

Best Management Practices Report

YG #1 Well Pad Form 2A

Kinder Morgan CO2 Company, LP

INTRODUCTION

This Form 2A Best Management Practices Report includes the Best Management Practices (BMPs) and reclamation plans for Kinder Morgan's proposed YG #1 well pad in accordance with Colorado Oil and Gas Conservation Commission's (COGCC) Form 2A requirements. Additional information on BMPs recommended for the associated pipeline and access road is included with the YG #1 Project Specific Data Sheet (PSDS) included with Kinder Morgan's Regional Stormwater Management Plan (RSWMP) for oil and gas construction activities for McElmo Dome and Doe Canyon. The PSDS also includes BMP construction diagrams and additional general stormwater information. Both the PSDS and RSWMP can be obtained from Kinder Morgan and are in accordance with Colorado Department of Public Health and Environment (CDPHE) stormwater guidelines. The contact information for the Kinder Morgan representative is:

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PROJECT DESCRIPTION

The proposed well pad and access road is currently located on land enrolled in the Conservation Reserve Program (CRP), it is uniformly covered with reseeded vegetation. The proposed project would be located on relatively flat topography with 1-2 degree slopes. Disturbance would include the removal of top soil to create a level pad (360 feet by 350 feet) for drilling.

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

The maximum disturbance associated with the proposed well pad would be up to 2.5 acres.

EXISTING SOIL DATA AND ESTIMATED RUNOFF COEFFICIENT BEFORE AND AFTER CONSTRUCTION

Surface geology of the project area and vicinity consists of loam residuum, slope alluvium, and Eolian deposits derived from sandstone and shale. Surveyed soil type for the project area consists of Wetherill loam 3-6 percent slopes (NRCS 2011¹).

Wetherill loam 3-6 percent slopes consists of 85 percent Wetherill soils and 15 percent contrasting inclusions and is found associated with hills and mesas. Wetherill loam soils are very deep, moderately

well drained, and have a moderately slow permeability. The available water capacity is high and the potential rooting depth is 60 inches or more. Runoff is high and water erosion is severe. The shrink-swell potential for Wetherill loam is moderate.

¹ Natural Resources Conservation Service (NRCS). 2011. Web Soil Survey. Available online at: <http://websoilsurvey.nrcs.usda.gov/app/>. Accessed December 7, 2011.

DESCRIPTION OF EXISTING VEGETATION AND ESTIMATE OF PERCENT OF GROUND COVER

The proposed well pad and access road would be located in agricultural land converted to CRP. Vegetation includes western wheat, cheat grass, and tansy mustard. Vegetative cover was visually estimated at 60 percent. The proposed project area contains no riparian or aquatic habitats.

NAME OF RECEIVING WATER AND TYPE OF OUTFALLS

The nearest perennial water, per the U.S. Geological Survey (USGS) topographic map—is the San Juan River, located 30-40 miles southwest of the project area. Drainage from the proposed project would flow generally southwest through several named and unnamed ephemeral and intermittent drainages to the San Juan River. 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 the field visit conducted November 17, 2011. Site specific BMPs would be installed pre-construction and during the construction process. BMP construction diagrams are included in the RSWMP. 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 RSWMP and required by the Colorado Department of Public Health and Environment (CDPHE). A map showing the BMP locations is attached. Site-specific BMPs will be inspected and maintained until vegetation reaches 70 percent of the pre-construction cover as mandated by the COGCC and CDPHE.

BMP # 1: Fiber wattles will encompass the entire western periphery of the well pad as shown in Photograph 1 and on the attached map.

BMP #2: Disturbed portions of the well pad not necessary for operation and maintenance of the well would be re-contoured and roughened to blend into the surrounding terrain. In addition, a landowner approved seed mix would be applied at the appropriate time using seeding and mulching methods outlined in the RSWMP.



Photograph 1. Looking at the western periphery of the well pad location.

PROJECT BMP MAP

