



ECMC ODOR MITIGATION PLAN OPERATOR GUIDANCE

FORM 2A

Rule 304.c.(4). - Odor Mitigation Plan

Document Control

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Rule Citation

304.c.(4). Odor Mitigation Plan. An odor mitigation plan consistent with the requirements of Rule 426.a.

Associated rules are included in Appendix A.

Purpose of the Odor Mitigation Plan

The Odor Mitigation Plan should identify the potential sources of odors associated with all phases of oil and gas operations at a proposed location, describe the measures and controls that are planned to eliminate or minimize odors, and include all Best Management Practices (BMPs) for addressing odors. The Odor Mitigation Plan is to cover anticipated sources of odors, including, but not limited to, drilling fluids and cuttings, flowback and produced fluids, exploration and production waste, and odors associated with the transport of substances either to or from the location. One or more methods of maintaining compliance with Rule 426 will be discussed in the Odor Mitigation Plan.

An Odor Mitigation Plan, described in Rule 426, or substantially equivalent information and plans developed through a local government land use process, is required under Rule 304.c.(4) for proposed locations that have a Working Pad Surface within 2,000 feet of a Residential Building Unit or Designated Outside Activity Area. While it is not required for locations with Working Pad Surfaces beyond 2,000 feet of a Residential Building Unit or Designated Outside Activity Area, there will be locations where the Odor Mitigation Plan or odor mitigation BMPs (Best Management Practices) are advisable.

Guidance/Requirements

Set of Requirements or Guidelines

The Odor Mitigation Plan shall include:

1. A list of all potential sources of odors at the location, examples include; drilling mud, shale shakers, cuttings staging and transfer areas, truck loading of cuttings, drilling mud on pulled drilling rods, completion fluids, flowback fluids, production fluids and exploration and production (E&P) wastes, and other potential sources (waste or material generated during well maintenance, during upset conditions, and during excavation of hydrocarbon impacted soils);
2. Identification of the drilling fluids (water/bentonite, oil, salt, freshwater, produced water) planned for the location;
3. Oil based drilling fluids will include a description that includes the IPIECA/OGP (International Petroleum Industry Environmental Conservation Association/International Association of Oil & Gas Producers) classification (Group), if applicable, and the aromatic content (by percentage) of the drilling fluid, if it is not possible to classify the drilling fluid by Group;
4. A list of odor reducing or suppressive additives that are planned for use on the location, as part of normal operations;

5. A description of equipment and processes used to control odors for each odor source or activity on the location, which can be clustered into groups or phases;
6. A description of how cuttings will be managed at the location to include how odors will be managed during the transport away from location;
7. A list of all odor control BMPs that apply to the location provided in a format that allows the BMPs to be copied onto the Form 2A; and
8. Per Rule 315.d.(2).D, include a description of all odor BMPs the operator is committed to on the The Cumulative Impacts Analysis attached to the Form 2A. Describe the measures planned to avoid, minimize, or mitigate incremental increases to adverse Cumulative Impacts.

Additional Information

Common Errors and Issues Encountered by ECMC Staff

1. Operators need to describe measures for addressing potential odors during both pre-production (construction, drilling, and completions) as well as subsequent operations (flowback, generation of E&P wastes, production fluids, and other potential sources of odor).
2. Odors associated with the removal of production fluids, wastes, and drill cuttings should be addressed.
3. When the Odor Mitigation Plan is not required for a Location, do not request a Lesser Impact Area Exemption from the Odor Mitigation Plan. In this case, the Odor Mitigation Plan should just be left blank.
4. Do not include processes or equipment on the plan that are not occurring on the location. One example of this is including drilling impacts for a location that only has a production facility with no wells.

General Notes

1. The Commission or Director may require an operator to evaluate its operations and impose additional mitigation measures in the event of a complaint, an inspection, or other observation of odors.
2. The Odor Mitigation Plan is required for Locations with a Working Pad Surface within 2,000 feet of a Building Unit or Designated Outside Activity Area. If a plan is not required, the operator may still add Best Management Practices to the Form 2A to address odors as appropriate.

Frequently Asked Questions

1. N/A

Document Change Log

Change Date	Description of Changes
April 9, 2025	Updated for template and accessibility standards, minor updates to guidance, updated the Common Errors section, verified with Dec 2024 Rules
April 16, 2025	Review, ADA accessibility check complete
April 29, 2025	Prepared for publication

Appendix A - Associated Rules

426. ODORS

- a. For proposed Working Pad Surfaces within 2,000 feet of a Building Unit or Designated Outside Activity Area, Operators will submit an odor mitigation plan as an attachment to their Form 2As, as required by Rule 304.c.(4). An Operator may submit substantially equivalent information or plans developed through a Local Government land use process or federal process in lieu of the information required by this Rule 426.a unless the Director or Commission determines that the information or plan developed through the Local Government land use process or federal process is not equivalent. All odor mitigation plans will address:
 1. How the Operator will comply with all requirements of this Rule 426 through one or more proposed methods; and
 2. All Best Management Practices the Operator will use to reduce odors.
- b. Operators will conduct all Oil and Gas Operations at all Oil and Gas Facilities in a manner that minimizes odors outside the boundaries of the Oil and Gas Location.
- c. In areas within 2,000 feet of a Building Unit or Designated Outside Activity Area, Operators will use current and appropriate Best Management Practices to minimize odors.