U.S. Department of Energy  
Finding of No Significant Impact  
Reconstruction of the South Access Road (CR 802) in Support of the Department of Energy, Waste Isolation Pilot Plant in Eddy County, New Mexico

AGENCY: U.S. Department of Energy  
ACTION: Finding of No Significant Impact (FONSI)  
SUMMARY: The U.S. Department of Energy (DOE), Carlsbad Field Office, has adopted an Environmental Assessment (EA) prepared by the U.S. Department of the Interior Bureau of Land Management (BLM) Carlsbad Field Office for the reconstruction of the South Access Road for the Waste Isolation Pilot Plant (WIPP) near Carlsbad, New Mexico. DOE currently operates WIPP as a disposal site for transuranic (TRU) waste and TRU-mixed waste containing hazardous chemical constituents generated by the nuclear defense activities of the federal government.

The WIPP site currently has two hard-surface access routes – the North Access Road connecting with US Highway 62/180, and the South Access Road originating at State Highway 128. The North Access Road consists of two 12-foot lanes with 8-foot paved shoulders; the South Access Road consists of two 12-foot lanes with no shoulders and the existing asphalt is deteriorating along the road edge at certain locations. The DOE is proposing to reconstruct the existing South Access Road, currently maintained by the Eddy County Road Department as County Road 802 (CR 802), widening the driving prism and right-of-way to improve the overall quality of the road. The roadway design will be based on the guidelines of the New Mexico Department of Transportation (NMDOT). The DOE Carlsbad Field Office has American Recovery and Reinvestment Act (ARRA) funds available for infrastructure upgrades, and is proposing to apply ARRA funds to reconstruct the South Access Road utilizing the North Access Road template as a design basis. The reconstructed road will provide a safer route for WIPP employees, vendor deliveries, local traffic, and commercial traffic.

The South Access Road is situated within both the WIPP Land Withdrawal Area and federal lands under the jurisdiction of the U.S. Department of the Interior BLM on an 80-foot right-of-way (NM ROW Permit #46130) issued by the BLM to Eddy County on September 18, 1987. The DOE Carlsbad Field Office has requested that the County transfer all rights and responsibilities for CR 802 to the DOE, and has also submitted a vacate application to the BLM requesting the right-of-way for the South Access Road corridor be granted to DOE.

The EA prepared by the BLM examined potential impacts of proposed highway reconstruction, and impacts of the no action alternative. The BLM also considered, but dismissed, alternatives that would not utilize the existing highway alignment as the basis for the reconstruction project, as such alternatives would result in greater surface disturbance. The EA and associated FONSI was made available by the BLM Carlsbad Field Office for public review and comment for a period of 15 days, from December 9 through December 24, 2009. No comments were received. Based on the analysis in the EA, DOE has determined that the proposed action does not constitute a major federal action significantly affecting the quality of the human environment within the meaning of the National Environmental Policy Act, 42 U.S.C. 4321 et seq. (NEPA).
Therefore, an environmental impact statement is not required and an EA will satisfy NEPA requirements for this proposed action.

**COPIES OF THE EA (DOI-BLM-NM-P020-2010-0011-EA) ARE AVAILABLE FROM:**
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**BACKGROUND:** DOE currently operates WIPP near Carlsbad, New Mexico, as a disposal site for TRU waste generated as part of the nuclear defense activities of the federal government. TRU waste is contaminated primarily with alpha-emitting radionuclides that are heavier than uranium (that is, their atomic numbers are greater than that of uranium) and that have half-lives longer than 20 years at concentrations greater than 100 nanocuries (13,700 becquerels) per gram of waste. DOE is responsible for the management and ultimate disposition of TRU waste generated at DOE sites and, as directed by Congress, has constructed WIPP for the purpose of disposing of TRU waste resulting from defense activities. The *Waste Isolation Pilot Plant Disposal Phase Final Supplemental Environmental Impact Statement* (DOE/EIS-0026-S-2) (WIPP SEIS-II) describes the potential environmental impacts associated with the disposal of TRU waste at WIPP.

WIPP is located in Eddy County in southeastern New Mexico. It is about 50 kilometers (30 miles) east of Carlsbad, New Mexico, in an area known as Los Medaños (“the dunes”), a relatively flat, sparsely inhabited plateau with little surface water.

**PROPOSED ACTION:** DOE is proposing to reconstruct the existing WIPP South Access Road, currently maintained by the Eddy County Road Department as CR 802, widening the driving prism and right-of-way to improve the present quality of the current road. The proposal would entail widening the existing road and increasing the present overall width of the right-of-way from 80 feet to a permanent width of 140 feet (70 feet from either side of the centerline). An additional 10 feet on either side is requested for construction purposes. Linear features for the access road are approximately 3.6 miles in length and 160 feet in width (140 permanent) for 69.818 acres of right-of-way, more or less. Actual disturbance due to road widening activities will be approximately 17 acres. The construction lay-down area and future rallying point will be
200 feet x 200 feet, or 0.918 acres, more or less. The proposed design will continue to use the existing horizontal and vertical alignments. The proposed design will be two 12-foot travel lanes with 8-foot paved shoulders. The intersection with the WIPP access road will be upgraded to accommodate transport vehicles accessing the WIPP site at some future date. No work will be required at the State Highway 128 intersection due to the upgrades by NMDOT in 2009. The roadway design will be based on NMDOT guidelines. As their design standards, the DOE has adopted the American Association of State Highway Transportation Officials (AASHTO) “A Policy On Geometric Design of Highways and Streets” (Green Book) (2004), the AASHTO “Roadside Design Guide” (2002), NMDOT Standard Drawings and design directives, and the NMDOT “Specifications For Highway and Bridge Construction” (2007).

**ALTERNATIVES CONSIDERED:** In addition to the proposed action, BLM considered the no action alternative (i.e., continued use of the existing roadway). The no action alternative would fail to correct the safety concerns associated with the deteriorating road surface and absence of shoulders, and would possibly interfere with the ability of WIPP to perform its assigned mission. The no action alternative is therefore not a reasonable alternative, but was analyzed for baseline purposes.

**ENVIRONMENTAL IMPACTS:** Because the proposed roadway reconstruction will take place primarily in the existing highway alignment, environmental impacts to air quality, land use, soil and vegetation, biological and visual resources, and sensitive noise receptors would be minor and/or short term. Impacts to cultural resources, environmental justice, socioeconomics, waste generation, and cumulative impacts would be negligible. With respect to air quality, various aspects of the proposed action could result in temporary impacts from exhaust, greenhouse gases, volatile organic compound (VOC) emissions and dust. The analysis in the EA indicates that these potential impacts to air quality could be reduced by following standard practices for minimizing disturbances during construction. Impacts to land use include the loss of an estimated 18 acres of vegetation, potential soil erosion, and potential impacts to range land livestock watering units during construction activities. The analysis in the EA indicates that impacts to rangeland, vegetation, and soil could be reduced by following standard practices for construction activities, such as utilizing existing surface disturbance, quickly re-establishing vegetation on disturbed areas, control of noxious weeds, and relocation of livestock watering units as necessary. Impacts of the proposed action to wildlife in the localized area may include mortality, habitat degradation and fragmentation, avoidance of habitat during construction activities, and the potential loss of burrows and nests. Standard mitigation measures will include minimizing cut and fill, periodic surveys for and avoidance of sensitive wildlife habitat, dust control, and timing limitations on construction activities. Implementation of the proposed action will cause minor visual impacts to the natural landscape that can be minimized by utilizing best management practices for design and construction of the roadway.

In addition to the direct and indirect impacts described above, BLM analyzed potential cumulative effects of the proposed action, including other past, present, and reasonably foreseeable future actions in the vicinity of WIPP. Overall, socioeconomic impacts from the experimental activities would be negligible because the number of additional personnel during the construction period will be small. Cumulative impacts to other resource areas are not
expected. Therefore, the effects of the proposed action, when combined with those due to current and foreseeable activities, will not result in cumulatively significant impacts.

To ensure implementation of mitigation measures identified in the EA, DOE/CBFO-10-3444, *Mitigation Action Plan for the Environmental Assessment and Finding of No Significant Impact for the Reconstruction of the South Access Road, Eddy County, New Mexico*, has been prepared for the proposed project. This plan describes the specific mitigation measures identified in the EA for this proposed project, how those measures will be planned and implemented, and identifies the organization responsible for their implementation.

**DETERMINATION:** Based on the information in the EA, DOE determines that the proposed action does not constitute a major federal action significantly affecting the quality of the human or physical environment within the meaning of NEPA. Therefore, the preparation of an environmental impact statement is not required and DOE has adopted this EA and is issuing this FONSI.

Issued in Carlsbad, New Mexico
January 27, 2010

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Signature on File
Dr. David C. Moody, Manager
U.S. Department of Energy, Carlsbad Field Office