

**From:** [Troy Curnutt](#)  
**To:** [Torres, Roberto](#)  
**Subject:** [External\_Sender] Re: NRC request for additional information (mail control 617402 - I-131 preparation room)  
**Date:** Thursday, January 16, 2020 3:25:57 PM  
**Attachments:** [NRC Questions I131 1-14-20.pdf](#)

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Sorry, please send the attached signed copy for your review.

Thank you  
V. Troy Curnutt

On Thu, Jan 16, 2020 at 9:13 AM Troy Curnutt <[nukemdude@gmail.com](mailto:nukemdude@gmail.com)> wrote:

Mr. Torres, please see the attached response to the questions you posed.

Thank you for your prompt review of our request.

Troy Curnutt  
Quantum Isotopes of Idaho

On Tue, Jan 14, 2020 at 1:32 PM Torres, Roberto <[RobertoJ.Torres@nrc.gov](mailto:RobertoJ.Torres@nrc.gov)> wrote:

Mr. Curnutt:

Attached is the procedure that you submitted to the NRC with four comments. Please review the comments and submit a corrected procedure. Note that your amendment request has been sent to a CHP for further technical review of the ventilation system and additional questions may follow at a later date.

1. Is the frequency of bioassay for I-131 weekly or within 72 hours of I-131 capsule preparation? This section in the procedure references weekly bioassay frequency. Which is the correct frequency?
2. Is the frequency of bioassay for I-131 weekly or within 72 hours of I-131 capsule preparation? This section in the procedure references a bioassay frequency within 72 hours of capsule preparation. Which is the correct frequency?
3. There is no reference of  $2 \times 10^{-9}$   $\mu\text{Ci/ml}$  in Appendix B. There is in Appendix B a reference to Derived Air Concentration (DAC - occupational) of  $2 \times 10^{-8}$   $\mu\text{Ci/ml}$ .
4. Statement: If no contamination is found on this sealed container  $> 0.01 \mu\text{Ci}$

(22,000 dpm), place it in storage until it becomes necessary to use it. I believe the greater than symbol is incorrect. It should be <. If no contamination is found on this sealed container,  $\leq 0.01 \mu\text{Ci}$  ( $\leq 22,000 \text{ dpm}$ ), place it in storage until it becomes necessary to use it.

Thank you for your cooperation.

Roberto J. Torres, M.S.

Senior Health Physicist

U.S. Nuclear Regulatory Commission, Region IV

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January 15, 2020

Roberto J. Torres, M.S.  
Senior Health Physicist  
U.S. Nuclear Regulatory Commission, Region IV  
1600 East Lamar Boulevard  
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Re: Questions Posed in Email on 1-14-2020

Dear Mr. Torres,

Please see the answers to your email questions posed on 1-14-2020.

1. Is the frequency of bioassay for I-131 weekly or within 72 hours of I-131 capsule preparation? This section in the procedure references weekly bioassay frequency. Which is the correct frequency?

**ANSWER**

**Employee's who prepare I -131 capsule/s are required to perform a bioassay on themselves within 72 hours of completing the capsule/s preparation.**

2. Is the frequency of bioassay for I-131 weekly or within 72 hours of I-131 capsule preparation? This section in the procedure references a bioassay frequency within 72 hours of capsule preparation. Which is the correct frequency?

**ANSWER**

**Employee's who prepare I -131 capsule/s are required to perform a bioassay on themselves within 72 hours of completing the capsule/s preparation.**

3. There is no reference of  $2 \times 10^{-9}$   $\mu\text{Ci/ml}$  in Appendix B. There is in Appendix B a reference to Derived Air Concentration (DAC - occupational) of  $2 \times 10^{-8}$   $\mu\text{Ci/ml}$ .

**ANSWER**

**Please remove the entire statement found in (3)(g) of Quantum Isotopes of Idaho, SOP Radioiodine Manipulation, Manual I-131 Pill Preparation, and replace with "Notify the RSO immediately if the concentration calculations exceed  $2 \times 10^{-10}$   $\mu\text{Ci/ml}$  in unrestricted area/s and  $2 \times 10^{-9}$   $\mu\text{Ci/ml}$  in restricted area/s"**

4. Statement: If no contamination is found on this sealed container  $\geq 0.01$   $\mu\text{Ci}$  (22,000 dpm), place it in storage until it becomes necessary to use it. I believe the greater than symbol is incorrect. It should be  $<$ . If no contamination is found on this sealed container,  $\leq 0.01$   $\mu\text{Ci}$  ( $\leq 22,000$  dpm), place it in storage until it becomes necessary to use it.

**ANSWER**

**Please change the statement "If no contamination is found on this sealed container  $\geq 0.01$   $\mu\text{Ci}$  (22,000 dpm), place it in storage until it becomes necessary to use it".**

To

**“If no contamination is found on this sealed container,  $< 0.01 \mu\text{Ci}$  ( $< 22,000 \text{ dpm}$ ), place it in storage until it becomes necessary to use it“.**

Please contact me if you have any questions.

Thank you for your prompt review of this amendment request.



V. Troy Curnutt, RSO  
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