

U.S. Department of Energy

**Environmental Assessment for
Reconstruction of the South Access Road (CR 802) in Support of the
Department of Energy,
Waste Isolation Pilot Plant in Eddy County, New Mexico
(DOE/EA-1755)**

January 2010

ENVIRONMENTAL ASSESSMENT (EA)
FOR THE RECONSTRUCTION OF THE SOUTH ACCESS ROAD (CR 802)
IN SUPPORT OF
THE DEPARTMENT OF ENERGY, WASTE ISOLATION PILOT PLANT
(WIPP)
IN

EDDY COUNTY, NEW MEXICO

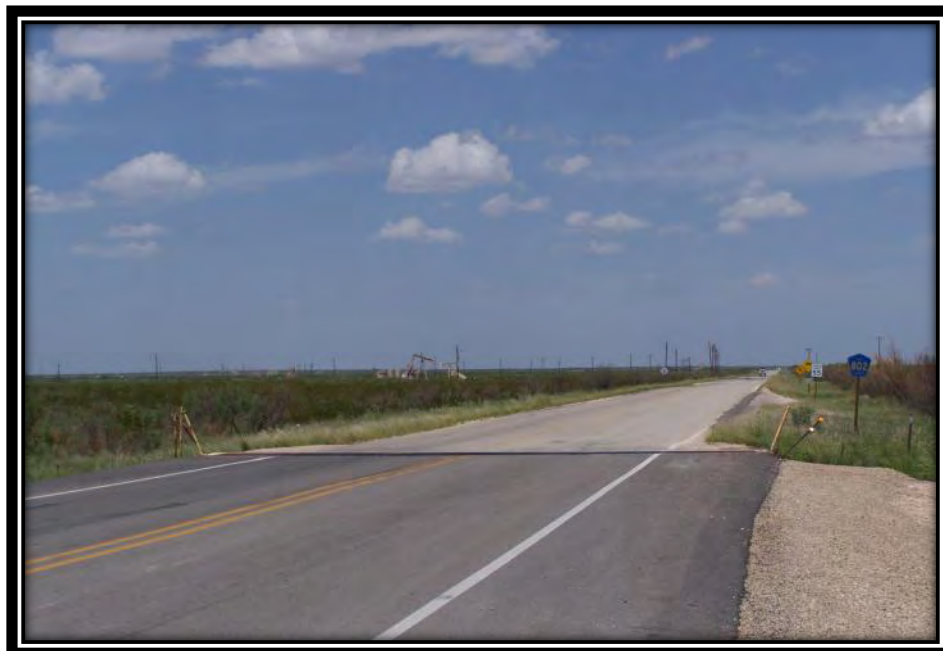
NEPA #: DOI-BLM-NM-P020-2010-0011-EA

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ENVIRONMENTAL ASSESSMENT
BLM Office: Carlsbad Field Office
DOI-BLM-NM-P020-2010-0011-EA
Serial #: NM-123703
Department of Energy (DOE), Carlsbad Field Office (CBFO)
Waste Isolation Pilot Plant (WIPP)
South Access Road (SAR)

1.0 **Purpose and Need for Action**

- 1.1 The DOE CBFO, is requesting a right-of-way (ROW) that consists of re-constructing the existing south access road (SAR) - currently maintained by the County as CR 802 - and widening the driving prism and ROW width to accommodate WIPP haulage trucks, and improve the overall quality of the current road condition. In addition, a construction lay down yard is being proposed, to be converted into a rallying point upon completion of the road construction.
- 1.2 The proposed action is sought to fill the need of having a second route to the WIPP for waste haulage activities via a southerly route. This would provide an alternate route for access to the WIPP site, and a rallying point for a contingency plan in the event of an evacuation of the facility in case of an emergency. An additional need is to improve the quality of the current road condition for safer travel.
- 1.3 Authority for this action is Title V of the Federal Land Policy and Management Act of Oct. 21, 1976, this site-specific EA tiers to and incorporates by reference the information and analysis contained in the Carlsbad Resource Area PRMP/FEIS (BLM, September 1986), the Carlsbad Resource Area PRMPA/FEIS (BLM, January 1997), and the Pecos District Special Status Species RMPA/FEIS (November 2007) which were approved as the Final RMP and RMPA for the CFO of the BLM by the Record of Decisions (ROD) signed September 30, 1988 , October 10, 1997, and May 2, 2008, respectively. These documents are available for review at the BLM Carlsbad Field Office (CFO), Carlsbad, New Mexico.

This EA addresses the resources and impacts on a site-specific basis as required by the NEPA of 1969, as amended (Public Law 91-90, 42 USC 4321 et seq.). The RMP and RMPA have been reviewed, and it has been determined that the proposed action conforms to the land use plan terms and conditions as required by 43 CFR 1610.5. The proposed project will not be in conflict with any local, county, or State plans.

- 1.4 The BLM Carlsbad Field Office utilizes a resource conflict map that was prepared by an interdisciplinary team showing areas of concern. These areas of concern include Special Management Areas (SMA's), Threatened and Endangered (T&E) Habitat, known locations of Threatened and Endangered (T&E) species, areas with other Special Status species, Wildlife Habitat projects, Riparian/Wetland habitat, 100-year floodplains, etc. The conflict map is reviewed, and the author of the EA signs off the projects shown to be outside of the areas of concern. The projects, which occur in the areas of concern depicted on the map, are reviewed and signed off only by the resource specialist with the expertise for that area.

The critical elements subject to requirements specified in statute, regulation, or executive order listed below are either not present or not affected by the proposed action or alternative.

Areas of Critical Environmental Concern (ACEC's)
Floodplains
Hazardous/Solid Wastes
Prime/Unique Farmlands
Water Quality
Wild & Scenic Rivers
Wilderness
Wetlands/Riparian

1.5 **Legal requirements or considerations**

Under Section 402 of the Clean Water Act (as amended), the U.S. Environmental Protection Agency (EPA), was directed to develop a phased approach to regulate storm water discharges under the National Pollutant Discharge Elimination System (NPDES) program. Industrial activities disturbing land may require permit coverage through a NPDES storm water discharge. Depending on the acreage disturbed, either a Phase I industrial activity (5 or more acres disturbance) or a Phase II small construction activities (between 1 and 5 acres disturbance) permit may be required. Additionally, a U.S. Army Corps of Engineers (Corp) Section 404 permit for the discharge of dredge and fill materials may also be required. Proponents are required to obtain all necessary permits and approvals prior to any disturbance activities.

The proposed action has been reviewed and determined to be in compliance with threatened and endangered species management guidelines outlined in the January 1996 and September 2006 Biological Assessments (Cons. #2-22-96-F-128 and #22420-2007-TA-0033, respectively). No further consultation with the U.S. Fish and Wildlife Service (USFWS) is required.

Compliance with Section 106 responsibilities of the National Historic Preservation Act are adhered to by following the BLM – New Mexico State Historic Preservation Officer protocol agreement, which is authorized by the National Programmatic Agreement between the *BLM*, the *Advisory Council on*

Historic Preservation, and the National Conference of State Historic Preservation Officers, and other applicable BLM handbooks.

The proposed project would have no effect on minority and/or low-income populations. The proposed project is too small to have a noticeable effect on the economy of the area, so effects to socioeconomic resources are not discussed.

Additionally, the Proponent is required to:

- Comply with all applicable Federal, State and local laws and regulations.
- Obtain the necessary permits for the construction of the road including water rights appropriations, the installation of water management facilities, water discharge permits, and relevant air quality permits.
- Obtain a right-of-way vacation from the County for CR 802.

2.0 **Alternatives Including the Proposed Action**

2.1 **Alternative A - Proposed Action**

The proposed action is to grant the applicant's proposal in accordance with the plan of development (POD) and design standards for paved access roads.

The proposal would entail widening the existing road and increasing the overall width of the ROW from 80', currently maintained by the County, to a permanent width of 140' (70' from either side of the centerline). An additional 10' on either side is requested for construction purposes.

Linear features for the access road are 3.6 +/- miles in length and 160 feet in width (140 permanent) for 69.818 acres of ROW, more or less. Actual disturbance due to road widening activities will be approximately 17 acres. The construction lay down area and future rallying point would be 200' X 200' for 0.918 acres, more or less.

The location of the proposed action is in Eddy County, New Mexico. The legal lands description is:

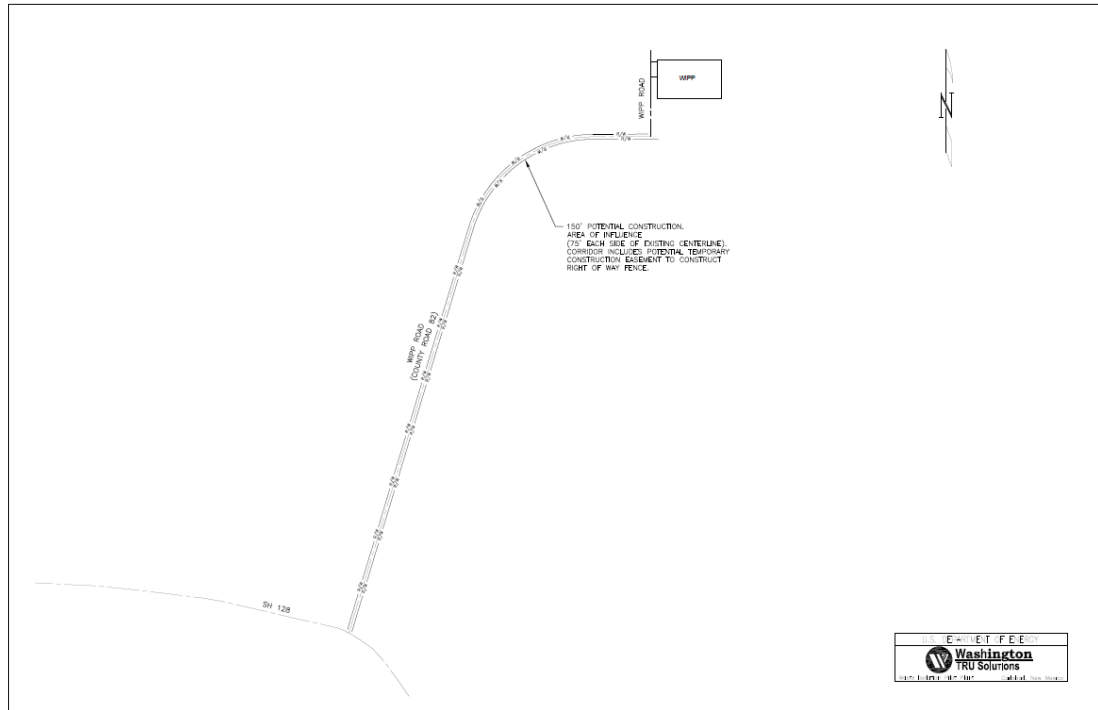
New Mexico Prime Meridian

T. 22 S., R. 31 E., (Withdrawn Lands to DOE/WIPP)
sec. 29, N $\frac{1}{2}$ N $\frac{1}{2}$;
sec. 30, E $\frac{1}{2}$ NE $\frac{1}{4}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$, and W $\frac{1}{2}$ SE $\frac{1}{4}$;
sec. 31, Lots 3, 4, and E $\frac{1}{2}$ NW $\frac{1}{4}$, and NE $\frac{1}{4}$ SW $\frac{1}{4}$.

T. 23 S., R. 30 E.,

sec. 01, SE $\frac{1}{4}$ NE $\frac{1}{4}$, and E $\frac{1}{2}$ SE $\frac{1}{4}$;
sec. 12, NE $\frac{1}{4}$ NE $\frac{1}{4}$.

T. 23 S., R. 31 E.,
sec. 06, Lots 4 and 5.



Design Features:

Roadway

The proposed design will use the existing County Road alignment horizontally and vertically as close as possible. The design will be 2 – 12' travel lanes with 8' paved shoulders. The intersection with the WIPP Access Road will be upgraded to accommodate the transport vehicles accessing the WIPP site at some future date. No work will be required at the SH 128 intersection due to the recent upgrades by New Mexico DOT in 2009.

The roadway design will be based on the guidelines of the New Mexico Department of Transportation (NMDOT). The Department has adopted the AASHTO's "A Policy On Geometric Design of Highways and Streets" (Green Book) (2004), AASHTO's "Roadside Design Guide" (2002), New Mexico DOT's standard drawings, Design Directives and their "Specifications For Highway and Bridge Construction" (2007) as their design standards.

Alignments, both horizontally and vertically, for the SAR will be based on a design speed of 60 mph with a maximum superelevation rate of 10%. The existing posted speed of 55 mph will be maintained. Alignments will be revised to meet at least the minimum design standards with a goal for the desired standards as defined in the above publications.

Roadway sideslope guidelines:

4:1 or flatter for Fill slopes and side ditches

3:1 or flatter for Cut slopes in soil

1:1 for Cut slopes in caliche or rock

Intersection design will be verified using the latest version of the "Auto Turn" software code used to design a minimum turn radius. The design vehicle used in the turn radius design will be a WB-62 trailer, modified to accommodate the RH72B Cask trailer.

The distance between any new gates and the roadway shoulder must be of sufficient length to allow oil field trucks to pull completely off of the roadway for safety.

The BLM standard range fence shall be utilized along the new ROW.

Existing cattle guards shall be relocated to accommodate widening of the roadway unless determination is made that the said cattle guard locations are not necessary. The BLM standard cattle guard details shall be utilized. For more information see SAR Plan of Development attachment A.

Mitigation Measures: To address the issues described above the following mitigation measures would be incorporated:

1. Cattle guards would be removed during construction and replaced in the same locations. Gates will be installed at the appropriate locations to allow the grazing lessee to move cattle across the road to adjacent pasture.
2. The livestock watering tank and fresh water lines will be avoided or re-located/routed during construction.
3. Oil and/or gas well sites and associated facilities will be avoided during construction. Historic drilling reserve pits will not be breached, only capping of the old pits will be allowed.
4. Access will continue to be allowed as it is currently, except in the case of an emergency shut down of the facility should a release occur.
5. Existing land use authorizations will be avoided when possible or will be moved if needed to allow for construction of the SAR.
6. Special timing stipulations for the Lesser Prairie-Chicken will be contained in the terms and conditions of the right-of-way grant.
7. Seeding requirements for sandy sites will be incorporated into the Plan of Development.
8. The right-of-way will be constructed per the design specifications contained in final Plan of Development (POD) for the SAR.

2.2 **Description of Alternatives.**

Alternative B - No Action

The BLM NEPA Handbook (H-1790-1) states that for Environmental Assessments (EAs) on externally initiated proposed actions, the No Action Alternative generally means that the proposed activity will not take place. This option is provided in 43 CFR 3162.3-1 (h) (2). This alternative would deny the approval of the proposed application, and the current land and resource uses would continue to occur in the proposed project area. No mitigation measures would be required.

2.3 **Alternatives Considered But Not Analyzed In Detail**

Field investigation of all areas of proposed surface disturbance for (Proposed Action) were inspected to ensure that potential impacts to natural and cultural resources would be minimized through the implementation of mitigation measures. These measures are described for all resources potentially impacted in Section 4.0 of this EA. In addition there were no other alternatives identified during the field investigations that would result in fewer impacts, since the proposed action utilizes the existing highway alignment. Any other alternative would require re-routing or re-aligning the road route resulting in more surface disturbance. Therefore, no additional alternative other than those listed above have been considered for this project.

3. **Affected Environment**

This section is a discussion, by relevant resources, of the current condition of the affected environment.

Location: The proposed project is located approximately 22 miles Southeast of Carlsbad. The regional industries are waste disposal activities within the WIPP withdrawal boundary, potash mining, ranching, and some oil and gas development. Occasional use is seasonal hunting. Both the surface and mineral estates are in Federal Ownership.

The land is leased for oil and gas under: See Oil and Gas Plats located at BLM Carlsbad field Office, Realty Department.

The rights-of-way of record are: See Master Title Plats locate at BLM Carlsbad Field Office, Realty Department.

3.1 **Air Resources**

Air Quality

Air quality is determined by atmospheric pollutants and chemistry, dispersion meteorology and terrain, and also includes applications of noise, smoke management, and visibility. The area of the proposed action is within the Pecos River airshed and is classified as a Class II Air Quality Area. A Class II area allows moderate amounts of air quality degradation. The primary causes of air pollution in the project area are from motorized equipment and dust storms caused by strong winds during the spring. Particulates from nearby oil and gas production, agricultural burning, recreational and industrial vehicular traffic and ambient dust can also affect air quality. Air quality in the area near the proposed action is generally considered good, and the proposed action is not located in any of the areas designated by the Environmental Protection Agency (EPA) as “non-attainment areas” for any listed pollutants regulated by the Clean Air Act.

Greenhouse gases (GHG), including carbon dioxide (CO₂) and methane (CH₄), are not regulated by the EPA under the Clean Air Act. The EPA’s Inventory of US Greenhouse Gas Emissions and Sinks 1990-2006, found that in 2006, total U.S. GHG emissions were over 6 billion metric tons and that total U.S. GHG emissions have increased by 14.1% from 1990 to 2006. The report also noted that GHG emissions fell by 1.5% from 2005 to 2006. This decrease was, in part, attributed to the increased use of natural gas and other alternatives to burning coal in electric power generation.

Climate

Ongoing scientific research has identified the potential impacts of anthropogenic (man-made) GHG-emissions, changes in biological carbon sequestration, and other changes due to land management activities on the global climate. Through complex interactions on a regional and global scale, these changes cause a net warming effect of the atmosphere, primarily by decreasing the amount of heat energy radiated by the earth back into space. Although natural GHG levels have

varied for millennia, recent industrialization and burning of fossil carbon sources have caused carbon dioxide equivalent (CO₂(e)) concentrations to increase dramatically, and are likely to contribute to overall global climatic changes. The Intergovernmental Panel on Climate Change recently concluded that “warming of the climate system is unequivocal” and “most of the observed increase in globally average temperatures since the mid-20th century is very likely due to the observed increase in anthropogenic greenhouse gas concentrations (Intergovernmental Panel on Climate Change (IPCC) 2007).

Global mean surface temperatures have increased nearly 1.33°F from 1906-2005. Models indicate that average temperature changes are likely to be greater in the Northern Hemisphere. Northern latitudes (above 24° N) have exhibited temperature increases of nearly 2.1°F since 1900, with nearly a 1.8°F increase since 1970 alone. Without additional meteorological monitoring systems, it is difficult to determine the spatial and temporal variability and change of climatic conditions, but increasing concentrations of GHGs are likely to accelerate the rate of climate change.

In 2001, the IPCC indicated that by the year 2100, global average surface temperatures would increase between 2.5°F and 10.4°F above 1990 levels, (IPCC Third Assessment Report: Climate Change 2001) depending on the assumptions made in the predictive model. The National Academy of Sciences has confirmed these findings, but also has indicated there are uncertainties regarding how climate change may affect different regions. More recently, the computer model predictions indicate that increases in temperature will not be equally distributed, but are likely to be accentuated at higher latitudes. Warming during the winter months is expected to be greater than during the summer, and increases in daily minimum temperatures are more likely than increases in daily maximum temperatures. Increases in temperatures would increase water vapor retention in the atmosphere, and reduce soil moisture, increasing generalized drought conditions, while at the same time enhancing heavy storm events. Although large-scale spatial shifts in precipitation distribution may occur, these changes are more uncertain and difficult to predict.

Several activities contribute to the phenomena of climate change, including emissions of GHGs (especially carbon dioxide and methane) from fossil fuel development, large wildland fires and activities using combustion engines; changes to the natural carbon cycle; and changes to radiative forces and reflectivity (albedo). It is important to note that GHGs will have a sustained climatic impact over different temporal scales. For example, recent emissions of carbon dioxide can influence climate for 100 years.

3.2 **Range**

The proposed action is within the Antelope Ridge allotment #77032. This allotment is a yearlong cow-calf deferred rotation operation. Range improvement projects such as windmills, water delivery systems (pipelines, storage tanks, and

water troughs), earthen reservoirs, fences, and brush control projects may be located within the allotment. In general, an average rating of the range land within this area is six acres/AUM (Animal Unit Months). In order to support one cow, for one year, about 72 acres is needed. This equals about nine cows per section.

A livestock watering unit and associated fresh water pipeline is located on the west side of the SAR near the south end of proposed project area. Another livestock watering unit and associated fresh water pipeline is located on the East side of the SAR near the North end of proposed project area. A range study (Deep Sand) was identified approximately 0.2 miles to the west of the proposed project.

3.3 **Soil**

The area of the proposed action is mapped as BD – Berino-Dune land complex, 0 to 3 percent slopes, and KM – Kermit-Berino fine sands, 0 to 3 percent slopes. These are sandy type soils and are described below:

Sandy Soil Type

Typically, these soils are deep, well-drained to excessively drained, non-calcareous to weakly calcareous sands. They are found on undulating plains and low hills in the “sand country” east of the Pecos River. Permeability is moderate to very rapid, water-holding capacity is low to moderate, and little runoff occurs. These soils are susceptible to wind erosion and careful management is needed to maintain a cover of desirable forage plants and to control erosion. Reestablishing native plant cover could take 3-5 years due to unpredictable rainfall and high temperatures.

Low stability soils, such as the sandy and deep sands found on this area, typically contain only large filamentous cyanobacteria. Cyanobacteria, while present in some locations, are not significant. While they occur in the top 4 mm of the soil, this type of soil crust is important in binding loose soil particles together to stabilize the soil surface and reduce erosion. The cyanobacteria also function in the nutrient cycle by fixing atmospheric nitrogen, contributing to soil organic matter, and maintaining soil moisture. Cyanobacteria are mobile, and can often move up through disturbed sediments to reach light levels necessary for photosynthesis. Horizontally, they occur in nutrient-poor areas between plant clumps. Because they lack a waxy epidermis, they tend to leak nutrients into the surrounding soil. Vascular plants such as grasses and forbs can then utilize these nutrients.

3.4 **Vegetation**

Vegetation within the general project area is dominated by warm season, short and midgrasses such as black grama, bush muhly, various dropseeds, and three-awns. Bluestems, bristlegrass, lovegrasses, and hooded windmillgrass make up some of the less common grasses. Shrubs include mesquite, shinnery oak, sand

sagebrush, broom snakeweed, and yucca. A large variety of forbs occur and production fluctuates greatly from year to year, and season to season. Common forbs include bladderpod, dove weed, globemallow, annual buckwheat, and sunflower.

3.5 **Wildlife Habitat**

This project occurs in a transition zone from Chihuahuan Desert habitat type to the west and to a sand shinnery habitat type to the east and is primarily dominated by mesquite scrublands intermixed with various grasses. This mesquite scrubland community extends across the southern Great Plains, occupying portions of north and west Texas, western Oklahoma, and southeast New Mexico. Portions of Eddy and Lea counties consist of mesquite scrublands to a lesser degree. The characteristic feature of the mesquite scrubland community is co-dominance by various species of grasses and cacti.

Various bird, mammal, reptile and invertebrate species inhabit this ecosystem in southeast New Mexico. Herbivorous mammals include mule deer, pronghorn, and numerous rodent species. Carnivores include coyote, bobcat, badger, striped skunk, and swift fox. Two upland game bird species, scaled quail and mourning dove, are prevalent throughout southeast New Mexico. Many species of songbirds nest commonly, with a much larger number that use the habitat during migration or for non-nesting activities. Common avian predators include northern harrier, Swainson's hawk, red-tailed hawk, kestrel, burrowing owl, and Chihuahuan raven. Numerous snake and lizard species also inhabit this ecosystem.

Raptors

The proposed project is located in the Los Medaños area of the Chihuahuan Desert. This area is known as a transition zone between deep sand-shinnery oak dominated dunelands to the north and east and mesquite-creosote dominated hardlands to the west. The resulting habitat has become home to a very diverse composition of wildlife. This is especially noticeable in the diversity and abundance of raptors. At least 20 raptor species utilize habitat available in the Los Medaños area (Restani 2000). The area also supports some of the densest raptor nesting habitat available anywhere (Olendorff et al. 1989). The four most abundant raptors to inhabit the area are Swainson's hawk, Harris' hawk, great horned owl, and western burrowing owl. Ohlendorff et al. (1989) identified the Los Medaños area as a Key Raptor Area on lands managed by BLM for the purposes of protecting and enhancing the expansive sensitive habitat. The BLM and DOE WIPP worked together under MOUs to perform raptor awareness studies known as the Raptor Research and Management Program in the WIPP Land Use Plan (DOE/WIPP 93-004).

Special Status Species

Lesser Prairie-Chicken

In New Mexico, the lesser prairie-chicken (LPC) formerly occupied a range that encompassed the easternmost one-third of the state, extending to the Pecos River, and 48 km west of the Pecos near Fort Sumner. This covered about 38,000 km². By the beginning of the 20th Century, populations still existed in nine eastern counties (Union, Harding, Chaves, De Baca, Quay, Curry, Roosevelt, Lea, and Eddy). The last reliable records from Union County are from 1993. Currently, populations exist only in parts of Lea, Eddy, Curry, Chaves, and Roosevelt counties, comprising about 23% of the historical range.

LPC are found throughout dry grasslands that contained shinnery oak or sand sage. Currently, they most commonly are found in sandy-soiled, mixed-grass vegetation, sometimes with short-grass habitats with clayey or loamy soils interspersed. They occasionally are found in farmland and smaller fields, especially in winter. Shinnery oak shoots are used as cover and produce acorns, which are important food for LPC and many other species of birds, such as the scaled quail, northern bobwhite, and mourning dove. Current geographic range of shinnery oak is nearly congruent with that of the lesser prairie-chicken, and these species sometimes are considered ecological partners. Population densities of LPC are greater in shinnery oak habitat than in sand sage habitat.

LPC use a breeding system in which males form display groups. These groups perform mating displays on arenas called leks. During mating displays male vocalizations called booming, attract females to the lek. Leks are often on knolls, ridges, or other raised areas, but in New Mexico leks are just as likely to be on flat areas such as roads, abandoned oil drill pads, dry playa lakes or at the center of wide, shallow depressions. Leks may be completely bare, covered with short grass, or have scattered clumps of grass or short tufts of plants. An important physical requirement for location of leks is visibility of surroundings, but the most important consideration is proximity of suitable nesting habitat, breeding females and the ability to hear male vocalizations.

In the late 1980's, there were 35 documented active booming grounds known to exist within the CFO. Due to population decreases and unpredictable weather cycles the LPC is currently a candidate for federal listing, and potentially may become extirpated from Eddy and southern Lea counties.

In June 1998, the US Fish and Wildlife Service (USFWS) issued a statement regarding their status review of the lesser prairie-chicken. It stated, "Protection of the lesser prairie-chicken under the Federal Endangered Species Act (ESA) is warranted but precluded which means that other species in greater need of protection must take priority in the listing process." Given the current Federal Candidate status of this species, the Bureau of Land Management is mandated to carry out management consistent with the principles of multiple use, for the conservation of candidate species and their habitats, and shall ensure that actions authorized, funded, or carried out do not contribute to the need to list any of these species as Threatened or Endangered (Bureau Manual 6840.06).

During the 2008 LPC survey season, the CFO wildlife staff located 9 active booming grounds and 12 other sightings not associated with an active lek. Historic survey data indicate the project is within suitable and formerly occupied lesser prairie-chicken habitat. The closest known lek locations were 10.0 and 10.2 miles NE, although neither location has been observed active since 1989. However, sightings of individual prairie-chickens have occurred more recently within 1.1 miles of the lek locations: A group of 14 prairie chickens were observed prior to breeding season in 2004, and two single birds were observed at separate locations in the same week of 2008. Closer to the project, observations of prairie-chickens in 2004 were reported 0.74 miles N, 3.1 miles NE, and 6.4 miles E.

The proposed project is located inside the WIPP Lesser Prairie-Chicken Habitat Evaluation Area (HEA) as described in the BLM 2008 Pecos District Special Status Species Resource Management Plan Amendment (SSS-RMPA). The HEAs were identified as areas of suitable lesser prairie-chicken habitat that contained minimum habitat fragmentation and could be managed as habitat building blocks for the species. Management prescriptions for the 17 Areas include increased survey effort to locate occupied habitat, focus reclamation efforts to reduce existing fragmentation, and minimize future habitat fragmentation caused by new construction and infrastructure installation.

3.6 **Cultural**

The project falls within the Southeastern New Mexico Archaeological Region. This region contains the following cultural/temporal periods: Paleoindian (ca. 12,000 – 6,200 B.C.), Archaic (ca. 6,200 B.C. – A.D. 500), Ceramic (ca. A.D. 500 – 1540), Protohistoric and Spanish Colonial (ca. A.D. 1400 – 1821), and Mexican and American Historical (ca. A.D. 1822 to early 20th century). Sites representing any or all of these periods are known to occur within the region. A more complete discussion can be found in *Living on the Land: 11,000 Years of Human Adaptation in Southeastern New Mexico; An Overview of Cultural Resources in the Roswell District, Bureau of Land Management* published in 1989 by the U.S. Department of Interior, Bureau of Land Management.

Native American Religious Concerns

The BLM conducts Native American consultation regarding Traditional Cultural Places (TCP) and Sacred Sites during land-use planning and its associated environmental impact review. In addition, during the oil & gas lease sale process, Native American consultation is conducted to identify TCPs and sacred sites whose management, preservation, or use would be incompatible with oil and gas or other land-use authorizations. With regard to Traditional Cultural Properties, the BLM has very little knowledge of tribal sacred or traditional use sites, and these sites may not be apparent to archaeologists performing surveys in advance of construction. However, to date no TCPs or sacred sites have been identified in the vicinity of the proposed project area.

3.7 **Visual Resource Management (VRM)**

The Visual Resource Management (VRM) program identifies visual values, establishes objectives in the RMP for managing those values, and provides a means to evaluate proposed projects to ensure that visual management objectives are met.

This project occurs within a Visual Resource Management Class IV zone. The objective of VRM Class IV is to provide for management activities which require major modifications of the existing character of the landscape. The level of change to the characteristic landscape can be high. These management activities may dominate the view and be the major focus of viewer attention. However, every attempt should be made to minimize the impact of these activities through careful location, minimal disturbance, and repeating the basic landscape elements of color, form, line and texture.

3.8 **Noxious Weeds**

There are four plant species within the CFO that are identified in the New Mexico Noxious Weed List Noxious Weed Management Act of 1998. These species are African rue (*Peganum harmala*), Malta starthistle (*Centaurea melitensis*), Russian olive (*Elaeagnus angustifolia*), and salt cedar (*Tamarix* sp.). African rue and Malta starthistle populations have been identified throughout the Carlsbad Field Office and mainly occur along the shoulders of highway, state and county roads, lease roads and well pads (especially abandoned well pads). The CFO has an active noxious weed monitoring and treatment program, and partners with county, state and federal agencies and industry to treat infested areas with chemical and monitor the counties for new infestations. Currently there are no known populations of invasive, non-native species located on the proposed access road corridor.

4. **Environmental Impacts or Consequences**

This section is a discussion, by relevant resources, of the potential impacts of the proposed action. The discussion includes direct, indirect, cumulative and residual impacts after mitigation actions have been applied.

No Action Alternative

Projects requiring approval from the BLM such as Rights-of-Way can be denied when the BLM determines that adverse effects to resources (direct or indirect) cannot be mitigated to reach a Finding of No Significant Impact (FONSI). Under the No Action Alternative, the proposed road would not be built or constructed and there would be no new impacts to natural or cultural resources from the action. The No Action Alternative would result in the continuation of the current land and resource uses in the project area and is used as the baseline for comparison of alternatives. There have been no environmental impacts identified which would warrant selection of this alternative.

4.1 **Air Resources**

Proposed Action:

Air Quality:

The proposed project would not adversely affect air quality. The winds that frequent the southeastern part of New Mexico generally disperse odors and emissions, however, air quality would be impacted temporarily from exhaust emissions, chemical odors, dust caused by vehicles traveling to and from the project area and from motorized equipment used during construction of the road. Potential impacts of development could include releases of GHG and volatile organic compounds during construction activities. Impacts to air quality will diminish upon completion of the construction phase of the proposed action.

The EPA has the primary responsibility for regulating air quality, including seven nationally regulated ambient air pollutants. The EPA has delegated regulation of air quality to some states of which New Mexico is one. The New Mexico Air Quality Bureau's (NMAQB) mission is to protect the inhabitants and natural beauty of New Mexico by preventing the deterioration of air quality. The NMAQB is responsible for: ensuring air quality standards are met and maintained; issuing air quality Construction and Operating Permits; enforcing air quality regulations and permit conditions. Any emission source must comply with the NMAQB regulations.

Impacts to air quality on lands managed by BLM in southeastern New Mexico are reduced by the following standard practices which include: utilizing existing disturbance; minimizing surface disturbance; reclaiming and quickly establishing vegetation on areas not necessary for production; periodic watering of access roads during dry periods; removal and reuse of caliche for building other projects.

Climate

Climate change analyses are comprised of several factors, including GHGs, land use management practices, and the albedo effect. The tools necessary to quantify incremental climatic impacts of specific activities associated with those factors are presently unavailable. As a consequence, impact assessment of effects of specific anthropogenic activities cannot be performed. Additionally, specific levels of significance have not yet been established. Qualitative and/or quantitative evaluation of potential contributing factors within the project area are included where appropriate and practicable. When further information on the impacts to climate change in southeastern New Mexico is known, such information will be incorporated into the BLM's NEPA documents as appropriate.

Mitigation: The dust abatement plan contained in the plan of development will include spraying water on the disturbed surface to control dust.

4.2 **Range**

Proposed Action: The loss of about 18 acres of vegetation will not affect the Animal Unit Months (AUMs) which are authorized for livestock use in this area. Livestock injuries or deaths may occur during construction of the road due to accidents such as collisions with vehicles, and ingesting plastic or other materials present at the work site, but are not expected to increase as a result of the proposed action. If further development occurs, the resulting loss of vegetation could reduce the AUMs authorized for livestock use in this area.

Impacts to the ranching operation are reduced by the following standard practices which include: utilizing existing surface disturbance, minimizing vehicular use, placing parking and staging areas on caliche surfaced areas, reclaiming the areas not necessary for road use, and quickly establishing vegetation on the reclaimed areas.

Impacts to a livestock watering units could occur from construction activities. A range study (Deep Sand Range Study Site) is located approximately 0.2 miles West of the proposed project. There are no impacts expected to occur to this site as a result of the proposed action.

Mitigation: Re-locate livestock watering unit away from the project area in a location desirable to the rancher.

4.3 Soil

Proposed Action: There is a potential for wind and water erosion due to the erosive nature of these soils once the cover is lost. There is always the potential for soil contamination due to spills or leaks during construction activities. Soil contamination from spills or leaks can result in decreased soil fertility, less vegetative cover, and increased soil erosion.

Impacts to soil resources will be reduced by following standard practices such as utilizing existing surface disturbance, placing parking and staging areas on caliche surfaced areas, and quickly establishing vegetation on the disturbed areas.

Mitigation: Contained in POD (see attached)

4.4 Vegetation

Proposed Action: Very little vegetation will be totally removed when the driving surface is widened. Removal of vegetation would be limited to the area needed to construct the widened road bed. Other disturbance to vegetation would include “mashing” of the vegetation caused by construction vehicles traveling along the right-of-way corridor and some disturbance when the new ROW fence is constructed. Vegetation should quickly return to the disturbed area without requiring the application of a seed mixture.

Impacts to vegetation will be reduced by following standard practices such as utilizing existing surface disturbance, no blading along the proposed route,

minimizing vehicular use, placing parking and staging areas on caliche surfaced areas, and quickly establishing vegetation on the disturbed areas.

Mitigation: None

4.5 **Wildlife**

Proposed Action: Impacts of the proposed action to wildlife in the localized area may include: possible mortality, habitat degradation and fragmentation, avoidance of habitat during construction activities and the potential loss of burrows and nests.

Standard mitigation measures and elements of the proposed action minimize these impacts to wildlife. These include but are not limited to: minimizing cut and fill, road placement, and avoidance of wildlife waters, stick nests, drainages, playas and dunal features. These practices reduce mortality to wildlife and allow habitat to be available in the immediate surrounding area thus reducing stressors on wildlife populations at a localized level. Impacts to local wildlife populations are therefore expected to be minimal.

Raptors

Impacts specific to raptors are expected to be minimal as the project is not new construction but, instead, an upgrade of an existing road. However because the project will occur beyond the existing road's footprint, pre-construction surveys will be performed within the project area to identify any existing raptor nests, current status of the nests (occupied or not), and potential nesting structures. The surveys should occur on several occasions leading up to construction activities due to the phased approach for completing the project. Because the estimated duration of the project would span several species breeding seasons, continuing surveys during construction, and potentially after construction, would identify any nests that became occupied during the project and any new nests constructed since the last survey. These efforts will aid in establishing potential timing limitations and distance avoidance buffers to avoid disrupting the breeding cycle of the particular species.

Mitigation: Surveys for raptor nests, including burrows, and nesting structures will be performed by the BLM CFO multiple times before and throughout the project. A 100 meter avoidance buffer will be employed around inactive raptor nests and a 200 meter buffer will be employed around active raptor nests. Portions of the project within these distances can be either delayed until the nest fledges or up to 90 days.

Special Status Species

Lesser Prairie-Chicken

Impacts of the proposed action to LPC in the localized area may include but are not limited to: disruptions in breeding cycles, habitat degradation and fragmentation, avoidance of habitat during construction activities and potentially

loss of nests. Noise and human activity generated from construction activity could impact the LPC by reducing the establishment of seasonal "booming grounds" or leks, thus possibly reducing reproductive success in the species. It is believed that the noise generated by construction activity and human presence could mask or disrupt the booming of the male prairie-chicken and thus, the females cannot hear the booming. In turn, female LPC would not arrive at the booming ground, and subsequently, there would be decreased courtship interaction and possibly decreased reproduction. Decreased reproduction and the loss of recruitment into the local population would result in an absence of younger male LPC to replace mature male LPC once they expire, eventually causing the lek to disband and become inactive. Additionally, habitat fragmentation caused by development could possibly decrease the habitat available for nesting, brooding and feeding activities.

The CFO takes every precaution to ensure that active booming grounds and nesting habitats are protected by applying a timing and noise condition of approval within portions of suitable and occupied habitat for the LPC. It is not known at this time whether active booming grounds or nest locations are associated with this specific location. Only after survey efforts during the booming season are conducted, will it be known whether an active lek is in close proximity (within 1.5 miles) of the proposed location or not.

Exceptions to timing and noise requirements will be considered in emergency situations such as mechanical failures, however, these exceptions will not be granted if BLM determines, on the basis of biological data or other relevant facts or circumstances, that the grant of an exception would disrupt LPC booming activity during the breeding season. Requests for exceptions on a non-emergency basis may also be considered, but these exceptions will not be granted if BLM determines that there are prairie-chicken sightings, historic leks and or active leks within 1.5 miles of the proposed location, or any combination of the above mentioned criteria combined with suitable habitat.

In light of the circumstances under which exceptions may be granted, minimal impacts to the LPC are anticipated as a result of the grant of exceptions to the timing limitation for LPC Condition of Approval. In light of these requirements and mitigation measures as below, minimal impacts to the LPC are anticipated as a result of construction activity.

Mitigation

In May 2008, the Pecos District Special Status Species Resource Management Plan Amendment (RMPA) was approved and is being implemented. In addition to the standard practices that minimize impacts, as listed above, the following COA will apply:

Timing Limitation Stipulation / Condition of Approval for lesser prairie-chicken, to minimize noise associated impacts which could disrupt breeding and nesting activities. All construction activities will be restricted to the hours of 9:00 am

through 3:00 am for the period of March 1st through June 15th. No construction activities will be allowed between 3:00 am and 9:00 am.

4.6 **Cultural**

Cultural resources on public lands, including archaeological sites and historic properties, are protected by federal law and regulations (Section 106 of the National Historic Preservation Act and the National Environmental Policy Act). Class III cultural surveys will be conducted of the area of effect for realty projects proposed on these lands prior to the approval of any ground disturbing activities to identify any resources eligible for listing on the National Register of Historic Places. Cultural resource inventories minimize impacts to cultural sites and artifacts by avoiding these resources prior to construction of the proposed project. If unanticipated or previously unknown cultural resources are discovered at any time during construction, all construction activities shall halt and the BLM authorized officer will be immediately notified. Work shall not resume until a Notice to Proceed is issued by the BLM.

A Class III cultural resource inventory (BLM 10-NM-523-0041) was conducted of the area of effect, no Historic Properties were identified.

Mitigation Measures: None

4.7 **Visual Resource Management (VRM)**

This project will cause some short term and long-term visual impacts to the natural landscape. Short term impacts occur during construction operations. These include the presence of construction equipment vehicle traffic.

Long term impacts are visible to the casual observer through the life of the road. These include the visual evidence which cause visible contrast to form, line, color, and texture. Removal of vegetation due to construction of the proposed project exposes bare soil lighter in color and smoother in texture than the surrounding vegetation. However, when the road is surfaced with asphalt the darker color may contrast with the surrounding vegetation, but since the existing road alignment is being utilized it is not expected that this action would increase the contrast to the viewshed.

After construction and removal of construction equipment the area should return to its current condition and the visual impacts would be alleviated.

Short and long term impacts are minimized by best management practices such as color selection, reducing cut and fill, screening facilities with natural features and vegetation, interim reclamation and contouring roads along natural changes in elevation.

Mitigation: None

4.8 **Noxious Weeds**

Proposed Action: Any surface disturbance can increase the possibility of establishment of new populations of invasive, non-native species. The construction of the access road and rally point may contribute to the establishment and spread of African rue and Malta starthistle. The main mechanism for seed dispersion would be by equipment and vehicles that were previously used and/or driven across noxious weed infested areas. Noxious weed seed could be carried to and from the project area by construction equipment, or transport vehicles. Impacts are expected to be minimal with the following mitigation measures applied.

Mitigation:

To reduce impacts the Noxious Weed COAs will apply:

The DOE CBFO shall ensure that the road construction contractor be held responsible for noxious weed control within their areas of operation.

4.9 **Solid and Hazardous Wastes**

No hazardous waste products would be used, discarded or produced by this proposed project. Solid wastes would be recycled or disposed of at an approved landfill. All of the present asphalt will be recycled and used in the new road. It will be broken up in place prior to embankment or base course build up as dictated by the profile grade of the road.

5 **Cumulative Impact Analysis**

Cumulative impacts are the combined effect of past projects, specific planned projects, and other reasonably foreseeable future actions within the project study area to which the development of this project may add incremental impacts. This includes all actions, not just the SAR and oil and gas actions, that may occur in the area including foreseeable non-federal actions.

The combination of all land use practices across a landscape has the potential to change the visual character, disrupt natural water flow and infiltration, disturb cultural sites, cause minor increases in greenhouse gas emissions, fragment wildlife habitat and contaminate groundwater. However, the likelihood of these impacts occurring is minimized through standard mitigation measures, special Conditions of Approval and ongoing monitoring studies.

All resources are expected to sustain some level of cumulative impacts over time, however these impacts fluctuate with the gradual abandonment and reclamation of wells, expansion and decommissioning of facilities associated with the WIPP project, and actions associated with cattle ranching and potash mining. As new actions occur on the landscape others may be nearing an end, creating an ebb and flow cumulative effect on the environment.

6 Consultations and Coordination

Prepared by: Owen W. Lofton, Supervisory Multi Resources Specialist, BLM-CFO
Date: 10/03/09

The following individuals have been consulted regarding the proposed action:

BLM

George H. MacDonnell, Archaeologist, BLM-CFO
Steve Daly, Soil Conservationist, BLM-CFO
Ty Allen, Wildlife Biologist, BLM-CFO
Steve Bird, Wildlife Biologist, BLM-CFO
Mark Lewis, Geologist, BLM-CFO (Mineral Materials)
James B. Smith, Planning and Environmental Coordinator, BLM-CFO
Aaron Stockton, Natural Resource Specialist Cave/Karst, BLM-CFO
Deanna Younger, Outdoor Recreation Planner, BLM-CFO

Department of Energy (DOE)

Hank Carey, Project Manager, Washington TRU Solutions (WTS)
Susan McCauslin, NEPA Coordinator, DOE CBFO
Gene Vallet, Project Manager, WTS

County Road Department

Frank Weldon, Superintendent, Eddy County

7 References Cited

Draft New Mexico GHG Inventory and Reference Case Projection – June 2005.

(Available on the Internet:

<http://www.nmclimatechange.us/ewebeditpro/items/O117F6527.pdf>)

Department of Energy. 2002. Waste Isolation Pilot Plant Land Management Plan. Reprint. (Available on the Internet:

<http://www.wipp.energy.gov/library/seis/WIPP93-004.pdf>).

EPA Inventory of US Greenhouse Gas Emissions and Sinks: 1990-2006.

Environmental Protection Agency, Washington, D.C.

Intergovernmental Panel on Climate Change (IPCC). 2001. Climate Change 2001: Synthesis Report. Contribution of Working Groups I, II, III to the Third Assessment Report. (Available on the Internet:

http://www.grida.no/publications/other/ipcc_tar/?src=/climate/ipcc_tar/)

Intergovernmental Panel on Climate Change (IPCC). 2007. Climate Change 2007, Synthesis Report. A Report of the Intergovernmental Panel on Climate Change.

Intergovernmental Panel on Climate Change (IPCC). 2007. *Climate Change 2007: The Physical Basis (Summary for Policymakers)*. Cambridge University Press. Cambridge, England and New York, New York. (Available on the Internet: <http://www.ipcc.ch/pdf/assessment-report/ar4/wg1/ar4-wg1-spm.pdf>)

New Mexico Environment Department Air Quality Bureau. (Available on the Internet: <http://www.nmenv.state.nm.us/aqb/>)

Ohlendorff, R. R., D. D. Bibles, M. T. Dean, J. R. Haugh, and M. N. Kochert. 1989. Raptor Habitat Management Under the U.S. Bureau of Land Management Multiple Use Mandate. Raptor Research Reports No. 8: 1-80.

Restani, M. 2000. Waste Isolation Pilot Plant WIPP Raptor Program 2000 Annual Report. Rocky Mountain College, Billings, MT. Prepared for: Westinghouse Government Services Group, Waste Isolation Division, Subcontract Number PO-3733.

Sebastian, L., and S. Larralde. 1989. *Living on the Land: 11,000 Years of Human Adaptation in Southeastern New Mexico*. Cultural Resources Series No. 6. New Mexico Bureau of Land Management. Prepared by the Office of Contract Archeology, University of New Mexico, for the Bureau of Land Management, Roswell District.

Attachment "A"

WIPP South Access Road Reconstruction – Plan of Development (POD) – v1.1

1. Purpose and Need for the Facility

The current South Access Road (SAR) is 3.75 miles of paved road connecting the WIPP North Access Road from 62/180 to SH-128 (Jal Highway) and is situated on an 80 foot ROW Grant issued by the BLM on September 18, 1987 (NM 46130) to Eddy County. The original grant was issued on May 29, 1981. The existing roadway has no shoulders and the asphalt is deteriorating along the road edge and at certain locations on the road. After reconstruction, the Waste Isolation Pilot Plant (WIPP) haulage trucks will be able to utilize the SAR as access to the WIPP from the south via SH 128. The reconstructed SAR will provide a second route to the WIPP for waste haulage activities. The SAR is a permanent road, intended for all-season use.

The design criteria established for the original North Access Road (NAR) is the design basis for the SAR. That design specified that the design traffic volume (for WIPP personnel and shipments only) be based upon an average daily traffic of 800 vehicles at the start of plant operation and 920 vehicles twenty years after the startup of plant operation. Two percent of the vehicles shall be assumed to be trucks (excluding light delivery trucks). The design hourly volume is assumed to be 144 vehicles with 67% of the vehicles traveling in the predominant direction of travel.

The current plan of record is to reconstruct the road as it exists. There has, however, been a design option presented that would introduce a curve at the proximity of the existing ‘T’ intersection (where the stop sign and flashing light are currently). There are many factors that weigh into the implementation of this option. Should it be decided to pursue this, this POD will be revised accordingly.

2. Right-of-way Location

BLM will provide the applicable verbiage for the legal description, supported by the maps created by the URS survey team. Road cross sections, plans and profiles are described by drawings 23-Z-015-W-8 through -19 provided.

The curve option, discussed above, will require a modification to the RoW.

3. Facility Design Factors

The roadway design will be based on the guidelines of the New Mexico Department of transportation (NMDOT). The Department has adopted the AASHTO’s “A Policy On Geometric Design of Highways and Streets” (Green Book) (2004), AASHTO’s “Roadside Design Guide” (2002), New Mexico DOT’s standard drawings, Design Directives and their “Specifications For Highway and Bridge Construction” (2007) as their design standards.

Alignments, both horizontally and vertically, for the SAR will be based on a design speed of 60 mph with a maximum superelevation rate of 10%. The existing posted speed of 55 mph will be maintained. Alignments will be revised to meet at least the minimum design standards with a goal for the desired standards as defined in the above publications.

Regarding the requirements and location of drainage ditches, culverts, bridges, and low-water crossings, refer to dgws 23-Z-015-W-11 through -31

Hot bituminous pavement will be the final lift

The reconstructed road will be 3.75 miles in length, with two twelve foot travel lanes and (the addition of) two eight foot shoulders. (Ref dwg 23-Z-015-W-8)

The NMDOT standard culvert and related drawings are provided as follows:

206-03-1/1 Max and min cover – steel-round pipes corrugated metal and structural plates

206-05-1/1 Max and min cover – aluminum-round pipes corrugated metal and structural plates

206-07-1/1 Corrugated metal culvert and pipe arches bedding and backfill details

511-11-1/1 Single metal pipe concrete blanket without safety grate

511-13-1,2/2 Single metal pipe concrete blanket with safety grate

511-15-1,2/2 Typical concrete blanket details

511-16-1/1 Concrete blanket safety grate details for circular metal pipes

570-02-1/2 Culvert pipe end sections (metal)

602-02-1/1 Erosion control at culvert outlets

An equipment storage/laydown area (ref dwg 23-Z-015-W-13) has been recommended at station 51+50, It 70⁷. It is our intention to convert this to a rally point upon completion of the road construction.

4. Additional Components

Our design team is presently working through the earthwork balance calculations and expects to present those findings by mid-Sept. In addition, they are working with Mark Lewis (BLM) as well as Stacey Mills to locate viable caliche pits in the area, should that material be required. The preliminary earthwork balance calculations suggest that no borrow sources will be required.

Per above, an equipment storage/laydown area has been identified. This is anticipated to require an additional, permanent easement.

Two Emergency Protection Zone (EPZ) gates will be installed at the sixteen section boundaries-on both the North and south Access Roads. These gates will remain locked in the open position and be closed only in the eventuality of an accidental radiological release.

5. Government Agencies Involved

There are no navigable waters involved this project and therefore no USACE 404 permitting required. There will be a new easement required that reflects the wider road corridor, as described above.

6. Construction of facilities – *This section will be addressed in its entirety with a formal construction plan, a submittal required of The Contractor upon NOA of the construction contract*

A typical traffic control staging plan has been developed that closes one lane of traffic in 0.5 miles segments during the daytime hours to perform construction activities. Traffic is maintained by flaggers. At nighttime, the roadway will re-open to two-lane, two-way traffic. The standard set up is shifted along the roadway to complete the improvements.

Traffic access to the South Access Road will be required at all times with restrictions to one-lane traffic during the day and two-lane traffic at nighttime. The Contractor shall provide and maintain public and private access driveways from the point of disruption to the traveled way. The Contractor will not be allowed to shut off access to any property and must coordinate his work with the property owner.

Ref 'Contacts' notes in dwg 23-Z-015-W-11

The Contractor will submit a safety plan

There is no anticipated need for an industrial waste disposal plan or the use of any toxic substances in the construction activities. This will be confirmed upon receipt of the construction plan, available as a submittal following NOA.

The only seasonal restrictions anticipated are those presented as a result of the environmental assessment; *i.e.*, Lesser Prairie Chicken accommodation (below).

7. Resource Values and Environmental Concerns

- a. address at level commensurate with anticipated impacts*
 - 1) location with regard to existing corridors*
- b. anticipated conflicts with resources or public health and safety*
 - 1) air, noise, geologic hazards, mineral and energy resources, paleontological resources, soils, water, vegetation, wildlife, threatened and endangered species, cultural resources, visual resources, BLM projects, recreation activities, wilderness, etc.*

8. Stabilization and Rehabilitation

- a. soil replacement and stabilization

- b. disposal of vegetation removed during construction (i.e., trees, shrubs, etc.)
- c. seeding specifications
- d. fertilizer
- e. limiting access to right-of-way

We are requesting the BLM specifications for topsoil salvage, seed mix, fertilizer and any other restorative activities that might be pertinent.

9. Operation and Maintenance – *Following vacation of 802 by Eddy County, the SAR will fall under standard O&M guidelines for a DOE facility*

10. Termination and Restoration

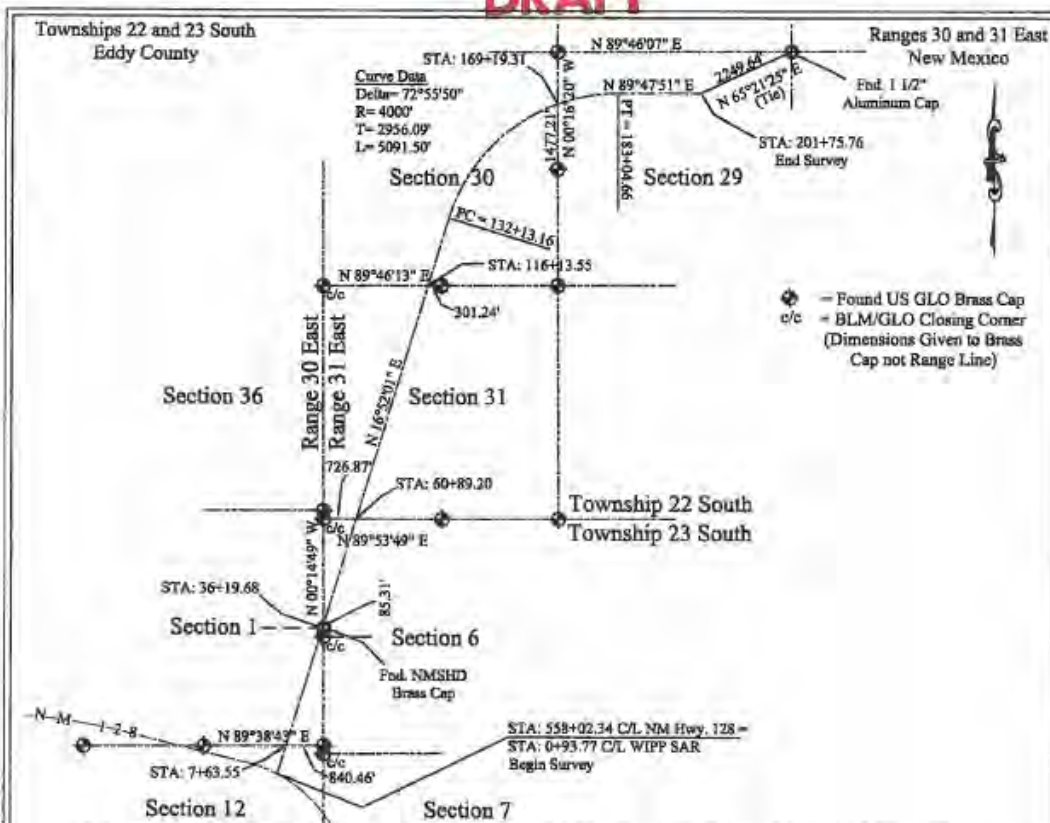
The existing road will be rehabilitated, widened and repaved. A phased rehabilitation plan is in-process with an expected completion date of end of August. Both fence lines- including cattleguards- will be removed, relocated and replaced with NMDOT standard cattle guards.

The vegetation, specifically mesquite, will be mitigated within the corridor to minimize shelter for deer and other wildlife that interfere with vehicular traffic.

Per item 8 above, a stabilization and re-vegetation plan will be submitted.

A decommissioning plan has been requested to be included in the final POD.

DRAFT



A strip of land 140 feet wide and 20,081.99 feet or 3.80 miles long being 70 feet left and 70 feet right of the above platted survey centerline.

Surveyor's Certificate

Kim Stelzer states he is by occupation a Land Surveyor employed by URS Corporation to make the survey of the South Access Road (SAR) as described and shown on this plat, that the survey of said works was made under his supervision and under authority commencing on the 7th day of July, 2009 and ending on the 22nd day of July, 2009 and that such survey is accurately represented upon this plat.

DRAFT

Surveyor

Applicant's Certificate

This is to certify that Kim Stelzer who subscribed the statement hereon is the person employed by the undersigned applicant to prepare this plat, which has been adopted by the applicant as the approximate final location of the works thereby shown; and that this plat is filed as part of the complete application, and in order that the applicant may obtain the benefits of _____ and I further certify that the Right-of-way herein described is desired for South Access Road (SAR).

Applicant's Signature

Title

UNITED STATES DEPARTMENT OF ENERGY

A Proposed Access Road Crossing Sections 12 and 1, Township 23 South, Range 30 East; Section 6, Township 23 South, Range 31 East; Sections 31, 30 and 29, Township 22 South, Range 31 East N.M.P.M., Eddy County, New Mexico

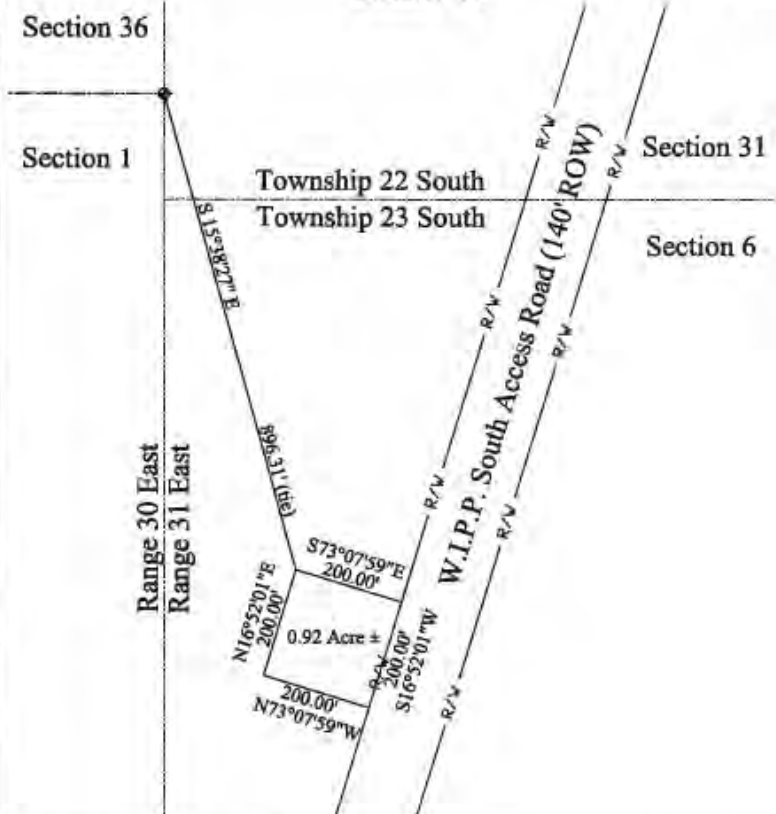
Drawn By: J. Lewis

Date: 8-07-09

Scale: 1" = 3000'

Sheet 1 of 1 Sheet

Exhibit "A"



A parcel of land being 200 feet wide by 200 feet long and being adjacent to the westerly Right-of way line of the South Access Road to W.I.P.P. site.

Surveyor's Certificate

Kim Stelzer states he is by occupation a Land Surveyor employed by URS Corporation to make the survey of the South Access Road (SAR) as described and shown on this plat, that the survey of said works was made under his supervision and under authority commencing on the 7th day of July, 2009 and ending on the 22nd day of July, 2009 and that such survey is accurately represented upon this plat.

DRAFT

Surveyor

Applicant's Certificate

This is to certify that Kim Stelzer who subscribed the statement hereon is the person employed by the undersigned applicant to prepare this plat, which has been adopted by the applicant as the approximate final location of the works thereby shown; and that this plat is filed as part of the complete application, and in order that the applicant may obtain the benefits of _____, and I further certify that the Easement herein described is desired for W.I.P.P.

Applicant's Signature

Title

UNITED STATES DEPARTMENT OF ENERGY

A Proposed Easement Within Section 6, Township 23 South, Range 31 East; N.M.P.M., Eddy County, New Mexico

Finding of No Significant Impact: I have reviewed the environmental assessment (EA) for the analysis of the South Access Road Construction Project. I have determined, based on the analysis in the EA that the proposed action with the mitigation measures described herein, would not adversely affect the quality of the human environment and, therefore, an Environmental Impact Statement is not required. This determination is based on the rationale that the significance criteria, as defined by the Council on Environmental Quality (40 CFR 1508.27), have been met.

/s/ Jim Stovall
Jim Stovall, Field Manager
Carlsbad Field Office, BLM

12/8/2009
Date

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:

Susan McCauslin
NEPA Compliance Officer
Carlsbad Field Office
U.S. Department of Energy
P.O. Box 3090
Carlsbad, NM 88221
Telephone: 505/234-7349
E-mail: susan.mccauslin@wipp.ws

FOR FURTHER INFORMATION ON THE DOE NEPA PROCESS, CONTACT:

Ms. Carol Borgstrom, Director
U.S. Department of Energy
Office of NEPA Policy and Compliance
100 Independence Avenue
Washington, D.C. 20585
Telephone: 202-586-4600 or 800-472-2756

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.

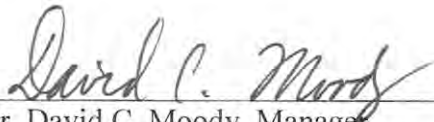
In addition to the direct and indirect impacts described above, BLM analyzed potential cumulative effects of the proposed action, including other past, present, and reasonably foreseeable future actions in the vicinity of WIPP. Overall, socioeconomic impacts from the experimental activities would be 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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