DOE/EA-1993

Finding of No Significant Impact for the High Explosive Science and Engineering Facility

U.S. Department of Energy
National Nuclear Security Administration

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U.S. DEPARTMENT OF ENERGY
NATIONAL NUCLEAR SECURITY ADMINISTRATION
FINDING OF NO SIGNIFICANT IMPACT FOR THE HIGH EXPLOSIVE SCIENCE AND ENGINEERING FACILITY ENVIRONMENTAL ASSESSMENT

AGENCY: Department of Energy, National Nuclear Security Administration

ACTION: Finding of No Significant Impact (FONSI)

SUMMARY: The NNSA has prepared an Environmental Assessment (EA), DOE/EA-1993, to analyze the potential environmental consequences of designing, constructing, and operating a High Explosive Science & Engineering Facility (HE S&E) at the Pantex Plant (Pantex) using federal funding. The HE S&E facility would provide a modernized capability-based infrastructure needed to ensure safe, secure, sustainable, and cost-effective operations in support of scientific and manufacturing activities. When completed, the HE S&E would include a campus approach consisting of two buildings, a storage area, an all-weather ramp connecting the buildings and vehicle access. It would be approximately 72,000 ft^2 and serve as the scientific and engineering hub supporting all High Explosive Center of Excellence (HE CoE) manufacturing activities at Pantex.

A Public Notice announcing the availability of the draft EA, the length of the comment period, and where copies of the draft EA could be obtained was placed in local newspapers, the Pantex website, and the Department of Energy (DOE) National Environments Policy Act (NEPA) website to provide the public the opportunity for involvement and comment. Comments were received from the public and a comment response matrix was included as an appendix in the final EA. Based on the information and analyses in the EA, NNSA has determined that the proposed action is not a major federal action significantly affecting the quality of the human environment, within the meaning of the National Environmental Policy Act (NEPA) of 1969, 42 United States Code 4321 *et seq.*, the Council on Environmental Quality regulations implementing the National Environmental Policy Act (40 CFR 1500-1508), and the Department of Energy regulations for implementing NEPA (10 CFR 1021). Therefore, preparation of an Environmental Impact Statement is not required, and NNSA is issuing this FONSI.

ADDRESSES: The Final EA and FONSI will be published on the Pantex website (http://www.pantex.com/mission/Pages/Environmental-Compliance-Documents.aspx) and the DOE NEPA website (https://energy.gov/nepa/listing/environmental-assessments-ea).

Hard copies of the EA are available from:

Mr. Steven Wyatt, NPO Public Affairs Manager
U.S. Department of Energy/National Nuclear Security Administration
P. O. Box 2050
Oak Ridge, Tennessee 37831
Requests may also be made by telephone to Mr. Wyatt at (865) 576-9918 or by fax at (865) 576-1237 or by e-mail to: Steven.Wyatt@npo.doe.gov.

For further Information on the DOE NEPA Process, contact:

Mr. Brian Costner, Acting Director
Office of NEPA Policy and Compliance (GC-20)
U.S. Department of Energy
1000 Independence Avenue, S.W.
Washington, D.C. 20585-0119

SUPPLEMENTARY INFORMATION:

The proposed action is to design, construct, and operate a HE S&E facility that would support the NNSA mission. This includes developing and sustaining high quality scientific staff and supporting computational and experimental capabilities as well as developing additional evaluation and diagnostic tools for the evaluation of technology development.

The existing facilities used for HE S&E represent a significant maintenance burden and soon will no longer meet the Pantex site mission needs. When completed, the HE S&E facility would support all HE CoE manufacturing activities and Special Nuclear Material (SNM) technology development activities at Pantex. Only HE would be present in the facility; no SNM would be present in the facility. Operations that are presently located in 17 separate facilities with seven connecting ramps, measuring approximately 81,552 square feet (ft^2), would be consolidated into a common facility where operations would be streamlined, technology sharing made possible, and technical communications improved.

Due to the DOE's requirement for new square footage to be offset by demolished square footage, many existing outdated facilities would have to be demolished. The demolition of these facilities is not addressed in this EA but are planned as part of the project. Additional NEPA analyses would be completed prior to demolitions.

ENVIRONMENTAL IMPACTS:

A sliding scale approach was used for analyzing potential environmental and socioeconomic effects. This means this EA focused on significant environmental issues and alternatives and discussed impacts in proportion to their significance. Generally, certain aspects of the proposed action have a greater potential for creating environmental effects than others. The aspects with greater potential for impacts are discussed in more detail in this EA, but are summarized below.

Impacts to land use would include approximately 2 acres of permanent disturbance, including an access road. Non-cultivated land would be reseeded with a seed mix of native grasses. During construction, impact to transient species would be minimal, since the habitat disturbance area would be geographically small scale, temporary, and not a critical or unique habitat. If Texas Horned lizards are encountered, they would be moved out of harm's way and released adjacent to the site. If nests of birds are discovered at the project site, the Pantex Wildlife Biologist would be consulted.

Runoff with increased suspended solids could occur during the proposed site work. Good engineering practices, including soil erosion and sediment control measures, and spill prevention and waste management practices, would minimize any suspended sediment and pollutant transport that could result in potential water quality impacts. The installation of permanent access roads has the potential to affect surface water drainage patterns. The

access roads would be all weather and the design would require proper sized culverts to allow for drainage and to support the weight of equipment.

During construction, standard dust suppression methods such as water spraying would be used to minimize dust from excavation or construction. Currently, emissions from the existing support of the office spaces are authorized by either Permits-by-Rule or its predecessor, Standard Exemptions. These authorizations are defined as types of facilities or changes within facilities which the Texas Commission of Environmental Quality has determined will not make a significant contribution of air contaminants to the atmosphere. As the proposed facility would not increase or change the nature or extent of emissions, the proposed office spaces would be eligible to be authorized by the same authorization.

Heavy equipment and hauling operations, staging areas, site preparation activities, trenching, construction, and operation of the concrete batch plant, and construction traffic would denude approximately 25 acres of revegetated prairie and create temporary adverse visual effects during the construction phase of the project. The proposed new facility would be adjacent to an industrial zone within the security fence and from a distance would present a façade similar in size and appearance to existing facilities. For the public, traveling on area roads, there would be a slight change in the distance view-scape after the facility was constructed.

Construction would result in the potential for the generation, treatment, storage, and disposal of solid waste. Operational impacts would not change from current waste management practices. The same types of waste would be generated by the proposed new facility as those generated by existing HE facilities, since the processes would be the same.

During construction, approximately 40 routine workers and 100 workers during peak construction would be onsite for a duration of approximately 2½ years. It is not anticipated that the construction and operation of the new facility would lead to a reduction in jobs, nor would there be Environmental Justice connections to employment.

Utility connections would be extended to the new facility campus during the construction phase. Underground utilities available near the site include potable water, high-pressure fire loop, sanitary sewer, and electricity. Natural gas, compressed air, phone and communication lines would have to be extended onto the site. Some utilities would be aboveground.

There would be no negative effects from the operation of the new facilities on visual resources, noise levels, cultural resources, human health, transportation/traffic, waste management, utilities infrastructure, or socioeconomic resources.

Analyzed resources which could potentially experience cumulative effects are land use, water resources, biological resources, air quality and climate change, visual, noise, cultural resources, human health, transportation, waste, and socioeconomic. The resource areas which are not considered under cumulative effects have a small potential for impact. These include environmental justice and floodplains/wetlands. Actions in the Area of Influence are mostly temporary and short-term. Most of the acreage that is needed for the construction phases of these projects would be returned to the original condition of open space or cultivation. For the long-term impacts of these projects, only the footprint of the facilities would remain and the land not necessary for the footprint would be restored.

Pipelines and some electrical connections are underground, so after installation, the surfaces would be returned to the original condition. Regarding the demolition projects, the footprints would be removed and the site returned to open space. Therefore, the incremental impact of the proposed action, when added to those from actions of a similar nature, would be minor.

DETERMINATION: Based on the analysis of the EA, and after careful consideration of all public and agency comments, I conclude that the Proposed Action does not constitute a major Federal action significantly affecting the quality of the human environment within the meaning of NEPA. Therefore, an EIS for the Proposed Action is not required and this FONSI is hereby issued.

Issued this 23rd day of February 2018.

Geoffrey L. Beausoleil, Manager
NNSA Production Office
National Nuclear Security Administration
U.S. Department of Energy