

U.S. Department of the Interior  
Bureau of Land Management  
Colorado River Valley Field Office  
2300 River Frontage Road  
Silt, Colorado 81652

## Section 390 Categorical Exclusion for Oil and Gas Development

**NUMBER:** DOI-BLM-CO-N040-2011-0040-CX (390)

**CASEFILE/PROJECT NUMBER:** COC074730 (Right-of-Way Grant), COC074731 (Right-of-Way Grant), COC62161 (Oil & Gas Lease), COC62162 (Oil & Gas Lease).

**PROJECT NAME:** Proposal to install a buried 4-inch poly (flexpipe) produced-water pipeline from the DOE 1-W-20 well pad to the Cottonwood Tank Facility and to install a buried 8-inch steel natural gas pipeline from the DOE 1-W-20 well pad to the PA 11-28 well pad within an existing 35-foot-wide right-of-way corridor adjacent to an existing access road.

**LEGAL DESCRIPTION:** Township 6 South (T6S), Range 95 West (R95W), Section 20, Lot 8; Section 28, NW $\frac{1}{4}$ NW $\frac{1}{4}$ ; and Section 29; Sixth Principal Meridian.

**APPLICANT:** Williams Production RMT Company, 1058 County Road 215, Parachute, Colorado 81635.

**DESCRIPTION OF PROPOSED ACTION:** Williams Production RMT Company (“Williams”) proposes to install a water delivery and collection system serving the DOE 1-W-20 well pad by installing a maximum 4-inch-diameter flexpipe pipeline in an existing pipeline on the western side of the Cottonwood Creek drainage, east of Parachute, Garfield County, Colorado (Figure 1). The pipeline would extend across a total distance of 14,800 feet, of which 5,270 feet would be located on BLM-administered public land.

Along with the installation of the water pipeline, Williams proposes to install a natural gas gathering line serving the DOE 1-W-20 well pad by adding an additional 8-inch-diameter steel gas pipeline in the same trench as the produced water pipeline described above. The natural gas pipeline would terminate at the PA 11-28 well pad after crossing 2,252 feet of BLM-administered public land.

Both the produced water and natural gas lines would be installed in the same trench as an existing 6-inch low-pressure gas line and a 2-inch high-pressure gas line. The existing lines are located within or adjacent to the access road leading to the DOE 1-W-20 well pad, depending on topography. To accommodate the additional water and gas pipelines, Williams is requesting an additional 15 feet of right-of-way width (where topographically feasible) for a total width of 35 feet (current width is 20 feet).

At present, no water line is available to service the 21 new oil and gas wells proposed by Williams on the DOE 1-W-20 pad. Installing the water line for collection and delivery of produced water to the Cottonwood Tank Facility would reduce the amount of truck traffic during production of the 21 proposed wells. The existing high- and low-pressure gas lines were originally installed by the previous owner of the lease to service a small number of wells. The new gas 8-inch steel gas line is needed to accommodate additional gas production associated with the 21 new wells currently proposed on the DOE 1-W-20 pad.

Because the water pipeline would deliver produced water from Federal wells to an off-lease tank facility, and the gas line would convey natural gas to an off-lease well pad (the PA 11-28), Williams is required to submit, and has submitted, an application to BLM for an amendment to the existing right-of-way grants for the two existing lines. The Terms and Conditions to be attached to the right-of-way amendment are appended to this Section 390 Categorical Exclusion (SCX). For the purposes of the right-of-way amendment, the permanent width of the new pipeline would be 20 feet, and the temporary working area would be 15 feet.

The existing pipeline corridor is in the road leading to the DOE 1-W-20, and the desired temporary use permit area for pipeline installation is parallel and adjacent to the road. The corridor deviates from the road slightly where topographically necessary. The corridor is vegetated with native grasses, forbs, and shrubs with an open juniper overstory. The new pipelines would be placed within the road, alongside the existing 6-inch low-pressure and 2-inch high-pressure gas lines. Sandbags would be placed between the lines to prevent contact. The 15-foot-wide temporary use area would be cleared of vegetation by grubbing and stockpiling the trees next to the right-of-way for later placement across the seeded corridor. Topsoil would be stripped and stockpiled for reclamation where the line corridor is not in the road. The gas pipeline sections would be welded, buried, and tested with air. The water pipeline sections would be joined with couplings (hydraulic pressed fittings), buried, and tested with air. Both lines would then be backfilled and, where they are outside the roadway, revegetated with a native seed mix approved by BLM.

Total acreage within the 5,270 feet of water pipeline on BLM land would be 4.2 acres, of which 1.8 acres would represent new disturbance (i.e., the 15-foot-wide temporary use area). Total acreage within the 2,252 feet of gas pipeline occurring on BLM land would be included within the 4.2 acres for the water pipeline (i.e., no additional disturbance).

BLM staff conducted numerous field visits to the site, the most recent on December 9, 2010, to review potential impacts to visual resources and special status plants and animals and it was determined that the realignment would impact less area and not directly affect these resources. A review of cultural resource data indicated that the proposed alignment would fall within a previously surveyed area. No additional survey work would be necessary to allow this work to proceed.

**PLAN CONFORMANCE REVIEW:** The proposed action is subject to and has been reviewed for conformance with (43 CFR 1610.5, BLM 1617.3) the following plan:

**Name of Plan:** The current land use plan is the *Glenwood Springs Resource Management Plan* (RMP), approved in 1984 and revised in 1988 (BLM 1984). Relevant amendments include the *Oil and Gas Plan Amendment to the Glenwood Springs Resource Management Plan* (BLM 1991) and the *Oil & Gas Leasing & Development Record of Decision and Resource Management Plan Amendment* (BLM 1999b).

**Date Approved:** *Oil and Gas Plan Amendment to the Glenwood Springs Resource Management Plan* (BLM 1991) – approved 11/27/91 and *Oil & Gas Leasing & Development Record of Decision and Resource Management Plan Amendment* (BLM 1999b) – approved March 24, 1999.

**Decision Number/Page:** BLM 1991, page 3; BLM1999b, page 15

**Decision Language:** The 1991 Oil and Gas Plan Amendment (BLM 1991) included the following at page 3: “697,720 acres of BLM-administered mineral estate within the Glenwood Springs Resource

Area are open to oil and gas leasing and development, subject to lease terms and (as applicable) lease stipulations” (BLM 1991, page 3). This decision was carried forward unchanged in the 1999 ROD and RMP amendment at page 15 (BLM 1999b): “In areas being actively developed, the operator must submit a Geographic Area Proposal (GAP) [currently referred to as a Master Development Plan, MDP] that describes a minimum of 2 to 3 years of activity for operator controlled leases within a reasonable geographic area.” Furthermore, Appendices A and B (BLM 1999b) list Lease Stipulations (Appendix A) and Management of Lease Development (Appendix B) features which further support the initial decision language from 1991 Resource Management Plan Amendment.

**REVIEW OF EXISTING NEPA DOCUMENTS:** The following NEPA document(s) satisfies the criteria of being an activity-level or project-level EIS or EA that is applicable to the proposed action, as described below.

The DOE 1-W-20 was identified as an existing well pad with expected future well drilling to occur in the Wheeler to Webster GAP (EA #CO140-2001-048), approved on July 24, 2002.

**CATEGORICAL EXCLUSION REVIEW:** The proposed action is categorically excluded from further documentation in accordance with statutory NEPA categorical exclusions (CXs), as granted in Section 390 of the Energy Policy Act of 2005, for oil and gas exploration and development. The proposed action qualifies as a categorical exclusion under Section 390, based on the qualifying criterion Number 2.

Qualifying Criteria	YES	NO
1. Individual surface disturbances of less than 5 acres, so long as the total surface disturbance on the lease is not greater than 150 acres and site-specific analysis in a document prepared pursuant to NEPA has been previously completed.	X	
a. Will disturb less than 5 acres; if more than one action is proposed for a lease, each activity is counted separately, and each may disturb up to 5 acres.	X	
b. The current un-reclaimed surface disturbance readily visible on the entire leasehold is not greater than 150 acres, including the proposed action.	X	
c. This categorical exclusion includes the requirement of a site-specific NEPA document. A site-specific NEPA analysis may be an EA/EIS for exploration and/or development, for a specific MDP, for a multi-well or a single well permit approval.	X	

Additionally, none of the extraordinary circumstances in the following table, taken from 516 DM 2, Appendix 2, applies to this project.

Extraordinary Circumstances	YES	NO
1. Has significant adverse effects on public health and safety.		X
2. Has significant impacts on such natural resources and unique geographic characteristics as historic or cultural resources; park, recreation or refuge lands; wilderness areas; wild or scenic rivers; national natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands (Executive Order 11990); floodplains (Executive Order 11988); national monuments; migratory birds; and other ecologically significant or critical areas.		X
3. Has highly controversial environmental effects or involves unresolved conflicts concerning alternative uses of available resources [NEPA Section 102(2)(E)].		X
4. Has highly uncertain and potentially significant environmental effects or involves unique or unknown environmental risks.		X

Extraordinary Circumstances	YES	NO
5. Establishes a precedent for future action or represents a decision in principle about future actions with potentially significant environmental effects.		X
6. Has a direct relationship to other actions with individually insignificant but cumulatively significant environmental effects.		X
7. Has significant impacts on properties listed, or eligible for listing, on the National Register of Historic Places as determined by either the bureau or office.		X
8. Has significant impacts on species listed, or proposed to be listed, on the List of Endangered or Threatened Species, or has significant impacts on designated Critical Habitat for these species.		X
9. Violates a Federal law or a State, local, or tribal law or requirement imposed for the protection of the environment.		X
10. Has the potential for a disproportionately high and adverse effect on low income or minority populations (Executive Order 12898).		X
11. Limits access to and ceremonial use of Indian sacred sites on Federal lands by Indian religious practitioners or significantly adversely affects the physical integrity of such sacred sites (Executive Order 13007).		X
12. Contributes to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area or may promote the introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act and Executive Order 13112).		X

**INTERDISCIPLINARY REVIEW:** The proposed action was presented to, and reviewed by the Colorado River Valley Field Office interdisciplinary team on December 9, 2010.

A list of resource specialists who participated in this review is available upon request from the Colorado River Valley Field Office.

**MITIGATION:** Conditions of Approval are attached.

**NAME OF PREPARER:** Rebecca Rutan, Natural Resource Specialist

**NAME OF ENVIRONMENTAL COORDINATOR:** Allen B. Crockett, Supervisory NRS

**DECISION AND RATIONALE:** I have reviewed this Section 390 Categorical Exclusion and have decided to approve the proposed action.

This action is listed in the Instruction Memorandum Number 2005-247 and Instruction Memorandum Number 2010-118 as an action that may be categorically excluded under Section 390 of the Energy Policy Act of 2005. I have evaluated the action relative to the five qualifying criteria listed above and have determined that, as it does not represent an exception, it is therefore categorically excluded from further environmental analysis.

**SIGNATURE OF AUTHORIZED OFFICIAL:** Allen B. Crockett  
 Supervisory Natural Resource Specialist

**DATE SIGNED:** 12/10/2010

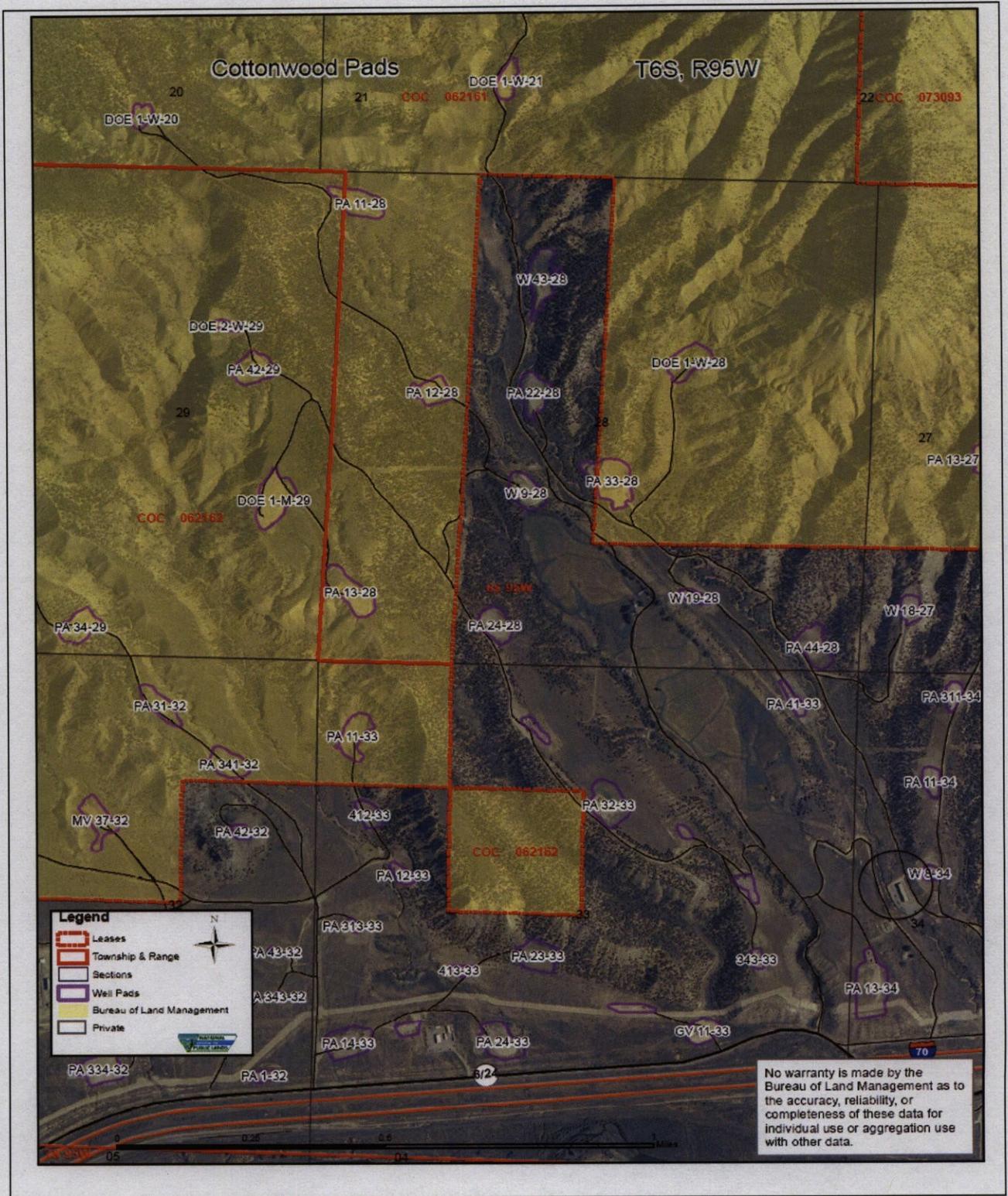


Figure 1. Location Map

DOI-BLM-CO-N040-2011-0040-CX (390)  
 Water Pipeline from DOE 1-W-20 Pad Cottonwood Tank Facility  
 Natural Gas Pipeline from DOE 1-W-20 Pad to PA 11-28 Pad  
 Operator: Williams Production RMT Company

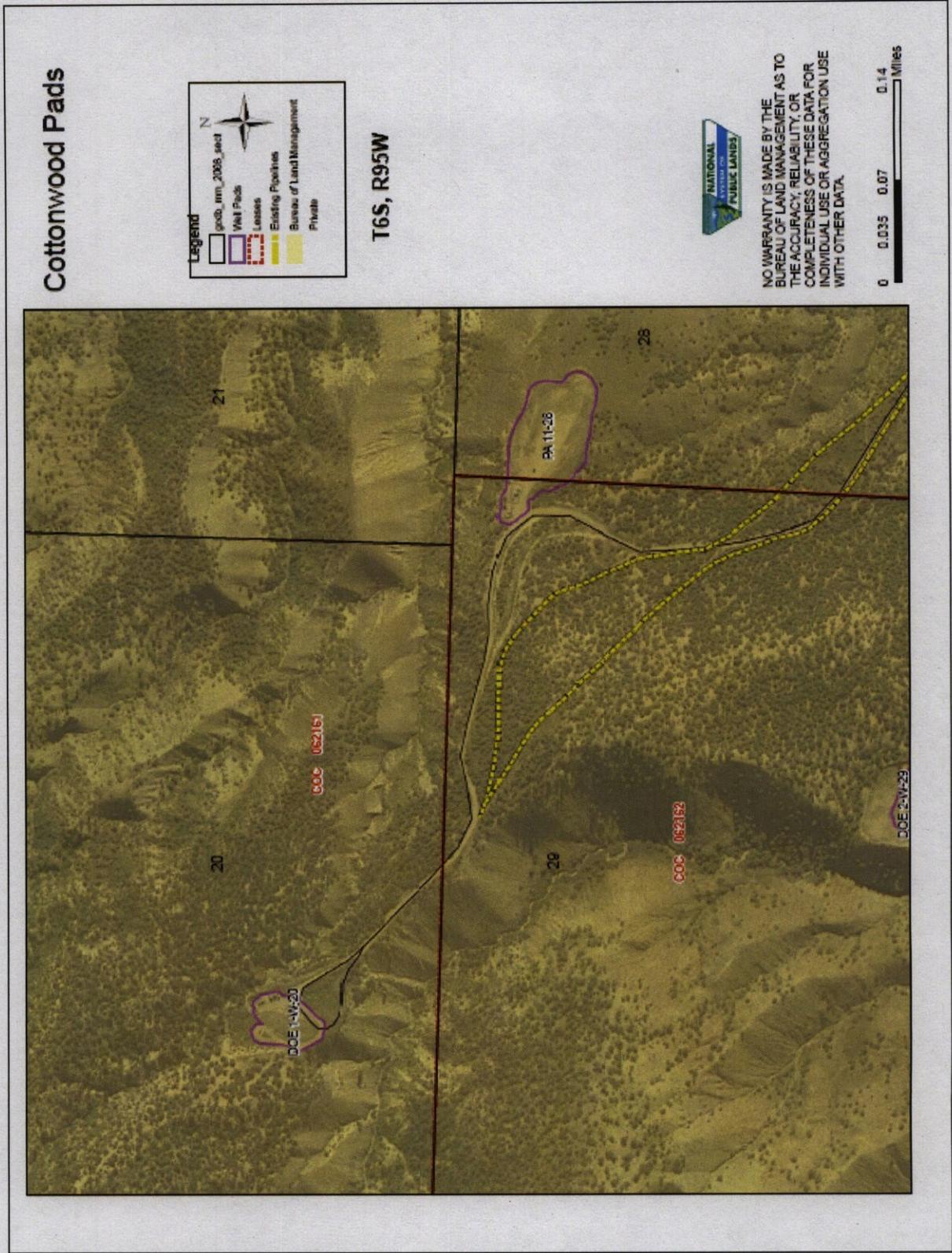


Figure 2. Pipeline Location in the Existing Access Road

### Administrative Review or Appeal Opportunities

This decision is effective upon the date the decision or approval by the authorized officer. Under regulations addressed in 43 CFR Subpart 3165, any party adversely affected has the right to appeal this decision. An informal review of the technical or procedural aspects of the decision may be requested of this office before initiating a formal review request. You have the right to request a State Director review of this decision. You must request a State Director review prior to filing an appeal to the Interior Board of Land Appeals (IBLA) (43CFR 3165.4).

If you elect to request a State Director Review, the request must be received by the BLM Colorado State Office, 2850 Youngfield Street, Lakewood, Colorado 80215, no later than 20 business days after the date the decision was received or considered to have been received. The request must include all supporting documentation unless a request is made for an extension of the filing of supporting documentation. For good cause, such extensions may be granted. You also have the right to appeal the decision issued by the State Director to the IBLA.

### Contact Person

For additional information concerning this decision, contact Rebecca Rutan, Natural Resource Specialist, Colorado River Valley Field Office, 2300 River Frontage Road, Silt, Colorado 81652, Phone 970-876-9059.

**SURFACE-USE CONDITIONS OF APPROVAL  
DOI-BLM-CO-N040-2011-0040-CX (390)**

**CONDITIONS OF APPROVAL SPECIFIC TO PIPELINE INSTALLATION**

1. Hydrostatic Pipeline Testing. After testing of newly installed pipelines, water used in pressure testing of the lines shall be disposed at a State-approved facility or reused for drilling and/or completion operations.
2. Pipeline Testing. The entire pipeline shall be tested in compliance with DOT regulations (49 CFR Part 192). Incremental segments of the pipeline shall be filled with compressed air to the desired maximum pressure and held for the duration of the test (8 hours minimum). (Ref. 49 CFR 192.503.c)

The compressed air shall be discharged into the atmosphere following the completion of the test. Notification to all nearby residents as well as the Garfield County Dispatch Center shall be made no less than 24 hours prior to the pressure test and blow down. All necessary and reasonable precautions shall be taken to ensure the safety of the employees and the general public, the lands, domestic animals and wildlife, etc. This may include, but not be limited to, restriction of access to the pipe being tested, temporary warning signs installed in appropriate locations, effective communication.

Williams and its contractors shall ensure that pressure-testing operations are carried out in accordance with the following:

- United States Department of Transportation Code of Federal Regulations (CFR), Title 49, Part 192, Subpart J, entitled "Test Requirements";
- Environmental Protection Agency

Portable compressors for pressure testing shall not be stationed within 100 feet of any residence. All residents, including the Garfield County Dispatch Center, shall be notified at least 24 hours in advance of beginning the pipeline loading process.

3. Welding of Pipeline. A minimum of 10% of all welds shall be X-rayed. Visual inspections shall be performed on 100% of all pipeline welds. Any pipeline occurring within the Rifle Municipal Watershed Area and/or within 100 feet of any perennial or intermittent stream crossing, shall have all welds X-rayed. All bored areas shall have 100% X-rays of all pipeline welds. All welders shall be appropriately certified.
4. Fire Suppression. Welding or other use of acetylene or other torch with open flame shall be operated in an area barren or cleared of all flammable materials at least 10 feet on all sides of equipment. Internal combustion engines shall be equipped with approved spark arrestors which meet either (a) the USDA Forest Service Standard 5100-1a or (b) Society of Automotive Engineers (SAE) recommended practices J335(b) and J350(a).
5. Right-of-Way Amendment. The operator, Williams, shall work with BLM to complete all right-of-way amendment paperwork, including payment of all associated processing, monitoring, and rental fees, within 30 days of the approval of the SCX.

**STANDARD CONDITIONS OF APPROVAL WITHIN THE COLORADO RIVER VALLEY FIELD OFFICE**

1. Administrative Notification. The operator shall notify the BLM representative at least 48 hours prior to initiation of construction. If requested by the BLM representative, the operator shall schedule a pre-construction meeting, including key operator and contractor personnel, to ensure that any unresolved issues are fully addressed prior to initiation of surface-disturbing activities or placement of production facilities.
2. Road Construction and Maintenance. Roads shall be crowned, ditched, surfaced, drained with culverts and/or water dips, and constructed to BLM Gold Book standards. Initial gravel application shall be a minimum of 6 inches. The operator shall provide timely year-round road maintenance and cleanup on the access roads. A regular schedule for maintenance shall include, but not be limited to, blading, ditch and culvert cleaning, road surface replacement, and dust abatement. When rutting within the traveled way becomes greater than 6 inches, blading and/or gravelling shall be conducted as approved by the BLM.
3. Dust Abatement. The operator shall implement dust abatement measures as needed to prevent fugitive dust from vehicular traffic, equipment operations, or wind events. The BLM may direct the operator to change the level and type of treatment (watering or application of various dust agents, surfactants, and road surfacing material) if dust abatement measures are observed to be insufficient to prevent fugitive dust.
4. Drainage Crossings and Culverts. Construction activities at perennial, intermittent, and ephemeral drainage crossings (e.g. burying pipelines, installing culverts) shall be timed to avoid high flow conditions. Construction that disturbs any flowing stream shall utilize either a piped stream diversion or a cofferdam and pump to divert flow around the disturbed area.

Culverts at drainage crossings shall be designed and installed to pass a 25-year or greater storm event. On perennial and intermittent streams, culverts shall be designed to allow for passage of aquatic biota. The minimum culvert diameter in any installation for a drainage crossing or road drainage shall be 24 inches. Crossings of drainages deemed to be jurisdictional waters of the U.S. pursuant to Section 404 of the Clean Water Act may require additional culvert design capacity. Due to the flashy nature of area drainages and anticipated culvert maintenance, the U.S. Army Corps of Engineers (USACE) recommends designing drainage crossings for the 100-year event. Contact the USACE Colorado West Regulatory Branch at 970-243-1199 ext. 17 (Travis Morse).

Pipelines installed beneath stream crossings shall be buried at a minimum depth of 4 feet below the channel substrate to avoid exposure by channel scour and degradation. Following burial, the channel grade and substrate composition shall be returned to pre-construction conditions.

5. Jurisdictional Waters of the U.S. The operator shall obtain appropriate permits from the U.S. Army Corps of Engineers (USACE) prior to discharging fill material into waters of the U.S. in accordance with Section 404 of the Clean Water Act. Waters of the U.S. are defined in 33 CFR Section 328.3 and may include wetlands as well as perennial, intermittent, and ephemeral streams. Permanent impacts to waters of the U.S. may require mitigation. Contact the USACE Colorado West Regulatory Branch at 970-243-1199 ext. 17 (Travis Morse). Copies of any printed or emailed approved USACE permits or verification letters shall be forwarded to the BLM.
6. Wetlands and Riparian Zones. The operator shall restore temporarily disturbed wetlands or riparian areas. The operator shall consult with the BLM Colorado River Valley Field Office to determine appropriate mitigation, including verification of native plant species to be used in restoration.

7. **Reclamation.** The goals, objectives, timelines, measures, and monitoring methods for final reclamation of oil and gas disturbances are described in Appendix I (Surface Reclamation) of the 1998 Draft Supplemental EIS (DSEIS). Specific measures to follow during interim and temporary (pre-interim) reclamation are described below.
- a. **Reclamation Plans.** In areas that have low reclamation potential or are especially challenging to restore, reclamation plans will be required prior to APD approval. The plan shall contain the following components: detailed reclamation plans, which include contours and indicate irregular rather than smooth contours as appropriate for visual and ecological benefit; timeline for drilling completion, interim reclamation earthwork, and seeding; soil test results and/or a soil profile description; amendments to be used; soil treatment techniques such as roughening, pocking, and terracing; erosion control techniques such as hydromulch, blankets/matting, and wattles; and visual mitigations if in a sensitive VRM area.
  - b. **Deadline for Interim Reclamation Earthwork and Seeding.** Interim reclamation to reduce a well pad to the maximum size needed for production, including earthwork and seeding of the interim reclaimed areas, shall be completed within 6 months following completion of the last well planned to be drilled on that pad as part of a continuous operation. If a period of greater than one year is expected to occur between drilling episodes, BLM may require implementation of all or part of the interim reclamation program.

Reclamation, including seeding, of temporarily disturbed areas along roads and pipelines, and of topsoil piles and berms, shall be completed within 30 days following completion of construction. Any such area on which construction is completed prior to December 1 shall be seeded during the remainder of the early winter season instead of during the following spring, unless BLM approves otherwise based on weather. If road or pipeline construction occurs discontinuously (e.g., new segments installed as new pads are built) or continuously but with a total duration greater than 30 days, reclamation, including seeding, shall be phased such that no portion of the temporarily disturbed area remains in an unreclaimed condition for longer than 30 days. BLM may authorize deviation from this requirement based on the season and the amount of work remaining on the entirety of the road or pipeline when the 30-day period has expired.

If requested by the project lead NRS for a specific pad or group of pads, the operator shall contact the NRS by telephone or email approximately 72 hours before reclamation and reseeding begin. This will allow the NRS to schedule a pre-reclamation field visit if needed to ensure that all parties are in agreement and provide time for adjustments to the plan before work is initiated.

The deadlines for seeding described above are subject to extension upon approval of the BLM based on season, timing limitations, or other constraints on a case-by-case basis. If the BLM approves an extension for seeding, the operator may be required to stabilize the reclaimed surfaces using hydromulch, erosion matting, or other method until seeding is implemented.

- c. **Topsoil Stripping, Storage, and Replacement.** All topsoil shall be stripped following removal of vegetation during construction of well pads, pipelines, roads, or other surface facilities. In areas of thin soil, a minimum of the upper 6 inches of surficial material shall be stripped. The BLM may specify a stripping depth during the onsite visit or based on subsequent information regarding soil thickness and suitability. The stripped topsoil shall be stored separately from subsoil or other excavated material and replaced prior to final seedbed preparation. The BLM best management practice (BMP) for the Windrowing of Topsoil (COA number 19) shall be implemented for well pad construction whenever topography allows.
- d. **Seedbed Preparation.** For cut-and-fill slopes, initial seedbed preparation shall consist of backfilling and recontouring to achieve the configuration specified in the reclamation plan. For compacted areas, initial

seedbed preparation shall include ripping to a minimum depth of 18 inches, with a maximum furrow spacing of 2 feet. Where practicable, ripping shall be conducted in two passes at perpendicular directions. Following final contouring, the backfilled or ripped surfaces shall be covered evenly with topsoil.

Final seedbed preparation shall consist of scarifying (raking or harrowing) the spread topsoil prior to seeding. If more than one season has elapsed between final seedbed preparation and seeding, and if the area is to be broadcast-seeded or hydroseeded, this step shall be repeated no more than 1 day prior to seeding to break up any crust that has formed.

Seedbed preparation is not required for topsoil storage piles or other areas of temporary seeding.

Requests for use of soil amendments, including basic product information, shall be submitted to the BLM for approval.

- e. Seed Mixes. A seed mix consistent with BLM standards in terms of species and seeding rate for the specific habitat type shall be used on all BLM lands affected by the project (see Attachments 1 and 2 of the letter provided to operators dated May 1, 2008). Note that temporary seeding no longer allows the use of sterile hybrid non-native species.

For private surfaces, the menu-based seed mixes are recommended, but the surface landowner has ultimate authority over the seed mix to be used in reclamation. The seed shall contain no noxious, prohibited, or restricted weed seeds and shall contain no more than 0.5 percent by weight of other weed seeds. Seed may contain up to 2.0 percent of "other crop" seed by weight, including the seed of other agronomic crops and native plants; however, a lower percentage of other crop seed is recommended. Seed tags or other official documentation shall be submitted to BLM at least 14 days before the date of proposed seeding for acceptance. Seed that does not meet the above criteria shall not be applied to public lands.

- f. Seeding Procedures. Seeding shall be conducted no more than 24 hours following completion of final seedbed preparation.

Where practicable, seed shall be installed by drill-seeding to a depth of 0.25 to 0.5 inch. Where drill-seeding is impracticable, seed may be installed by broadcast-seeding at twice the drill-seeding rate, followed by raking or harrowing to provide 0.25 to 0.5 inch of soil cover or by hydroseeding and hydromulching. Hydroseeding and hydromulching shall be conducted in two separate applications to ensure adequate contact of seeds with the soil.

If interim revegetation is unsuccessful, the operator shall implement subsequent reseeding until interim reclamation standards are met.

- g. Mulch. Mulch shall be applied within 24 hours following completion of seeding. Mulch may consist of either hydromulch or of certified weed-free straw or certified weed-free native grass hay crimped into the soil.

NOTE: Mulch is not required in areas where erosion potential mandates use of a biodegradable erosion-control blanket (straw matting).

- h. Erosion Control. Cut-and-fill slopes shall be protected against erosion with the use of water bars, lateral furrows, or other measures approved by the BLM. Cut-and-fill slopes along drainages or in areas with high erosion potential shall also be protected from erosion using hydromulch designed specifically for erosion

control or biodegradable blankets/matting, bales, or wattles of weed-free straw or weed-free native grass hay. A well-anchored fabric silt fence shall also be placed at the toe of cut-and-fill slopes along drainages or to protect other sensitive areas from deposition of soils eroded off the slopes. Additional BMPs shall be employed as necessary to reduce soil erosion and offsite transport of sediments.

- i. Site Protection. The pad shall be fenced to BLM standards to exclude livestock grazing for the first two growing seasons or until seeded species are firmly established, whichever comes later. The seeded species will be considered firmly established when at least 50 percent of the new plants are producing seed. The BLM will approve the type of fencing.
  - j. Monitoring. The operator shall conduct annual monitoring surveys of all sites categorized as “operator reclamation in progress” and shall submit an annual monitoring report of these sites to the BLM by **December 31** of each year. The monitoring program shall use the four Reclamation Categories defined in Appendix I of the 1998 DSEIS to assess progress toward reclamation objectives. The annual report shall document whether attainment of reclamation objectives appears likely. If one or more objectives appear unlikely to be achieved, the report shall identify appropriate corrective actions. Upon review and approval of the report by the BLM, the operator shall be responsible for implementing the corrective actions or other measures specified by the BLM.
8. Weed Control. The operator shall regularly monitor and promptly control noxious weeds or other undesirable plant species as set forth in the Glenwood Springs Field Office *Noxious and Invasive Weed Management Plan for Oil and Gas Operators*, dated March 2007. A Pesticide Use Proposal (PUP) must be approved by the BLM prior to the use of herbicides. Annual weed monitoring reports shall be submitted to BLM by **December 1**.
  9. Big Game Winter Range Timing Limitation. To minimize impacts to wintering big game, no construction, drilling or completion activities shall occur during a Timing Limitation (TL) period from **December 1 to April 30 annually**. To further reduce impacts to wintering big game, remote sensing should be used for production monitoring, and unavoidable monitoring maintenance activities should be conducted between 9 a.m. and 3 p.m., to the extent practicable. These additional recommendations apply to the period from December 1 to April 30.
  10. Bald and Golden Eagles. It shall be the responsibility of the operator to comply with the Bald and Golden Eagle Protection Act (Eagle Act) with respect to “take” of either eagle species. Under the Eagle Act, “take” includes to pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest and disturb. “Disturb” means to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, (1) injury to an eagle; (2) a decrease in its productivity by substantially interfering with normal breeding, feeding, or sheltering behavior; or (3) nest abandonment by substantially interfering with normal breeding, feeding, or sheltering behavior. Avoidance of eagle nest sites, particularly during the nesting season, is the primary and preferred method to avoid a take. Any oil or gas construction, drilling, or completion activities planned within 0.5 mile of a bald or golden eagle nest, or other associated activities greater than 0.5 miles from a nest that may disturb eagles, should be coordinated with the BLM project lead and BLM wildlife biologist and the USFWS representative in the BLM Field Office (970-876-9051).
  11. Raptor Nesting. To protect nesting raptors, a survey shall be conducted prior to construction, drilling, or completion activities that are to begin during the raptor nesting season (February 1 to August 15). The survey shall include all potential nesting habitat within 0.25 mile of a well pad or 0.125 mile of an access road, pipeline, or other surface facility. Results of the survey shall be submitted to the BLM. If a raptor nest is located within the buffer widths specified above, a 60-day Timing Limitation (TL) shall be applied to postpone initiation of construction, drilling, and completion activities. The dates of this TL will be based on the particular species of raptor.

12. Migratory Birds. It shall be the responsibility of the operator to comply with the Migratory Bird Treaty Act (MBTA) with respect to “take” of migratory bird species. Under the MBTA, “take” means to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The operator shall prevent use by migratory birds of any pit containing fluids associated with oil or gas operations, including but not limited to reserve pits, produced water pits, frac-water pits, cuttings trenches (if covered by water/fluid), and evaporation pits. Fluids in these pits may pose a risk to migratory birds (e.g., waterfowl, shorebirds, wading birds, songbirds, and raptors) as a result of ingestion, absorption through the skin, or interference with buoyancy and temperature regulation. Regardless of the method used, it shall be in place within 24 hours following the placement of fluids into a pit. Because of high toxicity to birds, oil slicks and oil sheens should immediately be skimmed off the surface of any pit that is not netted. The most effective way to eliminate risk to migratory birds is prompt drainage, closure, and reclamation of pits, which is strongly encouraged. All mortality or injury to species protected by the MBTA shall be reported immediately to the BLM project lead and to the USFWS representative in the BLM Field Office at 970-876-9051 (Creed Clayton) and visit <http://www.fws.gov/mountain-prairie/contaminants/oilpits.htm>.
13. Birds of Conservation Concern. Pursuant to BLM Instruction Memorandum 2008-050, all surface-disturbing activities are prohibited from **May 1 to July 1** to reduce impacts to Birds of Conservation Concern (BCC). An exception to this COA will be granted if nesting surveys conducted no more than one week prior to surface-disturbing activities indicate that no BCC species are nesting within 30 meters (100 feet) of the area to be disturbed. Nesting shall be deemed to be occurring if a territorial (singing) male is present within the distance specified above. Nesting surveys shall include an aural survey for diagnostic vocalizations in conjunction with a visual survey for adults and nests. Surveys shall be conducted by a qualified breeding bird surveyor between sunrise and 10:00 AM under favorable conditions for detecting and identifying a BCC species. This provision does not apply to ongoing construction, drilling, or completion activities that are initiated prior to May 1 and continue into the 60-day period at the same location.
14. Range Management. Range improvements (fences, gates, reservoirs, pipelines, etc) shall be avoided during development of natural gas resources to the maximum extent possible. If range improvements are damaged during exploration and development, the operator will be responsible for repairing or replacing the damaged range improvements. If a new or improved access road bisects an existing livestock fence, steel frame gate(s) or a cattleguard with associated bypass gate shall be installed across the roadway to control grazing livestock.
15. Ips Beetle. To avoid mortality of pinyon pines due to infestations of the *Ips* beetle, any pinyon trees damaged during road, pad, or pipeline construction shall be chipped after being severed from the stump or grubbed from the ground, buried in the toe of fill slopes (if feasible), or cut and removed from the site within 24 hours to a location approved by the Colorado State Forest Service.
16. Paleontological Resources. All persons associated with operations under this authorization shall be informed that any objects or sites of paleontological or scientific value, such as vertebrate or scientifically important invertebrate fossils, shall not be damaged, destroyed, removed, moved, or disturbed. If in connection with operations under this authorization any of the above resources are encountered the operator shall immediately suspend all activities in the immediate vicinity of the discovery that might further disturb such materials and notify the BLM of the findings. The discovery must be protected until notified to proceed by the BLM.

Where feasible, the operator shall suspend ground-disturbing activities at the discovery site and immediately notify the BLM of any finds. The BLM will, as soon as feasible, have a BLM-permitted paleontologist check out the find and record and collect it if warranted. If ground-disturbing activities cannot be immediately suspended, the operator shall work around or set the discovery aside in a safe place to be accessed by the BLM-permitted paleontologist.

17. Cultural Education/Discovery. All persons in the area who are associated with this project shall be informed that if anyone is found disturbing historic, archaeological, or scientific resources, including collecting artifacts, the person or persons will be subject to prosecution.

Pursuant to 43 CFR 10.4(g), the BLM shall be notified by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4 (c) and (d), activities shall stop in the vicinity of the discovery, and the discovery shall be protected for 30 days or until notified by the BLM to proceed.

If in connection with operations under this contract, the operator, its contractors, their subcontractors, or the employees of any of them discovers, encounters, or becomes aware of any objects or sites of cultural value or scientific interest such as historic ruins or prehistoric ruins, graves or grave markers, fossils, or artifacts, the operator shall immediately suspend all operations in the vicinity of the cultural resource and shall notify the BLM of the findings (16 USC 470h-3, 36 CFR 800.112). Operations may resume at the discovery site upon receipt of written instructions and authorization by the BLM. Approval to proceed will be based upon evaluation of the resource. Evaluation shall be by a qualified professional selected by the BLM from a Federal agency insofar as practicable. When not practicable, the operator shall bear the cost of the services of a non-Federal professional.

Within five working days, the BLM will inform the operator as to:

- whether the materials appear eligible for the National Register of Historic Places
- what mitigation measures the holder will likely have to undertake before the site can be used (assuming that *in-situ* preservation is not necessary)
- the timeframe for the BLM to complete an expedited review under 36 CFR 800.11, or any agreements in lieu thereof, to confirm through the SHPO State Historic Preservation Officer that the findings of the BLM are correct and that mitigation is appropriate

The operator may relocate activities to avoid the expense of mitigation and delays associated with this process, as long as the new area has been appropriately cleared of resources and the exposed materials are recorded and stabilized. Otherwise, the operator shall be responsible for mitigation costs. The BLM will provide technical and procedural guidelines for relocation and/or to conduct mitigation. Upon verification from the BLM that the required mitigation has been completed, the operator will be allowed to resume construction.

Antiquities, historic ruins, prehistoric ruins, and other cultural or paleontological objects of scientific interest that are outside the authorization boundaries but potentially affected, either directly or indirectly, by the proposed action shall also be included in this evaluation or mitigation. Impacts that occur to such resources as a result of the authorized activities shall be mitigated at the operator's cost, including the cost of consultation with Native American groups.

Any person who, without a permit, injures, destroys, excavates, appropriates or removes any historic or prehistoric ruin, artifact, object of antiquity, Native American remains, Native American cultural item, or archaeological resources on public lands is subject to arrest and penalty of law (16 USC 433, 16 USC 470, 18 USC 641, 18 USC 1170, and 18 USC 1361).

18. Visual Resources. Production facilities shall be placed as indicated on the plats attached to the APD, unless an alternative placement is approved by the BLM.

To the extent practicable, existing vegetation shall be preserved when clearing and grading for pads, roads, and pipelines. The BLM may direct that cleared trees and rocks be salvaged and redistributed over reshaped cut-and-fill slopes or along linear features.

Above-ground facilities shall be painted a natural color selected to minimize contrast with adjacent vegetation or rock outcrops. The color shall be specified by the BLM and attached as a COA to individual APDs.

19. Windrowing of Topsoil. Topsoil shall be windrowed around the pad perimeter to create a berm that limits and redirects stormwater runoff and extends the viability of the topsoil per BLM Topsoil Best Management Practices (BLM 2009 PowerPoint presentation available upon request from Glenwood Springs Field Office). Topsoil shall also be windrowed, segregated, and stored along pipelines and roads for later spreading across the disturbed corridor during final reclamation. Topsoil berms shall be promptly seeded to maintain soil microbial activity, reduce erosion, and minimize weed establishment.
20. Reserve Pit. A minimum of 2 feet of freeboard shall be maintained in the reserve pit. Freeboard is measured from the highest level of drilling fluids and cuttings in the reserve pit to the lowest surface elevation of ground at the reserve pit perimeter.
21. Soils. Cuts and fills shall be minimized when working on erosive soils and slopes in excess of 30 percent. Cut-and-fill slopes shall be stabilized through revegetation practices with an approved seed mix shortly following construction activities to minimize the potential for slope failures and excessive erosion. Fill slopes adjacent to drainages shall be protected with well-anchored silt fences, straw wattles, or other acceptable BMPs designed to minimize the potential for sediment transport. On slopes greater than 50 percent, BLM personnel may request a professional geotechnical analysis prior to construction.