

# Texas Commission on Environmental Quality

INTEROFFICE MEMORANDUM

To: Air Permits Division Technical Staff      Date: October 22, 2007  
From: Robert Opiela, Team Leader      *RO*  
Air Dispersion Modeling Team (ADMT)  
Subject: Preferred Air Dispersion Models for Refined Modeling

The United States Environmental Protection Agency (EPA) has designated the American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) as the preferred air dispersion model for federal New Source Review (NSR) permits. This model must be used for refined modeling of criteria pollutants within approximately 50 kilometers of a site. Beyond 50 kilometers, the EPA has designated the California Puff model (CALPUFF) as the preferred model for long-range transport.

An applicant can use either AERMOD or the most recent version of the Industrial Source Complex model with Plume Rise Model Enhancement (ISC-PRIME) until a federal NSR review is required. The most recent version of the ISC model can also be used if the dispersion of air pollutants could not be affected by building downwash at a site.

Once an applicant has used AERMOD for a federal permit, AERMOD should be used for state permits as well. In addition, if AERMOD has been relied upon for a sitewide analysis for a state permit, AERMOD should continue to be used at that site. This guidance will ensure consistency in the technical review process as modeled concentrations will be calculated under the requirements of the same modeling system. Engineering judgment must be used to reconcile emissions limits and controls based on predicted differences in contaminant concentrations between modeling systems until all authorizations at the site are evaluated under the same modeling system.

These modeling preferences are for refined modeling analyses. Until EPA provides a screening model for AERMOD, SCREEN3 may be used for screening analyses.