

Stormwater Management Plan (SWMP)

For Construction Activities At:

Catamount Animas #1 Gas Well Site
&
Conoco Phillips Animas 36-2 Gas Well Site

Unit Letter K & L
Section 36, Township 34 North, Range 10 West
New Mexico Principle Meridian
La Plata County, Colorado

SWMP Prepared For:

Catamount Energy Partners
1801 Broadway, Suite 1000
Denver, Colorado 80202
(720) 484-2346

and

Conoco Phillips Company
PO Box 2197
Houston, Texas 77252
(505) 326-9710

SWMP Prepared By:

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SWMP Preparation Date:

10/ 31 / 2014

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SECTION 1: CONTACT INFORMATION/RESPONSIBLE PARTIES

1.1 Operator(s) / Subcontractor(s)

Operator:

*Catamount Energy Partners
1801 Broadway, Suite 1000
Denver, CO 80202
(720) 484-2344*

*Conoco Phillips Company
PO Box 2197
Houston, Texas 77252
(505) 326-9710*

Subcontractor(s):

n/a

1.2 Stormwater Team

*Andrew Parker
SWMP Development/Modification & Site Inspection
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Operations Consulting Engineer, Catamount Energy Partners
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Conoco Phillips Company
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Clara.M.Cardoza@conocophillips.com*

The western 2/3 of the well pad is located on the Zyme component. The Zyme component makes up 70 percent of the map unit. Slopes are 3 to 25 percent. This component is on hills, ridges. The parent material consists of residuum weathered from shale. Depth to a root restrictive layer, bedrock, paralithic, is 6 to 20 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. This component is in the *Pinus Edulis-juniperus Osteosperma/artemisia Tridentata Ssp. Vaseyana-cercocarpus Montanus/poa Fendleriana-pleuraphis Jamesii* ecological site. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 6 percent. There are no saline horizons within 30 inches of the soil surface.

The eastern 1/3 of the well pad is located on the Mikim component. The Mikim component makes up 80 percent of the map unit. Slopes are 3 to 12 percent. This component is on foothill valleys, alluvial fans. The parent material consists of medium-textured alluvium derived from sandstone and shale. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 6 percent. There are no saline horizons within 30 inches of the soil surface.

2.1.2 Vegetation

The analysis area is located within the United States Environmental Protection Agency (USEPA) designated Colorado Plateaus Level IV Ecoregion: Semiarid Benchlands and Canyonlands. The Colorado Plateaus ecoregion is located in Arizona, Colorado, and Utah, with a small portion in New Mexico. This ecoregion is approximately 32,581,700 acres (131,854 km²), and the elevation ranges from 3,284 to 10,204 feet (1,001 to 3,110 meters). This ecoregion is characterized by rugged tableland topography, with large basins, ridges, spectacular canyons, and colorful geological formations. The ecoregion is heavily visited for recreational purposes. The higher elevations support extensive piñon-juniper woodlands. Groundcover in these woodlands is sparse and consists of grama and other grasses, forbs, and shrubs, such as big sagebrush and alderleaf mountain-mahogany. Lower areas contain saltbrush-greasewood shrublands, typical of hotter, drier areas. Land uses include livestock, some irrigated farming, recreation, mining, and gas and oil production.

Vegetation within the immediate project area contains piñon-juniper woodland, sagebrush scrub, and land converted to gravel mining and wildlife habitat.

2.1.3 Hydrology

The project area is located within the USGS-designated Animas Watershed (HUC: 14080104). An unnamed ephemeral/intermittent stream is located 250 feet north of the well site. The perennial Animas River is located within 850 feet east of the well site. Effective discharges within intermittent/ephemeral drainages are considered low to moderate (5 to 10 years) events and are typically the result of the North American Monsoon, delivering moisture to the area in late spring and continuing into September. Irrigation of pasture is also common in the vicinity to the project area.

2.2 Discharge Information

Does your project/site discharge stormwater into a Municipal Separate Storm Sewer System (MS4)? Yes No

Are there any surface waters that are located within 50 feet of your construction disturbances? Yes No

Table 1 – Names of Receiving Waters

| |
|--|
| Name(s) of the first surface water that receives stormwater directly from your site and/or from the MS4 (note: multiple rows provided where your site has more than one point of discharge that flows to different surface waters) |
| 1. Animas River (perennial) |
| 2. Unnamed ponds (wildlife habitat) to the east of the project |

Table 2 – Impaired Waters / TMDLs (Answer the following for each surface water listed in Table 1 above)

| | Is this surface water listed as "impaired"? | If you answered yes, then answer the following: | | | |
|-----------|---|---|---|----------------------------|--|
| | | What pollutant(s) are causing the impairment? | Has a TMDL been completed? | Title of the TMDL document | Pollutant(s) for which there is a TMDL |
| 1. | <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO | Metals - Jct. Creek to Elk Creek. | <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO | Not Reported | Zinc |
| 2. | <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO | | <input type="checkbox"/> YES <input type="checkbox"/> NO | | |

Describe the method(s) you used to determine whether or not your project/site discharges to an impaired water:

<http://watersgeo.epa.gov/mywaterway>

Table 3 – Tier 2, 2.5, or 3 Waters (Answer the following for each surface water listed in Table 1 above)

| | Is this surface water designated as a Tier 2, Tier 2.5, or Tier 3 water? (see Appendix F) | If you answered yes, specify which Tier (2, 2.5, or 3) the surface water is designated as? |
|-----------|---|--|
| 1. | <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO | |
| 2. | <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO | |

2.3 Nature of the Construction Activity

General Description of Project

Catamount Energy Partners in partnership with Conoco Phillips Company proposes to construct a new diversion trench and reinforce an existing diversion trench to redirect stormwater away from the well site; reducing the potential for stormwater run-on (see Exhibit 1, Appendix A). The diversion trenches will include berms on the well site side to reduce the potential of stormwater run-off from the well pad. Repair to the lease road accessing the well site caused by stormwater discharge will be repaired during construction of diversion trenches.

Sediment accumulation caused by stormwater run-on near the Conoco Phillips and Williams production equipment (west side of well pad) will be re-used on-site to maintain well pad roads and reinforce existing berms along the eastern portion of the well pad.

Off-lease installation of proposed culverts and diversion trenches reducing the potential for stormwater run-on to the well site shall be the responsibility of the current landowner, Mr. Lonnie Malouff. Mr. Parker discussed the proposed plan with Mr. Malouff on October 24, 2014 and stated that neither Catamount Energy nor Conoco Phillips will be responsible for off-lease stormwater management. Verbal agreement of Mr. Malouff's responsibility was confirmed during the October 24, 2014 meeting. Mr. Malouff's proposed diversion trenches and the northwest culvert will reduce the potential for stormwater eroding the slope northwest of the well site.

Erosion control of the rills and gully observed in the slope northwest of the location is discussed in the weed control plan submitted along with this SWMP.

Size of Construction Project

The length of the southwestern proposed diversion trench is approximately 300 feet. The proposed work to reinforce the existing northern diversion trench is approximately 240 feet. Maintenance of well pad access roads is approximately 800 feet.

2.4 Sequence and Estimated Dates of Construction Activities

The following represents stormwater control activities to mitigate surface water run-on/run-off and control erosion caused by stormwater run-on at the Catamount Animas #1 and Conoco Phillips Animas 36-2 we sites.

CONSTRUCTION/MAINTENANCE OF DIVERSION TRENCHES

- o Construction/maintenance of diversion trenches will begin within 2 weeks of COGCC's approval of this SWMP.
- o To prevent stormwater run-on:
 - the up-slope existing northwest diversion trench berm will be reinforced with compacted fill dirt and the diversion trench will include, as necessary, rock check dams and straw erosion logs (wattles) to control erosion and sediment run-off. The northwest diversion trench includes the gully running upslope along the northwestern slope.
 - a new diversion trench will be cut along the west edge of the well site, continue around to the south and southeast. Drainage will exit the lease at the existing southeast culvert. Cut dirt from the diversion trench will be utilized as fill for berms to prevent stormwater

run-off from the well site entering into the diversion trench. The berms will be compacted to minimize erosion. The diversion trench will include, as necessary, rock check dams, outlet protection for culverts, and straw erosion logs (wattles) to reduce erosions and reduce sediment run-off.

- o Stormwater run-off will be controlled by installing/reinforcing the berms along the eastern edge of the well site. Stormwater sediment removed near the Conoco Phillips and Williams production equipment will be re-used to construct the eastern berms. The berms shall be compacted to reduce erosion.

ACCESS ROAD MAINTENANCE

- o Maintenance of access and well pad roads will begin within two weeks of approval of this SWMP.
- o Control of dust emissions on access roads and well site, as necessary, with the application of dust suppressants (e.g., Magnesium Chloride) and/or water. Dust control will be implemented when dust plumes become larger than normal road use conditions.
- o Maintenance of access roads will include ditching, draining, installing culverts where necessary, crowning and capping, or sloping and dipping the roadbed, as necessary, to reduce 1) the potential for any sediment to migrate from the access road to nearby surface water or any drainages leading to surface water and 2) reduce erosion caused by stormwater events.
- o Identification of additional BMPs for erosion and stormwater management, as needed.

INTERIM RECLAMATION

- o Interim reclamation is complete. The location has not achieved a 70% coverage. A weed control plan will be submitted with this SWMP and include erosions control of rills observed on the northwestern slope.

2.5 Allowable Non-Stormwater Discharges

The following non-stormwater discharges may occur during construction:

- o Water for dust suppression as necessary

There will be no other water discharges, including stormwater, associated with industrial activities other than those associated with the construction activities mentioned above.

2.6 Site Maps

See Appendix A, Exhibit 1. Exhibit 1 identifies the location of the proposed drainage trench and construction activities.

SECTION 3: DOCUMENTATION OF COMPLIANCE WITH OTHER FEDERAL REQUIREMENTS

3.1 Endangered Species Protection

Under Section 7 of the Endangered Species Act of 1973 (ESA; 16 USC 1531-1544), all federal agencies are required to consult with the USFWS or National Marine Fisheries Service if they are proposing an action that may affect listed species or designated habitat. The proposed action does not have a federal connection or nexus, nor has it been proposed by a federal agency.

Woodland areas of the project area may contain suitable big game wintering habitat. No USFWS-designated critical habitat or species have the potential to occur in the project area.

3.2 Historic Preservation

Historic preservation documentation has not been requested by the Fee surface owners affected by the proposed development.

SECTION 4: EROSION AND SEDIMENT CONTROLS

- The construction phase erosion and sediment controls are designed to retain sediment on-site to the extent practicable. The primary goal is to intercept, divert, and convey stormwater originating from outside the project area around the project area.
- Control measures must be properly selected, installed, and maintained in accordance with the manufacturer's specifications and good engineering practices. If periodic inspections or other information indicate that a control has been used inappropriately or incorrectly, the control shall be replaced or modified as needed.
- If sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize off-site impact (e.g., fugitive sediment in street could be washed into storm sewers by the next rain and/or pose a safety hazard to users of public streets).
- Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from becoming a pollutant source for stormwater discharges (e.g., screening outfalls, picked up daily).

4.1 *Perimeter Controls*

Specific Perimeter Controls

Silt Fence/Hay/Straw Bales

Silt fences and hay/straw bales will be installed in accordance with the manufacturer's specifications. The silt fences and/or hay/straw bales will be installed as necessary to prevent erosion and sedimentation run-off from stormwater discharges. These measures will remain in place until permanent vegetation measures have been attained. Bale filters are effective for small rills that can be spanned by one or two bales. Bales are constructed of hay (or straw) that is securely bound to form a berm, which is held in place by two stakes driven through each bale. The first stake is driven at an angle toward previously positioned bale, and the second stake is driven perpendicular to the ground surface. The bindings of the bales will be horizontal. Filter fabric fences (silt fences) perform the same function as hay bale berms, but have the advantage of ease of installation, versatility, and light weight.

A silt fence is a geotextile fabric with fence posts spaced no more than 10 feet apart. Both silt fences and hay/straw bales will be installed according to the manufacturer's instructions where site conditions allow. Otherwise, the silt fencing will be imbedded a minimum of 4 inches, where two sections are joined and overlapped a minimum of 6 inches. Accumulated sediment will be removed regularly and the fence inspected to ensure the bottom of the fence remains imbedded in the ground.

Hay bales may be left in place. Any silt fencing and/or hay/straw bale perimeter controls established prior to the construction of the well site would be inspected on a routine schedule and/or following a major storm event. These barriers are required after the initial disturbance of the soil and may be installed at the following locations as necessary:

- Along banks of waterbodies between graded construction areas and waterbody after clearing
- Downslope of any stockpiled soil in the vicinity of waterbodies and wetlands

- At the sideslope and downslope boundaries of construction where runoff is not otherwise directed by temporary slope breakers

4.2 Stockpiled Sediment or Soil

Silt fence or straw wattles will be placed around all stockpiles until use in reclamation following drilling and completion activities. Topsoil will be stockpiled separate from subsoil with a noticeable gap left between the stockpiles. Vehicle/equipment traffic will be prevented from crossing topsoil stockpiles.

4.3 Minimize Dust

If the location becomes prone to wind or water erosion, appropriate measures will be taken to prevent topsoil loss. Such measures may include using tackifiers or water to wet the topsoil stockpile, essentially creating a crust on the exposed soil to prevent loss. Dust emissions will be controlled on the newly constructed and existing roads, as necessary, with the application of dust suppressants (e.g., Magnesium Chloride) and/or water. Dust control will be implemented when dust plumes become larger than normal road use conditions.

4.4 Constructed Stormwater Conveyance Channels

Natural drainage conditions would be utilized and enhanced if necessary. The well location generally drains west to east. Stormwater conveyance channels shall be constructed above the west slope and at the toe of the west slope. Stormwater conveyance channels will be inspected on a routine schedule and/or following a major storm event.

4.5 Sediment Basins

Site topography prevents the use of sediment basins. Sediment basins are not required and have not been requested in a Surface Owner Agreement.

4.6 Chemical Treatment

No chemical treatments have been proposed for the project area.

4.7 Dewatering Practices

Catamount Energy Partners or Conoco Phillips Company has not proposed any dewatering practices as part of the project.

4.8 Site Stabilization

The primary goal of site stabilization is to stabilize soils that have been affected by the proposed development. Existing vegetation would be retained to the maximum extent possible. All areas not needed for production equipment or vehicle driving surfaces have undergone interim reclamation.

4.8.1 Preservation of Existing Vegetation

Existing woodland tree screen would be preserved around the perimeter of the well site.

4.8.2 Slope Protection

The well site is situated within piñon-juniper woodland. Stormwater that is diverted around the well pad is directed downslope of the pad and above the Animas River drainage. Either berms or fiber rolls would be used to divert flow back into natural drainages. Slope protection measures in-place shall be inspected on a routine schedule and/or following a major storm event.

SECTION 5: POLLUTION PREVENTION STANDARD

5.1 Potential Sources of Pollution

Table 4. Potential Sources of Pollution

| Pollutant-Generating Activity | Pollutants or Pollutant Constituents (that could be discharged if exposed to stormwater) | Location on Site |
|-------------------------------|---|---|
| Workover activities | Drilling Fluids, Produced Water | Contained to well bore or contained to appropriate vessels on location. |

| Pollutant-Generating Activity | Pollutants or Pollutant Constituents (that could be discharged if exposed to stormwater) | Location on Site |
|--|--|---|
| Construction, Workover, and Reclamation Activities | Vehicle/Equipment Fuels and/or Lubricants | Fueling and vehicle/equipment maintenance will be done in designated areas. |
| Completion and Production Operations | Produced Hydrocarbons | Contained to pipelines and/or appropriate vessels on location. |

5.2 Spill Prevention and Response

On May 8, 2013, Governor Hickenlooper signed into law, House Bill 13-1278, relating to the reporting of spills. The rules require oil and gas operators to report any spill or releases of one barrel or more of exploration and production waste within 24 hours after the discovery. The operator is required to make a report to the COGCC as well as to either the municipality or county where the spill occurs. The report must include any information available to the operator concerning the type of waste involved in the spill.

5.3 Fueling and Maintenance of Equipment or Vehicles

Equipment and vehicle fueling and maintenance, if necessary, would be done in designated areas. Any areas of the project area designated for fueling and/or maintenance would be lined.

5.4 Washing of Equipment and Vehicles

Washout areas would be designated within the permitted project area. Vehicles and equipment used in construction and drilling activities would be washed in designated areas. The washout area would be lined. Washout is not permitted anywhere else on or off location.

5.5 Wastes, Hazardous or Solid

The Resource Conservation and Recovery Act (RCRA) passed in 1976, establishes a comprehensive program for managing hazardous wastes from the time they are produced until their disposal. The U.S. Environmental Protection Agency (EPA) regulations define solid wastes as any “discarded materials” subject to a number of exclusions. A “hazardous waste” is a solid waste that is (1) is listed by the EPA as a hazardous waste, (2) exhibits any of the characteristics of hazardous wastes (ignitability, corrosivity, reactivity, or toxicity) or (3) is a mixture of solid and hazardous waste.

A 1980, amendment to RCRA conditionally exempted from regulation as hazardous wastes, “drilling fluids, production waters, and other wastes associated with the exploration, development, or production of crude oil or natural gas. On July 6, 1988, EPA determined that oil and gas exploration, development and production (ED&P) wastes would not be regulated as hazardous wastes under RCRA. A simple rule of thumb was developed for determining if an ED&P waste is likely to be considered exempt or non-exempt from RCRA regulations: If (1) the waste came from down-hole, or (2) the waste was generated by contact with the oil and gas production stream during removal of produced water or other contaminants, the waste is most likely to be considered exempt by EPA.

The Comprehensive Environmental Response Compensation and Liability Act (CERCLA), passed in 1980, deals with the release (spillage, leaking, dumping, accumulation, etc.) or threat of a release of hazardous substances into the environment. Despite many oil and gas constituent wastes being exempt from hazardous waste regulations, certain RCRA exempt contaminants could be subject to regulations as hazardous substances under CERCLA.

Typical waste associated with the proposed development is trash. The construction operator is responsible for disposing trash off-site at an approved facility.

5.6 Fertilizers

No fertilizers will be stored on location. If fertilizers and/or soil amendments are needed for reclamation of the project area they would be provided by the contractor. Fertilizers would be stored in appropriate containers and applied appropriately.

SECTION 6: INSPECTION AND CORRECTIVE ACTION

6.1 Inspection Personnel and Procedures

Personnel Responsible for Inspections

A representative of Adkins Consulting, Inc. will be conducting site inspections to ensure compliance with the Stormwater Management Plan developed for this project.

Adkins Consulting, Inc.
180 E. 12th Street, Unit 5
Durango, CO 81301
(505) 793-1140

Inspection Schedule

Specific Inspection Frequency:

The site would be inspected as soon as construction activities begin. Inspections will take place every 14 days until proposed construction is complete. As the site has undergone interim reclamation, inspections will take place each month until final site stabilization standards have been attained.

Reductions in Inspection Frequency:

- For the reduction in inspections resulting from stabilization.
- For the reduction in inspections in arid, semi-arid, or drought-stricken areas.
- For reduction in inspections due to frozen conditions.

6.2 Corrective Action

Personnel Responsible for Corrective Actions

Corrective actions will be noted in routine inspections. Catamount Energy Partners or Conoco Phillips Company would be responsible for Corrective Actions needed and taken within the project area.

Corrective Action Forms

See Appendix D

6.3 Final Stabilization

Final stabilization of the site will be achieved by re-seeding areas that have been reduced to bare mineral soil. Final stabilization is reached when all ground surface disturbing activities at the site have been completed, and uniform vegetative cover has been established with an individual plant density of at least 70 percent of pre-disturbance levels, or equivalent permanent, physical erosion reduction methods have been employed.

Water Management/Erosion Control Features

Potential erosion control or water management features that may be used include (but are not limited to), waterbars or rolling dips for roads, sediment basins or sediment traps, check dams, silt fencing, outlet protection for culverts, erosion control blankets or geotextiles, and straw wattles. Catamount and Conoco Phillips (or its contractors) will use straw wattles (fiber rolls) as appropriate to limit erosion and sediment transport within diversion trenches and gullies.

6.4 Delegation of Authority

Duly Authorized Representative(s) or Position(s):

Company or Organization Name: Adkins Consulting, Inc.
Name: Andrew Parker
Position: Environmental Specialist
Address: 180 East 12th Street Suite #5
City, State, Zip Code: Durango, CO 81303
Telephone Number: (505) 793-1140
Fax/Email: bhering@catamountep.com

Duly Authorized Representative(s) or Position(s):

Company or Organization Name: Conoco Phillips Company
Name: Clara Cardoza
Position: Environmental Supervisor
Address: PO Box 2197
City, State, Zip Code: Houston, TX 77252
Telephone Number: (505) 326-9710
Fax/Email: Clara.M.Cardoza@conocophillips.com

CERTIFICATION AND NOTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: Clara Cardoza Title/Company: Environmental Supervisor
Conoco Phillips Company

Signature: _____ Date: 10/31/2014

Name: Andrew Parker Title/Company: Environmental Specialist
Adkins Consulting, Inc

Signature: Andrew Parker Date: 10/31/2014

SWMP APPENDICES

Appendix A – Site Maps

Appendix B – Certified Survey Plats of Proposed Development

Appendix C – Inspection Form

Appendix D – Corrective Action Form

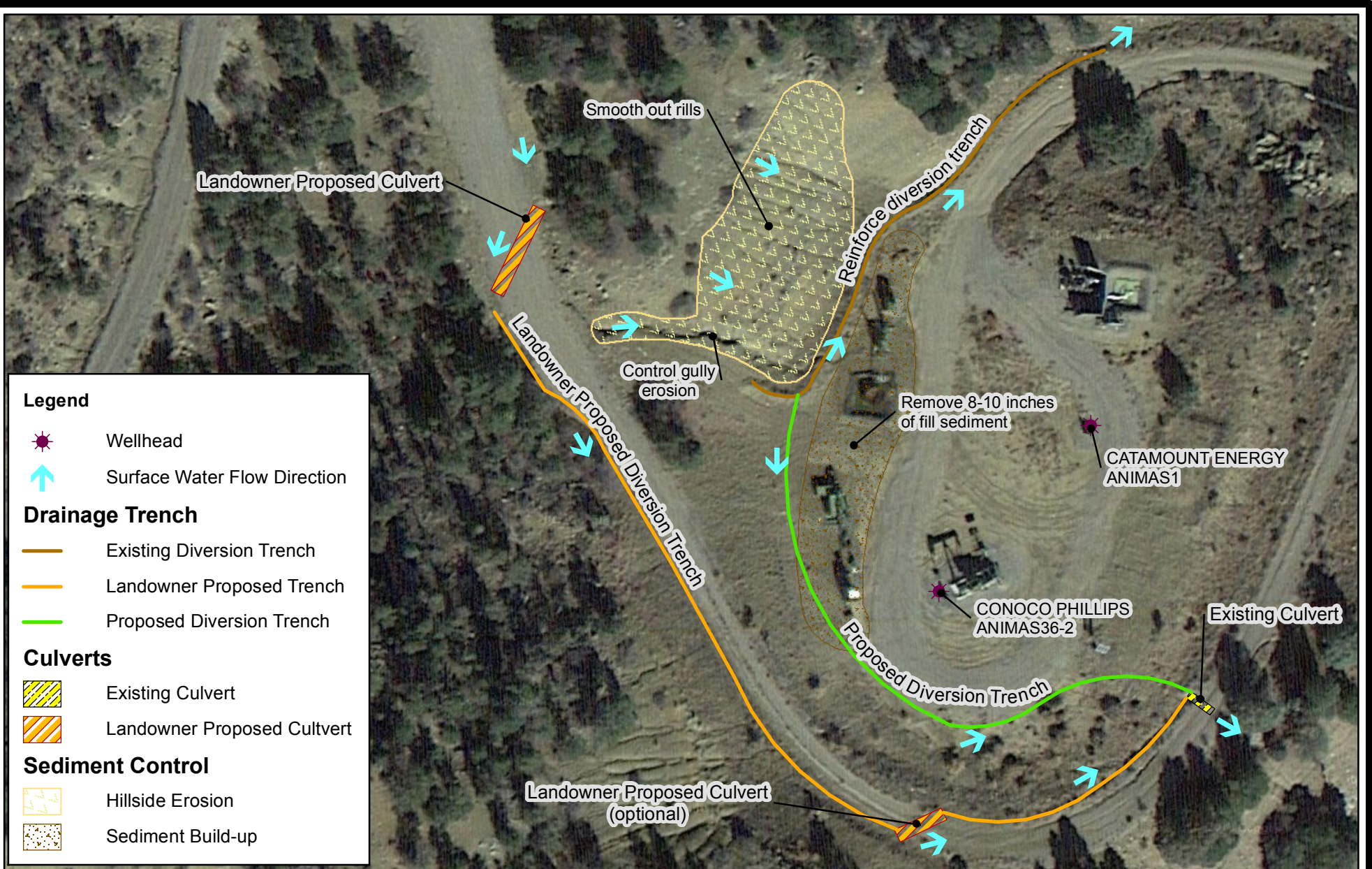
Appendix E – SWPPP Amendment Log

Appendix F – Subcontractor Certifications/Agreements

Appendix G – Grading and Stabilization Activities Log

Appendix H – Delegation of Authority

Appendix A – Site Maps



Legend

- Wellhead
- Surface Water Flow Direction

Drainage Trench

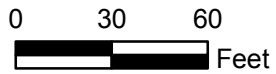
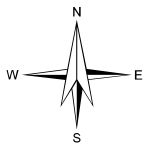
- Existing Diversion Trench
- Landowner Proposed Trench
- Proposed Diversion Trench

Culverts

- Existing Culvert
- Landowner Proposed Culvert

Sediment Control

- Hillside Erosion
- Sediment Build-up



Adkins Consulting Inc.
 180 East 12th St. Ste #5
 Durango, CO 81303
 505-793-1140

Stormwater Management Plan

Catamount Energy Partners LLC: Animas #1
 Conoco Phillips Company: Animas 36-2

Exhibit 1

October 2014

Appendix B – Certified Survey Plats of Proposed Development

N/A - site construction is complete.

Appendix C – Copy of Inspection Form

| Stormwater Inspection Form (Light/Heavy Industry) | | |
|--|-----|----|
| Colorado Stormwater Program (WQCD-B2-PE) Phone (303) 692-3575 Fax (303) 782-0390 Email: cdpheWQStorm@cdphe.state.co.us | | |
| General Information | | |
| Name of facility: _____ CDPS#: CO _____ | | |
| Facility Information | | |
| City: _____ County: _____ Address/Directions: _____ | | |
| Name(s) of Onsite Representative(s): _____ phone: () _____ | | |
| Permittee (If not permitted, Owner or Operator) | | |
| Company Name: _____ Name of Responsible Official: _____ | | |
| Title of Responsible Official: _____ phone: () _____ | | |
| Address: _____ | | |
| Inspector(s): _____ Persons present: _____ | | |
| Inspecting Agency: _____ | | |
| Date conducted: ____ / ____ / ____ Pictures Taken? Yes No | | |
| Records | | |
| Copy of SWMP confirmed on site? | Yes | No |
| SWMP Review: | | |
| 1. Industrial activity description as required in the permit? | Yes | No |
| Notes: _____ | | |
| 2. Site map as required in the permit? | Yes | No |
| Notes: _____ | | |
| 3. Stormwater Management Controls: | | |
| a. SWMP administrator as required in the permit? | Yes | No |
| Notes: _____ | | |
| b. Identifying potential pollutant sources and BMPs? | Yes | No |
| Notes: _____ | | |
| c. Sampling information as required in the permit? | Yes | No |
| Notes: _____ | | |
| d. Preventive maintenance as required in the permit? | Yes | No |
| Notes: _____ | | |
| e. Good housekeeping as required in the permit? | Yes | No |
| Notes: _____ | | |
| f. Spill prevention and response procedures as required in the permit? | Yes | No |
| Notes: _____ | | |
| g. Employee training as required in the permit? | Yes | No |
| Notes: _____ | | |
| h. Identifications of discharges other than stormwater as required in the permit? | Yes | No |
| Notes: _____ | | |
| 4. Comprehensive inspections as required in the permit | Yes | No |
| Notes: _____ | | |
| 5. Consistency with other plans as required in the permit | Yes | No |
| Notes: _____ | | |
| Inspection records kept? | Yes | No |
| Inspections conducted as required in the permit? | Yes | No |
| Notes: _____ | | |
| _____ | | |
| _____ | | |

Stormwater Inspection Form (Light/Heavy Industry)

Page 2

Site Inspection

| | | |
|--|-----|----|
| BMPs implemented for stormwater diversion around potential pollution sources? Notes: _____ | Yes | No |
| BMPs implemented for materials handling, spill prevention, and spill cleanup? Notes: _____ | Yes | No |
| BMPs implemented for sediment and erosion prevention? Notes: _____ | Yes | No |
| BMPs implemented for good housekeeping? Notes: _____ | Yes | No |
| BMPs implemented for inspection and maintenance of stormwater management devices? Notes: _____ | Yes | No |
| BMPs implemented for training all employees on stormwater management? Notes: _____ | Yes | No |
| Evidence of offsite transport of sediment or other pollutants? Notes: _____ | Yes | No |
| Evidence of offsite transport of sediment or other pollutants reaching state waters? Notes: _____ | Yes | No |
| Evidence of discharges other than stormwater? Notes: _____ | Yes | No |
| Comments: _____ | | |
| _____ | | |
| _____ | | |
| _____ | | |
| _____ | | |

Appendix F – Subcontractor Certifications/Agreements

SUBCONTRACTOR CERTIFICATION
STORMWATER MANAGEMENT PLAN

Project Number: _____

Project Title: _____

Operator(s): _____

As a subcontractor, you are required to comply with the Stormwater Management Plan (SWMP) for any work that you perform on-site. Any person or group who violates any condition of the SWMP may be subject to substantial penalties or loss of contract. You are encouraged to advise each of your employees working on this project of the requirements of the SWMP. A copy of the SWMP is available for your review at the office trailer.

Each subcontractor engaged in activities at the construction site that could impact stormwater must be identified and sign the following certification statement:

I certify under the penalty of law that I have read and understand the terms and conditions of the SWMP for the above designated project and agree to follow the practices described in the SWMP.

This certification is hereby signed in reference to the above named project:

Company: _____

Address: _____

Telephone Number: _____

Type of construction service to be provided: _____

Signature: _____

Title: _____

Date: _____

Appendix H – Delegation of Authority Form

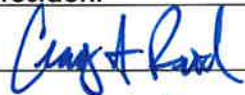
Delegation of Authority

I, Craig Reid (name), hereby designate the person or specifically described position below to be a duly authorized representative for the purpose of overseeing compliance with environmental requirements, including the Construction General Permit, at the Animas #1 construction site. The designee is authorized to sign any reports, stormwater pollution prevention plans and all other documents required by the permit.

Andrew Parker (name of person or position)
Adkins Consulting, Inc. (company)
180 East 12th Street (address)
Durango, CO 81301 (city, state, zip)
(505) 793-1140 (phone)

By signing this authorization, I confirm that I meet the requirements to make such a designation as set forth in Appendix I of EPA's Construction General Permit (CGP), and that the designee above meets the definition of a "duly authorized representative" as set forth in Appendix I.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: Craig Reid
Company: Catamount Energy Partners LLC
Title: President
Signature: 
Date: 10/30/14

LA PLATA COUNTY
SURFACE REVEGETATION
&
WEED MANAGEMENT PLAN

For the:

Catamount Animas #1 Gas Well Site
&
ConocoPhillips Animas 36-2 Gas Well Site

Prepared by:



Adkins Consulting, Inc.
Durango, Colorado 81301

October 2014

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I. BACKGROUND

Project Name and Location

Project/Site Name: *Animas #1 Gas Well Site*
Project Location: *NE/4 SW/4 Section 36, T34N, R10W, NMPM*
State: *Colorado*
County: *La Plata*

Project/Site Name: *Animas 36-2*
Project Location: *NW/4 SW/4 Section 36, T34N, R10W, NMPM*
State: *Colorado*
County: *La Plata*

Contact Information

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Introduction

This reclamation plan has been prepared based on requirements and guidelines of Colorado Parks and Wildlife (CPAW), Natural Resources Department; La Plata County Colorado Code of Ordinances; and Onshore Oil and Gas Order No. 1.

According to Onshore Oil and Gas Order No. 1 under the authority of the Code of Federal Regulations, Title 43: Subpart 3164, the operator must submit a plan for the surface reclamation or stabilization of all disturbed areas. This plan must address interim reclamation, as well as final abandonment of the well location, facilities or improvements.

Project Description

Catamount Energy Partners in partnership with Conoco Phillips Company propose upgrades to an existing facility which includes the Catamount Animas #1 and the ConocoPhillips Animas 36-2 Gas Wells. The twinned well pad is located on County Highway 213, approximately 10 miles south of Durango, Colorado on private lands within unincorporated La Plata County. Upgrades to the existing facilities would be confined to the previously permitted area. The project area is situated on an east slope dipping toward the Animas River valley within Piñon-Juniper Woodland at an elevation of approximately 6,200 feet above sea level.

Interim reclamation is complete for the facilities; however, the location has not achieved 70% vegetation coverage. Monitoring of re-vegetation efforts will be ongoing in conjunction with stormwater inspections. Maintenance and upgrade of the existing erosion control features and stormwater management features will commence in order to improve stormwater management at the facilities.

Planned upgrades include the construction of a new diversion trench and the reinforcement of an existing diversion trench to redirect stormwater away from the well site. The diversion trenches will include berms on the well site side to reduce the potential of stormwater run-off from the well pad. Repair to the lease road accessing the well site caused by stormwater discharge will be done during construction of diversion trenches. Sediment accumulation caused by stormwater run-on near the production equipment (west side of well pad) will be re-used on-site to maintain well pad roads and reinforce existing berms along the eastern portion of the well pad. Erosion occurring in the northwest slope of the location will also be rectified.

Estimated Total Area of Disturbance

The existing facilities include a 230-foot by 150-foot level well pad area which has undergone interim reclamation to a working surface with a teardrop shaped access. The existing resource road is approximately 350 feet long with a finished driving surface of roughly 14 feet.

Earthwork will occur covering the following areas during the proposed upgrades: the length of the southwestern proposed diversion trench is approximately 300 feet, the proposed work to reinforce the existing northern diversion trench is approximately 240 feet, and maintenance of well pad access roads is approximately 800 feet.

Pre-Disturbance Site Visit and Site Conditions

This plan is based on observations made during numerous site visits and compiled from information obtained from consultation with multiple agencies including CPAW, La Plata County Planning Department, Ridgeline Seeding & Reclamation and Colorado Oil and Gas Conservation Commission.

- Interim reclamation is complete; however, the location has not achieved 70% vegetation coverage.
- Erosion on the northwestern slope is apparent based on observed rills and gullies.
- Sediment accumulation caused by stormwater run-on near the production equipment (west side of well pad) is occurring.
- The lease road accessing the well site has sustained damage caused by stormwater discharge.

Vegetation Community

Based on observations made during pre-disturbance site visits, it has been determined that the vegetation community which best represents the proposed project area is Piñon-Juniper Woodland Community. This community is typically associated with a significant shrub component, notably antelope bitterbrush, mountain-mahogany, rabbitbrush species, sagebrush species, scrub oak, and Utah serviceberry. A mix of warm and cool season grasses are also often present, including blue grama, bottlebrush squirreltail, Indian ricegrass, muttongrass, needle-and-thread grass, prairie junegrass, sand dropseed, and Western wheatgrass. Piñon-Juniper Woodland Community can exhibit shallow, rocky soils (persistent) or deep soils (wooded shrubland).

Proposed Reclamation Seed Mix

Catamount/Conoco Phillips will use the Piñon-Juniper Woodlands/Sagebrush Ecotype reclamation seed mix recommended by the Colorado Parks and Wildlife, Department of Natural Resources (see Table 1 below).

Table 1. CPAW Piñon-Juniper Woodlands/Sagebrush Ecotype Reclamation Seed Mix

| Common Name | Variety | Percent of Mix | FRPLS | Pounds of pure live seed rate /acre¹ |
|----------------------------|--------------------|-----------------------|--------------|--|
| Grasses | | | | |
| Indian ricegrass | <i>White River</i> | 10% | 6.0* | 0.9 |
| Sand dropseed | | 10% | 1.0* | 0.15 |
| Blue grama | <i>Hachita</i> | 5% | 1.5* | 0.225 |
| Galleta | <i>Viva</i> | 15% | 6.0* | 0.9 |
| Western wheatgrass | <i>Arriba</i> | 10% | 8.0* | 0.8 |
| Forbs | | | | |
| Gooseberryleaf globemallow | | 15% | 2.0 | 0.3 |
| Penstemon palmeri | | 15% | 2.0 | 0.3 |
| Silky lupine -sericeus | | 15% | 20 | 3 |
| Oregon daisy | | 15% | 1.0 | 0.15 |
| Lewis flax | | 15% | 4.0 | 0.6 |
| Shrubs | | | | |
| Artemesia** | | | | 1 |
| Fourwing saltbush | | | | 1 |
| Antelope bitterbrush | | | | 1 |

*based on drill seeding; 2x if broadcasting

**wyomingensis or nova depending on site

Vegetation Reclamation Standards

The site will be considered adequately reclaimed once 70 percent revegetation has been achieved. Catamount/ConocoPhillips will document the progress of reclamation with photographs during routine site inspections in conjunction with stormwater management practices at the site.

Pre-Disturbance Weed Survey

During the pre-disturbance site visit, the proposed action area was surveyed for invasive and/or noxious weeds listed by the Colorado Department of Agriculture or as “Enforceable” by Colorado Noxious Weed Act. During the site survey, spotted knapweed was documented within the proposed action area.

Pre-Disturbance Site Photographs

Photographs were taken on October 27th, 2014 with a digital camera. The existing site has undergone interim reclamation.



Northwest slope above well pad—Looking north.



Northwest slope above well pad—Looking south-southwest.



Northwest slope above well pad—Looking south-southwest



West of well pad—Looking east.



North of well pad—
Looking south.



North of well pad —
looking north along
access road.

II. PLAN FOR SURFACE RESTORATION

Techniques for Successful Revegetation

Vegetation and Site Clearing

Minimal vegetation clearing will occur. Any surface rocks (where present and useful for reclamation) will be stockpiled adjacent to the topsoil stockpile. During reclamation activities, the surface rock will be

placed within the area of reclamation for erosion control or in a manner that visually blends with the adjacent undisturbed area.

Topsoil Stripping, Storage, and Redistribution

If available, the upper 6 inches of topsoil will be stripped, following any vegetation and site clearing during construction activities. Catamount/ConocoPhillips's contractors will take care not to mix topsoil with the underlying subsoil horizons and will stockpile the topsoil separately from subsoil or other excavated material. Topsoil and sub-surface soils will be replaced in the proper order, prior to final seedbed preparation.

Water Management/Erosion Control Features

Catamount/ConocoPhillips will use appropriate erosion control/water management design features within the proposed project area. Erosion observed in the slope northwest of the location will be remediated using several possible management practices at the discretion of the reclamation contractor:

- Stabilization may include using a track-hoe or raking to smooth out rill and gully erosion; seed will be applied and raked, and then the area will be protected with hydro-mulch.
- Due to the steep grade of the slope, tracking, soil stabilizer applied in conjunction with mulch, or mulch tackifier may be required.

Success of the northwestern slope revegetation will be monitored during stormwater inspections. Refer to the completed Storm Water Management Plan for additional Water Management/Erosion Control Features.

Seedbed Preparation

Areas to be reclaimed will be re-contoured to blend with the surrounding landscape, emphasizing restoration of existing drainage patterns and landform to pre-construction condition, to the extent practicable.

For final reclamation and at the reclamation contractor's discretion, seedbed preparation of compacted areas will be ripped to a minimum depth of 12 inches, with a maximum furrow spacing of 2 feet. Where practicable, ripping will be conducted in two passes at perpendicular directions. Disking will be conducted if large clumps or clods remain after ripping. Any tilling or disking that occurs along the contour of the slope and seed drills will also be run along the contour to provide terracing and prevent rapid run-off and erosion. If broadcast seeding is used, a dozer or other tracked equipment will track perpendicular to the slope prior to broadcast seeding.

Following final contouring, the backfilled or ripped surfaces will be covered evenly with stockpiled topsoil. Final seedbed preparation will consist of raking or harrowing the spread topsoil prior to seeding to promote a firm (but not compacted) seedbed without surface crusting. Seedbed preparation may not be necessary for topsoil storage piles or other areas of temporary seeding.

Soil Treatments

It has not been determined at this time if soil amendments will be used during reclamation of the affected environment.

Seeding

Seeding will occur within 90 days following earthwork or other surface disturbing activities.

A Truax seed drill or modified rangeland drill that allows for seeding species from different seed boxes at different planting depths will be used to seed the disturbed areas of the project area. Catamount/Conoco

Phillips or its reclamation contractor will ensure that perennial grasses and shrubs are planted at the appropriate depth. Intermediate size seeds (such as wheatgrasses and shrubs) will be planted at a depth of 1 to 2 inches. Small seeds (such as alkali sacaton and sand dropseed) will be planted at a depth of 0.25 inch. In situations where differing planting depths are not practicable using available equipment, the entire seed mix will be planted no deeper than 0.25 inch.

Drill seeding may be used on well-packed and stable soils that occur on gentler slopes and where equipment and drills can safely operate. Where drill seeding is not practicable due to topography, the reclamation contractor will hand-broadcast seed using a “cyclone” hand seeder or similar broadcast seeder. Broadcast application of seed requires a doubling of the drill-seeding rate. The seed will then be raked into the ground so the seed is planted no deeper than 0.25 inch below the surface.

Mulching

Hand seeding with hydro-mulch, excelsior netting, and/or mulch with netting may be required on cut and fill slopes. Mulch should be grass or straw spread at 2,000 to 3,000 pounds per acre, or approximately 1 to 2 inches deep. Mulching will consist of crimping certified weed-free straw or certified weed-free native grass hay into the soil.

Straw or native grass hay mulch can be applied by hand broadcasting or blowing to a relatively uniform depth of 2 to 3 inches, equivalent to a rate of approximately 2 tons per acre (one 74-pound bale per 800 square feet). When applied properly, approximately 20 to 40 percent of the original ground surface will be visible.

Straw or native grass hay mulch will then be anchored using one of the following methods:

- Hand Punching – a spade or shovel is used to punch mulch into the topsoil at 1-foot intervals until all areas have mulch standing perpendicular to the slope and the mulch is embedded at least 4 inches into the soil.
- Roller Punching – a roller is used to spread mulch over an area; the roller is equipped with straight studs not less than 6 inches long, from 4 to 6 inches wide, and approximately 1 inch thick.
- Crimper Punching – similar to roller punching, a crimper is used over the soil. The crimper has serrated disk blades about 4 to 8 inches apart that force the mulch into the soil. Crimping should be done in two directions with the final pass across the slope.

Mulch applications in extremely clayey soils should be evaluated carefully to avoid developing an adobe mixture. In these cases, a soil amendment may be beneficial.

Noxious and Invasive Weed Control

Inspection of the project area for noxious or invasive weeds listed by the Colorado Department of Agriculture will occur after earthwork and seeding activities, and in conjunction with storm water inspections. Should listed weeds considered “Enforceable” by the Colorado Noxious Weed Act be documented, Catamount/ConocoPhillips will comply with La Plata County Weed Office requirements and instructions for weed treatments, including the period of treatment, approved herbicides that may be used, required documentation to be submitted after treatment, and any other site-specific instructions that may be applicable. Catamount/ConocoPhillips will manage weeds at the proposed site with the following general practices:

- Any “Enforceable” weeds will be treated prior to commencement of construction to prevent incorporation into the soil.
- Equipment will be inspected and cleaned prior to entering the construction site, and earthmoving equipment will be cleaned prior to exiting the site.

- Potential weed introduction will be minimized by using only weed-free seed mix, straw, mulch or other materials that may be brought to the site.
- Ongoing weed inspection and appropriate treatment will continue until final stabilization has occurred and Catamount/Conoco Phillips files a Notice of Termination with the Colorado Department of Health and Environment (CDPHE).

Catamount/ConocoPhillips may manage weeds at the proposed site with the following specific practices:

- The knapweed infestation would not be mechanically disturbed, but rather treated with Milestone or Rodeo herbicides.
- Effective re-seeding with the specified mix will crowd out Kochia present at the site.

Final Abandonment

Upon final abandonment, Catamount/ConocoPhillips will file for ROW Grant termination. Surface disturbances within the lease areas will be returned to pre-disturbance conditions as practicable according to La Plata County requirements.

References

43 CFR Part 3160, "Onshore Oil and Gas Order No. 1; Onshore Oil and Gas Operations; Federal and Indian Oil and Gas Leases; approval of Operations," 72 Federal Register 44 (march 2007), pp. 10328-10338.

La Plata County, Colorado. Weed Management Program. Available online at:
http://co.laplata.co.us/departments_elected_officials/general_services/weed_office.

U.S. Department of the Interior, U.S. Department of Agriculture (USDI, USDA). 2007. Surface Operating Standards and Guidelines for Oil and Gas Exploration and Development. BLM/WO/ST-06/021+307/REV 07. Bureau of Land Management, Denver, Colorado. 84 pp.