



CRESTONE PEAK
RESOURCES

Odor Mitigation Plan ("OMP")

Submitted with Form 2A Application for the

Sky Ranch 4-65 10-9 South (Sky Ranch)

Plan Date: June 28, 2021

Re-Submittal Date: September 14, 2021

**Crestone Peak Resources' OMP was developed in accordance
with COGCC Regulation 304.c.(4)**

Introduction

Crestone Peak Resources, LLC (CPR) is committed to safe and environmentally responsible management to all COGCC rules governing public health, safety, and welfare and as it relates to odor mitigation.

CPR will comply with applicable regulations of the Colorado Oil and Gas Conservation Commission (COGCC) and the Colorado Department of Public Health and Environment (CDPHE) for mitigating odors. There are no RBUs, HOBUs, designated outdoor activity areas, school facilities or childcare facilities less than 5,280 feet from edge of working pad surface. There is only one RBU located 2,004 feet from edge of working pad surface. There is a second RBU a little over 2,004 from edge of working pad surface but there are no other RBUs less than 5,280 feet from edge of working pad surface. These two RBUs are the focus of our Odor Mitigation Plan. CPR's operations at the proposed Sky Ranch Form 2A location will be conducted in a manner such that odors do not constitute a nuisance or hazard to public health, safety, and welfare. Crestone's Odor Mitigation Plan (OMP) described herein is followed at every location and is consistent with COGCC Rule 426.

The OMP advances CPR's safety policies and provides accountability and transparency to our operations. This plan outlines CPR's processes and best management practices for odor mitigation.

Drilling Operations

CPR drilling operations utilize numerous best management practices and strategies to mitigate odors on and off the location. During drilling operations, all equipment is thoroughly inspected twice a day. Inspections include tanks, piping, and connections to ensure that equipment is in good condition, thus minimizing odors from contents. In the event that excessive odors are detected emitting from equipment in excess to standard operations, the equipment will be evaluated to ensure that all mitigating steps to minimize odors are taken. If routine inspections indicate that the equipment may need serviced, the equipment will be taken out of service and maintenance to ensure all preventive maintenance is taken to minimize odors. The following best management practices are used by drilling operations to minimize odors:

Best Management Practices

1. Drilling rig engine exhausts are pointed straight up so as not to be directed towards any occupied buildings.
2. To mitigate the effects of odor from Crestone's operations, Crestone will employ only International Association of Oil & Gas Producers (IOGP) Group III drilling base fluids with <0.5 weight % aromatics and will not use drilling fluids based on diesel. These Group III drilling fluids are odorless and contain no BTEX.
3. Drilling mud chillers are used to keep drilling fluid temperatures low.
 - a. Low drilling fluid temperatures reduce the volume of fluid vaporized into the air.
4. All drilling fluids will be routed through a closed loop system.
5. No open earthen pits to store fluids or drill cuttings.
6. Drill piping is wiped down each time the drilling operation "trips" out of the hole.
7. Drill cuttings are placed in metal bins and covered to minimize odors prior to being transported to the designated waste management facilities.

Completions Operations

CPR completion operations utilize numerous best management practices and strategies to minimize odors.

Best Management Practices

1. During the hydraulic fracturing process, diesel-fueled equipment is placed in a way that exhausts are pointed straight up to not direct exhaust towards any occupied buildings.
2. Tier II or Tier IV diesel engines are used during hydraulic fracturing operations where available.

Production Operations

CPR production operations utilize the following management practices and strategies to minimize odors.

Best Management Practices

1. During operations, tanks are sealed with a thief hatch to prevent emissions.
2. Emission Control Devices (Combustors) will be used to combust any flash gas from tanks.
3. During oil loadout operations, a Truck Loadout Vapor Recovery (TLVR) system will be used to capture and direct odorous air contaminants and emissions to a combustor.

Response Measures

If an odor complaint is received, CPR will respond and evaluate the location to determine if the source of the odor is related to operations. CPR will respond and evaluate equipment and potential sources of odors to determine the root cause. If the odors are determined to be caused by CPR's oil and gas operations, CPR will resolve the issue and remove odor causing equipment from service as soon as possible to ensure that all odors are minimized outside the boundaries of the oil and gas location.

City of Aurora Oil and Gas Operator Agreement

Related odor best management practices as outlined in Exhibit C, BMP No. 36 to the City of Aurora Oil and Gas Operator Agreement dated June 5, 2019 and recorded in the Arapahoe County Clerk and Recorder's Office at Reception No E0028448 with an effective date of June 1, 2019.

36. **Odor.** Operator shall mitigate odors by routing to closed loop systems to the maximum extent practicable. Odor emitting from Well Sites must be controlled safely and within a reasonable time. If a person living in a Residential Building Unit within 1,320 feet of a Well Site complains of odor, Operator shall determine whether the odor is caused by Operator's Operations. If the odor is caused by Operator's Operations, Operator shall resolve the odor concern to the maximum extent practical within 24 hours. Operator shall wipe down drill pipe each time the drilling operation "trips" out of hole. Operator shall comply with COGCC Rule 805 and CDPHE Regulation 2.