



PUBLIC WORKS DEPARTMENT
 AIR QUALITY DIVISION
 5885 NE 14TH STREET
 DES MOINES, IOWA 50313

POLK COUNTY AIR QUALITY DIVISION CONSTRUCTION PERMIT APPLICATION

NON-PSD MODELING DETERMINATION (FORM -M)

Company Name:	Office Use: AIRS#: _____ Permit#: _____
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DISPERSION MODELING DETERMINATION

Completion of Form M is intended to assist applicants in determining whether or not point source emissions associated with non-PSD construction permit projects will require an air dispersion modeling analysis. Modeling requirements for non-point source emissions will be determined on a case-by-case basis. This procedure is used for both new construction permit projects and for modifications to previous projects.

This form reflects the Polk County Air Quality Division's (AQD) Air Dispersion Modeling Applicability Procedure for Non-PSD construction permit applications. Please check the appropriate box below depending on whether the flow chart indicates that dispersion modeling is required or not.

Note: ALL projects must include a site plan; see section "PLOT PLAN REQUIREMENTS" for instructions. A scaled plot plan of the entire plant is required. Attach the plot plan, labeled as "MI-PP", with your permit application.

Note: Form M only applies to point source emissions and should not be applied to internally venting volume sources. Internally vented sources will be addressed on a case-by-case basis.

DISPERSION MODELING ANALYSIS IS NOT REQUIRED

Since the point source emissions in this application meet the criteria currently listed in the Air Dispersion Modeling Applicability Procedure, it is likely that modeling is not required.

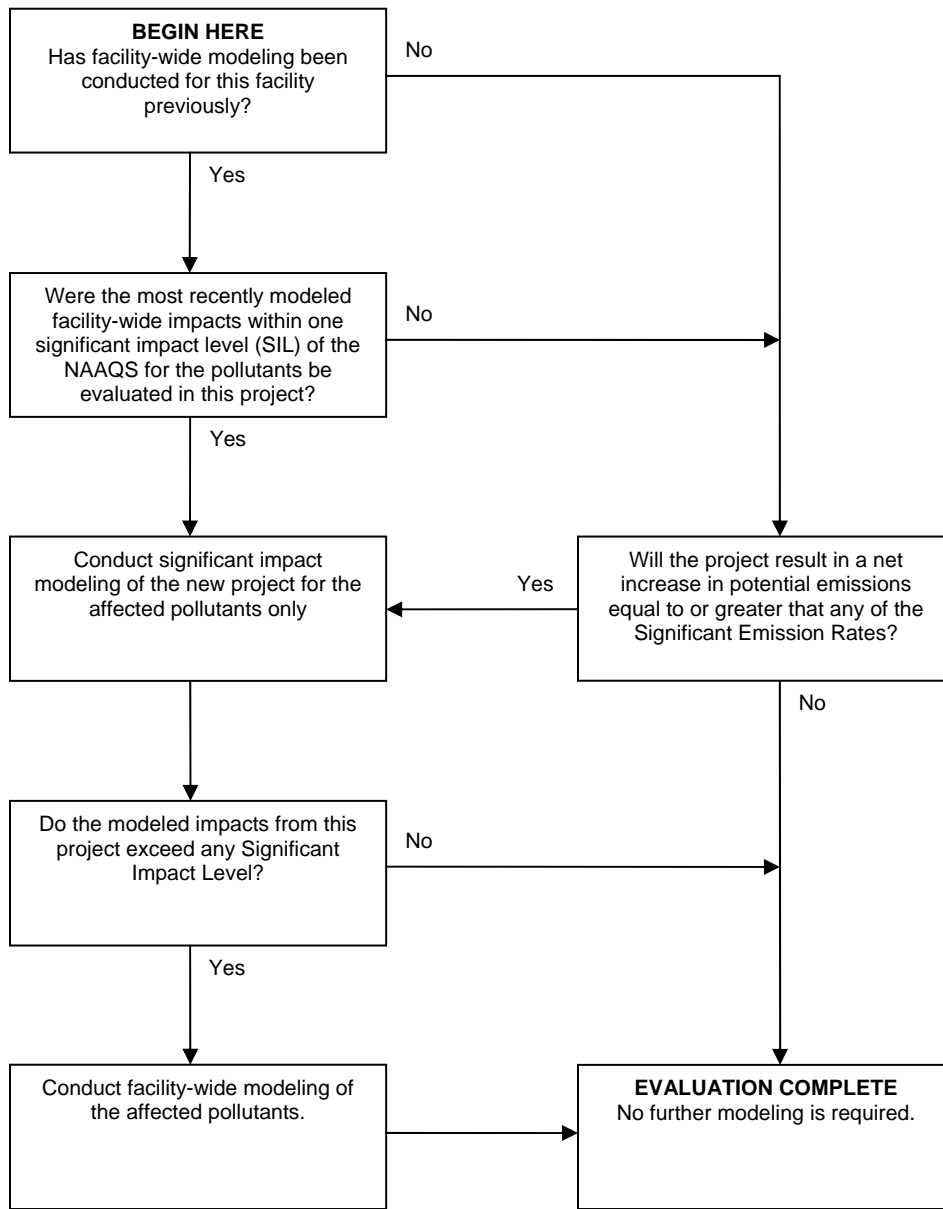
There are unique circumstances that the Air Dispersion Modeling Applicability Procedure does not address that may trigger a modeling review. Recommendations for modeling reviews that fall outside of the Air Dispersion Modeling Applicability Procedure will be reviewed by Polk County AQD management.

DISPERSION MODELING ANALYSIS IS REQUIRED

When dispersion modeling is required, the modeling analysis is either conducted by the Polk County AQD or is submitted by the applicant for Polk County AQD review as noted below:

- All applicants have the option to prepare and submit a complete dispersion modeling analysis, subject to review by the Polk County AQD.
- For major sources that have previously been modeled, the Polk County AQD will conduct the modeling analysis if resources allow. Applicants with extensive changes to their facility may expedite the modeling review by submitting their own modeling analysis.
- For major sources that have not previously been modeled, the applicant must prepare and submit the dispersion modeling analysis.
- For non-major sources (minor), the Polk County AQD will conduct the initial dispersion modeling as a service to minor sources when a modeling analysis has not been submitted by the applicant.

FORM - M



Pollutant	Significant Emission Rate	National Ambient Air Quality Standard ($\mu\text{g}/\text{m}^3$)					Significant Impact Level (SIL) ($\mu\text{g}/\text{m}^3$)				
		1-hour	3-hour	8-hour	24-hour	Annual	1-hour	3-hour	8-hour	24-hour	Annual
PM10	3.42 lb/hr				150				5		
PM _{2.5}	2.28 lb/hr				35	15			1.2	0.3	
NO ₂	9.13 lb/hr	188				100	7.5			1	
SO ₂ *	9.13 lb/hr	196	1,300		365	80	7.9	25	5	1	
CO	22.8 lb/hr	40,000		10,000			2,000		500		

* For 1-hour SO₂: no dispersion modeling is currently required for minor projects. Ambient air impact evaluation will be required in the future State Implementation Plan revision