Updated Response to COGCC's Conditions of Approval dated January 25, 2016

Revision Date: 3/23/2016

Operator	Well Name	API #	PLSS	Latitude (NAD83)	Longitude (NAD 83)
Catamount	Animas #1	05-067-06494	NESW (UL "K"), Sec. 36, T34N R10W	37.14450	-107.88954
ConocoPhillips	Animas 34-10 36-2	05-067-08517	NWSW (UL "L"), Sec. 36, T34N R10W	37.14429	-107.88976

Reference Documents:

- Inspection #680600315 dated October 09, 2015 addressed to Catamount.
- Inspection #680600229 dated October 05, 2015 addressed to ConocoPhillips.

Timing and Schedule

COGCC's first condition of approval dated January 25, 2016: In sections 1.3, 1.4, 1.5 and 2 of the December 2015 plan, it states that stormwater corrective actions will be completed "as soon as the weather permits" or "in 2016". "[A] detailed schedule with deadlines is needed. This schedule needs to be adhered to for installation and maintenance of stormwater BMPs and any applicable revegetation on this location."

Figure 1: Stormwater flow in diversion channel south of Northwest Slope on June 10, 2015.

Response

SWMP corrective actions, as described in sections 1.1 through 2 of this corrective action plan revision, are scheduled to be taken during the week of April 11, 2016. Landowners will be notified prior to work commencing. Unforeseen circumstances (such as inclement weather) may cause the schedule to change. COGCC and the landowners will be notified should this work need to be rescheduled.

1.1 Diversion Channel along Southern Edge of Northwest Slope

COGCC's second condition of approval dated January 25, 2016: Under Section 1.1 of the December 2015 plan it states that BMPs that "may" be used are, check dams with rip rap lining the drainage and a silt trap at the up-gradient end of the western channel. Submit a plan detailing what BMPs will be used in the western gully.

The rock check dams and rip rap lining proposed under Section 1.1 of the December 2015 plan could help de-energize the stormwater flows if properly sized and installed. Submit plan specifications detailing the size and grade of rip rap and dimensions of the check dams to help ensure that they will be properly sized and installed.

The proposed silt trap at the top of the western gully may be useful in de-energizing flows if it is sized and line properly. Provide engineered calculations and specifications as to the size and type of lining material for the proposed silt trap.

Response
The diversion channel along the southern edge of the Northwest Slope, trending west to east, proved an effective BMP for routing concentrated stormwater run-on around the well pad. Large rock installed within the diversion channel reduced the velocity of stormwater running through it (Figure 1). This prevented a breach of the North Diversion Channel berm during large storm events on both June 10, 2015 and October 19, 2015.

Additional steps will be taken to fortify this diversion channel further. Geotextile, similar to that described in Appendix A, will be installed within the diversion channel. The large rock installed previously will be reinstalled on the geotextile. Further, the entire channel will be lined with 4"+ fissured rock will be layered on the geotextile in between the reinstalled large rocks. Both hand and mechanical placement methods will be used for this work.

In addition, the angle of the turnout at the bottom of the diversion channel will be reduced by removing 20-25 cubic yards of soil. Geotextile and 4"+ fissured rock will be added at the base of the Northwest Slope to reinforce the area where soil was removed. Both will also be used to reinforce the section of the berm along the turnout (see Diagram A). Both hand and mechanical placement methods will be used for this work.

After further evaluation by ConocoPhillips Company, Catamount and their consultants, it was determined the above described BMPs will be sufficient to manage stormwater through the diversion channel without installation of a silt trap. Specifically, concentrated flows in this channel are further treated when routed into the North Diversion Channel addressed in Section 1.3 below.

1.2 Northwest Slope

COGCC's third condition of approval dated January 25, 2016: Under Section 1.2 of the December 2015 plan, it is stated that BMPs "may" include: straw wattles at the crest of the slope, stabilization of the slope with geomat and re-seeding in spring 2016, or hydroseeding the slope in 2016. Submit a plan detailing what stormwater BMPs and revegetation will be used on the northwestern slope.

COGCC agrees that spring 2016 seeding along with use of a rolled erosion control product such as jute mat to control erosion or a hydromulch product such as Flexterra™ is needed. It is our opinion that hydro-seeding would not be a viable solution for stabilization on this slope. Provide specifications as to product type that will be used, sizing, and installation methods. If Geomat will be used provide detailed specifications on its use, depth, and location.

We agree that stormwater diversion from the top of the northwestern slope is necessary. Additional BMPs not described in the December 2015 plan will be needed in areas where diverted stormwater flows around the northwestern slope. Additionally, size specifications are needed for diversion BMPs. A minimum of 12-inch in diameter straw wattles will be needed at the top of the slope.

Response

Rills on the Northwest Slope will be smoothed using mechanical means. The slope will then be re-seeded with Pinon-Juniper Woodlands/Sagebrush Ecotype Reclamation Seed Mix (see Appendix C). Additional Indian grass will be added to the mix, as it has grown successfully at this location. The slope will then be covered with approximately 6,300 square feet of erosion control blanket (ECB). The ECB will be trenched in at the top of the slope and held in place using biodegradable anchors (see Appendix A and Diagram A).

12-inch diameter wattles will be placed in a U-shape at the top of the Northwest Slope above the slope's deepest rill to filter and disperse concentrated stormwater run-on (see Diagram A).

Figure 2: Stormwater flow in the North Diversion Channel. Rock RipRap located at the beginning of the North Diversion Channel is underwater. The RipRap prevented significant erosion. October 10, 2015.

1.3 North Diversion Channel

COGCC's fourth condition of approval dated January 25, 2016: Under Section 1.3 of the December 2015 plan, additional check dams are proposed within the northern diversion channel. We agree that this would help de-energize stormwater flows along the slope adjacent to the northern edge of the access road, provided the check dams are properly installed. Vegetation within this diversion appears to be helping erosion and should not be removed/damaged to the extent possible during installation of the check dams.

Response

Five additional check dams will be placed in the North Diversion Channel to de-energize stormwater flow and reduce sediment transport (See Diagram A). Rock check dams will be wide enough to reach from bank to bank of the diversion channel. They will not exceed 2 feet in height and will be installed with a 2:1 slope. They will be constructed with 4"+ fissured rock along with rock found on location using hand and mechanical placement methods. The check dams will be underlain with geotextile fabric to further prevent soil erosion. The center section of each dam will be at least 6 inches lower than the outer edges of the check dams. This will encourage water to flow down the center of the diversion channel (see Diagram C). To the extent possible, vegetation will not be removed or damaged during this work.

1.4 South Diversion Channel and Access Road

COGCC's fifth condition of approval dated January 25, 2015: All additional stormwater controls and revegetation plans such as BMPs in the south diversion channel, maintenance along the access road, re-seeding of areas that did not revegetate in the 2015, etc., described in the December 2015 plan appear to be necessary and need to be implemented.

Response

The v-ditch along the south and east edges of the teardrop will be re-trenched so that the bottom is rounded. It was determined that installation of check dams throughout the v-ditch along the relatively flat well pad will be ineffective, so they will not be included. A small berm will be created on outer side of the South Diversion Channel using soil removed during re-trenching (see Diagram A), reducing off-site stormwater from running onto location.

Three to four feet of the northernmost part of the South Diversion Channel will be re-contoured to encourage water to disperse and de-energize in the vegetation in the relatively flat area behind the compressor (see Diagram A).

The section of the South Diversion Channel that diverts concentrated flows to a to a culvert under the landowner's road will be filled and reclaimed (see Diagram A) to prevent these flows from leaving the site untreated. Combined, these BMPs are designed to route stormwater away from the landowner's road and culvert.

1.5 Additional Measures

The access road will be graded to remove erosion channels. A stormwater diversion ditch will be created along the southern edge of the access road. Four rock check dams will be placed within the diversion ditch to de-energize stormwater, reduce sediment transport and minimize erosion (see Diagram A).

Lastly, a berm will be installed at the downstream end of the site. All stormwater runoff originating on the pad, as well as run-on channels that are diverted around the site drain towards this location. This berm will provide a final means of ensuring that sediment-laden runoff does not leave the site.

2 Reclamation/Revegetation

Per the SWMP, weeds will be controlled at the beginning of the growing season in the spring of 2016. Per the request of the landowner, the operators will notify the landowner if pesticide application is used to control weeds.

Re-seeding/mulching will occur in 2016 for areas that did not successfully revegetate in 2015. The seeding contractor will use the approved seed list contained in the SWMP Plan.

3 Monitoring/Maintenance

Per the SWMP installed BMPs will be checked at least monthly. Inspectors will have tools and materials available to install and/or reinstall straw wattles and ECBs. Inspectors will also inspect sediment build-up behind rock check dams and berms. Sediment will be hand-excavated when it attains a height of 50% of the structure.

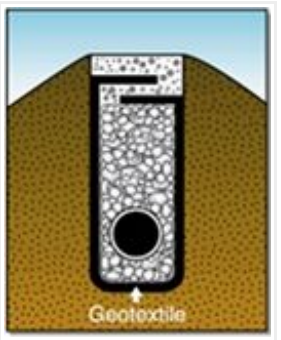
Diagram A
Animas 1 and Animas 34-10 36-2
Stormwater BMPs

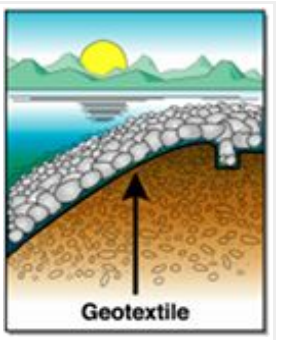
US 160NW

APPENDIX A

Nonwoven Geotextile

NTPEP APPROVED - GTX-2013-01-028. US 160NW is a nonwoven needlepunched geotextile made of 100% polypropylene staple filaments. US 160NW resists ultraviolet and biological deterioration, rotting, naturally encountered basics and acids. Polypropylene is stable within a pH range of 2 to 13. US 160NW will satisfy the requirements as outlined in AASHTO M-288-06 for Class 2 applications and meets the following M.A.R.V. values except where noted:





PROPERTY	TEST METHOD	ENGLISH	METRIC
Weight - Typical	ASTM D-5261	6.0 oz/sy	203 g/sm
Tensile Strength	ASTM D-4632	160 lbs	711 N
Elongation @ Break	ASTM D-4632	50%	50%
Mullen Burst*	ASTM D-3786*	305 psi	2,103 kPa
Puncture Strength*	ASTM D-4833*	90 lbs	400 N
CBR Puncture	ASTM D-6241	410 lbs	1,824 N
Trapezoidal Tear	ASTM D-4533	60 lbs	267 N
Apparent Opening Size	ASTM D-4751	70 US Sieve	0.212 mm
Permittivity	ASTM D-4491	1.50 Sec-1	1.50 Sec-1
Water Flow Rate	ASTM D-4491	110 g/min/sf	4,480 l/min/sm
UV Resistance @ 500 Hours	ASTM D-4355	70%	70%

ROLL SIZE	ROLL DIAMETER	AREA	WEIGHT
12.5' x 360'	15.0 in	500 sys	215 lbs
15' x 300'	15.0 in	500 sys	215 lbs

* Historical averages (current values not available): Mullen Burst Strength ASTM D3786 is no longer recognized by ASTM D-35 on Geosynthetics as an acceptable test method. Puncture Strength ASTM D4833 is not recognized by AASHTO M288 and has been replaced with CBR Puncture ASTM D6241.