

**TITLE 45
INTERPRETIVE RULE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF AIR QUALITY**

**SERIES 13B
THE PERMITTING OF LABORATORY FACILITIES
UNDER 45CSR13**

§45-13B-1. General.

1.1. Scope. -- It is the purpose of this rule to provide guidance and clarification regarding the permitting of laboratory facilities under 45CSR13, while ensuring compliance with all applicable requirements and at the same time providing operational flexibility.

1.2. Authority.-- W. Va. Code §§22-5-1 et seq. and WV 45CSR13.

1.3. Filing Date. – February 28, 2002.

1.4. Effective Date. – March 30, 2002.

§45-13B-2. Definitions.

2.1. “Bench-scale laboratory equipment” means:

2.1.a. Bench-scale laboratory testing equipment and quality control testing equipment used exclusively for chemical or physical analysis, including vacuum-producing devices;

2.1.b. Activities associated with the equipment or devices described in subdivision 2.1.a, including sample preparation, handling, and disposal activities; or

2.1.c. Laboratory process emission sources conducted at private, public or vocational educational institutions, where the emissions are the result of teaching or training exercises, and the institution is not generally

engaged in the manufacture of products for commercial sale.

2.2. “Bench-scale research and development equipment” means laboratory facilities not covered under subsection 2.1 and the primary purpose of which is at least one of the following:

2.2.a. To conduct “scale-up” from laboratory or bench-scale studies for the purpose of collecting information and data for engineering and design of a commercial facility;

2.2.b. To evaluate process changes in connection with pollution prevention efforts (including improved process efficiencies);

2.2.c. To develop data for correction of manufacturing facility operational problems and customer product quality concerns; or

2.2.d. To produce products for commercial sale for the purpose of customer evaluation, market development or testing, provided that such activity is not the principal purpose of the facility.

2.3. Other words and phrases used in this rule, unless otherwise indicated, shall have the meaning ascribed to them in 45CSR13 and W. Va. Code §22-5-2.

§45-13B-3. Facilities Exempt from Permitting.

3.1. Facilities defined as “bench-scale laboratory equipment” under subsection 2.1 shall be exempt from permitting requirements under 45CSR13 as de minimus sources included in No. 7 of Table 45-13B of 45CSR13.

3.2. The owner or operator of bench-scale research and development equipment designed to have a total input of no more than twenty-five (25) pounds of material which could be emitted into the air (excluding water, steam, nitrogen, hydrogen, oxygen, and chemicals which are not capable of being emitted as regulated air pollutants under 45CSR13) per any calendar day, including vacuum-producing devices, and any associated devices to capture and collect emissions from any such equipment or devices, shall be exempt from permitting requirements under 45CSR13. A demonstration of eligibility for this exemption shall be made by the owner or operator of such equipment in the following manner:

3.2.a. Make a case-specific demonstration of eligibility describing how total input of materials will be determined, which demonstration may include limitations on operating practices, training, engineering or administrative controls; or

3.2.b. Make an alternative demonstration of eligibility describing how total input of materials will be determined, which demonstration may include the kind of limitations and controls described in subdivision 3.2.a.

3.3. Case-specific determinations of eligibility under subdivision 3.2.a shall be maintained on-site at all times that the laboratory is relying on the demonstration and for at least an additional two (2) years thereafter and shall be available to the Secretary upon request. Alternative demonstrations of eligibility under subdivision 3.2.b shall be maintained on-site at all times that the laboratory is relying on the alternative

demonstration and for at least an additional two (2) years thereafter and shall be available to the Secretary upon request.

§45-13B-4. Additional Facilities Exempt from Permitting.

4.1. The owner or operator of a laboratory that does not qualify for the exemption set forth in section 3 shall be exempt from the permitting requirements under 45CSR13 provided the owner or operator meets all of the following conditions:

4.1.a. Laboratory activities shall be conducted in accordance with a written Good Laboratory Practices Plan, developed and implemented by the source, which sets forth procedures, equipment, and work practices which (with respect to regulated air pollutants):

4.1.a.1. Are capable of protecting the environment from activities occurring at that particular operation;

4.1.a.2. Include standard operating procedures relevant to environmental considerations to be followed when research and development work involves the emission of regulated air pollutants; and

4.1.a.3. Include, where appropriate, the following control measures that will be used to minimize the emission of regulated air pollutants:

4.1.a.3.A Procedures to minimize emissions of regulated air pollutants from equipment vents;

4.1.a.3.B. Procedures to minimize emissions of regulated air pollutants from equipment leaks;

4.1.a.3.C. Containers which have the potential to emit regulated air

pollutants shall be kept closed when not in use;
and

4.1.a.3.D. Procedures to estimate and record the actual emissions of regulated air pollutants, including supporting calculations and the date and duration of emissions, unless alternative procedures are approved in writing by the Secretary;

4.1.b. The Good Laboratory Practices Plan shall be maintained on-site at all times and be made available to the Secretary upon request;

4.1.c. The Secretary has made no determination that the laboratory facility causes statutory air pollution;

4.1.d. The specific laboratory operation shall be located at least 100 feet from any public recreational area or private residence unless waived by the owner thereof or waived in an easement that runs with the land on which such residence or recreation area is located;

4.1.e. The total input of materials to the laboratory facility (excluding water, steam, nitrogen, hydrogen, oxygen and chemicals which are not capable of emitting regulated air pollutants under 45CSR13), taking into account actual planned operating hours and conditions, does not exceed the following criteria:

4.1.e.1. One hundred forty-four (144) pounds per any rolling 24-hour time period; or

4.1.e.2 Five hundred (500) pounds per day, provided the actual emissions of regulated air pollutants do not exceed any threshold amounts under subdivisions 2.17 or 2.24 of 45CSR13; and

4.1.f. The owner or operator shall make a case-specific demonstration describing

how total input of materials will be determined, which demonstration may include limitations on operating practices, training, engineering or administrative controls. The owner or operator may submit the demonstration to the Secretary for approval. Records of the demonstration shall be maintained on-site at all times that the laboratory facility is relying on such demonstration and for at least an additional two (2) years thereafter and shall be available to the Secretary upon request.

§45-13B-5. Effect on Other Rules.

5.1. For application of the exemptions for particulate matter and mineral acids provided by section 10 of 45CSR7 and of the exemptions for sulfur dioxide provided by section 4 of 45CSR10, actual emissions will be regarded the same as potential to emit.