The third year costs for operating monitors are estimated to be \$11.4 million, leaving \$4.6 million for the targeted implementation strategy. This will allow for establishing sites around 16 sources in addition to the 41 sources established in the first and second years for a total of 57 targeted sources. The EPA estimates that monitors at 7 of the 15 sources established in the first year would be moved in the third year due to no monitored violations.

### 2. Siting Concerns

The EPA is aware of the many considerations that arise when siting monitoring stations. Monitors are usually sited where electrical power is already available, they are reasonably secure, the immediate environment satisfies the siting criteria of part 58, and they are in proximity to the desired locations. Waiver provisions are also included in the regulations to deviate from siting criteria when appropriate. Generally, monitors are sited at or within reasonable proximity of the desired locations. For purposes of convenience, monitors are sometimes sited where other pollutants are already monitored.

When conducting the SO<sub>2</sub> network review, EPA-approved air quality models and saturation studies may be used to predict locations where maximum concentrations are expected within the vicinity of SO<sub>2</sub> sources or clusters of sources. As discussed earlier, models can be used in a qualitative sense to predict relative ambient impacts and are useful as a tool for establishing preferred monitor locations for predicting 5-minute concentrations.

# 3. Trends Data Concerns

A potential concern regarding the movement of monitors is the effect on EPA's ability to detect and evaluate trends in air quality. When monitors are operated in the same locations for several years, it is possible to account for the effects of meteorology, seasonal patterns in air pollutant concentrations and other variables specific to a monitor location. When monitors are moved, the confidence in detecting trends in air pollutant concentrations is compromised due to a new set of variables that may affect ambient concentrations at the new location.

The EPA needs to maintain a certain number of monitors for detecting and evaluating trends in air pollutant concentrations. However, EPA believes that a sufficient number of monitors now used for trends analyses are not critical to the objectives of trends reporting and should be considered for relocation. Elsewhere in this notice, the

EPA is proposing changes to 40 CFR part 58, appendix D, in which a minimum number of  $SO_2$  monitors in the metropolitan areas will be retained for trends purposes.

#### 4. Barriers

Certain institutional barriers may be encountered in some attempts to relocate monitors. These stem from the separate political entities responsible for implementation of air pollution control programs at the State and local levels throughout the U.S. Where monitor sites considered for relocation are within the boundaries of one political entity, the problems are diminished, since the resources necessary to maintain existing monitoring sites may be redirected to the new sites, providing the SO<sub>2</sub> monitor is not sharing a site with other pollutant monitors. Sites in a network around targeted sources of SO<sub>2</sub> emissions which are located in different States or air pollution control districts may present some added difficulties. In such cases, resources, such as grants for support of air pollution planning and control programs as allowed under section 105 of the Act, may be redirected by EPA to aid in relocating and maintaining new monitoring stations.

#### 5. Conclusion

In general, EPA believes that a portion of the monitors now directed to monitoring ambient air quality in population areas for trends purposes should be considered for relocation. While EPA may not normally require monitors operated by industries to be relocated and thus industry-operated monitors will not be candidates for relocation, EPA strongly encourages companies to evaluate their networks in light of today's notice. However, quality-assured data from such monitors could allow for the relocation of nearby SLAMS monitors to other locations if monitored air quality concentrations from industry-operated monitors provide assurances that the SO<sub>2</sub> NAAQS are maintained.

## D. Compliance and Enforcement Issues

Certain compliance and enforcement issues will arise only if either the section 303 alternative or the new 5-minute NAAQS alternative is selected. The issues are how to determine compliance to ensure protection of a trigger level or NAAQS that has a 5-minute averaging period, and what actions are appropriate by the State when the cause of the violation may be process upsets, startup or shutdown, batch operations, or other nonsteady-state sources. As is currently done with

the NAAQS, measurement of SO<sub>2</sub> ambient air concentrations with ambient air monitors under each of the three proposed regulatory alternatives will serve as indicators of compliance. Enforcement will be based on the results of compliance inspections at the source, and the compliance inspection will be based on requirements in the applicable operating permit or SIP. In most instances, EPA believes that in order to ensure protection of the 5-minute NAAQS or trigger level, compliance will need to be determined through sources meeting recordkeeping and reporting requirements or carrying out any other agreed-upon actions designed to reduce short-term emission peaks.

## 1. Averaging Times for Emission Limits

Under EPA's policy for emissions averaging under the current SO<sub>2</sub> NAAQS, sources are to be controlled through the imposition of emission limits having averaging times consistent with the averaging period of the air quality standard of concern. As an example, in order to protect the SO<sub>2</sub> ambient air quality standard that has been established for a 24-hour period, mass emission limits for sources should normally allow averaging of emissions over no more than a 24-hour period when determining compliance with the limits. The purpose of this is to restrict extreme variations in emissions of short duration that might otherwise be allowed to occur if emission variations are averaged over much longer periods (e.g., 30 days). Air quality concentrations in excess of the standard could be produced while sources are still complying with long-term average emission limits by reducing emissions sufficiently at other times within their emission averaging periods.

A variety of emission limit averaging times had been developed by State and local agencies for SIP's both prior and subsequent to the implementation of this policy on averaging. As a result, those SIP's with averaging times inconsistent with the policy that were adopted prior to implementation of the policy are included in an effort by EPA to correct general SIP enforcement deficiencies. The EPA has not taken final action on those rules developed subsequent to the policy.

The EPA has allowed the use of stack tests and analysis of fuel samples for sulfur content as surrogates for continuous compliance monitoring with the emission limits. In many cases, these methods will continue to be feasible for ensuring compliance with a 5-minute trigger level or NAAQS. Technically, SO<sub>2</sub> emissions can be measured in a stack at intervals less