



Air Quality Evaluation Parameters



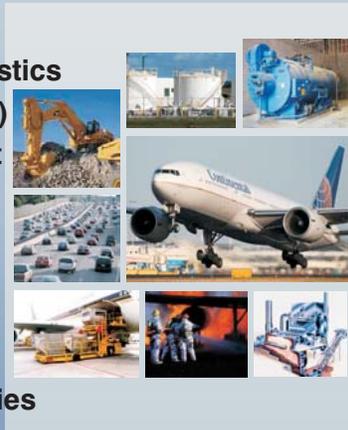
Computer Models Used

- Emissions and Dispersion Modeling System (EDMS)
- CAL3QHC - Roadway Intersection Dispersion Model
- MOBILE - Motor Vehicle Emissions Program
- NONROAD - Off-road Engine Emissions Program

Inventory

- Aircraft
- Aircraft delay and taxi statistics
- Auxiliary power units (APU)
- Ground support equipment
- Boilers
- Fuel storage tanks
- Aircraft Rescue and Fire Fighting (ARFF)
- Construction
- Roadways & parking facilities

Model Inputs



Concentrations

- Emissions inventory data
- Airport layout plan (ALP)
- Runway utilization
- Taxiway assignments
- Gate assignments
- Annual weather data
- Receptors



Model Outputs

Construction Emissions Inventory
Project: Access Roadway

Equipment	Emissions Inventory Summary (Tons per Year)				
	CO	SO ₂	NO _x	PM ₁₀	PM _{2.5}
Backhoe	0.05	0.00	0.00	0.00	0.00
Excavator	0.02	0.00	0.00	0.00	0.00
Grader	0.07	0.00	0.00	0.00	0.00
Loader	0.00	0.00	0.00	0.00	0.00
Piler	0.00	0.00	0.00	0.00	0.00
Total	0.14	0.00	0.00	0.00	0.00

EDMS Emissions Inventory Report
Study Area: Central 2003
Airport: Central International Airport
Report Date: January 24, 2005

Category	Emissions Inventory Summary (Tons per Year)				
	CO	SO ₂	NO _x	PM ₁₀	PM _{2.5}
Aircraft	1,000,000	10,000	100,000	10,000	10,000
APU	100,000	1,000	10,000	1,000	1,000
Boilers	10,000	100	1,000	100	100
Construction	0.14	0.00	0.00	0.00	0.00
Ground Support Equipment	10,000	100	1,000	100	100
Nonroad	10,000	100	1,000	100	100
Total	1,230,140	11,200	112,000	11,200	11,200

Emissions Inventory
(Tons per Year)



Sample Receptor Locations

EDMS Dispersion Report
Study Area: Central 2003
Airport: Central International Airport
Report Date: January 24, 2005

Receptor	CO	SO ₂	NO _x	PM ₁₀	PM _{2.5}
Receptor 1	1.00	0.01	0.10	0.01	0.01
Receptor 2	1.00	0.01	0.10	0.01	0.01
Receptor 3	1.00	0.01	0.10	0.01	0.01
Receptor 4	1.00	0.01	0.10	0.01	0.01
Receptor 5	1.00	0.01	0.10	0.01	0.01
Receptor 6	1.00	0.01	0.10	0.01	0.01
Receptor 7	1.00	0.01	0.10	0.01	0.01
Receptor 8	1.00	0.01	0.10	0.01	0.01
Receptor 9	1.00	0.01	0.10	0.01	0.01
Receptor 10	1.00	0.01	0.10	0.01	0.01
Total	10.00	0.10	1.00	0.10	0.10

Dispersion Analysis
(Parts per Million)



Landrum & Brown Team

Since 1949