

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[FRL-____]

Proposed Requirements for Control Technology
Determinations for Major Sources In Accordance with
Clean Air Act (Act) Section 112(g)

AGENCY: Environmental Protection Agency (EPA)

ACTION: Notice of reopening of comment period;
notice of availability of draft rule.

SUMMARY: The EPA is reopening the comment period
for the proposed rule implementing section 112(g) of
the Act and is announcing the availability of a
revised draft of the proposal. Section 112(g)
establishes requirements for owners or operators who
intend to construct, reconstruct, or modify a major
source of hazardous air pollutants (HAP). When no
emission standard has been promulgated under section
112(d) of the Act, determinations concerning such
sources must be made on a case-by-case basis.

Today's notice announces the availability of a
revised draft of the proposed rule which implements
section 112(g)(2)(B) of the Act with respect to
constructed or reconstructed major sources, and

requests comment on the revised draft. The EPA does not intend at this time to issue a rule implementing the provisions of section 112(g) which concern modifications.

DATES: The revised draft of the proposed rule will be available in the public docket and on the EPA electronic bulletin board on the date this notice is signed. Comments concerning this notice or the revised draft rule must be received by EPA on or before [insert date 30 days from date of publication in the Federal Register].

ADDRESSES: The revised draft rule and other information pertaining to the proposed rule are contained in Docket Number A-91-64. The docket is available for public inspection and copying from 8:30 a.m. to 12:00 p.m. and 1:00 p.m. to 3:00 p.m., Monday through Friday, at the EPA's Air Docket Section, Waterside Mall, Room M1500, EPA, 401 M Street, Southwest, Washington, DC 20460. A reasonable fee may be charged for copying. The draft rule is also available on the Office of Air Quality Planning and Standards (OAQPS) electronic

bulletin board, the Technology Transfer Network (TTN), under Clean Air Act, Title III, Recently Signed Rules. For information on how to access the TTN, please call (919) 541-5384 between the hours of 1:00 p.m. and 5:00 p.m. eastern standard time.

Comments concerning this notice or the revised draft rule should be submitted (in duplicate if possible) to: Central Docket Section (6102), EPA, Attn: Air Docket No. A-91-64, Washington, DC 20460.

FOR FURTHER INFORMATION CONTACT: Ms. Gerri Pomerantz, telephone (919) 541-2371, or Ms. Kathy Kaufman, telephone (919) 541-0102, Information Transfer and Program Integration Division (MD-12), OAQPS, EPA, Research Triangle Park, NC, 27711.

SUPPLEMENTARY INFORMATION: The information in this notice is organized as follows:

I. Background and Major Differences between the Proposed Rule and Draft Final Rule

II. Definition of "Construct a Major Source"

III. Review of Applications for a maximum achievable control technology (MACT) Determination

IV. Extensions of Compliance Date for
Subsequent Emission Standards

I. Background and Major Differences between the
Proposed Rule and Draft Final Rule

In designing a program to implement MACT requirements under section 112(g), the EPA is guided by the need to balance several, often competing, goals. Given a complex statutory mandate, the EPA has the difficult task of designing a rule that is simultaneously environmentally protective, maintains consistency across Agency programs, minimizes the administrative burden on sources and States, provides flexibility to sources, and maintains enforceability -- yet is not overly complex. The EPA's task is to create a coherent regulatory whole that strikes the right balance among a broad set of goals.

Section 112(g) is primarily a transitional program designed to operate until MACT standards issued under section 112(d) are in effect for all categories of major sources of HAP. To date, the EPA has issued 17 MACT standards covering 29

categories of major sources of HAP emissions, and has proposed five additional MACT standards covering 18 source categories. The EPA is currently developing all of the MACT standards that are due to be completed in 1997, as well as several of the standards due to be completed in 2000.

The EPA has concluded that the greatest benefits to be derived from section 112(g) would be from the control of major source construction and reconstruction in the period before these MACT standards go into effect. Therefore the EPA has determined that today's draft rule should implement only that portion of section 112(g) which requires new source MACT determinations for constructed and reconstructed major sources, but not that portion which requires existing source MACT determinations for modifications of existing sources. The EPA requests comment on this approach.

Under this approach, sources of toxic air pollution will be controlled at the time of construction or reconstruction, when controls are most cost-effective to install. This is a major

streamlining and simplification step that will focus section 112(g) implementation where it will provide the greatest reduction in emissions to the environment, certainty to the regulated community, and reduce the overall administrative burden on both regulators and the regulated community.

The EPA's decision to implement only the construction and reconstruction provisions of section 112(g) is premised in part on the Agency's ability to issue the remaining MACT standards under section 112(d) in a timely way, and also in part on the assumption that where there are existing State air toxics programs that address modifications, they will continue to operate as they do currently. If there were substantial delays in issuance of MACT standards, or radical changes to existing State programs, increased exposure to emissions from unregulated sources of HAP could occur and threaten public health and the environment. If such delays were to occur, the EPA would reconsider whether to move forward to cover modifications under section 112(g).

The EPA believes that Congress's basic goal in adopting section 112(g) of the Act was to make use of the opportunity for environmental protection that exists when major sources of HAP undergo changes that would lead to significant emission increases. The opportunity to evaluate emission control technologies, or other beneficial ways to bring about environmental improvements, generally exists because the environmental improvements are more efficient when built as part of the initial design.

The EPA also recognizes that it is critical to the success of the program to ensure that its provisions are enforceable and provide the greatest possible incentive for compliance. At the same time, the EPA recognizes the need to minimize administrative delays and grant sources and permitting authorities the flexibility to seek environmentally beneficial alternative means of control.

Finally, the program must be as consistent as possible with other Federal air pollution control programs, and must be simple enough to ensure smooth

implementation. Today's draft rule eliminates much of the complexity inherent in the portion of section 112(g) which covers modifications to existing sources. Among other things, under this simpler approach, it will not be necessary to proceed with development of de minimis emission values or the hazard ranking system necessary to support offset determinations. It will also not be necessary to address the multitude of issues and concerns, raised in the proposed rule, associated with defining the types of operations that would be considered "modifications."

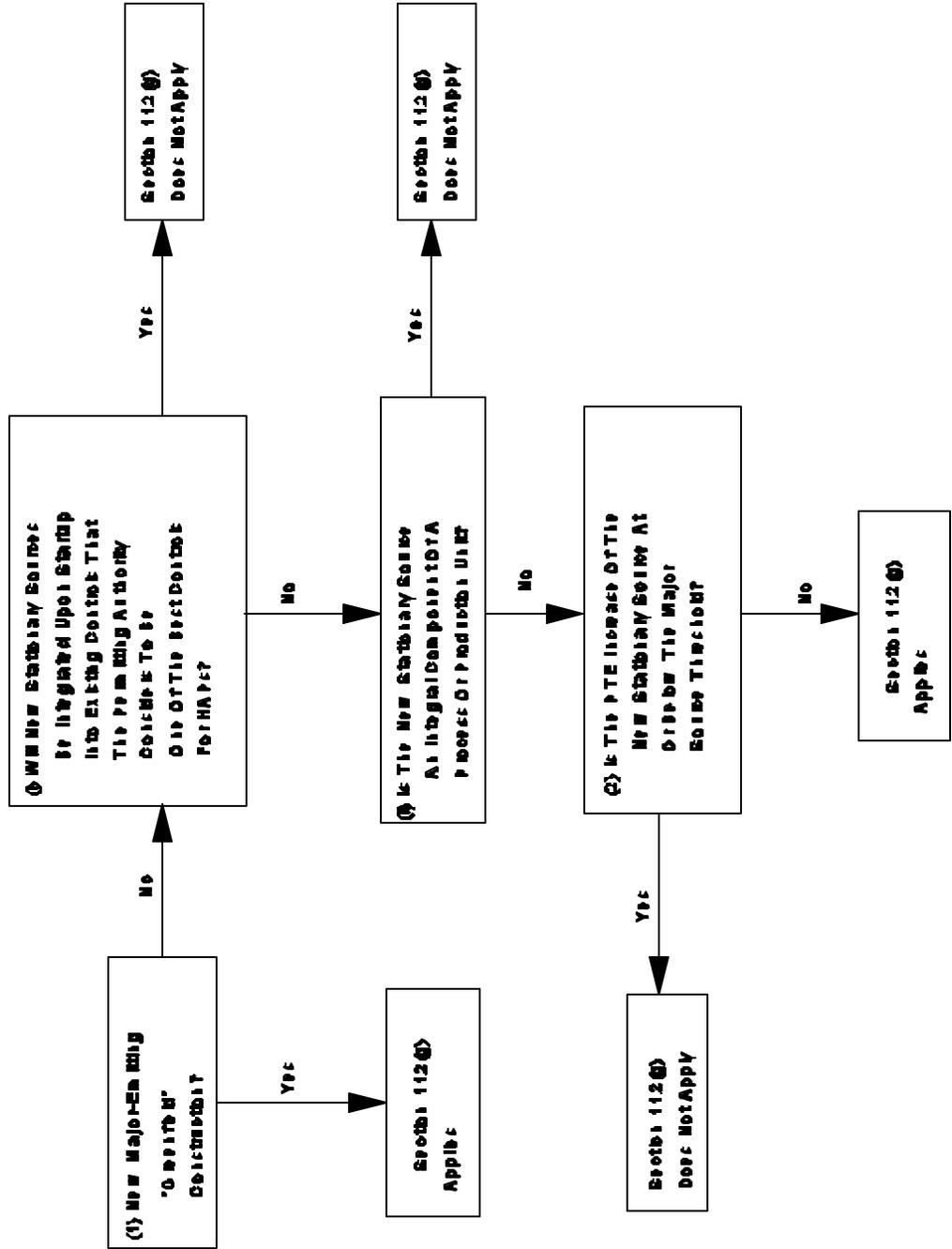
II. Definition of "Construct a Major Source"

Today's draft rule does require additional discussion to clarify the conditions under which a stationary source would require a new source MACT determination; i.e., what criteria must be met for new equipment to be considered construction or reconstruction of a major source. The new equipment which would meet these criteria is referred to as the "affected source." The EPA intends that either a major source constructed on a greenfield site, or

a new major-emitting stationary source with a discrete function at an existing plant site, such as a new discrete process or production unit, should be considered construction of a major source, and thus require a new source MACT determination. The stationary source must also itself be inherently major-emitting; the EPA does not intend that a new process unit causing increased emissions at another unit downstream should be covered by today's draft rule. The EPA requests comment on this overall approach.

Figure (1) illustrates how the definition of "construct a major source" works.

FIGURE 1: CONSTRUCT A MAJOR SOURCE



If the stationary source is constructed on a greenfield site and is major-emitting, then the stationary source is an affected source under section 112(g), and must apply new source MACT. If the stationary source is being constructed at an existing plant site, then several other criteria will determine whether it is to be considered an affected source under section 112(g), and must apply new source MACT.

Box (i) (the box labels refer back to the sections of the "construct a major source" definition in the draft rule) asks: Will the stationary source be controlled by existing emission control equipment which the permitting authority has determined represents one of the best technologies for control of HAP? If a new source can be incorporated into such existing control technology without any reduction in the degree of control of HAP, the new source would not be considered "construction" under section 112(g)(2)(B). The state permitting authority will be responsible for

determining whether these criteria apply, using those procedures it deems most appropriate.

The general purpose of this exclusion from the definition of "construct a major source" is to assure that facilities which have previously installed good control equipment with presently unutilized capacity will not be precluded from fully utilizing such equipment by any marginal differences in control effectiveness between such equipment and that required by new source MACT. Existing controls should be deemed satisfactory only where they are representative of the best technologies presently in use and the addition of new sources to existing control equipment will not impair its overall effectiveness. The rule also explicitly recognizes that some facilities have previously installed such controls to comply with a best available control technology (BACT) determination (that controls the HAP emitted by the stationary source) under the prevention of significant deterioration (PSD) program, a lowest-achievable emission rate (LAER) determination under the new source review (NSR)

program, or a toxics-best available control technology (T-BACT) determination under a State or local air toxics control program. The EPA requests comment on this exclusion.

The EPA notes that the definition of a "green-field site" in the draft rule includes developed sites which do not presently emit major source quantities of HAP. EPA therefore requests comment concerning whether the exclusion for new sources that use existing emission controls should be applied to area sources that are within the definition of a "green-field site."

Box (ii) asks: Is the new stationary source an integral component of a larger process or production unit? If the source is a discrete process unit or production unit as defined in the rule, and emissions from the source exceed the major source threshold, it meets the definition of an "affected source" under section 112(g) and is subject to new source MACT control. The EPA requests comment on this exclusion.

What does it mean to be an integral component of a larger process or production unit? Today's rule defines "integral component of a larger process or production unit" to be a stationary source or group of stationary sources whose function, and the function of the process unit or production unit, are interdependent. In other words, the stationary source is the kind of component upon which the functioning of the process or production unit relies, and vice versa. Equipment which is an integral component of a process or production unit is part of the functioning of the overall process or production unit. Under the proposed definition, equipment which is not an integral component itself comprises a process or production unit.

The EPA acknowledges that there is some room for judgment in determining if a stationary source is an integral component of a larger unit. Each individual determination should be based on answers to the following questions: Is the new stationary source a component critical to the function of the larger process or production unit? Could the

stationary source stand alone as an individually functioning unit if constructed elsewhere? Could the stationary source be reasonably controlled independently of the larger process? Reference documents such as AP-42 ¹ describe examples of different groupings of stationary sources that should be considered to be separately-controlled processes, as well as those stationary sources, contained within such processes, which should be considered integral components. Examples in these reference documents, where relevant, should be used to define a process or production unit.

The following examples should help illustrate where section 112(g) should and should not apply. The EPA requests comment on these examples.

1. An electronics manufacturing facility replaces individual manufacturing equipment such as etching, plating, or photolithography equipment with next generation etching, plating or photolithography equipment. This equipment change would not trigger

¹ U.S. EPA, AP-42, "Compilation of Air Pollutant Emission Factors," 5. ed., January 1995.

section 112(g), because the individual etching or plating or photolithography equipment is the kind of component upon which the functioning of the larger production process relies. Therefore the function of the new stationary source (the new etching, plating, or photolithography equipment) and the larger production process are interdependent.

2. An aluminum reduction plant has several potlines. Each potline consists of many pots, which are controlled using a common dry scrubbing system. The company replaces a few pots on each line. This equipment change would not trigger section 112(g), because the individual pots are the kind of component upon which the functioning of the larger production process relies. Therefore the function of the new stationary source (the new pots) and the larger production process are interdependent.

3. A chemical plant builds a new distillation column, to be added to a series of distillation columns, the emissions from which are collected at the end of the series and vented to a carbon absorber. This equipment change would not trigger

section 112(g), because the individual distillation columns are the kind of component upon which the functioning of the larger production process relies. Therefore the function of the new stationary source (the new distillation column) and the larger production process are interdependent.

4. A composites manufacturer adds additional vacuum and/or in-mold coating capability to an existing mold, in order to improve surface quality. This equipment change would not trigger section 112(g), because the additional components of the mold are the kind of components upon which the functioning of the larger production process relies. Therefore the function of the new stationary source (the new components of the mold) and the larger production process are interdependent.

5. A glass manufacturer adds a new glass furnace and associated process line which will emit HAPs in amounts above the major source threshold. This is an example of a stationary source which is not an integral component of a process or production unit, because it is itself a production or process

unit. Therefore the new furnace meets the definition of "affected source" under section 112(g) and should be controlled with new source MACT.

6. A composites manufacturer adds a new large molding line which will emit HAPs in amounts above the major source threshold. This is an example of a stationary source which is not an integral component of a process or production unit, because the molding line is itself a separately functioning process unit. Therefore the molding line meets the definition of "affected source" under section 112(g) and should be controlled with new source MACT.

7. An auto parts manufacturer adds a new automobile surface coating line (i.e., from body shop to trim shop) which will emit HAP in amounts above the major source threshold. This is an example of a stationary source which is not an integral component of a process or production unit, because the line is itself a separately functioning process unit, as described in AP-42. Therefore the coating line meets the definition of "affected source" under

section 112(g) and should be controlled with new source MACT.

8. An existing chemical plant builds a new nitric acid plant onsite which will emit HAPs in amounts above the major source threshold. This is an example of a stationary source or group of stationary sources which is not an integral component of a process or production unit. Therefore the nitric acid plant meets the definition of "affected source" under section 112(g) and should be controlled with new source MACT.

9. A manufacturer replaces an entire process which is similar to an entire process as it is described in AP-42. This is an example of a stationary source or group of stationary sources which is not an integral component of a process or production unit. Therefore the process meets the definition of "affected source" under section 112(g) and should be controlled with new source MACT, provided that it will emit HAPs in amounts above the major source threshold.

III. Review of Applications for a MACT
Determination

Today's draft rule contains three options for preconstruction review procedures for constructed and reconstructed major sources. The permitting authority has discretion to prescribe those procedures to be used in making a case-by-case MACT determination for constructed or reconstructed major sources (except that the owner or operator of the source may elect to use the part 70 or part 71 permitting process). The proposed rule allowed use of either the part 70 or 71 permitting process or a process, described in the proposed rule and in today's draft rule, culminating in issuance of a "Notice of MACT Approval." Today's draft rule adds one more option, designed to provide flexibility to the permitting authority and the source. Proposed section 63.43(c)(2)(ii) provides that if a permitting authority establishes, or has already established, preconstruction review procedures for sources to follow, then these procedures may be used in lieu of any procedures prescribed by today's

draft rule. The permitting authority's prescribed procedures may have been developed for other purposes beyond implementation of section 112(g), so long as they provide for public participation in the case-by-case MACT determination and ensure that a final MACT determination will be made prior to construction or reconstruction. The draft rule also provides that a final case-by-case MACT determination issued pursuant to any of these procedures will be deemed federally enforceable. The permitting authority need not obtain delegation under 40 CFR Part 63 subpart E in order to adopt its own review procedures for a case-by-case MACT determination. The EPA requests comment on this new provision.

The EPA also requests comment specifically on the presumption, in section 63.43(d)(iv), that the constructed or reconstructed major source should comply with the emission limitation set out in a relevant proposed MACT standard or presumptive MACT determination made by the EPA. The EPA believes that sources would be well-advised to comply with

such emission limitations, as those limitations would be most likely to be consistent with the requirements of the eventual MACT standard.

IV. Extensions of Compliance Date for Subsequent Emission Standards

The EPA anticipates that new source MACT requirements adopted with respect to construction or reconstruction of a particular source under section 112(g)(2)(B) will normally be at least as stringent as any subsequent requirements for existing sources adopted as part of a MACT standard issued under section 112(d). However, should a subsequently promulgated MACT standard impose more stringent requirements, EPA believes that it may be appropriate in some instances for EPA to establish a later compliance date for those sources which have acted in reliance on a prior case-by-case MACT determination. The draft rule expressly provides that EPA may establish separate compliance dates for facilities which have notified EPA of such determinations in a timely manner. Specifically, EPA may establish, in the MACT standard, a later

compliance date for those sources which have installed controls pursuant to section 112(g), and have provided the EPA with data on their section 112(g) control determination by the end of the public comment period on the subsequent Federal standard. The EPA requests comment on this approach, and on whether such sources should be required to inform EPA, before proposal of the subsequent MACT standard, that they have installed section 112(g) controls.

In those instances where the subsequent MACT standard does not establish a compliance date for sources subject to a prior case-by-case MACT determination, the present draft rule retains the provision from the original proposal authorizing the permitting authority to grant up to eight years of additional time for the affected source to comply with the subsequent MACT standard. The EPA has previously explained that the structure of section 112 as a whole supports such a construction of section 112(g), and a source may also be afforded up to 8 years to comply with a MACT standard in

instances where a prior emission limitation has been established by permit under section 112(j). The EPA requests comment on these provisions and this interpretation.