

## **Typical Duties and Responsibilities of the Radiation Safety Officer and Sample Delegation of Authority**

### **Model Radiation Safety Officer Duties and Responsibilities**

The duties and responsibilities of the Radiation Safety Officer (RSO) include ensuring radiological safety and compliance with NRC and DOT regulations and the conditions of the license. Model procedures for describing the RSO's duties and responsibilities appear below. Applicants may either adopt these model procedures or develop alternative procedures to meet the requirements of 10 CFR 35.24. As a result of implementation of the EPAct, licensed material now includes accelerator-produced radioactive materials and discrete sources of Ra-226. Licensees authorized under 10 CFR 30.32(j) to produce and noncommercially transfer PET radioactive drugs to consortium members should review the model duties and responsibilities below, expanding on them as necessary to ensure radiation safety oversight of the production and transfer only to medical use consortium members.

Typically, these duties and responsibilities include ensuring the following:

- Unsafe activities involving licensed material are stopped;
- Radiation exposures are ALARA;
- Up-to-date radiation protection procedures in the daily operation of the licensee's byproduct material program are developed, distributed, and implemented;
- Possession, use, and storage of licensed material are consistent with the limitations in the license, the regulations, the SSDR certificate(s), and the manufacturer's recommendations and instructions;
- Individuals installing, relocating, maintaining, adjusting, or repairing devices containing sealed sources are trained and authorized by an NRC or Agreement State license;
- Personnel training is conducted and is commensurate with the individual's duties regarding licensed material;
- Documentation is maintained to demonstrate that individuals are not likely to receive, in 1 year, a radiation dose in excess of 10% of the allowable limits or that personnel monitoring devices are provided;
- When necessary, personnel monitoring devices are used and exchanged at the proper intervals, and records of the results of such monitoring are maintained;
- Licensed material is properly secured;
- Documentation is maintained to demonstrate, by measurement or calculation, that the total effective dose equivalent to the individual likely to receive the highest dose from the licensed operation does not exceed the annual limit for members of the public;
- Proper authorities are notified of incidents such as loss or theft of licensed material, damage to or malfunction of sealed sources, and fire;

#### **APPENDIX I**

- **Medical events and precursor events are investigated and reported to NRC, cause(s) and appropriate corrective action(s) are identified, and timely corrective action(s) are taken;**
- **Audits of the Radiation Protection Program are performed at least annually and documented;**
- **If violations of regulations, license conditions, or program weaknesses are identified, effective corrective actions are developed, implemented, and documented;**
- **Licensed material is transported, or offered for transport, in accordance with all applicable DOT requirements;**
- **Licensed material is disposed of properly;**
- **Appropriate records are maintained; and**
- **An up-to-date license is maintained, and amendment and renewal requests are submitted in a timely manner.**

## Model Delegation of Authority

Memo To: Radiation Safety Officer

From: Chief Executive Officer

Subject: Delegation of Authority

You, Edward Reinders, have been appointed Radiation Safety Officer and are responsible for ensuring the safe use of radiation. You are 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. You are hereby delegated the authority necessary to meet these responsibilities, including prohibiting the use of byproduct material by employees who do not meet the necessary requirements and shutting down operations where justified to maintain radiation safety. You are required to notify management if staff does not cooperate and does not address radiation safety issues. In addition, you are free to raise issues with the Nuclear Regulatory Commission at any time. It is estimated that you will spend 2 hours per week conducting radiation protection activities.

Andy Blake

Signature of Management Representative

March 14, 2016

Date

I accept the above responsibilities,

Ed Reinders

Signature of Radiation Safety Officer

3/14/2016

Date

cc: Affected department heads

## **Tomczak, Tammy**

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**From:** Parker, Bryan  
**Sent:** Tuesday, March 15, 2016 10:53 AM  
**To:** Tomczak, Tammy  
**Subject:** FW: RE: RE: RSO Change for Carmeuse - River Rouge  
**Attachments:** SKM\_C284e16031412061.pdf; Carmeuse Lime AI 665.pdf

Hey Tammy,

I need the attached letter put into ADAMS so I can get an ML no. for a tie-down. A 665 is also attached.

Thanks.  
Bryan

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**From:** Reinders Edward [mailto:Ed.Reinders@carmeusena.com]  
**Sent:** Monday, March 14, 2016 11:58 AM  
**To:** Parker, Bryan <Bryan.Parker@nrc.gov>  
**Subject:** [External\_Sender] RE: RE: RSO Change for Carmeuse - River Rouge

### ***Commitment to Zero Injuries***

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**Edward REINDERS**  
Senior Health and Safety Manager

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**From:** Parker, Bryan [mailto:Bryan.Parker@nrc.gov]  
**Sent:** Wednesday, March 09, 2016 9:13 AM  
**To:** Reinders Edward  
**Subject:** RE: RE: RSO Change for Carmeuse - River Rouge

Hey Ed,

One other thing I need to change you to RSO is a Delegation of Authority. I need it for the license in Michigan (NRC Lic. No. 21-32513-01). I do not need one for the Indiana GL license.

Please see the attached model form for reference. You will need to sign as well as Mr. Routledge, appointing you RSO and you acknowledging.

Please return the signed form back to me as a PDF attached to an email as soon as possible.

If you have any questions, please let me know.

Thanks.  
Bryan

**From:** Parker, Bryan  
**Sent:** Wednesday, February 24, 2016 4:37 PM  
**To:** 'Reinders Edward' <Ed.Reinders@carmeusena.com>  
**Cc:** 'Crosmun Hugh' <Hugh.Crosmun@carmeusena.com>  
**Subject:** RE: RE: RSO Change for Carmeuse - River Rouge

Thank you Ed. I will get this processed in and we will get back to you all soon.

Bryan

**From:** Reinders Edward [mailto:Ed.Reinders@carmeusena.com]  
**Sent:** Wednesday, February 24, 2016 4:26 PM  
**To:** Parker, Bryan <Bryan.Parker@nrc.gov>  
**Subject:** [External\_Sender] RE: RSO Change for Carmeuse - River Rouge

Bryan, here are signed letters for our Gary, IN and River Rouge, MI locations and my training certificate.

I am also the RSO for our Manitowoc, WI location but have been working with the state of WI on the updates.

Any questions, please let me know.

Thanks.

### ***Commitment to Zero Injuries***

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**Edward REINDERS**  
Senior Health and Safety Manager

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**From:** Parker, Bryan [mailto:Bryan.Parker@nrc.gov]  
**Sent:** Wednesday, February 24, 2016 12:45 PM  
**To:** Reinders Edward  
**Cc:** Pelke, Patricia  
**Subject:** RE: RSO Change for Carmeuse - River Rouge

Hey Edward,

As I noted before, we don't have any record of receiving the 01/13/16 letter. We do need a signed copy though. So, if possible, please have it signed by another manager and re-submit it (along with a copy of the training certificate) as soon as possible. Also, if you are listed on other similar licenses as the RSO, please include that information.

If you have any questions, please let me know.

Thanks.  
Bryan

***Bryan A. Parker***  
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678-828-7050

630-515-1078 (fax)



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**From:** Reinders Edward [<mailto:Ed.Reinders@carmeusena.com>]  
**Sent:** Wednesday, February 24, 2016 12:42 PM  
**To:** Parker, Bryan <[Bryan.Parker@nrc.gov](mailto:Bryan.Parker@nrc.gov)>  
**Subject:** [External\_Sender] RSO Change for Carmeuse - River Rouge

Good morning Bryan. A signed version on Carmeuse letterhead of the attached letter was mailed to the NRC Region III on 1/13. The Site Manager, Andy Blake is out all week so I don't have access to the signed version. Please let me know if this will suffice. My RSO training certificate is also attached.

Thank you,

***Commitment to Zero Injuries***

\*\*\*\*\*  
**Edward REINDERS**  
Senior Health and Safety Manager

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