## SECTION 20 SUBTRACTIVE CONFIGURATIONS

## **BACKGROUND**

For the Acid Rain Program (40 CFR Parts 72 through 78), SO<sub>2</sub> and heat input (HI) monitoring requirements for exhaust configurations in which units discharge to the atmosphere through a common stack are defined in § 75.16. For a state or Federal NO<sub>x</sub> mass emissions reduction program subject to Subpart H of 40 CFR 75, provisions for monitoring various common stack configurations are found in § 75.72. In the specific case where affected and nonaffected units share a common stack, the allowable monitoring options under all of these programs are similar. To determine emissions for the affected units, you may:

- (1) Monitor in the duct(s) leading from the affected unit(s) to the common stack; or
- (2) Monitor at the common stack and opt-in the nonaffected units; or
- (3) Monitor at the common stack and attribute all of the emissions to the affected units; or
- (4) Petition EPA to use an alternative approach; or
- (5) Monitor the combined emissions from the affected and nonaffected units at the common stack and monitor the emissions of each nonaffected unit in the duct from the nonaffected unit to the common stack, and then determine the affected unit emissions by subtraction. Questions 20.1 through 20.11 provide monitoring and reporting guidelines for this subtractive stack configuration.

(Note: Common stack NO<sub>x</sub> *emission rate* monitoring and reporting is not addressed in this section. For information about NO<sub>x</sub> emission rate monitoring for affected units and nonaffected units sharing a common stack, consult Section 22 of this Policy Manual.)

## **DEFINITIONS**

**Affected Unit:** A unit subject to an SO<sub>2</sub> or NO<sub>x</sub> mass emissions limitation under the Acid Rain Program or under a State or Federal NO<sub>x</sub> mass trading program.

**Main Common Stack:** The stack through which the emissions from *all* units (affected and nonaffected) in a subtractive stack configuration discharge to the atmosphere.

**Nonaffected Unit:** A unit not subject to an SO<sub>2</sub> or NO<sub>x</sub> mass emissions limitation under the Acid Rain Program or under a State or Federal NO<sub>x</sub> mass trading program.

**Secondary Common Stack:** A location in the ductwork of a subtractive stack configuration, upstream of the main common stack, where the combined emissions from two or more nonaffected units are monitored.

**Subtractive Stack Configuration:** An exhaust configuration in which combined emissions from affected and nonaffected units discharge to the atmosphere through a

common stack, and for which the mass emissions and heat input from the affected unit(s) are determined by subtracting the mass emissions and heat input measured at the nonaffected unit(s) from the combined mass emissions and heat input measured at the common stack.