



Dust Mitigation Plan

Denova Project
Washington County, Colorado

February 2022, Revised September 2022

PRESENTED TO

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subsidiary of **Carbon America**
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ACRONYMS/ABBREVIATIONS

Acronyms/Abbreviations	Definition
APEN	Air Pollutant Emission Notice
Applicant	Carbon America
COGCC	Colorado Oil and Gas Conservation Commission
CO ₂	Carbon Dioxide
Project	Denova Project
Tetra Tech	Tetra Tech, Inc.

1.0 INTRODUCTION

Tetra Tech, Inc. (Tetra Tech) on behalf of Carbon America (Applicant) has drafted this Dust Mitigation Plan in accordance with the Colorado Oil and Gas Conservation Commission (COGCC) Rules 304.c.(5) and 427 for the Denova Project (Project) located in Township 1 North, Range 49 West, Sections 27 and 28 in Washington County, Colorado.

The Applicant wishes to locate and drill a stratigraphic test well to obtain geologic samples to evaluate the suitability of deep formations for injection and sequestration of CO₂. Tetra Tech assessed the preferred Project location, alternative Project location (required per COGCC Rule 304.b.(2).B), associated access road, and 1-mile buffer (referred to as the Project Area) for potential issues related to dust during Project operations.

The Project Area will be constructed on primarily sandy soils. Estimated ground disturbances are listed in Table 1 below. The proposed access road will have a 20-foot-wide corridor. The proposed access road will connect to an existing two-track dirt road. Improvements to the existing access road are included in the Table 1. No pipeline or utility corridors are being proposed for this location. This Dust Mitigation Plan for the Project covers the total acreage of proposed disturbance.

Table 1. Project Disturbance Areas

Project Component	Disturbance Area (Acres)
Existing Road	4.63
New Road	3.43
Well Pad	2.57
TOTAL	10.63

1.1 SOIL TYPES WITHIN THE PROJECT AREA

According to the U.S. Department of Agriculture, the dominant soil unit within the Project Area is Valent sand, rolling (USDA 2019). The soil types located within the Project Area are detailed in Table 2.

Table 2. Soil Types within the Project Area

Map Unit	Soil Unit Name
Proposed Access Road	
27	Haxtun loamy sand, 0 to 3 percent slopes
70	Valent sand, 3 to 9 percent slopes
71	Valent sand, rolling
Proposed Preferred Project Location	
27	Haxtun loamy sand, 0 to 3 percent slopes
71	Valent sand, rolling
Proposed Alternative Project Location	

71	Valent sand, rolling
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2.0 PROJECT ACTIVITIES

2.1 INGRESS/EGRESS TO THE PROJECT AREA LOCATION

The proposed access road will be an unpaved road. There will be no turn lanes, and tracking pads are not being proposed for use on this location.

Speed restrictions on the access road will be utilized to minimize dust. An average speed of 20 miles per hour is currently anticipated to be used for most vehicles.

Design and surface of the roads will be based on the anticipated amount of traffic, speed limit, and type of vehicles used to reduce dust, mud, and environmental damage (e.g., erosion).

2.2 DUST MITIGATION DURING CONSTRUCTION

During the construction of the proposed access road and Project, dust mitigation may occur up to twice per day during operations and in anticipation of rig mobilization/demobilization and otherwise dependent upon need.

Construction activities may be limited or deferred on high-wind days to restrict potential fugitive dust. Specifically, activities that involve moving dirt will be deferred on high-wind days to prevent the creation of fugitive dusts and the loss of soil.

Anticipated truck trips, including water trucks that will be used for dust mitigation, during the construction phase, is approximately 30 trips.

2.3 DUST MITIGATION DURING DRILLING

During drilling operations, dust mitigation may occur at least weekly, dependent upon need.

Anticipated truck trips, including water trucks that will be used for dust mitigation, during the drilling phase and completion is approximately 340 trips.

2.4 INTERIM RECLAMATION

During interim reclamation, traffic will be significantly less than that of the previous stages of activity; therefore, the need for dust mitigation will also lessen significantly. Dust mitigation will occur on an as-needed basis only.

Anticipated truck trips, including water trucks for that will be used for dust mitigation and workers' personal vehicles, during this phase is approximately 50 round trips.

2.5 GENERAL AIR POLLUTANT EMISSION NOTICE

If the Project requires a general Air Pollutant Emission Notice (APEN) Application for Construction Permit, a Form APCD-200 will be completed and submitted to the Colorado Department of Public Health and Environment (CDPHE 2022).

2.6 BEST MANAGEMENT PRACTICES

Carbon America is committed to limiting the potential for dust impacts and are implementing the following best management practices:

- Carbon America may utilize freshwater or flocculants for dust suppressant practices.
- Speed restrictions on the access road will be utilized to minimize dust. An average speed of 20 miles per hour is currently anticipated to be used for most vehicles.
- Construction activities may be limited or deferred on high-wind days to restrict potential fugitive dust.
- Topsoil and stockpiled soils will be stabilized through the use of either tackifiers, seeding practices, or erosion control blankets.

3.0 LITERATURE CITED

CDPHE (Colorado Department of Health and Environment). 2022. Air Permits for Non-Oil and Gas. Available online at: <https://oitco.hylandcloud.com/Pop/docpop/docpop.aspx>. Accessed January 2022.

USDA (U.S. Department of Agriculture). 2019. Web Soil Survey. Available online at: <https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>. Accessed January 2022.