Dust Mitigation Plan

North Cheyenne
Oil and Gas Development

Pfaffly 1-12

This Dust Mitigation Plan has been prepared by Navex Resources, LLC (Navex) for its North Cheyenne oil and gas development in Kit Carson County, Colorado. The Plan addresses the Colorado Oil & Gas Conservation Commission (COGCC) requirement at Rule 304.c.(5) to prepare a Dust Mitigation Plan and the dust mitigation criteria in Rule 427.

1.0 Soil Type

Soil types are listed in Table 1. They are shown on the Soil Unit Map submitted with the Form 2A application. The location will be accessed using a new unpaved access road from Kit Carson County Road 35 (CR 35). The off-location flowline will be buried in a trench for approximately 200 feet to a tie-in with the existing Ladder Creek Gathering System. The gathering system is operated by third-party Tumbleweed Midstream.

Table 1. Soil Type

Disturbance	Soil Type	Description
Oil and Gas Location	52: Norka 56: Norka-Colby	Norka, silt loam, 0 to 3 percent slopes. The A horizon is 0 to 5 inches of silt loam overlaying 5 to 67 inches of loam. Well drained. The depth to restrictive feature is more than 60 inches. Norka-Colby, silt loams, 5 to 15 percent slopes. The A horizon is 0 to 7 inches of silt loam overlaying 7 to 60 inches of silt loam. Well drained. The depth to restrictive feature is more than 60 inches.
Access	52: Norka	See above.
Flowline	52: Norka	See above.

Source: Natural Resources Conservation Service, National Cooperative Soil Survey

2.0 Area of Soil Disturbance

The areas of soil disturbance are shown in Table 2. The Oil and Gas Location will be approximately 3.0 acres. The Working Pad Surface will be approximately 2.7 acres. Interim reclamation will reduce the well pad size to 2.0 acres. The reclaimed area will be stabilized and revegetated with a row crop, in accordance with COGCC Rule 1003 and the surface owner's continued use for dryland farming.

The access road will be an anticipated 20 feet wide and 1,010 feet long.

The off-location gas flowline will be approximately 200 feet long. The trenching equipment used for the 2-inch-diameter gas flowline will limit the trench width to 8 inches wide.

Table 2. Area of Disturbance

Disturbance	Soil Type	Disturbance (ac)
Oil and Gas Location	52: Norka 56: Norka-Colby	2.25 Norka Pre-production 1.50 Norka After interim reclamation 0.75 Norka-Colby Pre-production 0.50 Norka-Colby After interim reclamation
Access	52: Norka	0.5
Flowline	52: Norka	0.003

3.0 Whether Access Roads are Paved

Access will be provided using unpaved CR 35 and an unpaved new access road.

4.0 Anticipated Truck Trips

Table 3 lists anticipated truck trips. Each location is expected to require 2 days to construct. Well drilling is expected to require 7 to 14 days. Completion is expected to require 6 days. Interim reclamation is expected to require 2 days. The short durations will limit vehicle trips and will minimize fugitive dust. The access road has no nearby receptors; the nearest residence is approximately 1.6 miles north.

Table 3. Anticipated Truck Trips

Activity	Estimated Days	Truck Trips[1]
Construction	2	15
Drilling	7 – 14	222
Completion	6	24
Interim Reclamation	2	4
Production	Monthly	124

[1]Truck trips are one way.

5.0 Best Management Practices

Best management practices to minimize fugitive dust are shown in Table 4.

Table 4. Best Management Practices

Activity	Best Management Practices
Speed Restrictions	• Drivers will be instructed to maintain a speed of 20 mph on the access road to minimize fugitive dust, road wear, and erosion.
Regular Road Maintenance	• Regular inspection will occur for the access road for evidence of inadequate drainage and formation of potholes. • Grading, blading, and filling potholes will be performed to maintain the road surface and discourage vehicles from widening the roadway or contributing to erosion.

Activity	Best Management Practices
Restricting Construction Activity During High Wind Days	• The 2-day well pad construction will be scheduled to avoid high-wind warnings issued for Kit Carson County.
Dust Suppression	• Blowing soil and failure of the soil to stabilize and form a crust on the location during construction and after interim reclamation will indicate that a dust suppression BMP is needed. In that event, a water truck will be used to wet the pad surface.
Interim Reclamation	• Area not needed for production will be reclaimed in accordance with Rule 1003.
Dust Tracking	• Aggregate will be placed at the apron where the access road ties into CR 35. The aggregate will serve as a wheel shaker and erosion control for the tie in with the unpaved county road.
Topsoil Stockpile	• The stockpile will be mounded with a slope of approximately 1:3 to prevent loose soils and promote vegetative growth. • Vehicle tracking perpendicular to the slope angle will be used to improve short term stabilization. • Vegetation will be allowed to establish, with crimped straw mulching, to stabilize the stockpile, outcompete weeds, and promote soil microbial activity.