1600, to exercise discretion, were satisfied.

_____ Non-Cited Violation(s) was/were discussed involving the following requirement(s) and Corrective Action(s):

- [ ] 4. During this inspection certain of your activities, as described below and/or attached, were in violation of NRC requirements and are being cited. This form is a NOTICE OF VIOLATION, which may be subject to posting in accordance with 10 CFR 19.11.
(Violations and Corrective Actions)

Licensee's Statement of Corrective Actions for Item 4, above.

I hereby state that, within 30 days, the actions described by me to the inspector will be taken to correct the violations identified. This statement of corrective actions is made in accordance with the requirements of 10 CFR 2.201 (corrective steps already taken, corrective steps which will be taken, date when full compliance will be achieved). I understand that no further written response to NRC will be required, unless specifically requested.

Title	Printed Name	Signature	Date
LICENSEE'S REPRESENTATIVE			
NRC INSPECTOR	Geoffrey M. Warren	Geoff Warren	9/22/09

NRC FORM 591M PART 3
(10-2003) 10 CFR 2.201

Docket File Information

U.S. NUCLEAR REGULATORY COMMISSION

SAFETY INSPECTION REPORT AND COMPLIANCE INSPECTION

1. LICENSEE High Energy Devices, LLC REPORT NUMBER(S) 2009-001, 2009-001	2. NRC/REGIONAL OFFICE **NRC Region III** **2443 Warrenville Road, Suite 210** **Lisle, Illinois 60532-4351**

3. DOCKET NUMBER(S) 030-32563, 030-33623	4. LICENSE NUMBER(S) 24-26366-01, 24-26366-02E	5. DATE(S) OF INSPECTION Sept. 22, 2009
6. INSPECTION PROCEDURES USED 87125	7. INSPECTION FOCUS AREAS 03.01 – 03.07; 03.01 – 03.07	

SUPPLEMENTAL INSPECTION INFORMATION

1. PROGRAM CODE(S) 03214, 03251	2. PRIORITY 5	3. LICENSEE CONTACT Michael C. Brower, RSO	4. TELEPHONE NUMBER 314-291-0036

[X] Main Office Inspection — Next Inspection Date: Sept. 2014

[ ] Field Office

[ ] Temporary Job Site Inspection

PROGRAM SCOPE

The licensee was a small company located in Bridgeton, Missouri, which manufactured and distributed gas discharge tubes (spark gaps), used to protect electronics for medical, military, transportation, and other equipment. The licensee employed four full-time and one part-time personnel in the production of the spark gaps, each unit containing less than 1 µCi of cesium-137 (Cs-137), nickel-63 (Ni-63), or krypton-85 (Kr-85). Approximately 1/3 of the units sold contained radioactive material. The licensee had ceased producing units with Cs-137, though they still possessed and distributed remaining stock. Since the last inspection, the licensee had moved to a new facility, which was consistent with maps provided to NRC for the license amendment. Licensee did not perform bioassays on personnel, and had performed an adequate evaluation to determine that bioassays were not needed. The company was open Monday through Thursday only.

The spark gaps were distributed as exempt distribution devices and shipped as excepted packages – instruments and articles. Each unit was marked as containing radioactive material, including the isotope. Packages containing the units were also marked as containing radioactive material. The licensee provided reports to NRC as requested, at intervals not exceeding five years, concerning the quantities of spark gaps shipped under the exempt distribution license; the most recent report submitted covered distributions in calendar year 2007.

Performance Observations

The inspector toured production and storage areas, including all areas where licensed material was used. Licensee personnel described the receipt and preparation of licensed material, tracking, packaging, and shipment of the spark gaps, and survey meter checks, and demonstrated the addition of Ni-63 and Kr-85 to spark gaps in production. All licensed materials were secured while unattended. Interviews with licensee personnel indicated adequate knowledge of radiation safety procedures and concepts. Surveys indicated radiation levels consistent with licensee postings and survey records.