

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 Exclusions for Oil and Gas Development, Exclusion No. 1

NEPA LOG NUMBER: DOI-BLM-CO-N040-2011-0100-CX (390)

### A. Background

BUREAU OF LAND MANAGEMENT (BLM) OFFICE: Colorado River Valley Field Office (CRVFO), Silt, Colorado

CASEFILE/PROJECT NUMBER: Federal Leases COC58674 (Oil and Gas Lease), COC66496X (Communitization Agreement)

PROPOSED ACTION TITLE/TITLE: Proposal for one temporary 8-inch surface pipeline (water) from an existing buried 8-inch lateral pipeline (water) to the C100U well pad located in the Orchard Mesa Unit, southwest of Parachute, Colorado.

LOCATION OF THE PROPOSED ACTION: Township 8 South (T8S), Range 96 West (R96W), Section 10, Sixth Principal Meridian. The existing C100U pad is located on Fee property up Wallace Creek Road (County Road 306) approximately 7 miles southwest of Parachute, Colorado. Figure 1 is a project location map.

DESCRIPTION OF THE PROPOSED ACTION: Encana Oil & Gas (U.S.A.), Inc. (“Encana”) proposes to temporarily install an 8-inch poly surface water line for the C100U well pad. Encana is requesting to run the surface water line from a buried tie-in point in Section 4, on BLM surface, along the road leading to the well pad crossing both BLM and Fee surfaces. Approximately 1,310 feet would be on two different Fee surface owners and 3,300 feet would be on BLM surface. There would not be any surface disturbance associated with installing the water line as it follows the existing access road (right-of-way) to the wellpad.

The pad was previously analyzed in EA#CO140-2008-0032 (Environmental Assessment of the Orchard II Master Development Plan for Oil and Gas Development), approved October 14, 2008. The wells on the well pad were previously analyzed in SCX#BLM-CO-N040-2011-0011 (Section 390 Categorical Exclusions for Oil and Gas Development).

Resource surveys including those for wildlife, special status plant, and cultural resources were completed relative to the 2008 Orchard II MDP/EA approval.

### B. Land Use Plan Conformance

Land Use Plan (LUP) Name: The current land use plan is the *Glenwood Springs Resource Management Plan* (RMP) (BLM 1984, revised 1988). Relevant amendments include the *Oil and Gas Plan Amendment*

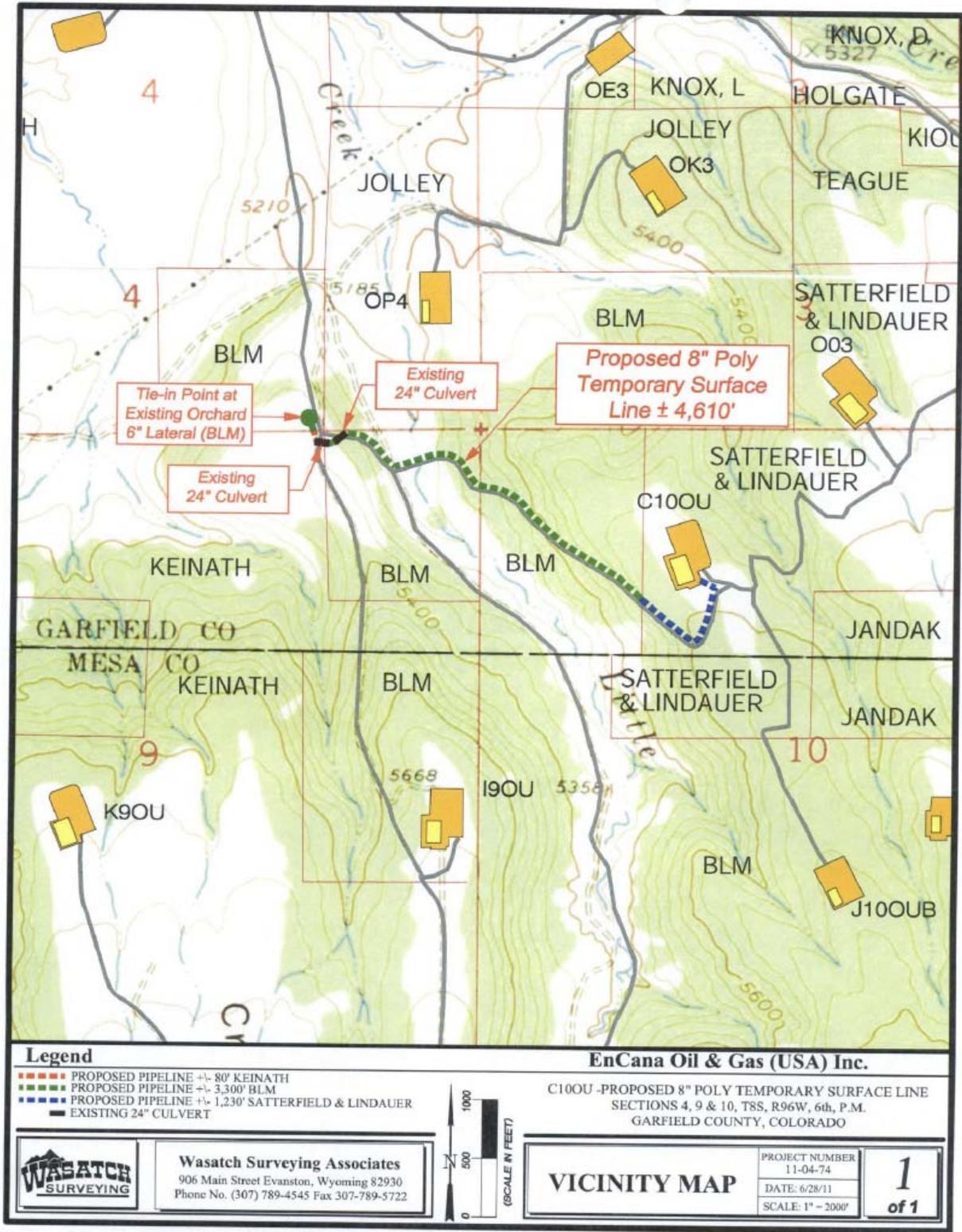


Figure 1. Location of Temporary Surface Line and C100U Well Pad

to the Glenwood Springs Resource Management Plan (BLM 1991) and the Oil & Gas Leasing & Development Record of Decision and Resource Management Plan Amendment (BLM 1999).

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

Determination of Conformance: The 1991 plan amendment for oil and gas (BLM 1991) included the following at page 3: “697,720 acres of BLM-administered mineral estate within the Glenwood Springs Resource Area (GSRA) 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 into the 1999 plan amendment for oil and gas. The 1999 plan amendment for oil and gas (BLM 1999) included the following at page 15: “In areas being actively developed, the operator must submit a Geographic Area Proposal (GAP) that describes a minimum of 2 to 3 years of activity for operator controlled leases within a reasonable geographic area.” The current project is in an area designated as open to oil and gas leasing and development, and this CX has been prepared pursuant to an MDP (Orchard II Master Development Plan, EA #DOI-BLM-CO-140-2008-0032). Therefore, the project conforms to the current LUP, as amended.

**C. Compliance with NEPA**

Consistency with Category: Note: All of the questions listed in Table 2 must be answered with “Yes” in order to use this CX.

<b>Table 2. Project Screening Questions</b>		
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.	<u>Yes</u>	No
a. Will the proposed action disturb less than 5 acres?	<u>Yes</u>	No
b. Is the current amount of surface disturbance on the entire leasehold, plus the proposed action, less than 150 acres?	<u>Yes</u>	No
c. Was the proposed action adequately analyzed in an existing site-specific National Environmental Policy Act (NEPA) document?	<u>Yes</u>	No

NEPA Document Name: Orchard II Master Development Plan (EA #DOI-BLM-CO-140-2008-0032) approved on October 14, 2008, specifically analyzed the construction and drilling of directional wells on the C100U pad.

Extraordinary Circumstances Review: Any “Yes” answers in Table 3 preclude use of the CX.

<b>Table 3. Extraordinary Circumstances</b>		
1. May have significant impacts on public health and safety.	Yes	<u>No</u>
2. May have significant impacts on such natural resources and unique geographic characteristics as historic or cultural resources; park, recreation or refuge lands; wilderness areas; wild and scenic rivers; national natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands (Executive Order 11990); floodplains (Executive Order 119880; national monument; migratory birds; and other ecologically significant or critical areas.	Yes	<u>No</u>
3. May have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources (NEPA Section 102 (2)(E)).	Yes	<u>No</u>

<b>Table 3. Extraordinary Circumstances</b>		
4. May have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks.	Yes	<b><u>No</u></b>
5. May establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects.	Yes	<b><u>No</u></b>
6. May have a direct relationship to other actions with individually insignificant but cumulatively significant environmental effects.	Yes	<b><u>No</u></b>
7. May have significant impacts on properties listed or eligible for listing, on the National Register of Historic Places as determined by either the bureau or office.	Yes	<b><u>No</u></b>
8. May have significant impacts on species listed or proposed to be listed, on the List of Endangered or Threatened Species, or have significant impacts on designated Critical Habitat for these species.	Yes	<b><u>No</u></b>
9. May violate a Federal law, or a state, local, or tribal law or requirement imposed for the protection of the environment.	Yes	<b><u>No</u></b>
10. May have a disproportionately high and adverse effect on low income or minority populations (Executive Order 12898).	Yes	<b><u>No</u></b>
11. May limit access to and ceremonial use of Indian sacred sites on Federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites (Executive Order 13007).	Yes	<b><u>No</u></b>
12. May contribute to the introduction, continued existence, or spread of noxious weed or non-native invasive species known to occur in the area or actions that may promote the introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act and Executive Order 13112).	Yes	<b><u>No</u></b>

This categorical exclusion is appropriate for the specific situation of this project because no extraordinary circumstances exist that would potentially have impacts that may significantly affect the environment. The proposed action has been reviewed, and none of the extraordinary circumstances described in 43 CFR 46.215 applies.

Persons and/or Agencies Consulted:

Encana Oil & Gas (USA) Inc.: Miracle Pfister, Bob Anderson

Interdisciplinary Review:

BLM staff from the CRVFO listed in Table 4 participated in the preparation of this SCX, including review of survey results submitted by the Operator's consultants, evaluation of impacts likely to occur from implementation of the proposed action, and identification of appropriate COAs.

<b>Table 4. BLM Interdisciplinary Team Authors and Reviewers</b>		
<i>Name</i>	<i>Title</i>	<i>Areas of Participation</i>
D.J. Beaupeurt	Lands/Realty Specialist	Realty, Rights-of-Way Grants
Beth Brenneman	Ecologist	Invasive Non-native Species, Special Status Plants, Vegetation
John Brogan	Archaeologist	Cultural Resources, Native American Religious Concerns
Allen Crockett, Ph.D.	Supervisory NRS/Phys. Sci.	NEPA Review
Shauna Kocman, Ph.D.	Hydrologist	Air Quality, Noise, Soils, Surface Water, Waters of the U.S.
Julie McGrew	Natural Resource Specialist	Visual Resources

Table 4. BLM Interdisciplinary Team Authors and Reviewers		
Name	Title	Areas of Participation
Sylvia Ringer	Wildlife Biologist	Migratory Birds, Special Status Species, Aquatic and Terrestrial
Rebecca Rutan	Natural Resource Specialist	Project Lead, Access & Transportation, Range Management, Socio-Economics
Todd Sieber	Geologist	Geology and Minerals, Groundwater, Paleontology

The proposed action was presented to the Colorado River Valley Field Office interdisciplinary team on July 15, 2011. The SCX was posted on the CRVFO NEPA website on July 15, 2011, for solicitation of public comment.

**MITIGATION:** Conditions of approval to be attached to the installation of the temporary surface line are listed in Attachment A and are in addition to conditions of approval attached to individual APDs for Federal oil and gas wells to be located on the C100U pad.

Name of Preparers: Rebecca Rutan Date: July 15, 2011

**D. Signature**

The proposed action is statutorily categorically excluded from further NEPA documentation in accordance with Section 390(b)(1) of the Energy Policy Act of 2005, which provides for exclusion of 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.

Authorizing Official:  Date: 8-8-11

**E. Decision and Rationale for Action**

I have decided to approve the installation of the temporary 8-inch poly surface water line for the C100U pad with the stipulations and conditions of approval identified in Attachment A of this form. The stipulations and COAs are required by this decision, and variance from these stipulations and COAs during project implementation may require further NEPA review.

I have reviewed Section B, Land Use Plan Conformance, and Section C, Compliance with NEPA, and have determined that the proposed activity is in conformance with the applicable land use plan(s) and referenced NEPA documents. I have also evaluated the proposal to ensure the appropriate exclusion category as described in Section 390 of the Energy Policy Act of 2005 has been correctly applied. I have determined, that no further environmental analysis is required.

  
 Allen B. Crockett, Ph.D., J.D.  
 Supervisory Natural Resource Specialist

8-8-11  
 Date

## **F. Administrative Review or Appeal Opportunities**

### Applications for Permit to Drill and Sundry Notices

Under BLM regulations addressed in 43 CFR 3165, a decision to approve the Application for Permit to Drill is subject to appeal and administrative review. An administrative review must be conducted in accordance with 43 CFR 3165.3 and must take place prior to pursuing an appeal to the Interior Board of Land Appeals.

Any adversely affected party may request an administrative review, before the State Director, either with or without oral presentation. Such a request must include information required under 43 CFR 3165.3(b), State Director Review (SDR), including all supporting documentation. Such a request must be filed in writing with the BLM Colorado State Office, 2850 Youngfield Street, Lakewood, Colorado 80215 within 20 business days from the date the decision is received or considered to have been received. Upon request and showing of good cause, an extension for submitting supporting/additional data may be granted by the State Director.

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

## **Surface Use Conditions of Approval DOI-BLM-CO-N040-2011-0100-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 blowdown. 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.

Encana 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).

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

1. Orchard II MDP. Standard Conditions of Approval outlined in Appendix D of the Orchard MDP will apply and remain in full force and effect. A completed document of the Orchard MDP may be found at the following web site:  
[http://www.blm.gov/co/st/en/fo/gsfso/GSFO\\_MasterPlansOfDevelopment.html](http://www.blm.gov/co/st/en/fo/gsfso/GSFO_MasterPlansOfDevelopment.html)
2. 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.
3. 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.
4. 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.
5. 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.

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.

6. 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. Copies of any printed or emailed approved USACE permits or verification letters shall be forwarded to the BLM.

7. 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.
8. 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.
9. **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**.
10. **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.
11. **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).

12. 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.
13. 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>.
14. 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.
15. 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.

16. 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.
17. 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.

18. 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).

19. 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.

20. 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.

21. 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.

22. 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.