



**U. S. Department of Energy
National Nuclear Security Administration
Pantex Site Office
P. O. Box 30030
Amarillo, TX 79120-0030**



**FINDING OF NO SIGNIFICANT IMPACT
HIGH EXPLOSIVE PRESSING FACILITY**

AGENCY: U.S. Department of Energy (DOE) National Nuclear Security Administration (NNSA)

ACTION: Finding of No Significant Impact (FONSI)

SUMMARY: NNSA has prepared an Environmental Assessment (EA), DOE/EA-1613, to analyze the potential environmental consequences of a construction project at the Pantex Plant in Amarillo, Texas. The proposed action is to construct a new facility that would consolidate the Pantex Plant's current high explosive (HE) pressing activities at one facility. The approximately 30-acre area proposed for construction would be impacted by a soil stockpiling area, an area for the entering and exiting of construction vehicles, an area for additional construction equipment, a laydown area, a permanent access road, a construction fence, a temporary concrete batch plant, and the proposed Pressing Facility.

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.* Therefore, preparation of an Environmental Impact Statement is not required, and NNSA is issuing this FONSI.

COPIES OF THE EA ARE AVAILABLE FROM:

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FOR FURTHER INFORMATION ON THE DOE NEPA PROCESS, CONTACT:

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BACKGROUND: One of the missions of the Pantex Plant is to fabricate high explosive components for nuclear weapons. Other missions include reducing energy requirements, minimizing wastes, reducing environmental impacts, and increasing domestic energy supplies through productivity and operational enhancements.

The purpose for constructing a new Pressing Facility is to support NNSA's production schedule for stockpile stewardship. Through consolidation of existing operations at the plant and equipment replacement, NNSA has the opportunity to meet the needs of changing weapon complexity, projected workload, and the current stockpile surveillance and management, and to incorporate a more robust infrastructure while improving safety, quality, and productivity. Additionally, NNSA would reduce energy use and costs of maintaining operations by consolidating existing operations from several facilities into one. The proposed facility would be located adjacent to an industrial zone in a separate zone from the weapons assembly facilities.

DESCRIPTION OF THE PREFERRED ALTERNATIVE: The preferred alternative is to construct a new 45,000 square foot facility that would consolidate current HE pressing activities at one facility. This proposed pressing complex would combine HE inspection, machining, staging, pressing, and HE radiography.

The construction of the proposed facility would include administrative areas, non-explosive areas, main pressing bays and control areas, ovens/buildup bays, staging and inspection bays, mechanical/electrical support areas, magazine staging areas, and an all-weather ramp and receiving area.

The approximately 30-acre area needed for construction would be used for a soil stockpiling area, an area for the entering and exiting of construction vehicles, an area for additional construction equipment, a laydown area, a permanent access road, a temporary construction fence, a temporary concrete batch plant, and the proposed pressing facility.

The temporary concrete batch plant would be placed within the construction zone to supply concrete for the proposed facility. The batch plant would be constructed mostly of steel and a structural steel framework, and is anticipated to produce less than 300 cubic yards of concrete per hour.

ENVIRONMENTAL CONSEQUENCES: A sliding-scale approach was used for analyzing potential environmental and socioeconomic effects and determined that certain elements of the affected environment might be impacted more than others by the preferred alternative. These potential impacts were:

Land Use: Approximately 30 total acres of reestablished shortgrass prairie would be impacted by both permanent and temporary features of the proposed project. Of the total area impacted,

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approximately 4.7 acres would remain in industrial use after project completion if the construction access road were to later become permanent. The 25.3 acres of temporarily disturbed land would be reseeded with native grass. It is possible for nests of songbirds and game birds to be discovered in the proposed construction area. If Texas horned lizards were encountered at the proposed site, they would be moved out of harm's way and released near the site. Horned lizards could possibly be encountered from March through October. It is possible that the 25.3 acres of temporary disturbance left from construction would be of use to Texas horned lizards and other species that utilize bare, soft, or recently disturbed ground. 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.

Surface Water: Process water would be subject to the same wastewater discharge requirements as water from current operations and would need to adhere to the limits imposed by current permits, since the processes occurring in the new facilities would be a consolidation of current processes and no new processes would be introduced. Runoff with increased suspended solids could occur during the proposed construction, ultimately ending up in Playa 2. Erosion controls, such as downslope silt fences or stabilization methods (e.g., mulch, stabilization blanket, etc.) would be evaluated and implemented where needed to mitigate soil erosion and siltation during rain events. Impervious surface area would be increased after project completion by approximately 4.7 acres and could result in slight increases in the amount of runoff to Playa 2 from storm events.

Air Quality: Air emissions during construction would include dust (from trenching and movements of construction vehicles), emissions from vehicle exhausts, and dust and emissions from operation of the concrete batch plant. These emissions would not require monitoring. Standard dust suppression methods such as water spraying would be used to minimize dust from excavation or construction. Appropriate best management practices would be used to control fugitive dust and particulate emissions. No regulated air pollutants would be emitted during construction of the HE Pressing Facility, so no National Ambient Air Quality Standards or Effect Screening Levels would be affected. Emissions during operations would remain within limits imposed by existing permits, since the activities occurring in the new facilities would be a consolidation of current activities; no new activities would be introduced.

Cultural Resources: No construction would be performed within 1/4 mile of a playa lake; therefore, no impacts to cultural, archeological, or historic resources are expected, based on the site location. Discovery of buried material or cultural remains during construction is not expected, since the proposed construction site was formerly disturbed by cultivation, but if artifacts were encountered, activities would cease until the significance of the remains was determined and appropriate subsequent actions were taken.

Visual Resources: Heavy equipment and hauling operations, staging areas, site preparation activities, trenching, construction and operation of the concrete batch plant, and construction

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traffic would denude approximately 30 acres of revegetated prairie and create temporary adverse visual effects. However, upon completion of the proposed project, removal of equipment and reestablishment of vegetation in the areas affected by construction would restore the preconstruction visual qualities of all but approximately 4.7 acres of the proposed facility area. The proposed facility would be adjacent to an industrial zone and, from a distance, would present a façade similar in size and appearance to existing facilities. For the public traveling on nearby roads, there would be minor changes to the distant viewscape.

Noise: The temporary increase in noise levels from proposed construction activities and traffic would be similar to other construction activities and vehicular noise at Pantex, as well as offsite vehicular traffic, airport traffic, railroad traffic, and agricultural activities. Temporary increases would not be expected to cause sufficient change in noise levels to result in more than a temporary annoyance to plant employees or adjacent landowners. Raised noise levels (between 73 and 90 dBA) from the use of heavy equipment like backhoes and front-end loaders during clearing and excavation activities would be temporary and intermittent. These levels would attenuate rapidly with distance and would not likely impact neighboring landowners because construction activities would be confined to the central portion of the plant, away from residential populations. Noise levels would return to preconstruction levels following completion of construction.

Transportation/Traffic: There would be some temporary increase in traffic from proposed construction, and there might also be rerouting of onsite traffic. No offsite routes would have traffic flow interrupted directly by construction, because the proposed construction would occur within the industrialized area of Pantex, away from Plant boundaries. Construction activities would not be expected to cause sufficient change in traffic as to result in more than a temporary annoyance to plant employees or adjacent landowners. Upon completion and start up of the proposed facility, there could be a slight reduction in plant traffic, and an accompanying reduction in fuel use and vehicle maintenance costs, by consolidating existing operations from several facilities in various zones into a single facility.

Waste: The proposed construction would result in the generation, treatment, storage, and disposal of solid waste. Waste would be handled in a manner that is appropriate to its characterization and is consistent with federal and state regulations and the contractor's approved waste management plan. Waste minimization principles would be incorporated into the project. Residual wastes would be evaluated for possible reduction of volume, toxicity, and mobility.

Operational impacts would not change from current waste management practices. The same types of waste would be generated by the proposed new facility as that generated by existing HE facilities, since the processes would be the same. It is conceivable that reductions in maintenance at the proposed facility would result in a slight reduction of generated waste, but that expectation cannot be quantified at this time.

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Utilities and Infrastructure: Usage at the proposed facility would not exceed the ranges of utility usage evaluated in the SA, since the activities occurring in the new facilities would be a consolidation of current activities, and no new activities would be introduced. However, new and improved energy-saving equipment, devices, and procedures would be installed at the new facility and could result in reductions in energy use during pressing activities. Construction activities would require electricity and water only.

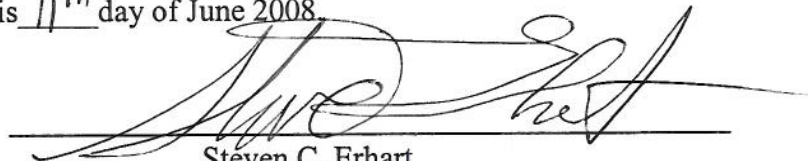
Cumulative Effects: Based on the preceding discussions, the potential effects of the Preferred Alternative, when combined with the effects of other actions within the area of influence, would not result in cumulatively significant impacts.

ALTERNATIVES CONSIDERED: In addition to the preferred alternative, NNSA considered the No Action Alternative, in which no new facility would be constructed and HE pressing activities would be adversely affected by increasing shutdowns for maintenance of the aging infrastructure. NNSA also reviewed the possibility of using other existing facilities, using temporary buildings, and replacing the existing press. NNSA found that retrofitting existing buildings would be an excessive construction investment. Temporary buildings would not meet safety and productivity requirements, and would require higher maintenance, likely forcing operations to shutdown during repairs. The replacement of the existing press could take up to several years, and pressing operations would be threatened. None of these alternatives were reasonable, and NNSA did not consider these further.

PUBLIC AVAILABILITY: The Pantex Site Office provided a copy of the Predecisional EA to the Texas Commission on Environmental Quality, Region I, for review and comment. The Commission did not comment on the proposed action. A Notice of Availability of the Final EA and FONSI will be published in the Amarillo Globe-News and the Panhandle Herald newspapers. Copies of the Final EA and FONSI will be available at the DOE Reading Rooms at the Lynn Library/Learning Center, Amarillo College, and at the Carson County Library in Panhandle, Texas. Copies can also be found on the following website:
<http://www.pantex.com/about/environment/regComp/NEPA/index.htm>.

DETERMINATION: Based on the information and analyses in the EA, NNSA has determined that the proposed federal action, to construct a new facility that would consolidate Pantex's current high explosive pressing activities at one facility, does not constitute a major federal action that would significantly affect the quality of the human environment, within the meaning of the National Environmental Policy Act. Therefore, an Environmental Impact Statement is not required, and the NNSA is issuing this FONSI.

Signed in Amarillo, Texas this 11th day of June 2008.



Steven C. Erhart
Manager