



Memorandum

Date: March 18, 2011

To: Eric C. Massey, Director
Air Quality Division

Through: Trevor Baggione, Deputy Director
Air Quality Division

Theresa Rigney, Manager
Air Quality Assessment Section

From: Balaji Vaidyanathan, Manager
Existing Source and General Permits Unit
Air Quality Permits Section

Brian Parkey, Manager
New Source Review Unit
Air Quality Permits Section

Subject: Permit Modeling Guidelines

In December 2004, the Air Quality Assessment Section finalized a substantive policy document titled "Air Dispersion Modeling Guidelines for Arizona Air Quality Permits". The document is intended to serve as a comprehensive guidance on dispersion modeling analyses for air quality permit applicants. As EPA revises the standards, modeling procedures and other elements that impact the dispersion modeling, the modeling guidelines need to be revised appropriately. In the interim period, this memo is intended to clarify a couple of key concepts:

- Air dispersion modeling to support permit applications are to be conducted in accordance with the procedures outlined in 40 CFR 51 Appendix W, Guideline on Air Quality Models. On November 9, 2005, EPA issued a final rule to replace the Industrial Source Complex (ISCST3) model with AERMOD as the approved modeling tool for air quality impact assessments. The Department will advise permit applicants to use AERMOD instead of ISC in all dispersion modeling analyses.
- Section 5 and Section 6 of the modeling guidelines discuss the concept of dispersion modeling for air toxics. Both sections reference the Arizona Ambient Air Quality Guidelines that were established back in 1992. Since the finalization of the modeling guidelines, the Department established the Arizona Ambient Air Concentrations (AAC) in support of the state toxics program. For facilities that are within 2 miles of learning sites, the Department will request toxics modeling to document compliance with the

AACs, which will demonstrate that the learning sites are protected. Details about the Department's learning sites policy can be referenced at:

<http://www.azdeq.gov/ceh/download/050713-1103.0.pdf>

Applicants that are not in the general vicinity of learning sites are not required to conduct toxics modeling.

Applicants are encouraged to use the GIS tracking tool below to identify learning sites within 2 miles of a proposed facility:

<http://gisweb.azdeq.gov/arcgis/epanls/>