



**CIVITAS**

Crestone Peak Resources Operating LLC

## **Bennett D Pad**

### **Dust Mitigation Plan**

Section 34, Township 3 South, Range 64 West  
Adams County, CO

## Introduction

In accordance with Colorado Energy & Carbon Management Commission (ECMC) Rule 427, Crestone Peak Resources Operating LLC provides the following information outlining existing conditions at the proposed Oil and Gas Location as well the best practices that will be employed to meet the dust mitigation requirements in these rules.

- NRCS Soil Survey data shows the access road, location, and disturbance area consists of the following soils:
  - Type A
    - Truckton loamy sand (3 to 9 percent slopes)
  - Type B
    - Ascalon-Platner association (0 to 5 percent slopes)
- The Operator will post an access road speed limit not to exceed 20 miles per hour to minimize fugitive dust emissions from vehicle traffic traveling on the access road.
- The Operator will perform regular inspections and road maintenance to ensure the integrity of the access road and associated features is maintained throughout the life of this project. Maintenance consists of re-compacting the road base/recycled asphalt mix on an as-needed basis.

Please refer to the associated Form 2B (Doc ID 403951729) for the estimated truck trips for each phase of development.

## Well Pad Construction Phase

Fugitive dust emissions associated with well pad construction are generally caused by soil excavation, earthwork and site development activities. The Operator will minimize dust emissions throughout all phases of well pad construction including dust resulting from the use of unimproved road surfaces. Dust suppression during initial construction will be accomplished by the application of freshwater to the access road(s) and exposed earthen surfaces to reduce the transportability of dust when atmospheric conditions are conducive to sustained winds and/or periodic gusts. All dust suppression efforts will consist of only freshwater unless otherwise requested and approved as applicable.

The initial disturbance area will be 22.96 acres.

The surface of the working pad surface of the Location (~13.24 acres) will be covered with Class 6 aggregate material or recycled asphalt. The use of this material greatly reduces the generation and transport of dust.

At the entrance to the location, the Operator will install and maintain vehicle tracking controls (i.e., coarse aggregate, a tracking pad, or cattle guard) to further reduce and remove loose mud and dirt on construction equipment and vehicles servicing location. These controls reduce and minimize the tracking of dirt and mud on public roads. The tracking controls are continually maintained and remain in place during pre-production operations. Topsoil stockpiles will be seeded, straw mulched, and crimped in order to promote the establishment of plants and associated vegetation used to stabilize the stockpiles and prevent the origination of dust and other erosion from occurring.

## Well Drilling and Completions Phases

Once the well pad is constructed and covered with aggregate or recycled asphalt, dust emissions will be minimal. Little if any dust emissions are anticipated during the drilling phase. The only notable source of dust during the completions phase is associated with handling of proppant (e.g., north white sand) that is used during hydraulic fracturing.

To minimize sand-related dust emissions, the Operator will be utilizing containerized box technology for sand transport, storage and use during the completions phase. These sand containers (or “sand boxes”) are sealed containers that protect the sand from exposure to wind and prevent dust generation. While fracturing operations are taking place, sand is dispensed from the sand boxes using transport hoses that keep the sand contained with a sealed system and not exposed to the wind or other atmospheric conditions. The sand is then pumped directly down the wellbore. Using this configuration, the Operator is able to avoid surface stockpiles of unused sand that could generate fugitive dust emissions when subjected to periodic wind events.

## Interim Reclamation Phase

Once the wells have been put into production, the Oil and Gas Location will be partially reclaimed to 7.42 acres; only those areas necessary for production and maintenance operations will remain. During interim reclamation, earthmoving activities will be required to reduce the original footprint of the well pad. The movement of earthen materials may create dust. As described above for well pad construction, dust will be controlled on an as-needed basis through application of freshwater on disturbed soils and exposed surfaces.

Those previously disturbed areas that have been graded will be stabilized and revegetated. Revegetated areas may return to prior agricultural use or usage pursuant to the contractual provisions between the operator and the Surface Owner(s).

## Production Phase

During the production phase, traffic in and out of the Oil and Gas Location will be limited. Typical maintenance and production operations require less than 10 small pickup trucks per day. Occasionally, larger trucks and associated equipment may be required for maintenance or workover activities, in addition to produced water trucks, which should be less than two trucks per day after the first several months of production.

As a result, long term traffic-related dust will be minimal if not insignificant. As described above, vehicle tracking control (i.e., coarse aggregate, a paved apron, or cattle guard) will be maintained after the terminus of the Apron to minimize tracking of dirt or mud onto public roads. Should dirt or mud tracking on public roads occur, the Operator will use a street sweeper to clean the road surface and minimize the potential for dust generation from muddy roads.

## Proposed Best Management Practices

1. On Location, dust suppression during high traffic periods on site will be accomplished by the application of water to the well pad and exposed earthen surfaces to reduce the transportability of dust when atmospheric conditions are conducive to sustained winds and/or periodic gusts. All dust suppression efforts will consist of only freshwater unless otherwise requested and approved as applicable.
2. Off Location, dust suppression during high traffic periods on site will be accomplished by the application of approved methods to the access road(s) and haul route to reduce the transportability of dust when atmospheric conditions are conducive to sustained winds and/or periodic gusts. All dust suppression efforts will consist of, but may not be limited to, the use of fresh water and/or magnesium chloride as a dust suppressant.
3. To minimize sand-related dust emissions, the operator will be utilizing containerized box technology for sand transport, storage and use during the completions phase. These sand containers (or “sand boxes”) are sealed containers that protect the sand from exposure to wind and prevent dust generation.
4. The operator will post an access road speed limit not to exceed 20 miles per hour to minimize fugitive dust emissions from vehicle traffic traveling on the access road.

5. The operator will perform regular inspections and road maintenance to ensure the integrity of the access road and associated features is maintained throughout the life of this project. Maintenance consists of re-compacting the road base/recycled asphalt mix on an as-needed basis.
6. The operator will install and maintain vehicle tracking controls (i.e., coarse aggregate, a tracking pad, paved apron, or cattle guard) to further reduce and remove loose mud and dirt on construction equipment and vehicles servicing location.
7. The pad will be plated with aggregate road base material to further minimize fugitive dust.