

programs and Fortran programs written by OKI.

The model takes zonal demographic data and the transportation network as inputs and produces estimated traffic volumes on each roadway segment in the network. Traffic zones are the analysis units in the model. The OKI region is divided into 909 zones. The output of the model is a loaded highway network which contains information for each link such as initial speed, capacity, distance, functional class district number area type and forecasted traffic.

The USEPA has reviewed the mobile source emissions inventory utilizing the checklist contained in the Quality Review guidance document. This was used to ensure that recommended procedures were followed in the development of the mobile source portion of the emissions inventory.

Off-Road Mobile Source Emissions Inventory

Canton, Cincinnati and Youngstown Areas: The State developed emissions estimates for the following off-road categories according to USEPA guidance: aircraft, railroad locomotives, recreational boating, off road motorcycles, agricultural equipment, construction equipment, industrial equipment, and lawn and garden equipment. Documentation was provided as to the sources of emissions factors utilized and were submitted in the area source emissions inventory portion of the submittal.

Cleveland Area: The State utilized emissions estimates for non-road emissions developed by the Office of Mobile Sources (OMS-USEPA) in October 1992, in accordance with USEPA requirements for the Cleveland/Akron off-road mobile source emissions inventory. These OMS emissions estimates are provided for off-road diesel engines, as well as two-stroke and four-stroke gasoline engines, including off-road motorcycles, construction equipment, farm equipment, lawn and garden equipment, industrial equipment, and recreational vessels. In addition, the State included in the off-road mobile source inventory emissions from aircraft, railroads, and commercial vessels, which are not included in the OMS data. These estimates were developed using emissions factors from AP-42 and activity factors gathered from various sources.

The off-road mobile source inventory was reviewed utilizing the Level I and II checklists and USEPA's guidance

documents to ensure that all source categories and their related emissions factors were included in the off-road mobile source emissions inventory.

Biogenic Emissions Inventory

The State of Ohio developed the naturally occurring (or biogenic) emissions for the Canton, Cincinnati, Cleveland and Youngstown areas according to a USEPA's guidance document entitled "User's Guide to the Personal Computer Version of the Biogenic Emissions Inventory System (PC-BEIS)," (EPA-450/4-91-017) dated July 1991. Meteorological data utilized in PC-BEIS was collected in accordance with USEPA guidance. The ten warmest days from the period between 1988 to 1990 with the highest hourly peak ozone concentrations in each ozone nonattainment areas was collected and reviewed. As required by USEPA guidance, the fourth highest daily maximum ozone concentration for each nonattainment area was selected and utilized in the model. The State provided hard copy documentation as to the meteorological inputs utilized and PC-BEIS output files for the biogenic emissions inventory for the Canton, Cincinnati, Cleveland and Youngstown nonattainment areas.

IV. Approval of the Emissions Inventories

In a letter addressed to Robert Hodanbosi, Chief, Division of Air Pollution Control, OEPA, dated March 23, 1995, USEPA provided comments on the 1990 base-year ozone emissions inventories submitted for the Canton, Cincinnati, Cleveland and Youngstown areas. These comments addressed corrections that would be needed before the inventories could be finally approved.

In a letter addressed to William MacDowell, Chief, Regulation Development Section, dated June 8, 1995, the State of Ohio provided a response to comments on the area, on-road and off-road mobile, and biogenic source emissions. The USEPA has reviewed these responses and finds that the State has satisfied the Agency's comments and that the emissions inventory for the area, on-road mobile, non-road mobile, and biogenic sources is approvable.

However, the State has not responded to the point source emissions inventory comments (these comments addressed possible facilities that may be required to be included in the point source

emissions inventory). The State is currently making determinations regarding such facilities, and once completed, will submit the revised point source inventory to be included as part of this SIP revision. Please note that the State has satisfied the procedural requirements for the development of the point source emissions inventory. Therefore, in anticipation of the corrections, USEPA is proposing to approve the State's point source emissions inventory. No further action will occur on this SIP revision until the State submits (and USEPA completes) its review of the response to the point source emissions comments.

V. Summary of Ozone Emissions Inventory

The following summary indicates the emissions inventories for an average ozone summer weekday for the Canton, Cincinnati, Cleveland and Youngstown ozone nonattainment areas. Please note that the point source emissions estimates stated may be revised (please refer to "Approval of the Emissions Inventories" section above). The emissions are stated in tons per ozone season weekday:

CANTON OZONE NONATTAINMENT AREA
[Tons per day]

Source type	VOC	CO	NO _x
Point sources	12.36	6.51	40.11
Area sources	18.93	1.54	0.98
On-road mobile sources	31.66	188.59	16.24
Off-road mobile sources	23.72	63.00	15.89
Biogenic sources	36.66
Totals	123.33	259.64	73.22

CINCINNATI OZONE NONATTAINMENT AREA
[Tons per day]

Source type	VOC	CO	NO _x
Point sources	70.93	88.67	280.00
Area sources .	64.48	5.41	2.29
On-road mobile sources	125.84	793.16	130.68
Off-road mobile sources	37.37	274.57	34.45
Biogenic sources	109.04
Totals ..	407.66	1161.81	447.42