

NRC FORM 313

(01-2020)
10 CFR 30, 32,
33, 34, 35, 36,
37, 39, and 40



U.S. NUCLEAR REGULATORY COMMISSION

APPLICATION FOR
MATERIALS LICENSE

APPROVED BY OMB: NO. 3150-0120

EXPIRES: 01/31/2023

Estimated burden per response to comply with this mandatory collection request: 4.3 hours. Submittal of the application is necessary to determine that the applicant is qualified and that adequate procedures exist to protect the public health and safety. Send comments regarding burden estimate to the Information Services Branch (T-6 A10M), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by e-mail to Infocollects.Resource@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0120), 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.

INSTRUCTIONS: SEE THE CURRENT VOLUMES OF THE NUREG-1556 TECHNICAL REPORT SERIES ("CONSOLIDATED GUIDANCE ABOUT MATERIALS LICENSES") FOR DETAILED INSTRUCTIONS FOR COMPLETING THIS FORM: <http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1556/>. SEND TWO COPIES OF THE COMPLETED APPLICATION TO THE NRC OFFICE SPECIFIED BELOW.

APPLICATION FOR DISTRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH:

MATERIALS SAFETY LICENSING BRANCH
DIVISION OF MATERIAL SAFETY, STATE, TRIBAL AND RULEMAKING PROGRAMS
OFFICE OF NUCLEAR MATERIALS SAFETY AND SAFEGUARDS
U.S. NUCLEAR REGULATORY COMMISSION
WASHINGTON, DC 20555-0001

ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS:

IF YOU ARE LOCATED IN:

ALABAMA, CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, FLORIDA,
GEORGIA, KENTUCKY, MAINE, MARYLAND, MASSACHUSETTS, NEW HAMPSHIRE,
NEW JERSEY, NEW YORK, NORTH CAROLINA, PENNSYLVANIA, PUERTO RICO,
RHODE ISLAND, SOUTH CAROLINA, TENNESSEE, VERMONT, VIRGINIA, VIRGIN
ISLANDS, OR WEST VIRGINIA,

SEND APPLICATIONS TO:

LICENSING ASSISTANCE TEAM
DIVISION OF NUCLEAR MATERIALS SAFETY
U.S. NUCLEAR REGULATORY COMMISSION, REGION I
2100 RENAISSANCE BOULEVARD, SUITE 100
KING OF PRUSSIA, PA 19406-2713

IF YOU ARE LOCATED IN:

ILLINOIS, INDIANA, IOWA, MICHIGAN, MINNESOTA, MISSOURI, OHIO, OR WISCONSIN, SEND
APPLICATIONS TO:

MATERIALS LICENSING BRANCH
U.S. NUCLEAR REGULATORY COMMISSION, REGION III
2443 WARRENVILLE ROAD, SUITE 210
LISLE, IL 60532-4352

IF YOU ARE LOCATED IN:

ALASKA, ARIZONA, ARKANSAS, CALIFORNIA, COLORADO, HAWAII, IDAHO, KANSAS,
LOUISIANA, MISSISSIPPI, MONTANA, NEBRASKA, NEVADA, NEW MEXICO, NORTH
DAKOTA, OKLAHOMA, OREGON, PACIFIC TRUST TERRITORIES, SOUTH DAKOTA, TEXAS,
UTAH, WASHINGTON, OR WYOMING,

SEND APPLICATIONS TO:

NUCLEAR MATERIALS LICENSING BRANCH
U.S. NUCLEAR REGULATORY COMMISSION, REGION IV
1600 E. LAMAR BOULEVARD
ARLINGTON, TX 76011-4511

PERSONS LOCATED IN AGREEMENT STATES SEND APPLICATIONS TO THE U.S. NUCLEAR REGULATORY COMMISSION ONLY IF THEY WISH TO POSSESS AND USE LICENSED MATERIAL IN STATES SUBJECT TO U.S. NUCLEAR REGULATORY COMMISSION JURISDICTIONS.

1. THIS IS AN APPLICATION FOR (Check appropriate item)

- ☒ A. NEW LICENSE
☐ B. AMENDMENT TO LICENSE NUMBER _____
☐ C. RENEWAL OF LICENSE NUMBER _____

2. NAME AND MAILING ADDRESS OF APPLICANT (Include zip code)

Jason M. Cook
Howard Industries, Inc.
PO Box 1588, Laurel, MS 39441

3. ADDRESS WHERE LICENSED MATERIALS WILL BE USED OR POSSESSED

Howard Industries, Inc.
2778 Simpson Hwy 49
Mendenhall, MS 39114

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

Abhishek K. Singh

BUSINESS TELEPHONE NUMBER
601-422-0033

BUSINESS CELLULAR TELEPHONE NUMBER

BUSINESS E-MAIL ADDRESS
asingh@Howard.com

SUBMIT ITEMS 5 THROUGH 11 ON 8-1/2 X 11" PAPER. THE TYPE AND SCOPE OF INFORMATION TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE.

5. RADIOACTIVE MATERIAL

a. Element and mass number; b. chemical and/or physical form; and c. maximum amount
which will be possessed at any one time.

6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED.

7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING AND
EXPERIENCE.

8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS.

9. FACILITIES AND EQUIPMENT.

10. RADIATION SAFETY PROGRAM.

11. WASTE MANAGEMENT.

12. LICENSE FEES (Fees required only for new applications, with few exceptions*)

(See 10 CFR 170 and Section 170.31)

*Amendments/Renewals that increase the scope of the existing license to a new or higher fee category will require a fee.

FEE
CATEGORY

2-C & 3-I

AMOUNT
ENCLOSED \$

15,900.00

PER THE DEBT COLLECTION IMPROVEMENT ACT OF 1996 (PUBLIC LAW 104-134), YOU ARE REQUIRED TO PROVIDE YOUR TAXPAYER IDENTIFICATION NUMBER. PROVIDE THIS INFORMATION BY COMPLETING NRC FORM 531: <https://www.nrc.gov/reading-rm/doc-collections/forms/nrc531info.html>.

13. CERTIFICATION. (Must be completed by applicant) THE APPLICANT UNDERSTANDS THAT ALL STATEMENTS AND REPRESENTATIONS MADE IN THIS APPLICATION ARE BINDING UPON THE APPLICANT.

THE APPLICANT AND ANY OFFICIAL EXECUTING THIS CERTIFICATION ON BEHALF OF THE APPLICANT, NAMED IN ITEM 2, CERTIFY THAT THIS APPLICATION IS PREPARED IN CONFORMITY WITH TITLE 10, CODE OF FEDERAL REGULATIONS, PARTS 30, 32, 33, 34, 35, 36, 37, 39, AND 40, AND THAT ALL INFORMATION CONTAINED HEREIN IS TRUE AND CORRECT TO THE BEST OF THEIR KNOWLEDGE AND BELIEF.

WARNING: 18 U.S.C. SECTION 1001 ACT OF JUNE 25, 1948 62 STAT. 749 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.

CERTIFYING OFFICER - TYPED/PRINTED NAME AND TITLE

Jason M. Cook, VP of Purchasing

SIGNATURE

DATE

5/17/21

FOR NRC USE ONLY

TYPE OF FEE	FEE LOG	FEE CATEGORY	AMOUNT RECEIVED	CHECK NUMBER	COMMENTS
			\$		
APPROVED BY				DATE	

HOWARDTM

LIGHTING PRODUCTS

a Division of Howard Industries, Inc.

Howard Lighting Products * 580 Eastview Drive * Laurel, MS 39440 * 800-956-3456 * Fax: 601-422-1652

www.howardlightingproducts.com

Ms. Shirley Xu
Nuclear Materials Licensing Branch
U.S. Nuclear Regulatory Commission, Region IV
1600 E. Lamar Boulevard,
Arlington, TX 76011-4511

Re: Application for Exempt Distribution License; new license

Dear Ms. Xu,

Enclosed is NRC Form 313, Howard Lighting Products', a division of Howard Industries, Inc. ("Howard") application for exempt distribution license, in order for Howard to continue to distribute products (metal halide and ceramic metal halide high intensity discharge lamps) containing Thorium and Krypton-85.

Howard does not manufacture metal halide lamps; we source them from domestic and international manufacturers. Our role is purely in distribution and sales of said lamps (not manufacturing), each containing an activity level of Kr-85 ranging from 0.0077 to 0.2 micorcuries (μCi). Two electrodes in inner arc-tube of metal halide lamps are Thorium and Tungsten mixture alloy. This data is based solely on information provided to Howard by the manufacturers. The lamps contain a sealed arc tube in which Kr-85 is pre-mixed with small amounts of argon gas inside the arc tube. The Kr-85 is used to improve ionization and starting of the lamp. Our U.S. customers are commercial distributors, and the metal halide lamps are generally used in commercial/industrial applications (i.e., not by the general public).

Below are responses requested in the form.

Items 1-4: Filled directly on the NRC form 313.

Item 5. Radioactive Material

- a. Element and Mass Number Kr-85, and Thorium (natural)
- b. Chemical and/or Physical Form Kr-85 gas (diluted in Argon); Thorium/tungsten alloy is used for arc tubes
- c. Maximum activity in each source ≤ 0.2 microcurie per lamp;

We have a radioactive material possession license for Kr-85 # MS-1115-01 with State of MS (**20mCi total.**)

Item 6. Purpose for which licensed material will be possessed and used

The purpose is distribution of bulbs containing gaseous krypton glass tubes to persons exempt from licensing pursuant to section 30.15, 10 CFR 30, or equivalent provisions of the

regulations of any Agreement State. We also assemble HID fixtures that would use these lamps.

Item 7. Individuals responsible for radiation safety program and their training and experience

RSO – Abhishek K. Singh

Abhishek Singh has been appointed as radiation safety officer (RSO) to ensure the safe use of radiation. Abhishek was awarded Ph.D. in Mechanical Engineering at Oklahoma State University, Stillwater, Oklahoma in 2009. He received basic training on handling radioactive materials during his graduate research program. RSO is responsible for managing the radiation protection program; identifying radiation protection problems; initiating, recommending, or providing corrective actions; verifying implementation of corrective actions; stopping unsafe activities; and ensuring compliance with regulations. RSO has been delegated the authority necessary to meet those responsibilities, including prohibiting the use of radioactive material by employees who do not meet the necessary requirements and shutting down operations where justified by radiation safety. RSO is required to notify management if staff do not cooperate and do not address radiation safety issues. In addition, RSO is free to raise issues with the Division of Radiological Health, Mississippi Department of Health at any time. It is estimated that RSO will spend ½ hours per week conducting radiation protection activities.

Authorized Users – N/A

Item 8: Training for Individuals working in or frequenting restricted areas

N/A

Item 9: Facilities and Equipment

N/A

Item 10: Radiation Safety Program

Audit Program – N/A

Radiation Monitoring Instruments – N/A

For Instrument Calibration – N/A

Material Receipt and Accountability – We will report inventory/distribution as needed by agreement state and federal authorities.

We will develop, implement, and maintain procedures for ensuring accountability of license materials at all times.

Physical inventories will be conducted at intervals not to exceed 6 months, to account for all sealed sources and devices received and possessed under the license. Records of inventory will be maintained for a period of 3 years from the date of each inventory and will include the radionuclides, quantities, manufacturer's name and model numbers, and the date of the inventory.

Public Dose – N/A

Item 11: Waste Management

If the breakage of a lamp containing the Krypton results in releasing the gas, the very small quantity present would quickly dissipate to the surrounding atmosphere and as a noble gas the Krypton would not react with anything, therefore leaving no residual radioactive contamination. For any potential inhalation hazard to exist, a large number of lamps would have to be broken at the same time, in an occupied, small and unventilated space, a very unlikely occurrence.

Small quantity damaged or broken lamps will be collected in a sturdy, lidded metal container for eventual shipment to a licensed waste processor or burial site for disposal. In case of an unlikely event where multiple lamp boxes get crushed, we will collect them in a sturdy, lidded metal container, and contact MSDH within 24 hours of the occurrence to review disposal strategy.

Item 12–13: Filled directly on the NRC form 313.

Sincerely,



Jason Cook
VP Purchasing