

May 4, 2017

Bruker Detection Corporation  
ATTN: Mr. George Gleason  
Radiation Safety Officer  
40 Manning Road  
Billerica, MA 01821

SUBJECT: BRUKER DETECTION CORPORATION, THIRD REQUEST FOR ADDITIONAL INFORMATION CONCERNING APPLICATION FOR A NEW EXEMPT LICENSE

Dear Mr. Gleason:

This letter refers to your letter dated April 21, 2017, which responded to questions in our letter dated April 11, 2017, for a new Exempt Distribution License. In reviewing your response, we have determined additional information is required to complete our review. In order to continue our review, please address the issues listed below. This information is required by Title 10 of the *Code of Federal Regulations* (10 CFR) 32.26, "Gas and aerosol detectors containing byproduct material: Requirements for license to manufacture, process, produce, or initially transfer."

1. In your response, you stated that "...the dimensions in the device registration for  $\mu$ RAID are incorrect." Please submit an amendment request to amend your current Registry of Sealed Sources and Devices Registration Certificate NR-1101-D-102-E.
2. In your response, you stated that "The reason the submitted report referenced questions 26 and 27 was that it was pulled from a reply to a previous submission." We do not know what the original questions 26 and 27 were, or how this "previous submission" applied to the questions asked in our letter dated March 21, 2017.
3. In your response to question 3, you stated that "We maintain that the calculations for the RAID-S2 are correct." The staff has reviewed the deep dose equivalent, lens dose equivalent and combined doses calculations for models RAID-AFM and RAID-S2 contained in Attachment K to your letter dated April 3, 2017, letter and finds the calculations incorrect. Provide correct dose calculations for this model.
4. In your response, Attachment B, the calculation for "Additional dose calculations for fire scenario" are incorrect. Provide correct calculations for this scenario.

We will continue our review upon receipt of this information. If we do not receive a reply from you within 15 calendar days from the date of this letter, we will assume that you do not wish to pursue your application.

G. Gleason

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In accordance with 10 CFR 2.390 of the NRC's "Agency Rules of Practice and Procedure," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records component of NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

If you have any questions, you may contact me at (301) 415-7640, or by e-mail at [Shirley.Xu@nrc.gov](mailto:Shirley.Xu@nrc.gov).

Sincerely,

**/RA/**

Shirley S. Xu  
Materials Safety Licensing Branch  
Division of Material Safety, State, Tribal  
and Rulemaking Programs  
Office of Nuclear Material Safety  
and Safeguards

Docket No. 030-39032  
Mail Control No. 593124

BRUKER DETECTION CORPORATION, THIRD REQUEST FOR ADDITIONAL INFORMATION CONCERNING APPLICATION FOR A NEW EXEMPT LICENSE

Date: May 4, 2017

Certified Mailing No. 7015 3010 0000 7901 6260

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<b>NAME</b>	SXu	DMiller	HGonzalez	SXu
<b>DATE</b>	5/4/17	5/4/17	5/4/17	5/4/17

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