

**APPENDIX 5**

**DEVELOPMENT OF REASONABLE FURTHER PROGRESS  
NON-ROAD MOBILE SOURCE EMISSIONS INVENTORIES  
FOR THE DALLAS-FORT WORTH NONATTAINMENT AREA**

**Airports Source Categories**

## **AIRPORT EMISSIONS ESTIMATION FOR DFW RFP SIP**

To estimate airport emissions, input files were compiled and applied to the Emissions and Dispersion Modeling System (EDMS). The EDMS is a tool used to estimate airport emissions and was developed by the United States Department of Transportation's Federal Aviation Administration. This computer model integrates all airport emissions sources, mobile and stationary, into a single model. The mobile source emissions include aircraft, ground support equipment, and auxiliary power units.

Aircraft specific activity data are needed to run the EDMS system, specifically, the make and model number of the aircraft producing emissions at each airport. While such data are readily available for medium to large commercial air carriers, they are not typically available for air taxis, general aviation, or military aircraft. To estimate emissions from these sources, the methodology documented in the United States Environmental Protection Agency's National Emission Inventory was used.

The activity data needed to estimate emissions were provided by the North Central Texas Council of Governments (NCTCOG) and compiled into model-ready input files. The compiled input files were reviewed by senior staff, and any identified data gaps or duplicate data were discussed with airport staff to determine an appropriate method to address those anomalies. Once the input data were quality checked, the emissions were calculated for 2008, 2011, and 2012. The 2008 emissions estimates were adjusted to reflect projected activity in 2011 and 2012 based on projection data obtained from the NCTCOG.

The input files, output files, and all other relevant documents used for this study can be obtained from the [Texas Commission on Environmental Quality's file transfer protocol server](ftp://ftp.tceq.texas.gov/pub/OEPAA/TAD/Modeling/Offroad_EI/Airports/DFW/). (ftp://ftp.tceq.texas.gov/pub/OEPAA/TAD/Modeling/Offroad\_EI/Airports/DFW/)