

Section (6) Dispersion Modeling Protocol

Installation Name & Address:

Click here to enter text.

Date:

Click here to enter text.

Prepared by:

Click here to enter text.

Submitted to:

Department of Natural Resources
Air Pollution Control Program
Permit Section
P.O. Box 176
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1. Installation & Project Description

Information regarding the location and operating status of the facility being modeled should be provided. The installation and project description should include a detailed discussion of the project and how it could impact the existing installation, if applicable. Please attach a map of the facility and the surrounding area in Appendix A.

2. Model Selection & Pollutants Under Review

The air quality models and methodologies that will be used to demonstrate compliance with the air quality standards for each pollutant under review should be provided. Please note each pollutant that is explicitly being modeled.

3. Installation Locational Data

Include detailed information on the geographic coordinate system that will be used in the air quality analysis including the Universal Transverse Mercator Zone and geodetic reference system, i.e. reference datum.

4. Modeled Emission Rates & Limits

Detailed information on the calculation of the modeled emission rates, including any limits that are proposed for use in the air quality analysis, should be provided. It is important to note that any limits that are noted within the air quality analysis will become a special condition within the construction permit.

5. Source Characterization & Facility Layout

Provide the methodology that will be used to characterize emission releases within the ambient air quality impact analysis based upon source type, i.e. point, volume or area. Please provide a facility layout that includes each emission point and structure that will be located within the property boundary of the new source or modification in Appendix B (if known). Also, within Appendix C, please include the procedures that will be used in the calculation of each release parameter, i.e. volume source release height, initial lateral and vertical dimension calculations.

6. Receptor Grid & Terrain Elevations

Please describe the receptor grid that will be used to calculate the ambient air quality impacts within the region surrounding the facility. In addition, the extraction techniques used to determine terrain elevations should be described in detail. Appendix D should contain an overview that includes a visual depiction of the property boundary with fenced areas highlighted.

7. Meteorological Data & Surface Characteristics

The Department's Air Pollution Control Program will provide a five year, model ready, National Weather Service data set that includes an evaluation of the surface characteristics surrounding the facility site for use in the air quality analysis. It should be noted that the department retains the right to require on-site meteorological data collection if it is determined that the facility is located within an area that is comprised of complex terrain, or is unduly influenced by nearby obstacles. If on-site data is required, written notification will be provided.

8. Background Concentrations & Interactive Source Inventories

The department's Air Pollution Control Program will provide background values and interactive source inventories for incorporation into the National Ambient Air Quality and increment standard compliance determinations.

Appendices

Appendix A-Map of Facility & Surrounding Area

Appendix B-Facility Layout

Appendix C-Source Characterizations & Release Parameter Assignments (Optional)

Appendix D-Property Boundary & Receptor Grid Overview