BUREAU OF LAND MANAGEMENT-ROSWELL FIELD OFFICE
ENVIRONMENTAL ASSESSMENT # NM-510-08-0089

PURPOSE AND NEED

Agave Energy Company has applied to the Bureau of Land Management (BLM) for a right-of-way ROW) and a short-term ROW (STR) for construction, maintenance, operation, termination of natural gas gathering pipeline, and temporary work areas. The files have been serialized as NM-120141 and NM-120141-01 respectively. The ROWs are needed to develop production of leased oil and gas resources in the Pecos Slope fields.

LOCATION OF PROPOSED ACTION

T. 10 S., R. 26 E., NMPM, Chaves County, NM
Section 21, SW¼NE¼, (private Land)
Section 21, SE¼NW¼ (public land

ACRES OF PUBLIC LAND DISTURBED

ROW 608-feet by 30-feet = 0.42 acre.
STR 608-feet by 20-feet = 0.28 acre.
Total disturbance on public land 0.70 acre.

CONFORMANCE WITH LAND USE PLAN

This proposed action is in conformance with the 1997 Roswell Resource Management Plan (RMP), as amended.

The Proposed Action is not located within the portion of public land designated for right-of-way avoidance or exclusion.

The Proposed Action is outside the RMP Amendment planning area.

RELATIONSHIP TO STATUTES, REGULATIONS, OR OTHER PLANS

Roswell Field Office staff reviewed the proposed action and determined it would be in compliance with threatened and endangered species management guidelines outlined in Biological Assessments Cons. #2-22-96-F-102, Cons. #22420-2006-I-0144, and Cons. #22420-2007-TA-0033. No further consultation with the U.S. Fish and Wildlife Service 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.

EPA has finalized changes to its storm water regulations as they apply to field operations, including construction activities, at oil and gas exploration, production, processing or treatment operations or transmission facilities. This final action codifies changes resulting from Clean Water Act

amendments in the Energy Policy Act of 2005 signed by the President on August 8, 2005. The Administrator of EPA signed the final rule on June 7, 2006 which was published in the Federal Register, and is effective on June 12, 2006. You can view the rule and a descriptive Fact Sheet at http://www.epa.gov/npdes/stormwater/oilgas. The final rule specifies that storm water discharges from oil and gas-related construction activities are exempt from NPDES permit coverage, except in very limited instances. EPA interprets this exclusion to apply to construction of drilling sites, waste management pits, and access roads, as well as construction of the transportation and treatment infrastructure such as pipelines, natural gas treatment plants, natural gas pipeline compressor stations, and crude oil pumping stations. Construction activities that result in a discharge of a reportable quantity release or that contribute pollutants (other than non-contaminated sediment from construction) to a violation of a water quality standard are still subject to permit coverage. This final action also adds complementary text encouraging operators of oil and gas field activities or operations to implement and maintain Best Management Practices (BMPs) to minimize erosion and control sediment during and after construction activities to help ensure protection of surface water quality during storm events. This rulemaking applies to all States, Federal lands and Indian Country regardless of whether EPA or a State is the NPDES permitting authority. However, this rule is not intended to interfere with the States' authority to regulate any discharges, pursuant to state law, through a non-NPDES permit program.

This environmental assessment is being prepared in accordance with the requirements of the National Environmental Policy Act of 1969 (NEPA) and other statutes relevant to the proposal. Authority for the proposal and alternatives is contained in the Mineral Leasing Act of 1920 (MLA), as amended [30 USC 181 et seq.], and the regulations sited in 43 CFR 2800.

CHAPTER 2
PROPOSED ACTION AND ALTERNATIVES

PROPOSED ACTION

The proposed action would allow Agave Energy Company to construct, operate, maintain and terminate a buried natural gas pipeline on public land. The pipeline would begin at the Oreck BDO Com#1 on private land and run 718-feet west to public land, thence 608-feet across public land terminating at an existing gathering pipeline.

One 4-inch pipeline, constructed of X-42 steel would be buried with approximately 45-inches of cover, operating at 1,000-PSI, with a volume of 2-mmcfd. Construction phases include:

Topsoil will be removed and windrowed for use in reclamation.
Trench will be dug to approximately 48-inches depth.
Pipe will be lowed and installed along with appurtenant valves, blocks, meters and gates.
Pipe will be covered with approximately 45-inches of cover.

A ROW for temporary work areas would also be granted for stockpiling of topsoil, storage of materials and implementation of safety measures.

Waste will be removed from the site and will be disposed of at an approved site. "Waste" means all discarded human waste, trash and refuse.

Reclamation:

The final phase of the project is cleanup and reclamation. Windrowed topsoil will be spread to approximate the original surface contours. All tracks to and from the drill sites shall be "brushed" out upon project completion. Access roads to be used for maintenance will be restricted to a 14-foot wide driving surface. All other areas will be reclaimed.

Maintenance and Operation:

Agave Energy Company (AEC) will maintain the work area as required by BLM stipulations.

NO-ACTION ALTERNATIVE

The BLM NEPA Handbook (H-1790-1) and the National Environmental Policy Act and associated Code of Federal Regulations state that for EAs on externally initiated proposed actions, the No Action Alternative means that the proposed activity would not take place. The No Action Alternative is presented for baseline analysis of resource impacts, and if selected, would deny the approval of the proposed application. Current land and resource uses would continue to occur in the proposed project area. No mitigation measures would be required.

Chapter 3
Affected Environment:

General Setting

The site area is characterized by gyp uplands and nearly level loams and level to hilly gravelly loams that are very shallow with gyp inclusions. Vegetation is mainly gyp grama *(Bouteloua breviseta),* burrograss *(Scleropogon brevifolius),* three-awn *(Arisitida* spp.), tobosa *(Pleuraphis mutica),* black grama *(Bouteloua eriopoda),* creosotebush *(Larrea tridentata),* coldenia *(Coldenia* spp.) prickly pear *(Opuntia engelmannia*) and broom snakeweed *(Gutierrezia sarothrae).* Elevation ranges from 3,300 to 4,200 feet. The mean annual precipitation is 10 to 12 inches and the mean annual soil temperature is 62 to 65 degrees. The area has a continental climate characterized by light and variable total precipitation, large diurnal and moderate annual temperature range, low relative humidity and plentiful sunshine.

Affected Resources

Air Quality

BLM is required to comply with the Clean Air Act, as amended, and State Implementation Plans. The proposed area has not been identified as a non-attainment area. Additionally, throughout most of the year the air quality throughout Chaves County is very good and is considered clean. Air quality will be temporarily impacted only during the dry spring months, windstorms and blowing dust can become a problem throughout the area.

The area of the proposed action is considered a Class II air quality area. A Class II area allows moderate amounts air quality degradation. The primary sources of air pollution are dust from blowing wind on disturbed or exposed soil and exhaust emissions from motorized equipment.

The Environmental Protection Agency's (EPA) U.S. Greenhouse Gas inventory lists six types of gases which contribute to global average radiative forcing on global warming potential. These gases include carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF6). The levels of these greenhouse gases (GHG) have been increasing and are expected to continue increasing. Theses emissions are present because of the oil and gas development within the Roswell Field Office.

Through complex interactions on a regional and global scale, these GHG emissions cause a net warming effect of the atmosphere, primarily by decreasing the amount of heat energy radiated by the Earth back into space. Although GHG levels have varied for millennia (along with corresponding variations in climatic conditions), recent industrialization and burning of fossil carbon sources have caused CO2 concentrations to increase dramatically, and are likely to contribute to overall climatic changes, typically referred to as global warming. Increasing CO2 concentrations also lead to preferential fertilization and growth of specific plant species.

In 2001, the Intergovernmental Panel on Climate Change (IPCC) indicated that by the year 2100, global average surface temperatures would increase 1.4 to 5.8°C (2.5 to 10.4°F) above 1990 levels. The National Academy of Sciences (2006) has confirmed these findings, but also indicated that there are uncertainties regarding how climate change may affect different regions. 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 is more likely than increases in daily maximum temperatures.

Several activities occur within the planning area that may generate GHG emissions. Oil and gas development, large fires, and recreation using combustion engines, can potentially generate CO2 and methane.

Water Quality – Surface/Ground

Surface water within the area is affected by geology, precipitation, and water erosion. Factors that currently affect surface water resources include livestock grazing management, oil and gas development, recreational use and brush control treatments. No perennial surface water is found on public land in the area. Ephemeral surface water within the area may be located in tributaries, playas, alkali lakes and stock tanks.

Groundwater within the area is affected by geology and precipitation. Factors that can affect groundwater resources in the area include livestock grazing management, oil and gas development, groundwater pumping, and possible impacts from brush control treatments. Most of the groundwater in the area is used for industrial, rural, domestic and livestock purposes.

The depth to water ranges from 14 to 50 feet in the area in the shallow unconfined alluvial aquifer at the location.

Watershed – Hydrology

The watershed and hydrology in the area is affected by land and water use practices. The degree to which hydrologic processes are affected by land and water use depends on the location, extent, timing and the type of activity. Factors that currently cause short-lived alterations to the hydrologic

regime in the area include livestock grazing management, recreational use activities, groundwater pumping and also oil and gas developments such as well pads, permanent roads, temporary roads, pipelines, and powerlines.

Soil

The ***Soil Survey of Chaves County, New Mexico, Northern Part (USDA Soil Conservation Service 1980)*** was used to describe and analyze impacts to soil from the proposed action. The soil map units represented in the project area are:

Hollomex-Reeves-Milner, dry loams, 0 to 3 percent slopes (HMA) Permeability of the Hollomex soil is moderate. Runoff of the Hollomex soil is medium and the hazard of water erosion is moderate and the hazard of soil blowing is high. Permeability of the Simona soil is moderate. Runoff of the Simona soil is medium and the hazard of water erosion is medium and soil blowing is high.

Cultural Resources – The project falls within the Southeastern New Mexico Archaeological Region. This region contains the following cultural/temporal periods: Paleoindian (ca. 12,000-8,000 B.C.), Archaic (ca. 8000 B.C. –A.D. 950), Ceramic (ca. A.D. 600-1540) 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 the Interior, Bureau of Land Management. A cultural resource inventory shall be conducted of the area of effect for the proposed project prior to any ground disturbing activities.

Invasive & Noxious Weeds

There are no known populations of invasive or noxious weed species on the proposed access road and well pad. However the poisonous weed African rue *(Peganum harmala)* has been found in the vicinity and surrounding allotments.

Infestations of noxious weeds can have a disastrous impact on biodiversity and natural ecosystems. Noxious weeds affect native plant species by out-competing native vegetation for light, water and soil nutrients. Noxious weeds cause estimated losses to producers $2 to $3 billion annually. These losses are attributed to: (1) Decreased quality of agricultural products due to high levels of competition from noxious weeds; (2) decreased quantity of agricultural products due to noxious weed infestations; and (3) costs to control and/or prevent the noxious weeds.

Further, noxious weeds can negatively affect livestock and dairy producers by making forage either unpalatable or toxic to livestock, thus decreasing livestock productivity and potentially increasing producers' feed and animal health care costs. Increased costs to operators are eventually borne by consumers.

Noxious weeds also affect recreational uses, and reduce realty values of both the directly influenced and adjacent properties.

Recent federal legislation has been enacted requiring state and county agencies to implement noxious weed control programs. Monies would be made available for these activities from the federal government, generated from the federal tax base. Therefore, all citizens and taxpayers of the United States are directly affected when noxious weed control prevention is not exercised.

Rangeland Management

This proposed ROW is located on BLM grazing allotment #65095 Comanche 15, permitted to Alfonso Caballero.

Wildlife

The vegetation found at this site provides habitat to a large range of wildlife species. Some of the common mammals are mule deer, pronghorn, badger, coyote, fox, jackrabbit, cottontails, kangaroo rats, and pocket gophers. It also provides habitat for a variety of grassland and desert birds. Important passerine birds include meadowlarks, horned larks, lark buntings, Cassin's sparrows, lark sparrows, Chihuahuan ravens, and loggerhead shrikes. Other birds include scaled quail, mourning doves, roadrunners, common nighthawks, killdeer, and a variety of raptors including red-tailed and Swainson's hawks, northern harriers, great horned owls, and burrowing owls. It also provides habitat to a large variety of common lizards and snakes.

Threatened, Endangered and Sensitive (TES) Species

Under Section 7 of the Endangered Species Act of 1973 (as amended), the BLM is required to consult with the U.S. Fish and Wildlife Service on any proposed action which may affect Federal listed threatened or endangered species or species proposed for listing. The Roswell Field Office; Wildlife Biologist reviewed and determined the proposed action is in compliance with listed species management guidelines outlined in the 1997 Biological Assessment (Cons. #2-22-96-F-102). No further consultation with the Service is required.

There are no known threatened or endangered species of plant or animals within the project area. The list of federal threatened, endangered and candidate species reviewed for this EA can be found in Appendix 11 of the Roswell Approved RMP (AP11-2).

Visual Resources-

Visual Resource Management (VRM) Class IV on public land is conducted in accordance with BLM Handbook 8410 and BLM Manual 8411.

Recreation:

The area around the proposed action site is primarily used by recreational visitors engaged in hunting, caving, sight-seeing, driving for pleasure, off-highway vehicle use, and other recreational activities. Non-recreation visitors include oil and gas industrial workers and ranchers.

Cave/Karst

While the proposed action is located in the *High Potential Karst Area*, no surface cave/karst features were observed in the immediate vicinity of the proposed action.

Public Health and Safety –

Environmental Justice – Executive Order 129898, Federal Action to Address Environmental Justice in Minority Populations and Low-Income Populations, requires each Federal agency to "*Identify and address, as appropriate, disproportionately high and adverse human health or environmental effects on minority populations and low-income populations."* The project is located in a sparsely populated area, which does not contain a disproportionately high concentration of minority or low-income populations.

RESOURCES CONSIDERED BUT NOT AFFECTED

Environmental investigations conducted for preparation of this document have shown that the proposed project would not have discernable adverse impacts in any of the following areas of potential concern: Air quality, areas of critical environmental concern, cultural resources, prime and unique farmlands, floodplains, Native American concerns, threatened or endangered species or their habitat, solid or hazardous wastes, drinking and groundwater quality, wetlands or riparian areas, wild and scenic rivers, wilderness values, and minority or low-income populations or communities.

CHAPTER 4
ENVIRONMENTAL IMPACTS

PROPOSED ACTION:

Air Quality

Air quality would temporary be directly impacted with pollution from exhaust emissions, chemical odors, and dust that would be caused by the motorized equipment used to construct the access road, well pad, and by the drilling rig that will be used to drill the well. Dust dissemination would discontinue upon completion of the construction phases of the access road and well pad. Air pollution from the motorized equipment would discontinue at the completion of the drilling phase of the operations. The winds that frequent the southeastern part of New Mexico generally disperse the odors and emissions. The impacts to air quality would be greatly reduced as the construction and drilling phase are completed. Other factors that currently affect air quality in the area include dust from livestock herding activities, dust from recreational use, and dust from use of the road for vehicular traffic.

The Federal Clean Air Act requires that air pollutant emissions be controlled from all significant sources in areas that do not meet the national ambient Air quality standards. The New Mexico Air Quality Bureau (NMAQB) is responsible for enforcing the state and national ambient air quality standards in New Mexico. Any emission source must comply with the NMAQB regulations (USDI, BLM 2003b). At the present time, the counties that lie within the jurisdictional boundaries of the Roswell Field Office are classified as in attainment of all state and national ambient air quality standards as defined in the Clean Air Act of 1972, as amended (USDI, BLM 2003b).

The Environmental Protection Agency (EPA), on October 17, 2006, issued a final ruling on the lowering of the National Ambient Air Quality Standard (NAAQS) for particulate matter ranging from 2.5 micron or smaller particle size. This ruling became effective on December 18, 2006,

stating that the 24-hour standard for PM2.5 was lowered to 35 ug/m³ from the previous standard of 65 ug/m³. This revised PM2.5 daily NAAQS was promulgated to better protect the public from short-term particle exposure.

The significant threshold of 35 ug/m³ daily PM2.5 NAAQS is not expected to be exceeded under the proposed action. The state and national ambient air quality standards as defined in the Clean Air Act of 1972, as amended (USDI, BLM 2003b) are not expected to be exceeded under the proposed action.

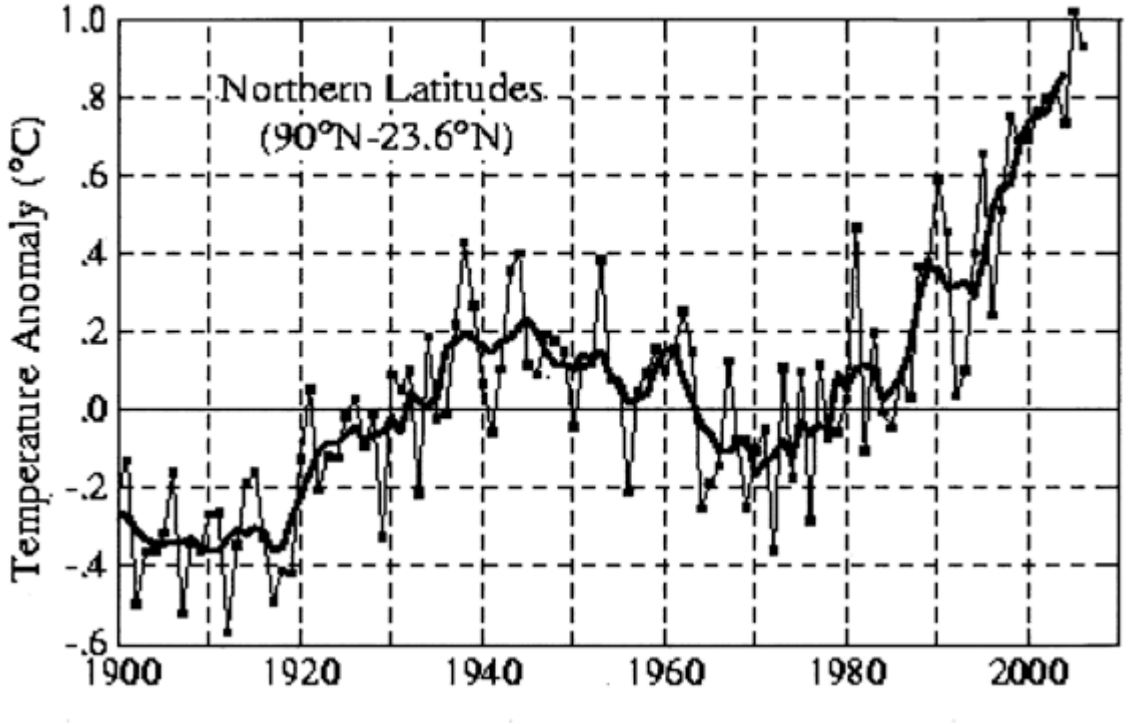
There would be some impact to air resources in the short term resulting from construction activities. The construction activities would cause temporary increase in dust concentrations in construction areas. The use of standard construction dust mitigation procedures would help control emissions.

The New Mexico Greenhouse Gas Inventory and Reference Case Projection 1990-2020 estimates that totals approximately 19.6 million metric tons of both CO2 and CH4 emissions are produced each year by oil and natural gas production, processing, transmission and distribution. Of the 19.4 million metric tons, approximately 17.3 million metric tons can be attributed to natural gas activities and 2.3 million metric tons can be attributed to oil production.

From 2001 to 2007 an average of 1,663 per year of new oil and natural gas wells were drilled. (See NM Oil Conservation Division statistics.) An average of 60 wells per year are drilled for Federal minerals within the Roswell Field Office, 22 oil wells and 28 natural gas wells. The oil wells represent approximately 1.3 percent of wells drilled in New Mexico per year. The gas wells represent approximately 1.7 percent of wells drilled in New Mexico per year. Both are indicators of the level of activity in the field office. The emissions from Federal oil wells within the field office is approximately 0.03 million metric tons of emissions per year. The emissions from Federal natural gas wells within the field office is approximately 0.29 million metric tons of emissions per year.

Indirect impacts include those resulting from greenhouse gas (GHG) emissions. One result is global mean surface temperatures have increased nearly 1.0°C (1.8°F) from 1890 to 2006 (Goddard Institute for Space Studies, 2007). However, observations and predictive models indicate that average temperature changes are likely to be greater in the Northern Hemisphere. Figure 3.1.1 demonstrates that northern latitudes (above 24° N) have exhibited temperature increases of nearly 1.2°C (2.1°F) since 1900, with nearly a 1.0°C (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 GHG are likely to accelerate the rate of climate change.

Figure 3.1.1 – Annual Mean Temperature Change for Northern Latitudes (24 - 90° N)



Source: Goddard Institute for Space Studies (2007)

The assessment of GHG emissions and climate change is in its formative phase; therefore, it is not yet possible to know with confidence the net impact to climate. However, the Intergovernmental Panel on Climate Change (IPCC 2007) 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 [man-made] greenhouse gas concentrations."

The lack of scientific tools designed to predict climate change on regional or local scales limits the ability to quantify potential future impacts. However, potential impacts to air quality due to climate change are likely to be varied. For example, if global climate change results in a warmer and drier climate, increased particulate matter impacts could occur due to increased windblown dust from drier and less stable soils. Cool season plant species' spatial ranges are predicted to move north and to higher elevations, and extinction of endemic threatened/ endangered plants may be accelerated. Due to loss of habitat, or due to competition from other species whose ranges may shift northward, the population of some animal species may be reduced. Less snow at lower elevations would be likely to impact the timing and quantity of snowmelt, which, in turn, could impact aquatic species.

Currently, world-wide demand for oil and natural gas is driving exploration, development and production. The demand is such that should the BLM not lease Federal minerals or not approve an application for permit to drill, development activities and their accompanying GHG emissions would be shifted to other regions of the world. These other regions may or may not have programs in place to reduce GHG emissions.

Mitigation

EPA data shows that improved practices and technology, and changing economics have reduced emissions from oil and gas exploration and development. One of the factors in this improvement is the adoption, by industry of the Best Management Practices proposed by the EPA's Natural Gas Energy Star program. BLM will work with industry to facilitate the expansion of the following BMP's on operations proposed on federal mineral leases.

Distribution Systems

- Implement directed inspection and maintenance programs at gate stations and surface facilities
- Identify and rehabilitate leaky distribution pipes

Transmission Systems

- Implement directed inspection and maintenance programs at compressor stations
- Consider use of turbines at compressor stations in lieu of reciprocating engines
- Identify and replace high-bleed pneumatic devices

Water Quality: Surface and Groundwater

Direct and Indirect Impacts

Surface disturbance from the construction of the project can result in degradation of surface water quality and groundwater quality from non-point source pollution, increased soil losses, and increased gully erosion.

Potential direct impacts that would occur due to construction of the project include increased surface water runoff and off-site sedimentation brought about by soil disturbance and increased salt loading and water quality impairment of surface waters. The magnitude of these impacts to water resources would depend on the proximity of the disturbance to the drainage channel, slope aspect and gradient, degree and area of soil disturbance, soil character, duration and time within which construction activity would occur, and the timely implementation and success or failure of mitigation measures.

Direct impacts would likely be greatest shortly after the start of construction activities and would likely decrease in time due to natural stabilization, and reclamation efforts. Construction activities would occur over a relatively short period; therefore, the majority of the disturbance would be intense but short lived. Direct impacts to surface water quality would be minor, short-term impacts which may occur during storm flow events. Indirect impacts to water-quality related resources, such as fisheries, would not occur.

Authorization of the proposed projects would require full compliance with BLM directives and stipulations that relate to surface and groundwater protection.

Mitigation

Upon relinquishment of the project the Authorized Officer shall issue instructions and/or orders for surface reclamation/restoration of the disturbed area.

Watershed - Hydrology

Direct and Indirect Impacts

Construction and surface disturbance activities from the construction of the project can result in long term and short term alterations to the hydrologic regime. Peak flow and low flow of perennial streams, ephemeral, and intermittent rivers and streams would be directly affected by an increase in impervious surfaces resulting from the construction of the well pad and road. The potential hydrologic effects to peak flow is reduced infiltration where surface flows can move more quickly to perennial or ephemeral rivers and streams, causing peak flow to occur earlier and to be larger. Increased magnitude and volume of peak flow can cause bank erosion, channel widening, downward incision, and disconnection from the floodplain. The potential hydrologic effects to low flow is reduced surface storage and groundwater recharge, resulting in reduced baseflow to perennial, ephemeral, and intermittent rivers and streams. The direct impact would be that hydrologic processes may be altered where the perennial, ephemeral, and intermittent river and stream system responds by changing physical parameters, such as channel configuration. These changes may in turn impact chemical parameters and ultimately the aquatic ecosystem.

Long term direct and indirect impacts to the watershed and hydrology would continue for the life of the project and would decrease once reclamation of the project has taken place. Short term direct and indirect impacts to the watershed and hydrology from access roads that are not surfaced with material would occur and would likely decrease in time due to reclamation efforts.

Mitigation

Upon relinquishment of the project the Authorized Officer shall issue instructions and/or orders for surface reclamation/restoration of the disturbed area.

Soil

The construction of the project would physically disturb about 0.42 acres of topsoil and would expose the substratum soil. Direct impacts resulting from the construction of the project include removal of vegetation, exposure of the soil, mixing of horizons, compaction, loss of top soil productivity and susceptibility to wind and water erosion. Wind erosion would be expected to be a minor contributor to soil erosion with the possible exception of dust from vehicle traffic. These impacts could result in increased indirect impacts such as runoff, erosion and off-site sedimentation. Activities that could cause these types of indirect impacts include.

Mitigation

Upon relinquishment of the project the Authorized Officer shall issue instructions and/or orders for surface reclamation/restoration of the disturbed area.

Cultural Resources – A cultural resource inventory was conducted for the area of effect (08-R-066A), no Historic Properties were identified.

Noxious Weeds

The construction of this pipeline Right-of-Way Amendment may unintentionally contribute to the establishment and spread of noxious weeds. Noxious weed seed could be carried to and from the project areas by construction equipment, the drilling rig and transport vehicles. The main mechanism for seed dispersion on the road and well pad is by equipment and vehicles if they were previously used and or driven across or through noxious weed infested areas. The potential for the dissemination of invasive and noxious weed seed may be elevated by the use of construction equipment typically contracted out to companies that may be from other geographic areas in the region. Washing and decontaminating the equipment prior to transporting onto and exiting the construction areas would minimize this impact.

Impacts by noxious weeds will be minimized due to requirements for the company to eradicate the weeds upon discovery. Multiple applications may be required to effectively control the identified populations.

Mitigation

In the event noxious weeds are discovered after the construction of the access road and well pad, measures will be taken to mitigate those impacts.

Wildlife

Some small wildlife species may be killed and their dens or nests destroyed during construction of the pipeline. The construction of the pipeline could contribute to fragmentation of wildlife habitat in relation to existing developments in the area, i.e., the well pads that the pipeline services and associated roads.

The short-term negative impact to wildlife would occur during the construction phase of the operations would be due to noise and habitat destruction. In general, most wildlife species would become habituated to the new facilities. For other wildlife species with a low tolerance to activities, the operations on the well pads which the pipeline services would continue to displace wildlife from the area due to disturbances by the high volumes of vehicle traffic during equipment maintenance. Upon abandonment of the wells and pipeline, the area would revegetate and wildlife would return to previous levels.

Mitigation

Minimize surface disturbance by simply trenching in the line without unecessary surface scraping to the clear the line to bare ground. Trenches left open for an extended period of time would have earthen plugs left intact or filled into the open trench every ¼ mile to allow the escape of wildlife species from the bottom of the trenches. Minimize the number of vehicular travel/passes over the route to prevent undue soil compaction for vegetation recovery.

Threatened, Endangered and Sensitive (TES) Species – Not Present

Visual Resources –

Environmental Justice – No significant impact on minority or low-income populations is expected to occur.

No-Action Alternative

Under the No Action Alternative, no environmental impacts would occur. Current activities would continue with no change.

Cumulative Impacts

Cumulative impacts are impacts on the environment which result from the incremental impact of the proposed action, when added to other past, present and reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions. They can result from individually minor but collectively significant actions taking place over a period of time.

Residual Impacts

Direct impacts to the local environment detailed above remain throughout the life of the proposed operation; however, they would be substantially reduced by mitigation measures.

Mitigation Measures

Mitigation measures have been identified and have been incorporated into stipulations and are made part of the right-of-way grant. These measures include but are not limited to the following:

Cultural Resources - Any cultural and/or Paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the authorized officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the authorized officer after consulting with the holder.

The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the authorized officer after consulting with the holder.

If any substantial cultural resources are discovered during construction, activities at the site(s) will cease. The authorized officer will be notified within 24 hours and appropriate measures taken to determine the extent and importance of the resources and appropriate actions, if any, to prevent the loss of substantial cultural or scientific values.

Noxious Weeds: Clean all equipment (power or high-pressure cleaning) of all mud, dirt, and plant parts before moving into project area.

Any gravel or fill to be used in must come from weed-free sources. Inspect gravel pits and fill sources to identify weed-free sources.

Use of pesticides and herbicides shall comply with the applicable Federal and State laws. Pesticides and herbicides shall be used only in accordance with their registered uses and within limitations imposed by the Secretary of the Interior. Prior to the use of pesticides, holder shall obtain from the Authorized Officer (AO) written approval of a plan showing the type and quantity of materials to be used, pest(s) to be controlled, method of application, location of storage and disposal of containers, and any other information deemed necessary by the AO. Emergency use of pesticides must be approved in writing by the AO prior to use.

Wildlife: Minimize surface disturbance by simply trenching in the line without unecessary surface scraping to the clear the line to bare ground. Trenches left open for an extended period of time would have earthen plugs left intact or filled into the open trench every ¼ mile to allow the escape of wildlife species from the bottom of the trenches. Minimize the number of vehicular travel/passes over the route to prevent undue soil compaction for vegetation recovery.

Recreation

Oil and gas activities would have little or no affect on recreational opportunities within this area. Large blocks of public land would allow recreationist to use public land and avoid the oil and gas facilities within the area.

4.16.1 Direct and Indirect Impacts - None

4.16.2 Mitigation - None

Visual Resources

The objective of Class IV is to: "Provide for management activities which require major modification of the existing landscape character...Every attempt, however, should be made to reduce or eliminate activity impacts through careful location, minimal disturbance, and repeating the basic landscape elements."

Direct and Indirect Impacts- By adhering to the objectivity Class for VRM IV, direct and indirect impacts would be minimal

Cave/Karst

While the proposed action is located in the *High Potential Karst Area*, no surface cave/karst features were observed in the immediate vicinity of the proposed action.

Direct and Indirect Impacts - None

Mitigation - None

Persons and Agencies Consulted

Rebecca L. Hill	Archaeologist, BLM
Jerry Dutchover	Geologist, BLM
Joseph M. Navarro	Range Mgt Specialist, BLM
Howard Parman	Environmental Planner, BLM
Ken Beardemphl	Landman – Agent, AEC
Wesley Neal	Right-of-Way Agent, AEC
Michael McGee	Hydrologist, BLM
Bill Murray	Outdoor Rec Planner, BLM
Dan Baggao	Biologist, BLM

Preparer(s): Scott Sanderford, Realty Specialist

References:

United States Department of the Interior, Bureau of Land Management

United States Department of Agriculture, Soil Conservation Service in cooperation with the United States Department of Interior, Bureau of Land Management New Mexico Agricultural Experiment Station *Soil Survey of Chaves County Area New Mexico,* April 1980.

Department of the Interior
Bureau of Land Management

Roswell Field Office

Project: Agave Oreck BDO Com #1 P/L
Location: Section: 21, T. 10 S., R. 26 E.
Applicant: Agave Energy Company
Roswell Field Office: (505) 627-0272

EA Log Number: NM-510-2008-0089
Case File: NM-120141
File Code: 2881

Finding of No Significant Impact

Based on the analysis of potential environmental impacts contained in the attached environmental assessment, I have determined the proposed action is not expected to have significant impacts on the environment and that preparation of an Environmental Impact Statement is not warranted.

Decision Record

Based upon the analysis, the proposed pipeline and temporary work area, located in Section 21, T. 10 S., R. 26 E., is approved.

Rational: The Bureau of Land Management staff has reviewed the environmental assessment and identified site-specific mitigation measures to avoid or minimize surface impacts resulting from the construction of this project. The pipeline will remain as a long-term impact. The cumulative impacts to the environment from existing and new development have been identified.

The Bureau of Land Management's approval of the ROW and TUP does not relieve the lessee and operator from obtaining required authorizations from the private surface owner.

This proposed action is in compliance with the 1997 Roswell Resource Management Plan, as amended. This plan has been reviewed to determine if the proposed action conforms to the land-use planning terms and conditions required by 43 CFR 1610.5. This action does not conflict with existing Chaves County land-use planning or zoning.

Administrative Review and Appeal: Under BLM regulations, this Decision Record (DR) is subject to administrative review in accordance with 43 CFR 2801.1. Any request for administrative review of this DR must include information required under 43 CFR 3165.3(b) (State Director Review), including all supporting documentation. Such a request must be filed in writing with the State Director, Bureau of Land Management, 1474 Rodeo Road, Santa Fe, NM 87505, no later than 20 business days after this DR is received or considered to have been received.

Any party who is adversely affected by the State Director's decision may appeal that decision to the Interior Board of Land Appeals, as provided in 43 CFR 3165.4.

Approved by:

_____Date_____

Assistant Filed Manager, Lands and Minerals