CB Cluster
Stormwater Report and Site Specific Data Sheet
Kinder Morgan CO_2 Company, LP

INTRODUCTION

This Form 2A Stormwater Report and Site Specific Data Sheet (SSDS) includes the Best Management Practices (BMPs) and reclamation plans for Kinder Morgan's proposed CB Cluster Site in accordance with Colorado Oil and Gas Conservation Commission's (COGCC) Form 2A and Colorado Department of Public Health and Environment (CDPHE) stormwater requirements. BMP diagrams and additional general stormwater information is included with Kinder Morgan's Master Stormwater Management Plan (MSWMP) for oil and gas construction activities for McElmo Dome and Doe Canyon. The MSWMP can be obtained from Kinder Morgan and is in accordance with CDPHE stormwater guidelines. The Kinder Morgan contact person is Bob Clayton and his contact information is below:

Bob Clayton
Field Supervisor/Production Operations & Maintenance
Kinder Morgan CO_2 Company L.P.
17801 Highway 491
Cortez, CO 81321
Office – (970) 882-5507

PROJECT DESCRIPTION

The proposed CB Cluster Site would be located in an active agricultural field. Slopes within the proposed project average 3 to 6 percent. Disturbance would include the removal of top soil to create a level 5.25-acre area for placement of facilities.

ESTIMATED TOTAL AREA OF THE SITE TO UNDERGO CLEARING, EXCAVATION, OR GRADING

The maximum disturbance associated with the proposed CB Cluster Site would be 5.25 acres.

EXISTING SOIL

Parent materials found at the project site and surrounding areas is of eolian material; containing unconsolidated Aeolian sand deposits. The surveyed soil map unit for the project area consists of Wetherill loam, 3 to 6 percent slopes. Wetherill soils are very deep and well drained with a moderate potential for wind and water erosion (NRCS 2014[1]).

[1] Natural Resources Conservation Service (NRCS). 2015. Web Soil Survey. Available online at: http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx. Accessed February 2014.

DESCRIPTION OF EXISTING VEGETATION AND ESTIMATE OF PERCENT OF GROUND COVER

The proposed CB Cluster Site would be located on an active agricultural field. At the time of the February 18, 2014 survey, the ground cover was at 0 percent due to recent tilling.

NAME OF RECEIVING WATER AND TYPE OF OUTFALLS

The nearest perennial water source—indicated on the U.S. Geological Survey topographic map—is Dove Creek, located 5 miles west of the project area. Drainage from the proposed project area generally flows southwest through unnamed intermittent drainages to Cow Canyon and then to Dove Creek. There are no perennial water sources, wetlands, seeps, springs, or riparian areas within the proposed well pad or surrounding area.

PROJECT-SPECIFIC BMPs

The following listed BMPs are site-specific BMPs identified by Ecosphere during a field visit on February 18, 2014. BMP diagrams are included in the MSWMP. BMPs would be maintained or amended by Kinder Morgan as site conditions change throughout the construction and reclamation process. Stormwater inspections would occur as stipulated in the MSWMP and as required by the CDPHE. A map showing the BMP locations is attached. All recommend BMP locations are subject to change upon commencement of construction. Site-specific BMPs will be installed prior to construction and during the construction process and would continue to be maintained until the site is determined to be finally stabilized per CDPHE requirements. Table 1 describes structural BMPs used at the CB Cluster Site.

Table 1. Structural BMPs

BMP	How It Works	Location
Bonded Fiber Matrix (Tackifier)	Bonding agents provide durability to minimize water and wind erosion while allowing for optimal rainwater penetration into soil for vegetative growth.	Any stock-piled soils and all cut-and-fill slopes will be protected with tackifier due to high wind erosion potential.
Fiber Wattle (Sediment Control Logs)	Fiber wattles on the downhill side of a disturbed area help filter contaminates from stormwater and reduce water velocity, which also helps reduce soil erosion.	Perimeter of site. Larger wattles will be used below the fill slope on the north and west sides.
Fuel and Chemical Containment	Fuel and chemicals stored on-site will be within secondary containment to reduce the potential for spills or off-site releases.	Where needed.
Tracking Control	An effective vehicle tracking control helps remove sediment (mud or dirt) from vehicle tires, reducing the potential for tracking onto off-site paved roadways.	At access road.
Rock Check Dams	Rock check dams are constructed across a ditch to catch sediment.	Along diversion ditch.
Diversion Ditch with Wattles	The diversion ditch captures run on near the access road.	Diversion ditch would be located along the south side of the access road to capture run on.
Culvert Protection	Inlet and outlet protection prevents soil and debris from entering culverts and prevents scouring at outlets by reducing flow.	At culvert.

Concrete Washout	A concrete washout consolidates soils for easier disposal and prevents runoff of liquids.	Southwest corner.

NON-STRUCTURAL BMPs

Table 2 includes non-structural BMPs that will be applied to the entire project area where needed beginning with construction and continuing until final stabilization is reached.

Table 2. Non Structural BMPs

BMP	How It Works	Location
Soil Roughening	Surface roughening creates small ridges and gullies with the teeth of the bucket on the front-end loader, or with the grooves of tracked equipment. These ridges and gullies go across the slope (or along the contour of the slope), trapping stormwater and helping with revegetation. To create these ridges/gullies with tracked equipment, the equipment should be run up/down the slope.	All disturbed areas where needed.
Equipment Storage	All equipment will be contained within the ROW disturbance.	Within disturbance area where needed.
Rapid Reclamation	Rapid reclamation (surface contouring, surface roughening, seeding, and weed control) help to stabilize soil with vegetation and reduce runoff.	Within disturbance area where needed.
Dust Mitigation	Whenever needed, a water truck will be used to add moisture to the soil, which will prevent the soil from becoming airborne and leaving the site.	Within disturbance area where needed.

PROJECT BMP MAP