

pertains to the Missouri portion of the St. Louis area.

The commenter's characterization of the "basic premise" of the maintenance plans is incorrect. The plans do not simplistically assume that there will be no increase in emissions. The plans carefully project the growth in emissions that will occur in various source sectors (source categories or types), and the emission reductions which will occur based on emission control programs which are in place, in order to determine the net change in emissions from 2000 through 2014. The States are required to and have applied the appropriate techniques to estimate and account for potential emissions changes in the area. These techniques are necessarily based on source sector-specific growth indicators (positive and negative), *i.e.*, sector-specific economic factors, because the States have no way of predicting specific changes which will take place on a source-by-source basis in the emissions inventory.

Specific new source projects, such as those cited by the commenter, are addressed through mechanisms other than maintenance plans. To implement new source projects, Illinois implements PSD and NSR permitting regulations depending on the attainment status and classification of an area. These regulations address the air quality impacts of new sources and expansion of existing sources both inside and outside the boundaries of nonattainment areas. They are designed to prevent new source construction or existing source expansion which would adversely affect an area's ability to attain or maintain a national standard.

EPA believes that it is the function of the State's air permitting rules, rather than the maintenance plan, to ensure that specific potential new sources do not create emissions which would interfere with the maintenance of the ozone standard. The new source rules in Illinois' address potential new sources both inside and outside of the St. Louis area.

The anticipated plant referenced by the commenter is a potential source in Missouri. See the response to comment 33 in a separate rulemaking in today's **Federal Register** regarding redesignation of the Missouri portion of the St. Louis area for a discussion regarding this facility.

Comment 34: The emission estimates in the maintenance plans are unreliable. A recent study of flares throws doubt into the St. Louis emission inventory. Flares area used extensively in the Metro-East St. Louis area, including at the Conoco Wood River Refinery, two barge loading facilities, Granite City

Steel, and three bulk gasoline storage facilities. EPA must consider the significant underestimation of flare emissions in the emission inventory.

Response 34: This comment refers to both the Missouri and Illinois portions of the St. Louis area. EPA is here providing a response regarding the Illinois portion of the St. Louis area. See a separate rulemaking in today's **Federal Register** regarding redesignation of the Missouri portion of the St. Louis area for EPA's response to this comment as it pertains to the Missouri portion of the St. Louis area.

EPA believes that the States used the appropriate emission estimates in developing the emission inventories. The commenter cites a study of emissions from flares reported by the Bay Area Management District which the commenter alleges shows that the States greatly underestimated emissions from flares. EPA does not agree that the study cited by the commenter renders the emission estimates unreliable.

The Bay Area Air Quality Management District (AQMD) study referenced by the commenter is a "Draft" document, which has the stipulation "Do Not Cite or Quote." In addition, the study was specific to refinery flares and not all flare systems in general. The submitted comment inappropriately extends the applicability of this draft study document to flares at barge loading facilities, steel making operations, and bulk gasoline storage facilities.

IEPA staff reviewed the flare operations at the Conoco Phillips Wood River Refinery, which is the only facility in the Metro-East St. Louis area that the AQMD study findings would possibly apply to, and found a well-designed emissions recovery and control system. The flares at the Wood River refinery function primarily as safety devices and are provided to avoid discharge of raw hydrocarbons to the atmosphere both during upsets and during planned intermittent maintenance activities. Process units' hydrocarbon emissions to flares are kept to a minimum to prevent product loss. Whenever possible, vent gasses are recovered, compressed, and used for firing heaters and boilers rather than being sent to flares. Seal vessels and pressure control systems allow nearly all vent gasses to be recovered by managing the pressure levels during normal operations and upsets.

The Conoco Phillips Wood River Refinery has four refinery flares that the findings of the AQMD study would apply to—the distilling flare, the alkylation flare, the aromatics low-pressure flare, and the aromatics high-pressure flare. The AQMD technical

assessment document presented that the primary concern for the 28 flares studied was that refinery flares were being used more often and more routinely than historic emissions data indicated. For the Conoco Phillips Wood River Refinery, this finding is not valid. The Conoco Phillips refinery flares are used only as safety devices and as minimally as possible because loss of product occurs when these devices must be used. When it became necessary to use these safety devices, all upset emissions were reported in the annual emissions reports. Such reports for 2000 were used in the development of the emission inventories developed by the IEPA for the redesignation request and the maintenance plan. Therefore, the Illinois redesignation request and maintenance plan accurately includes these emissions.

Another issue identified in the AQMD refinery flare study was in regards to emissions control efficiency (CE) since its impact has a significant effect on reported emissions. All field studies regarding flare CE, which were referenced in the AQMD technical analysis document, indicate that CEs of greater than 98 percent could be expected for flares. The emissions for the Conoco Phillips flares, as included in Illinois' emissions inventories, uses EPA's recommended CE of 98 percent for all flares except in the lube area, which has a 99 percent CE. Therefore, any impact of inventory emissions from overestimation of CE is considered to be insignificant for the Conoco Phillips Wood River Refinery.

In regards to the impacts of crosswinds, the AQMD technical analysis document references one laboratory scale Canadian study that indicates that CEs may be impacted by crosswinds. The Canadian researchers, however, indicate that applying their laboratory findings after scaling up to the actual sizes of flares that refineries normally use could prove difficult. A referenced study in the AQMD technical analysis document shows that crosswinds with a speed of 18 miles per hour (8 meters per second) are needed before any impact is seen on CEs for flares. In the years of 1999 and 2000, no hourly wind speeds greater than 11 miles per hour was recorded at the Edwardsville monitor, which is located less than 10 miles from Wood River, during high ozone days in the St. Louis area. Therefore, crosswinds are not considered to be an issue that might impact emission estimates for the Metro-East St. Louis area refinery flares.

Further review of the document has shown that methane was included in the emission factor that was used to