

NEPA Categorical Exclusion Determination for Proliferation Detection Research for Discovery and Development of Processes for Deposition of Pure, Stoichiometric and Conformal Films of Magnesium Diboride at Harvard University

The U.S. Department of Energy (DOE), National Nuclear Security Administration (NNSA), Defense Nuclear Nonproliferation (DNN), Office of Nonproliferation Research and Development (DNN R&D) has the responsibility to improve national capabilities for detecting and monitoring indicators of foreign nuclear weapons programs. DNN R&D applies the unique skills and capabilities of the NNSA and DOE national laboratories and facilities to meet the nonproliferation research development (R&D) requirements necessary to close nonproliferation technology gaps identified through close interaction with other U.S. government agencies and in support of US government policy. DNN R&D develops the tools, technologies, techniques, and expertise to address the most challenging problems related to detecting, localizing, and analyzing global proliferation of weapons of mass destruction.

DNN R&D sponsors research and development across all disciplines of nuclear science and security where there is synergy with the nonproliferation mission. DNN R&D encourages the participation of academia in its R&D programs to broaden its research sources and diversify the types of organizations working on its programs. DNN R&D programs encompass technology development for the early detection of nuclear proliferation by national, sub-national, and trans-national entities with a special emphasis on activities indicative of the production and transport of special nuclear material, fabricated components, and weapons. The Office of Proliferation Detection within DNN R&D funds research to develop the tools, technologies, techniques, and expertise to address the most challenging problems related to detection, localization, and analysis of the global proliferation of weapons of mass destruction, with special emphasis on nuclear weapon technology and the diversion of special nuclear materials.

The non-competitive funding request submitted by Harvard University to the Office of Proliferation Detection and the technical review of that proposal did not reveal any extraordinary related circumstances that might affect the significance of the environmental effects of the proposal. The proposal is not "connected" to other actions with potentially significant impacts, or to other proposed actions with cumulatively significant impacts, and is not precluded by 40 CFR 1506.1 or 10 CFR 1021.211. The proposal does not result in adverse effects to historic properties included or eligible for inclusion in the National Register of Historic Places (National Register) and would not impact sensitive resources (e.g., threatened and endangered (T/E) species, wetlands and floodplains). Nor does the proposal threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, including requirements of DOE and/or Executive Orders; require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities (including incinerators and facilities for treating wastewater, surface water, and groundwater; or disturb hazardous substances, pollutants, contaminants, or petroleum and natural gas products excluded from the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) that pre-exist in the environment such that there would be uncontrolled or unpermitted releases.

Accordingly, and pursuant to the DOE NEPA Implementing Procedures at 10 CFR 1021,

Subpart D, Appendix A and Appendix B, the categorical exclusion (CX) determination applies to the following proposal submitted by Harvard University: Discovery and Development of Processes for Deposition of Pure, Stoichiometric and Conformal Films of Magnesium Diboride. Based on my review, I have determined that the proposed actions are categorically excluded from further NEPA review and documentation.

A 9, A 11, and B 3.6 are the applicable CXs that cover the proposed action in the DOE NEPA Implementing Procedures, 10 CFR 1021, Subpart D, Appendix A and Appendix B.

*M E Martin*

*Aug 6, 2012*

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Mary E. Martin, NNSA HQ NEPA Compliance Officer

Date