

Nuclear Reactor Laboratory 1298 Kinnear Road Columbus, OH 43212

> Phone: 614-688-8220 Fax: 614-292-2209 reactor.osu.edu

March 6, 2017

Cindy Bladey
Office of Administration
Mail Stop: OWFN-12-H08
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Re: Docket ID NRC-2016-0276

Dear Ms. Bladey,

Thank you for the opportunity to provide input to the NRC regarding Category 3 source security and accountability. The staff of the Nuclear Reactor Laboratory at the Ohio State University (OSU NRL) would like to submit one general comment in addition to answering one of the posed questions.

In the event that the NRC revises its regulations/processes governing source security and accountability for Category 3 sources, the OSU NRL staff propose that the NRC develop a list of nuclides and their respective Category 3 threshold activity limits. Docket ID NRC-2016-0276 states "NRC regulations do not include a definition for Category 3 but the NRC has historically considered the Category 3 threshold to be greater than 1/10th of the Category 2 threshold but less than the Category 2 threshold." The OSU NRL staff assert that the above statement does not provide enough guidance and that a list similar to Appendix A of 10 CFR 37 would be required as part of any revisions to the regulations/processes governing source security and accountability for Category 3 sources.

Question 1 posed in Docket NRS-2016-0276 under Other Questions asks:

Should physical security requirements for Category 1 and 2 quantities of radioactive material be expanded to include Category 3 quantities?

The OSU NRL staff propose that two physical barriers would be a sufficient deterrent to the loss of a Category 3 quantity of radioactive material. A requirement for continuous monitoring and detection of unauthorized entry into an area containing a Category 3 source would be an undue burden upon the Licensee.

Sincerely,

Susan M White, PhD

The Ohio State University Nuclear Reactor Laboratory

1298 Kinnear Rd

Columbus, OH 43212