

- On-board refueling vapor recovery starting with MY 1998,
- Heavy duty (HD) diesel rule starting with MY 1991,
- HD diesel rule starting with MY 2004, and
- HD diesel rule starting with MY 2007

## 2. Contingency Measures

As required by the CAA, contingency provisions are provided in the plan. During the first two years of the plan, 2003 and 2004, if a violation occurs anywhere within the maintenance area, the state committed to using transportation control measures sufficient to achieve at least a five percent reduction in area-wide emissions.

For the remaining years of the maintenance plan, 2005 through 2012, two different triggers would initiate an evaluation and selection of appropriate control measures to implement. A response would be invoked whenever a future emissions inventory shows that VOC or NO<sub>x</sub> levels are more than five percent above the 1999 emission inventory levels or there is a pattern of exceedances measured at the ambient air quality monitors. At that time Missouri would work cooperatively with Kansas to evaluate and determine what and where controls may be required and the level of emissions reductions needed. The study would be completed within nine months and control measures adopted within 18 months of the determination. This time frame is similar to that in Kansas' revised maintenance plan.

A response would also be invoked whenever the NAAQS was violated. At that time an analysis would be completed within six months and control measures adopted within 18 months and implemented expeditiously taking into consideration the ease of implementation and the technical and economic feasibility of the selected measures. The state intends to implement any necessary contingency measures within 24 months after a violation of the 1-hour ozone standard. For both triggers, a number of potential point source, mobile source, and area source control measures are identified. Thus acceptable contingency provisions are provided in the plan as required by the CAA.

Emission control measures relied upon to maintain the NAAQS cannot be used as a contingency measure. Alternatively, emission control measures can be used as contingency measures to the extent that emissions reductions achieved by these rules are not necessary for maintaining the

NAAQS. Clearly, the excess emissions reductions obtained from the Tier-II rule, heavy duty diesel standards and the Federal off-road engine standards not needed for maintenance of the NAAQS can be used as contingency measures.

The CAA requires the inclusion of contingency measures in a maintenance plan to promptly correct any violation of the standard. We believe that Missouri is committing to and will take action quickly to maintain the standard in the event of a violation. Missouri has listed measures to be considered, intends to implement any necessary contingency measures within 24 months after a violation, and established a process to develop contingency measures if needed. Therefore, we believe the SIP has fulfilled the requirement for including contingency measures in the plan as required by the CAA. Any failure by the state to implement contingency measures to address a violation of the 1-hour standard, within the 24-month time frame in the plan, would be a failure to implement the SIP.

## 3. Ambient Air Quality Monitoring

The current ambient air quality monitoring network consisting of six monitors operating in the Kansas City area is described. Two monitors are located in Liberty and Watkins Mill Park and are considered to be downwind monitors; two are placed in populated areas at Rocky Creek, previously located at Worlds of Fun and the Kansas City International Airport; one is placed upwind at Richards Gebaur Airport; and one is located downtown in Kansas City, Kansas. The state did commit to continue monitoring the air quality for the next ten years.

The ambient air quality is also described. During the initial ten-year period, the data indicates that a number of exceedances of the standard did occur from time to time. However, only two violations of the standard occurred during the time periods of 1993 through 1995 and again in 1995 through 1997. The state implemented contingency measures to address these violations. Note that no excursion nor violation occurred during 1999, and no 1-hour violations have occurred since 1997.

A review of the design values also shows a decrease from the early nonattainment designation through the end of the first ten-year maintenance period from 0.14 parts per million (ppm) to 0.12 ppm. Although there was some fluctuation in the design value during the first ten-year maintenance period (1992–2002), the value was

fairly stable ranging from 0.11 ppm to 0.13 ppm. From 1996 through September 30, 2001, the design values were below the value established in the Act for classifying the area as a marginal nonattainment area under section 181 of the Act.

As required, air quality in the metropolitan area has been monitored during the past ten-year period and the state has committed to continuing monitoring the air quality for the next ten-year maintenance period.

## 4. Tracking the Progress of the Plan

Continued maintenance of the ozone standard depends, in part, upon the state's efforts toward tracking air quality and VOC and NO<sub>x</sub> emissions. As noted above, the state has committed to measuring air quality for the next ten-year period. In addition, the state has committed to updating the emissions inventory for the Missouri portion of the Kansas City maintenance area every three years. This inventory will include point, area, mobile and biogenic emissions sources. Under the discussion of the contingency measures, the state will compare future emission inventory levels to the 1999 emission inventory level. Lastly, the state will use the conformity analysis of transportation plans as a means of tracking mobile source VOC and NO<sub>x</sub> precursor emissions in the future. Thus the state and EPA will utilize several methods for tracking the progress of the maintenance plan.

## 5. Emission Inventory and Motor Vehicle Emissions Budgets

An emissions inventory was prepared for the Kansas City area for the base year of 1999 following EPA's procedures as provided in the Emissions Inventory Improvement Program. The year 1999 was selected for the inventory as no excursion nor violations of the standard occurred. Emissions were then projected for 2012. The MOBILE6 emissions model was used for on-road mobile sources. The draft NONROAD model released in June 2001 in support of the 2007 heavy-duty vehicle rule was used to generate the 1999 and 2012 emissions for off-road mobile sources. Area source emissions, on-road mobile source emissions and vehicle miles traveled for 2012 were based upon the new population and employment forecast approved by the Mid-American Regional Council (MARC) Technical Forecast Committee on July 11, 2002, and the MARC Board in August 2002. The emission inventory amounts are shown in the table below.