

PIONEER NATURAL RESOURCES USA, INC

STORMWATER PROGRAM-BEST MANAGEMENT PRACTICES

Pioneer's construction activities (for disturbances 1 > 5 acres) in the Raton Basin in Las Animas County, Colorado are covered by CDPS Permit No COR-039774 which has been issued by the Colorado Department of Public Health and Environment.

The construction sequence is simple and standardized for well pads, access roads, and pipelines constructed throughout the Raton Basin. Best Management Practices (BMPs) will be selected and implemented where needed to minimize potential for discharge of sediment and other pollutants to the waters of the state. Perimeter erosion controls will be implemented prior to the time of disturbance to retain sediment on site during construction activities. Then vegetation will be cleared for the construction of these sites. Well pad locations will be promptly roughened and graded after clearing. All sites will have permanent erosion controls (both structural and non-structural) installed upon completion of construction activities and exposed areas will be seeded when feasible, depending upon seasonal and weather conditions. Erosion controls will be selected on the basis of the site's topography, amount of vegetation, soil type, and distance to surface water. BMPs will be selected and implemented during appropriate phases of construction activity. Attached is a template used for the placement of erosion control BMP's.

Pioneer has identified potential pollutants of concern that may be present on a construction/well site during routine operations. Pioneer has developed a pollution prevention plan to protect from such discharges; in the event, of a discharge, a spill response and cleanup plan is in place to address such events. Spill Prevention Control and Countermeasures (SPCC) plans are not associated with individual well sites due to the absence of petroleum and condensate production and storage; however, SPCC plans are utilized for drilling rig units that operate in the Raton Basin.

BMPs for Stormwater Pollution Prevention:

1. Structural Practices for Erosion and Sediment Control:

Structural BMPs include, but are not limited to: diversion ditch, earthen berm, silt fence, straw bale, wattle (straw/mulch/bark), rip rap, bonded fiber matrix, erosion control blanket, coconut matting, slash, brush dam, sediment retention pond, and turnout.

2. Non-Structural Practices for Erosion and Sediment Control:

Nonstructural BMPs include, but are not limited to: preservation of existing vegetation, vegetative buffer zones, slope roughening, and protection of trees.

3. Materials Handling and Spill Prevention:

All drums and totes temporarily stored onsite shall be inspected regularly to ensure integrity. Secondary containment shall be utilized when necessary or required by SPCC regulations. Spill response equipment shall be available in the event of a spill or release. Onsite personnel are instructed to report all spills; Pioneer shall investigate all spills to ensure proper clean-up/remediation measures and required reporting protocol is implemented. Spill cleanup materials are onsite in the event of a release. All spills are reported according to state and federal requirements.

4. Waste Management and Disposal (Including Concrete Washout):

A skid-mounted cage/dumpster is placed at a well pad during construction and is utilized while crews

are onsite during drilling and completion activities. Upon completion of these activities the dumpster is removed from the site.

For Producing Well Sites:

Pollution Control:

After the construction of a well pad, and drilling and completion activities at a well have been completed only necessary production equipment is located onsite. This equipment typically includes the wellhead pump or pumpjack, small natural gas powered engine, a meter house. A lined (COGCC permitted) production pit is typically used for water disposal for each well that exists. Engine oil and produced water are the only potential pollutants that exist at a producing gas well. Well sites are visited frequently by lease operators; spills are reported and mitigated according to Pioneer policy and in accordance with applicable State and federal regulations.

Good Housekeeping:

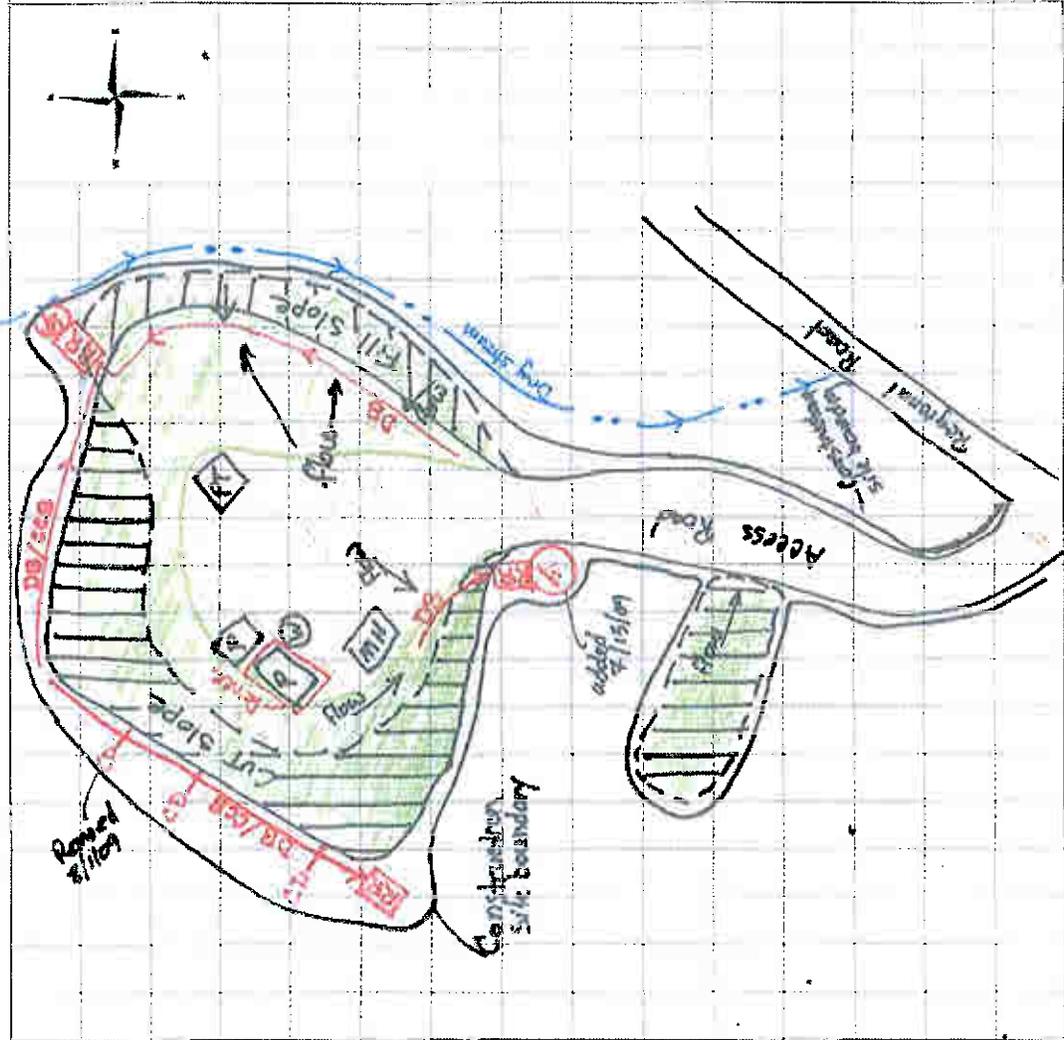
Good housekeeping practices will be used to reduce the risk of spills or other accidental exposure of materials and substances to stormwater runoff. The following good housekeeping practices will be followed onsite during the construction project.

- No solid materials, including building materials, shall be discharged to State waters.
- Vehicular traffic will be minimized as much as possible to reduce nuisance dust and prevent further soil erosion.
- Any trash generated during the project will be disposed of properly.
- Any chemicals used will be kept to a minimum. Any chemical or oil spills will be cleaned up immediately in accordance with established company procedures.
- Store all materials in a neat and orderly manner in their appropriate containers.
- Follow manufacturers' recommendations and company policies for proper use and disposal of products.
- Monitor on-site vehicles for leaks.

Pioneer Natural Resources
Erosion Control Site Map
EXAMPLE

Well Name Sample Site
Date MM/DD/YYYY

Inspector Joe Inspector



SITE MAP CHECKLIST:

Construction site boundaries	✓
All areas of ground surface disturbance	✓
Areas of cut and fill	✓
Areas used for storage of building materials, equipment, soil, or waste	✓
Locations of all structural BMPs	✓
Locations of all non-structural BMPs	✓
Locations of springs, streams, wetlands, arroyos, and other surface waters	✓
Initial and date BMP modifications	✓

- Legend
- C = Culvert
 - SB = Straw Bale
 - WD = Water Dip
 - TO = Turn out
 - ST = Sediment Trap
 - RR = Rip Rap
 - DB = Diversion Berm
 - ECB = Erosion Control Blanket
 - CCB = Coconut & Straw Blanket
 - CCB = Coconut Blanket
 - WAD = Waddle
 - MH = Meter House
 - W = Well
 - P = Pit
- CD = check dam
- = Disturbed Area
- = Seeded/Mulch
- = Gravel
- PT = portable toilet