



Site Specific Conditions and Storm Water Management Plan

SITE DESCRIPTION:

Project/Site Name: Federal RGU 23-23-198

Field Name: Ryan Gulch

Location: Section 23, Township 1 South, Range 98 West

CDPS Permit #:COR-03A115

CDPS Permit Date: 05/16/06

Site Type: Well Pad

Estimated Disturbance: ~6.6 acres

SWMP Administrator: Mike Gardner

Inspection Type: 14 day upon construction; 30 day upon interim reclamation

SOIL AND VEGETATION DESCRIPTION:

Soil Types: Yamac loam

Soil Erosion Potential: Moderate

Existing Vegetation Description:Pinyon-Juniper woodland with assorted grasses/shrubs

Pre-Disturbance Vegetative Cover: ~50%

Seed Mix for Interim Reclamation: TBD

Final Stabilization Date: TBD

RECEIVING WATERS

Name of Receiving Waters: Ephemeral Tributary to Yellow Creek

Distance to Receiving Waters: ~0.01 Miles

Non-Storm Water Discharges: None Anticipated

Description of Potential Pollution Sources: Refer to Ryan Gulch Field Wide SWMP
Phased BMP Implementation*:

BMPs will be installed prior to, during, and immediately following construction as practicable with consideration given to safety, access, and ground conditions at the time of construction. Due to the nature of the topography at the site, any number of BMP

combinations may be utilized at any phase of the project. Constant efforts will be employed to limit the extent of vegetative disturbance at the time of soil exposure during all construction activities and structural BMP implementation.

For BMP descriptions and installation details, refer to the Ryan Gulch Field Wide SWMP and the “Storm Water and 404 Handbook of Best Management Practices (BMPs), January 2006.”

Construction Phase:

A perimeter earthen berm will be constructed around the edge of the pad during well pad construction to prevent the potential offsite transport of pollutant laden storm water. A row of straw wattles will be installed to surround the windrowed topsoil stockpile. During construction, the topsoil stockpile will be seeded, with an erosion control blanket installed, to aid in stabilization and to maintain a desired nutrient cycling regime. Straw wattles will also be installed around the excess material stockpile.

A series of straw bale check dams will be installed within an ephemeral drainage located off of the eastern corner of the well pad. A straw bale barrier will be installed along the NE side of the pad for further stormwater management.

Additional structural BMPs will be installed as necessary to ensure site stabilization and to protect surface water quality.

Interim Reclamation Phase:

After the well pad has been constructed, drilling and completions are completed, with production facilities in operation, the site will be graded to reduce cut and fill slopes to minimize the overall size of the well pad. Where practicable, the topsoil stockpile will be spread onto the re-contoured surface. Any remaining topsoil will be seeded to maintain stabilization and continued nutrient cycling. The well pad will be re-seeded upon completed grading activities. Permanent structural BMPs will be installed and maintained as necessary to assist in site stabilization during interim reclamation.

Final Stabilization Phase:

After all wells have been plugged and abandoned, and production facilities are removed, the well pad will be graded to restore pre-disturbance contours. Any remaining topsoil will be spread onto the re-contoured surface. The well pad will be re-seeded upon completed grading activities. Storm water inspections will continue until the site has reached a stabilization level of 70% of pre-disturbance conditions. Once the site reached final stabilization, a post construction storm water management program will be implemented per COGCC Final Amended Rules (December 17, 2008), Rule 1002 (f) (3).

***NOTE:**

This document is intended to serve as a preliminary plan to document proposed stormwater management practices for this project. Any additional/alternative site stabilization and/or reclamation efforts may be employed in reflection of unforeseen site conditions or resource availability, and will be

updated into the Ryan Gulch Field Wide SWMP per requirements of CDPS Permit COR-03A115, regulated by the Colorado Department of Health and Environment's (CDPHE) General Permit No. COR-03000.