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| --- | --- |
| Minnesota Pollution Control Agency (MPCA), 520 Lafayette Road North, St. Paul, MN 55155-4194 | AQDM-07  AQDM results review form  Air Quality Dispersion Modeling (AQDM)  *(Previously AQDMRRF-01)*  *Doc Type: Air Dispersion Modeling* |

Acronym information on page 3

## **Instructions:** This form is used for Minnesota Pollution Control Agency (MPCA) internal use by Air Dispersion Modelers, Permit Engineers, and Risk Assessors to review modeling results.

**Note:** If results are marked not approved, please use the *AQDM-06* form to resubmit. Updated *AQDM-06* forms and updated attachments should be emailed to: [AirModeling.PCA@state.mn.us](mailto:AirModeling.PCA@state.mn.us). If files are too large to email, please mail a CD with the files to:

Air Quality Permit Document Coordinator

Minnesota Pollution Control Agency

520 Lafayette Road North

St. Paul, MN 55155-4194

Facility information

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Tempo AI ID number: | | | |  | | | | | AQ facility/permit ID number: | | | | | |  | | | | | Submittal date (mm/dd/yyyy): | | | | | | | |  |
| Three-letter modeling facility ID (ex., XEK = Xcel Energy Allen S. King, MEC = Mankato Energy Center, etc.): | | | | | | | | | | | | | | | | | | | | | | | | | |  | | |
| Facility name: | |  | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Facility street address: | | | | | |  | | | | | | | | | | | | | | | | | | | | | | |
| City: |  | | | | | | | | | County: |  | | | | | | | State: | | | MN | | | Zip Code: |  | | | |
| Facility contact: | | |  | | | | | | | | | | Report prepared by: | | | | | |  | | | | | | | | | |
| Facility contact phone: | | | | | |  | | | | | | | Preparer phone: | | | |  | | | | | | | | | | | |
| Facility contact email: | | | | |  | | | | | | | | Preparer email: | | | |  | | | | | | | | | | | |
| UTM coordinates of facility (NAD83, zone 15 extended **only**): | | | | | | | | | | | | x = | | | | m East, | | | | | | y = | | | | | m North | |
| MPCA Air Dispersion Modeler: | | | | | | | |  | | | | | | MPCA Air Permit Engineer: | | | | | | | | |  | | | | | |
| MPCA Air Risk Assessor: | | | | | | |  | | | | | | |

List of files with names/descriptions submitted with modeling results

|  |  |
| --- | --- |
| 1. | AERMOD input files (\*.inp, \*.adi, \*.ami)  AERMOD output files (\*.out, \*.ado, \*.amo)  AERMOD plot files (\*.plt)  AERMOD post files (\*.pst) – If applicable  AERMOD event files (\*.evi, \*.evo) – If applicable  AERMOD miscellaneous/other files (MAXDCONT, SUMTABLE, etc.) – If applicable |
| 2. | AERMOD meteorological surface files (\*.sfc) |
|  | AERMOD meteorological upper air/profile files (\*.pfl) |
| 3. | BPIP-PRIME input files (\*.bpi, \*.pip) |
|  | BPIP-PRIME output files (\*.bpo, \*.sum) |
| 4. | Terrain file(s) for AERMAP(\*.dem, \*.tif) |
|  | AERMAP input files (\*.ami) |
|  | AERMAP output files (\*.rou, \*.sou, etc.) |
| 5. | Background data files/background concentrations for applicable pollutants (seasonal, monthly, daily, hourly, etc.) |
| 6. | Figures for modeling results (\*.jpeg, \*.bmp, \*.pdf) |
|  | GIS maps for modeling results (\*.shp) |
| 7. | *AQDM-02* form – if applicable (not applicable if changes were not made) |
| 8. | Paved Roads Results – If applicable |
| 9. | SIL Analysis and Results – If applicable |
| 10. | Hourly O3 File – If applicable |
| 11. | AERA forms – If applicable |
| 12. | Other files and supporting documents (hourly ozone, background files, supplements, etc.): |
|  |  |

Section 1. Modeling review – 30-day substantial completeness determination

|  |  |  |  |
| --- | --- | --- | --- |
| Completeness review of modeling report by sections | | | |
| **Section and section name** | **Substantially complete/incomplete** | **Deficiencies and/or comments** | |
| Files to accompany modeling |  | No comments on this section | |
| Section 1: Modeling protocol |  | No comments on this section | |
| Section 2: Changes to modeling protocol |  | No comments on this section | |
| Section 3: Paved roads fugitive dust (optional) |  | No comments on this section | |
| Section 4: Modeling results |  | No comments on this section | |
| Section 5: Discussion |  | No comments on this section | |
| Section 6: Modeling results figures/maps |  | No comments on this section | |
| ***Modeling results substantially complete?*** |  | Date (mm/dd/yyyy): |  |

Section 2. Air dispersion modeler results review

|  |  |  |  |
| --- | --- | --- | --- |
| Technical review of final modeling report | | | |
| **Review items** | **Acceptable/ Unacceptable** | **Deficiencies and/or comments** | |
| Are all changes from the protocol adequately described and addressed? |  | No comments on this section | |
| Are the model files consistent with the MPCA AQDM-02 spreadsheet accompanying the permit application? |  | No comments on this section | |
| Is the effective ambient air boundary described by the general public preclusion plan consistent with the ambient air boundary receptor locations? |  | No comments on this section | |
| Modeling demonstrates compliance with applicable NAAQS/MAAQS, SIL’s, and PSD increments? |  | No comments on this section | |
| ***This section is:*** |  | Date (mm/dd/yyyy): |  |

Section 3. Permit engineer results review

|  |  |  |  |
| --- | --- | --- | --- |
| Has the 150-day completeness requirement been waived?  No  Yes | | | |
| Technical review of final modeling report | | | |
| **Review items** | **Acceptable/ Unacceptable** | **Deficiencies and/or comments** | |
| Are all emissions changes from the protocol adequately described and addressed? |  | No comments on this section | |
| Are the emission calculations on the AQDM-02 spreadsheet consistent with permitted emissions? |  | No comments on this section | |
| Are the emissions on the Nearby Sources Emission Calculations spreadsheet consistent with permitted emissions for those sources? |  | No comments on this section | |
| If a general public preclusion plan is required (as noted on form AQDM-05), does the attached plan include a map that clearly displays the ambient air boundary and identifies how access is precluded for each section of the boundary? |  | No comments on this section | |
| If a general public preclusion plan is required, are the boundary control strategies identified in the plan adequate? |  | No comments on this section | |
| ***This section is:*** |  | Date (mm/dd/yyyy): |  |
| Recommended permit conditions or related items: | (To be determined) | | |

## **Section 4. Air risk assessor results review (If applicable)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Technical review of final modeling report** | | | |
| **Review items** | **Acceptable/ Unacceptable/ Not applicable** | **Deficiencies and/or comments** | |
| Are all changes from the protocol phase adequately described and addressed in the AERA forms? |  | No comments on this section | |
| Do the submitted results reflect the methodology described in the AERA forms? |  | No comments on this section | |
| ***This section is:*** |  | Date (mm/dd/yyyy): |  |
| Are there any additional recommendations that will be submitted to the MPCA Air Managers? | No comments on this section | | |

Overall status of results

|  |  |
| --- | --- |
| **This modeling results are:** |  |
| Comments on approvable-status: | |

Acronyms

|  |  |
| --- | --- |
| AERA  AERMAP | Air Emission Risk Analysis  AERMOD Terrain Preprocessor |
| AERMOD | AMS/EPA Regulatory Model |
| AQ | Air Quality |
| AQDM  AQDMRRF-01 | Air Quality Dispersion Modeling  Previous Results Review Form |
| BPIP-PRIME  GIS | Building Profile Input Program for PRIME  Geographic Information System |
| MAAQS | Minnesota State Ambient Air Quality Standard |
| MPCA | Minnesota Pollution Control Agency |
| NAAQS  O3 | National Ambient Air Quality Standard  Ozone |
| PSD  SIL  UTM | Prevention of Significant Deterioration Program  Significant Impact Level  Universal Transverse Mercator |