NRC FORM 313 (05-2022) 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 FOIA, Library, and Information Collections Branch (T-6 A10M), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by e-mail to Infocollects.Resource@nrc.gov, and the OMB Reviewer at: OMB Office of Information and Regulatory Affairs, (3150-0120), Attn: Desk Officer for the Nuclear Regulatory Commission, 725 17th Street NW, Washington, DC 20503; e-mail: oira_submission@omb.eop.gov. The NRC may not conduct or sponsor, and a person is not required to respond to, a collection of information unless the document requesting or requiring the collection displays a currently valid OMB control number.

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 AND TRIBAL LIAISON BRANCH
DIVISION OF MATERIALS SAFETY, SECURITY, STATE AND TRIBAL 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 RADIOLOGICAL SAFETY AND SECURITY
U.S. NUCLEAR REGULATORY COMMISSION, REGION I
475 ALLENDALE ROAD, SUITE 102
KING OF PRUSSIA, PA 19406-1415

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:

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 21-18491-01

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

Gosling Czubak Engineering Sciences, Inc.
1280 Business Park Drive
Traverse City, MI 49686-8607

3. ADDRESS WHERE LICENSED MATERIALS WILL BE USED OR POSSESSED

1280 Business Park Drive
Traverse City, MI 49686-8607

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

Bernie Jacobson

BUSINESS TELEPHONE NUMBER	BUSINESS CELLULAR TELEPHONE NUMBER
231.946.91911	231.357.0643

BUSINESS E-MAIL ADDRESS
bcjabobson@goslingczubak.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.

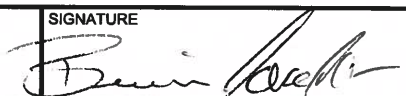
12. LICENSE FEES (Fees required only for new applications, with few exceptions*)
(See 10 CFR 170 and Section 170.31)
***Amendments/Renewals that increase the scope of the existing license to a new or higher fee category will require a fee.**

FEE CATEGORY [ ] AMOUNT ENCLOSED $ [ ]

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	SIGNATURE	DATE
Bernie Jacobson, RSO		5-26-22

FOR NRC USE ONLY

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

Gosling Czubak Engineering Sciences, Inc.
License Renewal #21-18491-01
Item 8 (amended 5/26/2022)

TROXLER

EMERGENCY PROCEDURES

1. In the event of physical damage to a gauge, the following steps must be taken:

    a) An area of 15 feet in radius from the gauge must be sealed or cordoned off to prevent entry by unauthorized persons.

    b) If a vehicle is involved, it must be moved until the extent of contamination (if any) to the vehicle is determined.

    c) Make a visual inspection of the gauge to determine whether any damage to the source housing or shield has been sustained.

    d) As soon as possible, after the situation has been stabilized and under control, notify Bernie Jacobson 231-357-0643 or 231-384-2984. Describe the present existing conditions and follow the instructions of the Radiation Safety Officer.

2. If Bernie Jacobson is not available, call Troxler Electronic Laboratories at (919) 549-9539 for emergency assistance (24 hours/day).

3. If the gauge is lost or stolen, the Radiation Safety Officer listed above is to be notified immediately.

INCIDENTS

An incident may be defined as an event where the gauge is lost, stolen or physically damaged to the extent that the source shielding is or could be compromised.

1. Occasionally, portable nuclear gauges are damaged at construction sites. Special care must be taken. In case of accident, the following steps are recommended:

    a) Partition off the area for 15 feet around the instrument in question. Do not allow personnel to enter or equipment to leave the area.

    b) If heavy equipment is involved, it must be contained long enough to verify it is not contaminated by using an instrument to measure radiation levels.

    c) The individual designated on the Radioactive Materials License, usually the Radiation Safety Officer, has the responsibility to notify the appropriate regulatory agency.

d) The instrument in question is NEVER TO BE LEFT UNATTENDED.

2. IN CASE THE GAUGE IS LOST OR STOLEN:

   Notify your Radiation Safety Officer as soon as possible, he will immediately notify the appropriate regulatory agency and gauge manufacturer.

3. IN CASE OF FIRE:

   a) Do not move damage containers; move undamaged containers out of fire zone.

   b) For small fires: Dry Chemical, CO2, water spray, or regular foam.

   c) For large fires: Water spray, fog (flooding amount).

4. IN CASE OF SPILLS OR LEAKS:

   a) Do not touch damaged containers or exposed contents.

   b) Damage to outer container may not affect primary inner container.

5. IF FIRST AID IS REQUIRED:

   a) Use first aid treatment according to the nature of the injury.

   b) Advise medical personnel that victim may be contaminated with low level radioactive material.

GOSLING CZUBAK ENGINEERING

Certified Users:

Bernie Jacobson
Dennis Fisk
Doug Krajnik
Joshua Cain
Brendan Holbrook

Gosling Czubak Engineering Sciences, Inc.
License Renewal #21-18491-01
Item 8 (amended 5/26/2022)

Troxler Nuclear Gauge Emergency Response Information Required For Transportation

1. Proper shipping name and Hazard Class:

   USA DOT 7A Type A
   RADIOACTIVE MATERIAL, TYPE A PACKAGE, SPECIAL FORM, UN 3332RQ
   RADIOACTIVE MATERIAL, TYPE A PACKAGE, UN2915

Potential Hazards

2. Immediate Hazards to Health
   - External radiation Hazard from unshielded radioactive material
   - Low-level radioactive material; little personal radiation hazard
   - Materials in Special Form are not expected to cause contamination in accidents
   - Commonly available instruments cannot detect some radioactive materials
   - Potential internal radiation hazard from inhalation, ingestion, or breaks in skin, only if special form source capsule is breached
3. Fire or Explosion
   - No Risk of fire or explosion
   - Radioactivity does not change flammability or other properties of the materials

EMERGENCY PHONE NUMBERS

TROXLER ELECTRONIC LABORATORIES	(919) 549-9539
BERNIE JACOBSON, RSO	(231) 357-0643
	(231) 384-2984

Suggested Format for Providing Information Requested in Items 5 through 11 of U.S. Nuclear Regulatory Commission Form 313

Items 5 and 6: Materials To Be Possessed and Proposed Uses

Yes	No	Radionuclide	Manufacturer or Distributor Model No.	Quantity	Use as Listed on SSD Registration Certificate	Specify Other Uses Not Listed on SSD Registration Certificate
X		Cesium-137	Gauge manufacturer (or distributor) and model number: 3400 Troxler	Specify activity per source and number of gauges requested.	Yes ☒ Specific description of the gauge use: Construction Testing	☒ Not applicable ❒ Uses are: (Submit safety analysis supporting safe use.)
X		Americium-241	Gauge manufacturer (or distributor) and model number: 3400 Troxler	Specify activity per source and number of gauges requested.	Yes ☒ Specific description of the gauge use: Construction Testing	☒ Not applicable ❒ Uses are: (Submit safety analysis supporting safe use.)

Yes	No	Radionuclide	Manufacturer or Distributor Model No.	Quantity	Use as Listed on SSD Registration Certificate	Specify Other Uses Not Listed on SSD Registration Certificate
	X	Californium-252	Gauge manufacturer (or distributor) and model number: _____	Specify activity per source and number of gauges requested. _____ _____	Yes ❒ Specific description of the gauge use: _____ _____ _____ _____ _____ _____ _____	❒ Not applicable _____ ❒ Uses are: _____ (Submit safety analysis supporting safe use.)
	X	Radium-226	Gauge manufacturer (or distributor) and model number: _____	Specify activity per source and number of gauges requested. _____ _____	Yes ❒ Specific description of the gauge use: _____	❒ Not applicable _____ ❒ Uses are: _____ (Submit safety analysis supporting safe use.)
	X	Other Isotope (Specify):	Gauge manufacturer (or distributor) and model number: _____	Specify activity per source and number of gauges requested. _____ _____	Yes ❒ Specific description of the gauge use: _____	❒ Not applicable _____ ❒ Uses are: _____ (Submit safety analysis supporting safe use.)
		Is financial assurance required? If yes, submit evidence of financial assurance.				

Items 7 through 11: Training and Experience, Facilities and Equipment, Radiation Safety Program, and Waste Disposal

Item No. and Title	Suggested Response	Yes	Alternative Procedures Attached
7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING AND EXPERIENCE—RADIATION SAFETY OFFICER Name: Bernie Jacobson	Documentation demonstrating the proposed radiation safety officer's training and experience (e.g., certificate of completion of the RSO's course and/or the authorized user's course).	Submit applicable documentation.	
8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS	Before using licensed materials, authorized users will have successfully completed one of the training courses described in the "Criteria" part of the section titled, "Training for Individuals Working in or Frequenting Restricted Areas" in NUREG–1556, Vol. 1, Rev. 2, "Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Portable Gauge Licenses."	☒	❒
9. FACILITIES AND EQUIPMENT	Provide a facility diagram for each permanent portable gauge storage location. Include on the diagram the use of adjacent areas (including above and below), and information relevant to public dose and security as discussed in Sections 8.10.5, "Public Dose," and 8.10.6, "Operating, Emergency, and Security Procedures," respectively, in NUREG–1556, Vol. 1, Rev. 2, "Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Portable Gauge Licenses"	Submit applicable documentation.	

Item No. and Title	Suggested Response	Yes	Alternative Procedures Attached
10.1 RADIATION SAFETY PROGRAM—AUDIT PROGRAM	The applicant should not submit its audit program to the NRC for review during the licensing phase. The audit program will be reviewed during NRC inspections.	Need Not Be Submitted with Application	
10.2 RADIATION SAFETY PROGRAM—RADIATION MONITORING INSTRUMENTS	We will either possess and use, or have access to and use, a radiation survey meter that meets the criteria in the section titled, "Radiation Safety Program—Radiation Monitoring Instruments" in NUREG–1556, Vol. 1, Rev. 2, "Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Portable Gauge Licenses," in the event of an incident.	☒	☐
10.3 RADIATION SAFETY PROGRAM—MATERIAL RECEIPT AND ACCOUNTABILITY	Physical inventories will be conducted every 6 months or at other intervals approved by the NRC to account for all sealed sources and devices received and possessed under the license. AND We will develop, implement, and maintain procedures for ensuring accountability of licensed materials at all times.	☒	☐
10.4 RADIATION SAFETY PROGRAM—OCCUPATIONAL DOSE	We will maintain, for inspection by the NRC, documentation demonstrating that unmonitored individuals are not likely to receive a radiation dose in excess of the limits in 10 CFR 20.1502(a). OR We will provide and require the use of individual monitoring devices (dosimetry). All personnel dosimeters that require processing to determine the radiation dose will be processed and evaluated by a NVLAP-approved processor.	☒ ☐	☐

Item No. and Title	Suggested Response	Yes	Alternative Procedures Attached
10.5 RADIATION SAFETY PROGRAM—PUBLIC DOSE	The applicant is *not* required to submit a response to the public dose section in a license application. This matter will be examined during NRC inspections.	Need Not Be Submitted with Application	
10.6 RADIATION SAFETY PROGRAM—OPERATING, EMERGENCY, AND SECURITY PROCEDURES	We will implement and maintain the operating, emergency, and security procedures in Appendix G to NUREG–1556, Vol. 1, Rev. 2, "Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Portable Gauge Licenses." Copies of these procedures will be provided to all gauge users and will be available at each jobsite. OR Operating, emergency, and security procedures will be developed, implemented, and maintained and will meet the criteria in section 8.10.6, "Radiation Safety Program—Operating, Emergency, and Security Procedures," NUREG–1556, Vol. 1, Rev. 2, "Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Portable Gauge Licenses." Copies of these procedures will be provided to all gauge users and will be available at each jobsite.	☒ ❒	❒ For this item, checking this box indicates that alternative procedures will be provided as part of the application and that these procedures will be provided to all gauge users and will be available at each jobsite.

Item No. and Title	Suggested Response	Yes	Alternative Procedures Attached
10.7 RADIATION SAFETY PROGRAM—LEAK TEST	Leak tests will be performed at intervals approved by the NRC or an Agreement State and specified in the SSD registration certificate. Leak tests will be performed by an organization licensed by the NRC or an Agreement State to provide leak testing services to other licensees; or by using a leak test sample collection kit supplied by an organization licensed by the NRC or an Agreement State to provide leak test kits and/or sample analysis services to other licensees and according to the kit supplier's instructions. Records of leak test results will be maintained. OR We will implement the model leak test program published in Appendix I of NUREG–1556, Volume 1, Revision 2, "Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Portable Gauge Licenses." Records of leak tests will be maintained.	☒ ❒	❒ For this item, checking this box indicates that alternative equipment and/or procedures will be provided as part of the application and that records of leak tests will be maintained.

Item No. and Title	Suggested Response	Yes	Alternative Procedures Attached
10.8 RADIATION SAFETY PROGRAM—MAINTENANCE	*Routine Cleaning and Lubrication* We will implement and maintain procedures for routine maintenance of our gauges according to each manufacturer's written recommendations and instructions.	☒	☐
	Nonroutine Maintenance The gauge manufacturer or other person licensed by the NRC or an Agreement State will perform nonroutine maintenance or repair operations that require detaching the source or source rod from the gauge.	☐	☒ The information listed in Appendix F of this NUREG supporting a request to perform nonroutine maintenance in house is attached.
10.9 RADIATION SAFETY PROGRAM—TRANSPORTATION	The applicant is *not* required to submit a response about transportation during the licensing process. The NRC will review this issue during inspection.	Need Not Be Submitted with Application	
11. WASTE MANAGEMENT—GAUGE DISPOSAL AND TRANSFER	The applicant is *not* required to submit a response about waste management during the licensing process; however, the licensee should establish and include gauge transfer and waste disposal procedures in its radiation safety program.	Need Not Be Submitted with Application	

Non-Routine Maintenance

All routine maintenance will be performed by Bernie Jacobson or Jeffrey H. Kowalski. Maintenance operations will be completed with the source in the safe shielded position and in accordance with the manufacturer's recommendations.

On limited occasions it may be necessary to remove the source rod to perform specific maintenance and cleaning. The source rod removal is normally only required to inspect and clean the rod bearings and seals. This procedure will only be completed in our facility by authorized personnel. Those individuals authorized to perform this maintenance are Bernie Jacobson the RSO and Jeffrey Kowalski an authorized gauge user. Mr. Kowalski has completed the manufacturers training course and had specific hands-on training at the MDOT maintenance facility. Removal of the source rod containing the Cs-137 source is a very serious matter. The primary concern is to limit the personal exposure of the employee doing the maintenance and to uninvolved employees. Limitation of the exposure will be accomplished by a combination of shielding and isolation. The shielding will be accomplished by using the gauge itself and by insertion of the rod into a lead pig following removal. The source rod will be handled by the non-source end, at arms length, and immediately placed in the lead pig. This will provide approximately three feet of isolation while holding to an absolute minimum the period of time the source is unshielded. The source rod will be in the immediate control of the employee doing the maintenance and locked in a secured storage area. The required maintenance will be performed immediately and the source rod reinstalled and shielded without delay. These repairs will be accomplished when no other employees are in the area or a minimum of ten feet of isolation will be maintained between unauthorized employees and the source rod. All employees performing these operations will always wear both whole body and extremity monitoring devices, which will be exchanged quarterly.

Prior to and during performance of any extended maintenance, the maintenance and source storage areas will be surveyed with a TROXALERT Radiation Survey Meter, which is calibrated annually. Records of the surveys and individuals performing the maintenance will be maintained for a minimum of three years.

Item 5. RADIOACTIVE MATERIAL

RADIONUCLIDE	SEALED SOURCE	MAX.ACTIVITY/SOURCE
A. Cesium-137	A. Sealed Source (Troxler Dwg. No. A-102112)	A. Not to exceed 9 millicuries per source and 81 millicuries total
B. Americium-241	B. Sealed Source (Troxler Dwg. No. A-102451	B. Not to exceed 44 millicuries per source and 396 millicuries total

5.1 Authorized Use

The sources will be used in Troxler Model 3400 Series moisture/density gauges.

5.2 Possession Limit Commitment

Gosling Czubak maintains up to nine sealed sources as described in this document. We will limit possession of licensed material to no more than nine separate sources.

5.3 Financial Assurance and Record keeping For Decommissioning

We will retain records required for decommissioning, including information related to spills, leak sources and other unusual incidents that involve the spread of contamination. These records, if required, will be maintained throughout the term the license is in effect and will be stored at the corporate office.

Item 6. PURPOSE FOR WHICH THE MATERIAL WILL BE USED

The material will be used in Troxler Moisture/Density meters to determine the moisture and density of construction materials at construction sites.

Item 7. INDIVIDUALS RESPONSIBLE FOR RADIATION SAFETY PROGRAM

Before obtaining licensed materials, the proposed RSO will have successfully completed one of the training courses described in Criteria in the section intitled "Individual(s) Responsible for Radiation Safety Program and Their Training and Experience – Radiation Safety Officer" in NUREG-1556, Vol. 1, Rev. 2, dated June 2016.

Before being named as the RSO, future RSO's will have successfully completed one of the training courses described in Criteria in the section entitled "Individual(s) Responsible for Radiation Safety Program and Their Training and Experience – Radiation Safety Officer" in NUREG-1556, Vol. 1, Rev. 2, dated June 2016.

Item 8. TRAINING PROVIDED TO USERS

Before using licensed materials, authorized users will have successfully completed one of the training courses described in Criteria in the section entitled "Training for Individual(s) Work, In or Frequenting Restricted Areas" in NUREG-1556, Vol. 1, Rev. 2, dated June 2016.

Item 9. FACILITIES AND EQUIPMENT

See Item 10.6 – Radiation Safety Program – "Radiation Safety Program-Operating and Emergency Procedures".

Item 10. RADIATION SAFETY PROGRAM

10.1 Occupational Dosimetry

Either we will maintain, for inspection by NRC, documentation demonstration that unmonitored individuals are not likely to receive a radiation dose in excess of 10% of the allowable limits in 10 SFR Part 20, or we will provide dosimetry processed and evaluated by a NVLAP-approved processor that is exchanged at a frequency recommended by the processor.

10.2 Radiation Detection Instruments

We will either possess and use, or have access to and use, a radiation survey meter that meets the Criteria in the Section entitled “Radiation Safety Program – Instruments” in NUREG-1556, Vol. 1, Rev. 2, dated June 2016, in the event of an incident.

10.3 Leak Testing

Nuclear/Density gauges will be leak tested annually. The tests will be completed by trained personnel using kits and procedures from an approved source at the time of calibration

10.4 Inventories

Inventories of gauges containing sealed source will be taken at six-month intervals during leak testing. Records of the inventories will be maintained for three years.

10.5 Maintenance

All routine maintenance will be performed Jeffrey H. Kowalski or Bernie Jacobson. Maintenance operations will be completed with the source in the safe shielded position and in accordance with the manufacturer’s recommendations.

On limited occasions it may be necessary to remove the source rod to perform specific maintenance and cleaning. The source rod removal is normally only required to inspect and clean the rod bearings and seals. This procedure will only be completed in our facility by authorized personnel. Those individuals authorized to perform this maintenance are Jeffrey Kowalski and Bernie Jacobson, RSO. Both have completed the manufacturers training course and had specific hands-on training at the MDOT maintenance facility. Removal of the source rod containing the Cs-137 source is a very serious matter. The primary concern is to limit the personal exposure of the employee doing the maintenance and to uninvolved employees. Limitation of the exposure will be accomplished by a combination of shielding and isolation. The shielding will be accomplished by using the gauge itself and by insertion of the rod into a lead pig following removal. The source rod will be handled by the nonsource end, at arms length, and immediately placed in the lead pig. This will provide approximately three feet of isolation while holding to an absolute minimum the period of time the source is unshielded. The source rod will be in the immediate control of the employee doing the maintenance and locked in a secured storage area. The required maintenance will be performed immediately, and the source rod reinstalled and shielded without delay. These

repairs will be accomplished when no other employees are in the area or a minimum of ten feet of isolation will be maintained between unauthorized employees and source rod.

All employees performing these operations will always wear both whole body and extremity monitoring devices, which will be exchanged quarterly,

Prior to and during performance of any extended maintenance, the maintenance and source storage areas will be surveyed with the instrument described in 10.2. Records of the surveys and individuals performing the maintenance will be maintained for a minimum of three years.

10.6 Operating and Emergency Procedures

Operating and emergency procedures will be developed, implemented and maintained, and will meet the criteria in the section entitled “Radiation Safety Program – Operating and Emergency Procedures” in NUREG-1556, Vol. 1, Rev. 2, dated June 2016.

Pavon, Martha

From: Bernie Jacobson <bcjacobson@goslingczubak.com>
Sent: Tuesday, May 31, 2022 12:54 PM
To: Lassman, Keith
Cc: Kevin Ringwelski, P.G., C.P.G.
Subject: [External_Sender] FW: License Renewal Application
Attachments: NRC Form 313 (amended 5-26-2022).pdf; NRC Licesnse - 2021 Items 5-10 Supplemental Information (amended 5-26-2022).pdf; NRC License-2021-Non Routine Maintenace (amended 5-26-22).pdf; NRC License - 2021 - Checklist Items 7 through 11 (amended 5-26-22).pdf; Item 8 - Emergency Procedures (amended 5-26-2022).pdf

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From: Kevin Ringwelski, P.G., C.P.G. <kdringwelski@goslingczubak.com>
Sent: Tuesday, May 31, 2022 1:49 PM
To: Bernie Jacobson <bcjacobson@goslingczubak.com>
Subject: RE: License Renewal Application

Bernie, I have revised and prepared the attached documents for submittal to NRC.

1. NRC Form 313 was updated to include the correct business cellular telephone number (Item 4).
2. Items 5-10 Supplemental Information was revised to include the most recent NUREG revision dated June 2016
    a. Item 5 is revised to per source maximum activity as our current license.
    b. Item 10.6 has been revised per request.
3. Items 7-11 checklist has been revised per request.
4. Item 8 – Emergency Procedures document has been updated to include the correct phone numbers.

Kevin D. Ringwelski, P.G., CPG | Director of Environmental & Drilling Services
Gosling Czubak Engineering Sciences, Inc.

231.946.9191 office | 231.933.5129 direct | 231.342.0904 mobile
kdringwelski@goslingczubak.com | www.goslingczubak.com

Connect with us on LinkedIn!

From: Bernie Jacobson <bcjacobson@goslingczubak.com>
Sent: Tuesday, May 24, 2022 1:26 PM
To: Kevin Ringwelski, P.G., C.P.G. <kdringwelski@goslingczubak.com>
Subject: Fwd: License Renewal Application

Get Outlook for Android

From: Lassman, Keith <Keith.Lassman@nrc.gov>
Sent: Tuesday, May 24, 2022 12:21:31 PM
To: Bernie Jacobson <bcjacobson@goslingczubak.com>
Subject: License Renewal Application

Hello Mr. Jacobson,

I'm Keith Lassman, a Materials License Reviewer for Region III of the U.S. Nuclear Regulatory Commission. I'll be assisting in renewing your license. I've reviewed the application and determined that a few adjustments must be made before we can proceed. The nature of the adjustments are largely quick fixes. I'll include a few points of clarification as well. For these fixes, there is no need to resubmit the application. Any amended pages can be sent directly to me, and I will add them to the current application.

Let's get right into it. The primary fix that is required is to update the application's references. The submitted application references NUREG-1556 Volume 1, dated May 1997. The most recent revision is NUREG-1556 Volume 2, dated June 2016. Please comb through your supplemental information attachment and update any references to the old revision to reflect the new one.

I've provided a link to the revision, hyperlinked above for your review. Page B-2 of the U.S. NRC Form 313 also references the old revision. The remainder of the 313 seems to reference the correct version. There are two additional pages that require small fixes: Page B-5 Item No. 10.6 is missing a checked box. Page B-7 Item No. 10.8 should have the "The information listed in Appendix F…" box checked, since the intention is to perform non routine maintenance. Please complete these items and return them to me via an email attachment. Done

Regarding the non-routine maintenance attachment, could you please provide clarification for the statement ending in "the instrument described in Appendix G of NUREG-1556." Reading through Appendix G, I did not find any instruments referenced. It's very possible that this statement could be a holdover from the previous NUREG revision.

The Emergency Procedures attachment lists your cell phone number as ending in 2984, whereas our records indicate that it ends in 2989. Please provide clarification.

I reviewed the manufacturer's requirements regarding the sealed source maximum activity per source and found that Item 5. of your request slightly exceeds the manufacturer maximum. The per-source maximum activity will remain the same as it is on your current license. Per the request in Item 5.2 "Possession Limit Commitment" I will be reducing the possession limit (total number of separate sources) as requested. No action is required on your part.

Please make the aforementioned adjustments and send them back to me in an email attachment as soon as you can. After further review by my mentor, Bryan Parker (who I believe you've spoken with), we're close to being able to issue this renewal. If you have any questions or need to contact me, feel free to email me at this address or call me at 630-829-9730. If I am unavailable, feel free to reach out to Bryan Parker at bryan.parker@nrc.gov, or call him using 678-828-7050. One or both of us will be able to assist you.

Please confirm receipt of this email by responding.

Thank you!

Keith Lassman
Materials Licensing Branch Health Physicist
Division of Nuclear Materials Safety, Region III
U.S. Nuclear Regulatory Commission

Pavon, Martha

From: Lassman, Keith
Sent: Wednesday, June 8, 2022 1:40 PM
To: Pavon, Sandy; Pavon, Martha
Subject: CN629492
Attachments: [External_Sender] FW: License Renewal Application; 629492 Additional Information 665.pdf

Hi Martha and Sandy,

Please input the following additional information into ADAMS, attached is the information in question as well as an associated 665.

Thank you,

Keith Lassman, NRRPT
Materials Licensing Branch Health Physicist
Division of Nuclear Materials Safety, Region III
U.S. Nuclear Regulatory Commission