

to be considered by the State. In such cases, when the State exempts any source subject to this appendix by use of this provision from installing continuous emission monitoring systems, the State shall set forth alternative emission monitoring and reporting requirements (e.g., periodic manual stack tests) to satisfy the intent of these regulations. Examples of such special cases include, but are not limited to, the following:

6.1 Alternative monitoring requirements may be prescribed when installation of a continuous monitoring system or monitoring device specified by this appendix would not provide accurate determinations of emissions (e.g., condensed, uncombined water vapor may prevent an accurate determination of opacity using commercially available continuous monitoring systems).

6.2 Alternative monitoring requirements may be prescribed when the affected facility is infrequently operated (e.g., some affected facilities may operate less than one month per year).

6.3 Alternative monitoring requirements may be prescribed when the State determines that the requirements of this appendix would impose an extreme economic burden on the source owner or operator.

6.4 Alternative monitoring requirements may be prescribed when the State determines that monitoring systems prescribed by this appendix cannot be installed due to physical limitations at the facility.

[40 FR 46247, Oct. 6, 1975, as amended at 51 FR 40675, Nov. 7, 1986]

APPENDIXES Q-R [RESERVED]

APPENDIX S TO PART 51—EMISSION OFFSET INTERPRETATIVE RULING

I. INTRODUCTION

This appendix sets forth EPA's Interpretative Ruling on the preconstruction review requirements for stationary sources of air pollution (not including indirect sources) under 40 CFR subpart I and section 129 of the Clean Air Act Amendments of 1977, Public Law 95-95, (note under 42 U.S.C. 7502). A major new source or major modification which would locate in an area designated in 40 CFR 81.300 *et seq.*, as nonattainment for a pollutant for which the source or modification would be major may be allowed to construct only if the stringent conditions set forth below are met. These conditions are designed to insure that the new source's emissions will be controlled to the greatest degree possible; that more than equivalent offsetting emission reductions (*emission offsets*) will be obtained from existing sources; and that there will be progress toward achievement of the NAAQS.

For each area designated as exceeding an NAAQS (nonattainment area) under 40 CFR 81.300 *et seq.*, this Interpretative Ruling will

be superseded after June 30, 1979—(a) by preconstruction review provisions of the revised SIP, if the SIP meets the requirements of Part D, Title 1, of the Act; or (b) by a prohibition on construction under the applicable SIP and section 110(a)(2)(I) of the Act, if the SIP does not meet the requirements of Part D. The Ruling will remain in effect to the extent not superseded under the Act. This prohibition on major new source construction does not apply to a source whose permit to construct was applied for during a period when the SIP was in compliance with Part D, or before the deadline for having a revised SIP in effect that satisfies Part D.

The requirement of this Ruling shall not apply to any major stationary source or major modification that was not subject to the Ruling as in effect on January 16, 1979, if the owner or operator:

A. Obtained all final Federal, State, and local preconstruction approvals or permits necessary under the applicable State Implementation Plan before August 7, 1980;

B. Commenced construction within 18 months from August 7, 1980, or any earlier time required under the applicable State Implementation Plan; and

C. Did not discontinue construction for a period of 18 months or more and completed construction within a reasonable time.

II. INITIAL SCREENING ANALYSES AND DETERMINATION OF APPLICABLE REQUIREMENTS

A. *Definitions*— For the purposes of this Ruling:

1. *Stationary source* means any building, structure, facility, or installation which emits or may emit any air pollutant subject to regulation under the Act.

2. *Building, structure, facility or installation* means all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control) except the activities of any vessel. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same "Major Group" (i.e., which have the same two digit code) as described in the *Standard Industrial Classification Manual, 1972*, as amended by the 1977 Supplement (U.S. Government Printing Office stock numbers 4101-0066 and 003-005-00176-0, respectively).

3. *Potential to emit* means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design only if the limitation or

the effect it would have on emissions is federally enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source.

4. (i) *Major stationary source* means:

(a) Any stationary source of air pollutants which emits, or has the potential to emit, 100 tons per year or more of any pollutant subject to regulation under the Act; or

(b) Any physical change that would occur at a stationary source not qualifying under paragraph 5.(i)(a) of section II of this appendix as a major stationary source, if the change would constitute a major stationary source by itself.

(ii) A major stationary source that is major for volatile organic compounds shall be considered major for ozone.

(iii) The fugitive emissions of a stationary source shall not be included in determining for any of the purposes of this ruling whether it is a major stationary source, unless the source belongs to one of the following categories of stationary sources:

(a) Coal cleaning plants (with thermal dryers);

(b) Kraft pulp mills;

(c) Portland cement plants;

(d) Primary zinc smelters;

(e) Iron and steel mills;

(f) Primary aluminum ore reduction plants;

(g) Primary copper smelters;

(h) Municipal incinerators capable of charging more than 250 tons of refuse per day;

(i) Hydrofluoric, sulfuric, or nitric acid plants;

(j) Petroleum refineries;

(k) Lime plants;

(l) Phosphate rock processing plants;

(m) Coke oven batteries;

(n) Sulfur recovery plants;

(o) Carbon black plants (furnace process);

(p) Primary lead smelters;

(q) Fuel conversion plants;

(r) Sintering plants;

(s) Secondary metal production plants;

(t) Chemical process plants;

(u) Fossil-fuel boilers (or combination thereof) totaling more than 250 million British thermal units per hour heat input;

(v) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;

(w) Taconite ore processing plants;

(x) Glass fiber processing plants;

(y) Charcoal production plants;

(z) Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input;

(aa) Any other stationary source category which, as of August 7, 1980, is being regulated under section 111 or 112 of the Act.

5. (i) *Major modification* means any physical change in or change in the method of operation of a major stationary source that

would result in a significant net emissions increase of any pollutant subject to regulation under the Act.

(ii) Any net emissions increase that is considered significant for volatile organic compounds shall be considered significant for ozone.

(iii) A physical change or change in the method of operation shall not include:

(a) Routine maintenance, repair, and replacement;

(b) Use of an alternative fuel or raw material by reason of an order under section 2 (a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act;

(c) Use of an alternative fuel by reason of an order or rule under section 125 of the Act;

(d) Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste;

(e) Use of an alternative fuel or raw material by a stationary source which:

(1) The source was capable of accommodating before December 21, 1976, unless such change would be prohibited under any federally enforceable permit condition which was established after December 21, 1976, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR subpart I or §51.166; or

(2) The source is approved to use under any permit issued under this ruling;

(f) An increase in the hours of operation or in the production rate, unless such change is prohibited under any federally enforceable permit condition which was established after December 21, 1976 pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR subpart I or §51.166;

(g) Any change in ownership at a stationary source.

6. (i) *Net emissions increase* means the amount by which the sum of the following exceeds zero:

(a) Any increase in actual emissions from a particular physical change or change in the method of operation at a stationary source; and

(b) Any other increases and decreases in actual emissions at the source that are contemporaneous with the particular change and are otherwise creditable.

(ii) An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs between:

(a) The date five years before construction on the particular change commences and

(b) The date that the increase from the particular change occurs.

(iii) An increase or decrease in actual emissions is creditable only if the Administrator has not relied on it in issuing a permit

for the source under this Ruling which permit is in effect when the increase in actual emissions from the particular change occurs.

(iv) An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level.

(v) A decrease in actual emissions is creditable only to the extent that:

(a) The old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions;

(b) It is federally enforceable at and after the time that actual construction on the particular change begins;

(c) The reviewing authority has not relied on it in issuing any permit under regulations approved pursuant to 40 CFR 51.18; and

(d) It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change.

(vi) An increase that results from a physical change at a source occurs when the emissions unit on which construction occurred becomes operational and begins to emit a particular pollutant. Any replacement unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed 180 days.

7. *Emissions unit* means any part of a stationary source which emits or would have the potential to emit any pollutant subject to regulation under the Act.

8. *Secondary emissions* means emissions which would occur as a result of the construction or operation of a major stationary source or major modification, but do not come from the major stationary source or major modification itself. For the purpose of this Ruling, secondary emissions must be specific, well defined, quantifiable, and impact the same general area as the stationary source or modification which causes the secondary emissions. Secondary emissions include emissions from any offsite support facility which would not be constructed or increase its emissions except as a result of the construction or operation of the major stationary source or major modification. Secondary emissions do not include any emissions which come directly from a mobile source, such as emissions from the tailpipe of a motor vehicle, from a train, or from a vessel.

9. *Fugitive emissions* means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

10. (i) *Significant* means, in reference to a net emissions increase or the potential of a source to emit any of the following pollutants, a rate of emissions that would equal or exceed any of the following rates:

Pollutant and Emissions Rate

Carbon monoxide: 100 tons per year (tpy)

Nitrogen oxides: 40 tpy

Sulfur dioxide: 40 tpy

Particulate matter: 25 tpy of particulate matter emissions

Ozone: 40 tpy of volatile organic compounds

Lead: 0.6 tpy

11. *Allowable emissions* means the emissions rate calculated using the maximum rated capacity of the source (unless the source is subject to federally enforceable limits which restrict the operating rate, or hours of operation, or both) and the most stringent of the following:

(i) Applicable standards as set forth in 40 CFR parts 60 and 61;

(ii) Any applicable State Implementation Plan emissions limitation, including those with a future compliance date; or

(iii) The emissions rate specified as a federally enforceable permit condition, including those with a future compliance date.

12. *Federally enforceable* means all limitations and conditions which are enforceable by the Administrator, including those requirements developed pursuant to 40 CFR parts 60 and 61, requirements within any applicable State implementation plan, any permit requirements established pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR part 51, subpart I, including operating permits issued under an EPA-approved program that is incorporated into the State implementation plan and expressly requires adherence to any permit issued under such program.

13. (i) *Actual emissions* means the actual rate of emissions of a pollutant from an emissions unit as determined in accordance with paragraphs 16. (ii) through (iv) of Section II.A. of this appendix.

(ii) In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a two-year period which precedes the particular date and which is representative of normal source operation. The reviewing authority shall allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored or combusted during the selected time period.

(iii) The reviewing authority may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.

(iv) For any emissions unit which has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.

14. *Construction* means any physical change or change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emissions unit) which would result in a change in actual emissions.

15. *Commence* as applied to construction of a major stationary source or major modification means that the owner or operator has all necessary preconstruction approvals or permits and either has:

(i) Begun, or caused to begin, a continuous program of actual on-site construction of the source, to be completed within a reasonable time; or

(ii) Entered into binding agreements or contractual obligations, which cannot be cancelled or modified without substantial loss to the owner or operator, to undertake a program of actual construction of the source to be completed within a reasonable time.

16. *Necessary preconstruction approvals or permits* means those permits or approvals required under Federal air quality control laws and regulations and those air quality control laws and regulations which are part of the applicable State Implementation Plan.

17. *Begin actual construction* means, in general, initiation of physical on-site construction activities on an emissions unit which are of a permanent nature. Such activities include, but are not limited to, installation of building supports and foundations, laying of underground pipework, and construction of permanent storage structures. With respect to a change in method of operating this term refers to those on-site activities other than preparatory activities which mark the initiation of the change.

18. *Lowest achievable emission rate* means, for any source, the more stringent rate of emissions based on the following:

(i) The most stringent emissions limitation which is contained in the implementation plan of any State for such class or category of stationary source, unless the owner or operator of the proposed stationary source demonstrates that such limitations are not achievable; or

(ii) The most stringent emissions limitation which is achieved in practice by such class or category of stationary source. This limitation, when applied to a modification, means the lowest achievable emissions rate for the new or modified emissions units within the stationary source. In no event shall the application of this term permit a proposed new or modified stationary source to emit any pollutant in excess of the amount allowable under applicable new source standards of performance.

19. *Resource recovery facility* means any facility at which solid waste is processed for the purpose of extracting, converting to energy, or otherwise separating and preparing solid waste for reuse. Energy conversion facilities must utilize solid waste to provide

more than 50 percent of the heat input to be considered a resource recovery facility under this Ruling.

20. *Volatile organic compounds (VOC)* is as defined in §51.100(s) of this part.

B. *Review of all sources for emission limitation compliance.* The reviewing authority must examine each proposed major new source and proposed major modification¹ to determine if such a source will meet all applicable emission requirements in the SIP, any applicable new source performance standard in 40 CFR part 60, or any national emission standard for hazardous air pollutants in 40 CFR part 61. If the reviewing authority determines that the proposed major new source cannot meet the applicable emission requirements, the permit to construct must be denied.

C. *Review of specified sources for air quality impact.* In addition, the reviewing authority must determine whether the major stationary source or major modification would be constructed in an area designated in 40 CFR 81.300 *et seq.* as nonattainment for a pollutant for which the stationary source or modification is major.

D.–E. [Reserved]

F. *Fugitive emissions sources.* Section IV. A. of this Ruling shall not apply to a source or modification that would be a major stationary source or major modification only if fugitive emissions, to the extent quantifiable, are considered in calculating the potential to emit of the stationary source or modification and the source does not belong to any of the following categories:

- (1) Coal cleaning plants (with thermal dryers);
- (2) Kraft pulp mills;
- (3) Portland cement plants;
- (4) Primary zinc smelters;
- (5) Iron and steel mills;
- (6) Primary aluminum ore reduction plants;
- (7) Primary copper smelters;
- (8) Municipal incinerators capable of charging more than 250 tons of refuse per day;
- (9) Hydrofluoric, sulfuric, or nitric acid plants;
- (10) Petroleum refineries;
- (11) Lime plants;
- (12) Phosphate rock processing plants;
- (13) Coke oven batteries;
- (14) Sulfur recovery plants;
- (15) Carbon black plants (furnace process);
- (16) Primary lead smelters;
- (17) Fuel conversion plants;
- (18) Sintering plants;
- (19) Secondary metal production plants;
- (20) Chemical process plants;

¹Hereafter the term *source* will be used to denote both any source and any modification.

- (21) Fossil-fuel boilers (or combination thereof) totaling more than 250 million British thermal units per hour heat input;
- (22) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
- (23) Taconite ore processing plants;
- (24) Glass fiber processing plants;
- (25) Charcoal production plants;
- (26) Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input;
- (27) Any other stationary source category which, as of August 7, 1980, is being regulated under section 111 or 112 of the Act.

G. *Secondary emissions.* Secondary emissions need not be considered in determining whether the emission rates in Section II.C. above would be exceeded. However, if a source is subject to this Ruling on the basis of the direct emissions from the source, the applicable conditions of this Ruling must also be met for secondary emissions. However, secondary emissions may be exempt

from Conditions 1 and 2 of Section IV. Also, since EPA's authority to perform or require indirect source review relating to mobile sources regulated under Title II of the Act (motor vehicles and aircraft) has been restricted by statute, consideration of the indirect impacts of motor vehicles and aircraft traffic is not required under this Ruling.

III. SOURCES LOCATING IN DESIGNATED CLEAN OR UNCLASSIFIABLE AREAS WHICH WOULD CAUSE OR CONTRIBUTE TO A VIOLATION OF A NATIONAL AMBIENT AIR QUALITY STANDARD

A. This section applies only to major sources or major modifications which would locate in an area designated in 40 CFR 81.300 *et seq.* as attainment or unclassifiable in a State where EPA has not yet approved the State preconstruction review program required by 40 CFR 51.165(b), if the source or modification would exceed the following significance levels at any locality that does not meet the NAAQS:

Pollutant	Annual	Averaging time (hours)			
		24	8	3	1
SO ₂	1.0 µg/m ³	5 µg/m ³ .....	.....	25 µg/m ³ .....	.....
TSP	1.0 µg/m ³	5 µg/m ³ .....	.....	.....	.....
NO ₂	1.0 µg/m ³ .....	.....	.....	.....	.....
CO .....	.....	.....	0.5 mg/m ³ .....	.....	2 mg/m ³ .

B. Sources to which this section applies must meet Conditions 1, 2, and 4 of Section IV.A. of this ruling.² However, such sources may be exempt from Condition 3 of Section IV.A. of this ruling.

C. *Review of specified sources for air quality impact.* For stable air pollutants (i.e. SO₂, particulate matter and CO), the determination of whether a source will cause or contribute to a violation of an NAAQS generally should be made on a case-by-case basis as of the proposed new source's start-up date using the source's allowable emissions in an atmospheric simulation model (unless a source will clearly impact on a receptor which exceeds an NAAQS).

For sources of nitrogen oxides, the initial determination of whether a source would cause or contribute to a violation of the NAAQS for NO₂ should be made using an atmospheric simulation model assuming all the nitric oxide emitted is oxidized to NO₂ by the time the plume reaches ground level. The initial concentration estimates may be adjusted if adequate data are available to account for the expected oxidation rate.

For ozone, sources of volatile organic compounds, locating outside a designated ozone

nonattainment area, will be presumed to have no significant impact on the designated nonattainment area. If ambient monitoring indicates that the area of source location is in fact nonattainment, then the source may be permitted under the provisions of any State plan adopted pursuant to section 110(a)(2)(D) of the Act until the area is designated nonattainment and a State Implementation Plan revision is approved. If no State plan pursuant to section 110(a)(2)(D) has been adopted and approved, then this Ruling shall apply.

As noted above, the determination as to whether a source would cause or contribute to a violation of an NAAQS should be made as of the new source's start-up date. Therefore, if a designated nonattainment area is projected to be an attainment area as part of an approved SIP control strategy by the new source start-up date, offsets would not be required if the new source would not cause a new violation.

D. *Sources locating in clean areas,* but would cause a new violating of an NAAQS. If the reviewing authority finds that the emissions from a proposed source would cause a new violation of an NAAQS, but would not contribute to an existing violation, approval may be granted only if both of the following conditions are met:

²The discussion in this paragraph is a proposal, but represents EPA's interim policy until final rulemaking is completed.

Condition 1. The new source is required to meet a more stringent emission limitation³ and/or the control of existing sources below allowable levels is required so that the source will not cause a violation of any NAAQS.

Condition 2. The new emission limitations for the new source as well as any existing sources affected must be enforceable in accordance with the mechanisms set forth in Section V of this appendix.

IV. SOURCES THAT WOULD LOCATE IN A DESIGNATED NONATTAINMENT AREA

A. Conditions for approval. If the reviewing authority finds that the major stationary source or major modification would be constructed in an area designated in 40 CFR 81.300 *et seq* as nonattainment for a pollutant for which the stationary source or modification is major, approval may be granted only if the following conditions are met:

Condition 1. The new source is required to meet an emission Limitation⁴ which speci-

³If the reviewing authority determines that technological or economic limitations on the application of measurement methodology to a particular class of sources would make the imposition of an enforceable numerical emission standard infeasible, the authority may instead prescribe a design, operational or equipment standard. In such cases, the reviewing authority shall make its best estimate as to the emission rate that will be achieved and must specify that rate in the required submission to EPA (see Part V). Any permits issued without an enforceable numerical emission standard must contain enforceable conditions which assure that the design characteristics or equipment will be properly maintained (or that the operational conditions will be properly performed) so as to continuously achieve the assumed degree of control. Such conditions shall be enforceable as emission limitations by private parties under section 304. Hereafter, the term *emission limitation* shall also include such design, operational, or equipment standards.

⁴If the reviewing authority determines that technological or economic limitations on the application of measurement methodology to a particular class of sources would make the imposition of an enforceable numerical emission standard infeasible, the authority may instead prescribe a design, operational or equipment standard. In such cases, the reviewing authority shall make its best estimate as to the emission rate that will be achieved and must specify that rate in the required submission to EPA (see Part V). Any permits issued without an enforceable numerical emission standard must contain enforceable conditions which assure that the design characteristics or equipment

will be properly maintained (or that the operational conditions will be properly performed) so as to continuously achieve the assumed degree of control. Such conditions shall be enforceable as emission limitations by private parties under section 304. Hereafter, the term *emission limitation* shall also include such design, operational, or equipment standards.

Condition 2. The applicant must certify that all existing major sources owned or operated by the applicant (or any entity controlling, controlled by, or under common control with the applicant) in the same State as the proposed source are in compliance with all applicable emission limitations and standards under the Act (or are in compliance with an expeditious schedule which is Federally enforceable or contained in a court decree).

Condition 3. Emission reductions (*offsets*) from existing sources⁶ in the area of the proposed source (whether or not under the same ownership) are required such that there will be reasonable progress toward attainment of the applicable NAAQs.⁷

Only intrapollutant emission offsets will be acceptable (e.g., hydrocarbon increases may not be offset against SO₂ reductions).

Condition 4. The emission offsets will provide a positive net air quality benefit in the affected area (see Section IV.D. below).⁸ Atmospheric simulation modeling is not necessary for volatile organic compounds and NO_x. Fulfillment of Condition 3 and Section

will be properly maintained (or that the operational conditions will be properly performed) so as to continuously achieve the assumed degree of control. Such conditions shall be enforceable as emission limitations by private parties under section 304. Hereafter, the term *emission limitation* shall also include such design, operational, or equipment standards.

⁵Required only for those pollutants for which the increased allowable emissions exceed 50 tons per year, 1000 pounds per day, or 100 pounds per hour, although the reviewing authority may address other pollutants if deemed appropriate. The preceding hourly and daily rates shall apply only with respect to a pollutant for which a national ambient air quality standard, for a period less than 24 hours or for a 24-hour period, as appropriate, has been established.

⁶Subject to the provisions of section IV.C. below.

⁷The discussion in this paragraph is a proposal, but represents EPA's interim policy until final rulemaking is completed.

⁸Required only for those pollutants for which the increased allowable emissions exceed 50 tons per year, 1000 pounds per day, or 100 pounds per hour, although the reviewing authority may address other pollutants if deemed appropriate. The preceding hourly and daily rates shall apply only with respect to a pollutant for which a national ambient air quality standard, for a period less than 24 hours or for a 24-hour period, as appropriate, has been established.

IV.D. will be considered adequate to meet this condition.

B. *Exemptions from certain conditions.* The reviewing authority may exempt the following sources from Condition 1 under Section III or Conditions 3 and 4, Section IV.A.:

(i) Resource recovery facilities burning municipal solid waste, and (ii) sources which must switch fuels due to lack of adequate fuel supplies or where a source is required to be modified as a result of EPA regulations (e.g., lead-in-fuel requirements) and no exemption from such regulation is available to the source. Such an exemption may be granted only if:

1. The applicant demonstrates that it made its best efforts to obtain sufficient emission offsets to comply with Condition 1 under Section III or Conditions 3 and 4 under Section IV.A. and that such efforts were unsuccessful;

2. The applicant has secured all available emission offsets; and

3. The applicant will continue to seek the necessary emission offsets and apply them when they become available.

Such an exemption may result in the need to revise the SIP to provide additional control of existing sources.

Temporary emission sources, such as pilot plants, portable facilities which will be relocated outside of the nonattainment area after a short period of time, and emissions resulting from the construction phase of a new source, are exempt from Conditions 3 and 4 of this section.

C. *Baseline for determining credit for emission and air quality offsets.* The baseline for determining credit for emission and air quality offsets will be the SIP emission limitations in effect at the time the application to construct or modify a source is filed. Thus, credit for emission offset purposes may be allowable for existing control that goes beyond that required by the SIP. Emission offsets generally should be made on a pounds per hour basis when all facilities involved in the emission offset calculations are operating at their maximum expected or allowed production rate. The reviewing agency should specify other averaging periods (e.g., tons per year) in addition to the pounds per hour basis if necessary to carry out the intent of this Ruling. When offsets are calculated on a tons per year basis, the baseline emissions for existing sources providing the offsets should be calculated using the actual annual operating hours for the previous one or two year period (or other appropriate period if warranted by cyclical business conditions). Where the SIP requires certain hardware controls in lieu of an emission limitation (e.g., floating roof tanks for petroleum storage), baseline allowable emissions should be based on actual operating conditions for the previous one or two year period (i.e., actual

throughput and vapor pressures) in conjunction with the required hardware controls.

1. *No meaningful or applicable SIP requirement.* Where the applicable SIP does not contain an emission limitation for a source or source category, the emission offset baseline involving such sources shall be the actual emissions determined in accordance with the discussion above regarding operating conditions.

Where the SIP emission limit allows greater emissions than the uncontrolled emission rate of the source (as when a State has a single particulate emission limit for all fuels), emission offset credit will be allowed only for control below the uncontrolled emission rate.

2. *Combustion of fuels.* Generally, the emissions for determining emission offset credit involving an existing fuel combustion source will be the allowable emissions under the SIP for the type of fuel being burned at the time the new source application is filed (i.e., if the existing source has switched to a different type of fuel at some earlier date, any resulting emission reduction [either actual or allowable] shall not be used for emission offset credit). If the existing source commits to switch to a cleaner fuel at some future date, emission offset credit based on the allowable emissions for the fuels involved is not acceptable unless the permit is conditioned to require the use of a specified alternative control measure which would achieve the same degree of emission reduction should the source switch back to a dirtier fuel at some later date. The reviewing authority should ensure that adequate long-term supplies of the new fuel are available before granting emission offset credit for fuel switches.

3. (i) *Operating hours and source shutdown.*

A source may generally be credited with emissions reductions achieved by shutting down an existing source or permanently curtailing production or operating hours below baseline levels (see initial discussion in this Section IV.C), if such reductions are permanent, quantifiable, and federally enforceable, and if the area has an EPA-approved attainment plan. In addition, the shutdown or curtailment is creditable only if it occurred on or after the date specified for this purpose in the plan, and if such date is on or after the date of the most recent emissions inventory used in the plan's demonstration of attainment. Where the plan does not specify a cut-off date for shutdown credits, the date of the most recent emissions inventory or attainment demonstration, as the case may be, shall apply. However, in no event may credit be given for shutdowns which occurred prior to August 7, 1977. For purposes of this paragraph, a permitting authority may choose to consider a prior shutdown or curtailment to have occurred after the date of its most recent emissions inventory, if the inventory

explicitly includes as current "existing" emissions the emissions from such previously shutdown or curtailed sources.

(ii) Such reductions may be credited in the absence of an approved attainment demonstration only if the shutdown or curtailment occurred on or after the date the new source application is filed, or, if the applicant can establish that the proposed new source is a replacement for the shutdown or curtailed source and the cutoff date provisions of section IV.C.3.(i) are observed.

4. *Credit for VOC substitution.* As set forth in the Agency's "Recommended Policy on Control of Volatile Organic Compounds" (42 FR 35314, July 8, 1977), EPA has found that almost all non-methane VOCs are photochemically reactive and that low reactivity VOCs eventually form as much ozone as the highly reactive VOCs. Therefore, no emission offset credit may be allowed for replacing one VOC compound with another of lesser reactivity, except for those compounds listed in Table 1 of the above policy statement.

5. *"Banking" of emission offset credit.* For new sources obtaining permits by applying offsets after January 16, 1979, the reviewing authority may allow offsets that exceed the requirements of reasonable progress toward attainment (Condition 3) to be "banked" (i.e., saved to provide offsets for a source seeking a permit in the future) for use under this Ruling. Likewise, the reviewing authority may allow the owner of an existing source that reduces its own emissions to bank any resulting reductions beyond those required by the SIP for use under this Ruling, even if none of the offsets are applied immediately to a new source permit. A reviewing authority may allow these banked offsets to be used under the preconstruction review program required by Part D, as long as these banked emissions are identified and accounted for in the SIP control strategy. A reviewing authority may not approve the construction of a source using banked offsets if the new source would interfere with the SIP control strategy or if such use would violate any other condition set forth for use of offsets. To preserve banked offsets, the reviewing authority should identify them in either a SIP revision or a permit, and establish rules as to how and when they may be used.

6. *Offset credit for meeting NSPS or NESHAPS.* Where a source is subject to an emission limitation established in a New Source Performance Standard (NSPS) or a National Emission Standard for Hazardous Air Pollutants (NESHAPS), (i.e., requirements under sections 111 and 112, respectively, of the Act), and a different SIP limitation, the more stringent limitation shall be used as the baseline for determining credit for emission and air quality offsets. The difference in emissions between the SIP and the NSPS or NESHAPS, for such source may

not be used as offset credit. However, if a source were not subject to an NSPS or NESHAPS, for example if its construction had commenced prior to the proposal of an NSPS or NESHAPS for that source category, offset credit can be permitted for tightening the SIP to the NSPS or NESHAPS level for such source.

D. *Location of offsetting emissions.* In the case of emission offsets involving volatile organic compounds (VOC), the offsets may be obtained from sources located anywhere in the broad vicinity of the proposed new source. Generally, offsets will be acceptable if obtained from within the same AQCR as the new source or from other areas which may be contributing to the ozone problem at the proposed new source location. As with other pollutants, it is desirable to obtain offsets from sources located as close to the proposed new source site as possible. If the proposed offsets would be from sources located at greater distances from the new source, the reviewing authority should increase the ratio of the required offsets and require a showing that nearby offsets were investigated and reasonable alternatives were not available.⁹

Offsets for NO_x sources may also be obtained within the broad vicinity of the proposed new source. This is because areawide ozone and NO₂ levels are generally not as dependent on specific VOC or NO_x source location as they are on overall area emissions. Since the air quality impact of SO₂, particulate and carbon monoxide sources is site dependent, simple areawide mass emission offsets are not appropriate. For these pollutants, the reviewing authority should consider atmospheric simulation modeling to ensure that the emission offsets provide a positive net air quality benefit. However, to avoid unnecessary consumption of limited, costly and time consuming modeling resources, in most cases it can be assumed that if the emission offsets are obtained from an existing source on the same premises or in the immediate vicinity of the new source, and the pollutants disperse from substantially the same effective stack height, the air quality test under Condition 4 of Section IV.A. of this appendix will be met. Thus, when stack emissions are offset against a ground level source at the same site, modeling would be required. The reviewing authority may perform this analysis or require the applicant to submit appropriate modeling results.

E. *Reasonable progress towards attainment.* As long as the emission offset is greater than one-for-one, and the other criteria set forth

⁹The discussion in this paragraph is a proposal, but represents EPA's interim policy until final rulemaking is completed.

above are met, EPA does not intend to question a reviewing authority's judgment as to what constitutes reasonable progress towards attainment as required under Condition 3 in Section IV.A. of this appendix. This does not apply to "reasonable further progress" as required by Section 173.

F. *Source obligation.* At such time that a particular source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of this Ruling shall apply to the source or modification as though construction had not yet commenced on the source or modification.

V. ADMINISTRATIVE PROCEDURES

The necessary emission offsets may be proposed either by the owner of the proposed source or by the local community or the State. The emission reduction committed to must be enforceable by authorized State and/or local agencies and under the Clean Air Act, and must be accomplished by the new source's start-up date. If emission reductions are to be obtained in a State that neighbors the State in which the new source is to be located, the emission reductions committed to must be enforceable by the neighboring State and/or local agencies and under the Clean Air Act. Where the new facility is a replacement for a facility that is being shut down in order to provide the necessary offsets, the reviewing authority may allow up to 180 days for shakedown of the new facility before the existing facility is required to cease operation.

A. *Source initiated emission offsets.* A source may propose emission offsets which involve:

(1) Reductions from sources controlled by the source owner (internal emission offsets); and/or (2) reductions from neighboring sources (external emission offsets). The source does not have to investigate all possible emission offsets. As long as the emission offsets obtained represent reasonable progress toward attainment, they will be acceptable. It is the reviewing authority's responsibility to assure that the emission offsets will be as effective as proposed by the source. An internal emission offset will be considered enforceable if it is made a SIP requirement by inclusion as a condition of the new source permit and the permit is forwarded to the appropriate EPA Regional Office.¹⁰ An external emission offset will not be

¹⁰The emission offset will, therefore, be enforceable by EPA under section 113 as an applicable SIP requirement and will be enforceable by private parties under section 304 as an emission limitation.

enforceable unless the affected source(s) providing the emission reductions is subject to a new SIP requirement to ensure that its emissions will be reduced by a specified amount in a specified time. Thus, if the source(s) providing the emission reductions does not obtain the necessary reduction, it will be in violation of a SIP requirement and subject to enforcement action by EPA, the State and/or private parties.

The form of the SIP revision may be a State or local regulation, operating permit condition, consent or enforcement order, or any other mechanism available to the State that is enforceable under the Clean Air Act. If a SIP revision is required, the public hearing on the revision may be substituted for the normal public comment procedure required for all major sources under 40 CFR 51.18. The formal publication of the SIP revision approval in the FEDERAL REGISTER need not appear before the source may proceed with construction. To minimize uncertainty that may be caused by these procedures, EPA will, if requested by the State, propose a SIP revision for public comment in the FEDERAL REGISTER concurrently with the State public hearing process. Of course, any major change in the final permit/SIP revision submitted by the State may require a reproposal by EPA.

B. *State or community initiated emission offsets.* A State or community which desires that a source locate in its area may commit to reducing emissions from existing sources (including mobile sources) to sufficiently outweigh the impact of the new source and thus open the way for the new source. As with source-initiated emission offsets, the commitment must be something more than one-for-one. This commitment must be submitted as a SIP revision by the State.

VI. POLICY WHERE ATTAINMENT DATES HAVE NOT PASSED

In some cases, the dates for attainment of primary standards specified in the SIP under section 110 have not yet passed due to a delay in the promulgation of a plan under this section of the Act. In addition the Act provides more flexibility with respect to the dates for attainment of secondary NAAQS than for primary standards. Rather than setting specific deadlines, section 110 requires secondary NAAQS to be achieved within a "reasonable time". Therefore, in some cases, the date for attainment of secondary standards specified in the SIP under section 110 may also not yet have passed. In such cases, a new source locating in an area designated in 40 CFR 81.3000 *et seq.* as nonattainment (or, where Section III of this Ruling is applicable, a new source which would cause or contribute to an NAAQS violation) may be exempt from the Conditions of Section IV. A.

so long as the new source meets the applicable SIP emissions limitations and will not interfere with the attainment date specified in the SIP under section 110 of the Act.

(Secs. 101(b)(1), 110, 160-169, 171-178, and 301(a), Clean Air Act, as amended (42 U.S.C. 7401(b)(1), 7410, 7470-7479, 7501-7508, and 7601(a)); sec. 129(a), Clean Air Act Amendments of 1977 (Pub. L. 95-95, 91 Stat. 685 (Aug., 7, 1977)))

[44 FR 3282, Jan. 16, 1979, as amended at 45 FR 31311, May 13, 1980; 45 FR 52741, Aug. 7, 1980; 45 FR 59879, Sept. 11, 1980; 46 FR 50771, Oct. 14, 1981; 47 FR 27561, June 25, 1982; 49 FR 43210, Oct. 26, 1984; 51 FR 40661, 40675, Nov. 7, 1986; 52 FR 24714, July 1, 1987; 52 FR 29386, Aug. 7, 1987; 54 FR 27285, 27299, June 28, 1989; 57 FR 3946, Feb. 3, 1992]

APPENDIXES T-U [RESERVED]

APPENDIX V TO PART 51—CRITERIA FOR DETERMINING THE COMPLETENESS OF PLAN SUBMISSIONS

1.0. PURPOSE

This appendix V sets forth the minimum criteria for determining whether a State implementation plan submitted for consideration by EPA is an official submission for purposes of review under § 51.103.

1.1 The EPA shall return to the submitting official any plan or revision thereof which fails to meet the criteria set forth in this appendix V, and request corrective action, identifying the component(s) absent or insufficient to perform a review of the submitted plan.

1.2 The EPA shall inform the submitting official whether or not a plan submission meets the requirements of this appendix V within 60 days of EPA's receipt of the submittal, but no later than 6 months after the date by which the State was required to submit the plan or revision. If a completeness determination is not made by 6 months from receipt of a submittal, the submittal shall be deemed complete by operation of law on the date 6 months from receipt. A determination of completeness under this paragraph means that the submission is an official submission for purposes of § 51.103.

2.0. CRITERIA

The following shall be included in plan submissions for review by EPA:

2.1. Administrative Materials

(a) A formal letter of submittal from the Governor or his designee, requesting EPA approval of the plan or revision thereof (hereafter "the plan").

(b) Evidence that the State has adopted the plan in the State code or body of regulations; or issued the permit, order, consent agreement (hereafter "document") in final

form. That evidence shall include the date of adoption or final issuance as well as the effective date of the plan, if different from the adoption/issuance date.

(c) Evidence that the State has the necessary legal authority under State law to adopt and implement the plan.

(d) A copy of the actual regulation, or document submitted for approval and incorporation by reference into the plan, including indication of the changes made to the existing approved plan, where applicable. The submittal shall be a copy of the official State regulation /document signed, stamped, dated by the appropriate State official indicating that it is fully enforceable by the State. The effective date of the regulation/document shall, whenever possible, be indicated in the document itself.

(e) Evidence that the State followed all of the procedural requirements of the State's laws and constitution in conducting and completing the adoption/issuance of the plan.

(f) Evidence that public notice was given of the proposed change consistent with procedures approved by EPA, including the date of publication of such notice.

(g) Certification that public hearings(s) were held in accordance with the information provided in the public notice and the State's laws and constitution, if applicable.

(h) Compilation of public comments and the State's response thereto.

2.2. Technical Support

(a) Identification of all regulated pollutants affected by the plan.

(b) Identification of the locations of affected sources including the EPA attainment/nonattainment designation of the locations and the status of the attainment plan for the affected areas(s).

(c) Quantification of the changes in plan allowable emissions from the affected sources; estimates of changes in current actual emissions from affected sources or, where appropriate, quantification of changes in actual emissions from affected sources through calculations of the differences between certain baseline levels and allowable emissions anticipated as a result of the revision.

(d) The State's demonstration that the national ambient air quality standards, prevention of significant deterioration increments, reasonable further progress demonstration, and visibility, as applicable, are protected if the plan is approved and implemented. For all requests to redesignate an area to attainment for a national primary ambient air quality standard, under section 107 of the Act, a revision must be submitted to provide for the maintenance of the national primary ambient air quality standards for at least 10 years as required by section 175A of the Act.

(e) Modeling information required to support the proposed revision, including input