7.3.3 - Fire Systems Inspection, Testing, and Maintenance

Fire detection / alarm systems are installed in accordance with NFPA 72 "National Fire Alarm Code" and the Pennsylvania Uniform Construction Code Standards and are maintained in operable condition, routinely inspected, and tested by Penn State University Office of Physical Plant trained technicians.

Portable fire extinguishers are maintained in operable condition, routinely inspected, and tested in accordance with NFPA 10 "Portable Fire Extinguishers" by Penn State University Office of Physical Plant trained technicians.

7.3.4 - Laboratory Specific Fire Protection, Combustible Loading, and Fire Scenarios

The fire loading in **the second second** is a low quantity of ordinary physics laboratory materials; metal enclosed electronics, tools, metal shelving, several books, manuals, and paper products.

Laboratories where SNM will be used consist of radiation detection electronics, small amounts of shielding materials (e.g. lead, poly neutron shielding, etc.), and lab benches and chairs.

In this facility the most likely fire scenario would be an electronics failure causing a local fire. The smoke detector would alarm and campus police would call the fire department.

<u>7.4 –</u>

fire safety is discussed in the license amendment request originally dated December 18, 2013, resubmitted by letter dated February 4, 2014, and supplemented by Penn State's letter dated April 1, 2014 in response to NRC RAI letter dated March 19, 2014.

Section 8.0 – Emergency Management

An emergency management plan is not required for this license as the quantity of material allowed by license does not exceed any of the conditions in 10 CFR 70.22 (i)(1).

Section 9.0 – Environmental Protection

None of the requested uses for SNM included in this application will intentionally create releasable effluent (liquid, airborne, or solid) needing monitoring or control. However, an accident involving Material A in the form of the second se

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Section 10.0 – Decommissioning

Section 10.1 - Current Decommissioning Plan Status

A decommissioning plan for this license was submitted to NRC in the Penn State University letter dated December 19, 2013.

Financial test and self-guarantee information was submitted to NRC by Penn State letter dated December 20, 2014 (TAC L33304).

Lab closeouts and decommissioning will be accomplished according the current license condition 16.

<u>Section 10.2 – Decommissioning Funding, Financial Test and Self-Guarantee Certification</u> <u>Plan</u>

A decommissioning funding plan (DFP) is required for this license per 10 CFR 70.25(a)(2) due to the frequence of the contents of the DFP described in 10 CFR 70.25 (e)(1)(iii) requires the use of one of the methods to assure funds listed in 10 CFR 70.25 (f). Penn State University, being a non-profit university, will use 10 CFR 70.25 (f)(2) to use 10 CFR 30 Appendix E.

The financial test will be performed under 10 CFR 30 Appendix E Paragraph II.A.(1) as Penn State University issues bonds. Also required by 10 CFR 30 Appendix E Paragraph II.C.(2) is the submission of the financial test annually. Because Penn State University does not finalize its audited financial statements until more than 90 days after the close of the fiscal year, Penn State will submit the financial test and audited financial statements to the NRC within 180 days of the close of the fiscal year. This exemption was also documented in a license amendment request letter dated September 23, 2013 (TAC L33284).

Penn State University will be using the self-guarantee method of financial assurance, as provided in 10 CFR 30 Appendix E Paragraph III, and has a stand-by trust on file with the NRC as required by 10 CFR 30 Appendix E Paragraph III.F.

Section 11.0 - Management Measures

<u>11.1 – Procedures Review</u>

Penn State University is committed to continuous improvement and performs a review of procedures, policies, and practices at least annually as part of the annual report to the UIC on the status of the radiation protection program. At any time, incidents, near misses, lessons learned, and

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