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# Questions and Answers about the Early Reductions Program

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Regulations have been proposed governing compliance extensions for early reductions of Hazardous Air Pollutants (HAPs). The regulations allow a six year MACT standard compliance extension for sources that achieve HAP reductions of 90% (95% for particulates) from a base year of 1987 (or more recent base year). This document is a compilation of questions and answers about the early reductions program, and is intended to assist companies interested in participating in the program and to assist Regulatory agencies responsible for implementing the program.

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Air

EPA

# Questions and Answers About the Early Reductions Program

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# QUESTIONS & ANSWERS ABOUT THE EARLY REDUCTIONS PROGRAM

Emission Standards Division (MD-13)
U.S. Environmental Protection Agency
Research Triangle Park, North Carolina 27711

January 1992

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## PURPOSE OF THIS MANUAL

This manual has been produced to assist companies who are interested in participating in the Early Reductions Program, and to assist regulatory agencies who are involved with the implementation of the program. The manual contains questions and answers pertaining to the program that have been compiled by the EPA Early Reductions team.

As part of the outreach program to support the early reductions rule, EPA has been conducting workshops for various groups throughout the country. In addition, EPA has been meeting with interested parties to discuss the regulations. Meetings have been held with State and local regulatory agencies, industrial trade associations, and individual companies. The questions and answers in this manual were generated during these workshops and meetings.

The answers provided in this document are not necessarily EPA's final position. At the time this document was prepared, neither the early reductions regulations nor the Title V permitting regulations had been promulgated. A final question and answer document will be published shortly after promulgation of the early reductions regulation.

As indicated in the table of contents, questions and answers in this document are organized into ten topic groups. Within each topic area, all relevant questions and answers are included. Some questions and answers are relevant to more than one topic area and are, therefore, duplicated in each appropriate section. Questions and answers that have been duplicated are followed by a bracketed key [ ] indicating the section where the duplicated question and answer is found.

As an added aid to the reader, a detailed index has also been included at the end of the document. Questions and answers can be located using the key words in the index. For example, if the reader is interested in EPA's position on "shutdowns," all questions and answers related to that topic are listed by number in the index.

## SECTION A - ADMINISTRATIVE / GENERAL

A1. When will there be public comment/public review for early reductions? [TIMING]

Public review will take place at two points in the Early Reductions Program. First, the public will have a chance to review enforceable commitments and base year emissions that are submitted for early review. Second, there will be a public comment period for permit applications.

A2. What are the components of public review? [TIMING]

With respect to enforceable commitments, the components of public review are outlined under section 63.76 of the proposed rule. For permit applications, including the demonstration of early reductions, the components of public review are outlined in the permit regulations.

In summary, the components of public review for enforceable commitments are as follows. Once EPA has determined that the base year emissions are approvable, a notice providing the aggregate base year emissions will be published by advertisement in the area affected. The advertisement will explain that the base year emissions are being proposed for approval and note the availability of additional nonconfidential information contained in the enforceable commitment. A 30 day public comment period will be provided, with an opportunity to extend it to 60 days and/or hold a public hearing upon request by an interested party. In the event that adverse comments are received, the reviewing agency has the authority to determine which, if any, public comments need to be addressed for the base year emissions to be approved. For those comments that need to be addressed, the Agency will work with the applicant to make revisions.

A3. How do facilities appeal decisions made under this program?

Since decisions under the Early Reductions Program are not judicially reviewable, there is not a formal appeals process for decisions regarding base year emissions data. Appeals concerning demonstration of early reductions will be handled according to procedures outlined in the

permitting regulations (Part 70 or Part 71, whichever is applicable).

Although there is not an appeals process for base year emissions data, the review process for base year emissions is designed to allow input from all interested parties in order to reach agreement regarding the approvability of emissions data. The State, Region, EPA Headquarters review team, and the public will review the base year emissions. The reviewing agency will determine which comments, if any, need to be addressed by the applicant and the applicant will be given an opportunity to revise and resubmit the emission data. The EPA, however, will not accept poor quality base year emissions data. In the case of disagreements regarding base year emissions, the decision of the reviewing authority will be final.

A4. Does the submittal date refer to the date a submittal is postmarked or to the date it is received by EPA? [TIMING]

The submittal date refers to the date the submittal is postmarked.

A5. Does the proposal date refer to the date a proposed regulation is signed by the Administrator or to the date it is published in the Federal Register? [TIMING]

The proposal date refers to the date the rule is published in the Federal Register.

A6. Who pays for the local advertisement and the announcement in the Federal Register?

The EPA headquarters will pay for announcements in the Federal Register. The reviewing agency will pay for the notification in local publications.

A7. If a source violates the alternative emission limitation, is the compliance extension revoked?

No. The source is simply in violation of its permit condition and will be treated in the same manner as any other permit violation.

A8. Will there be any annual or quarterly reporting requirements in this program to demonstrate that 90(95) percent is maintained?

The reviewing agency will establish the alternative emission limitations for the source reflecting the control which qualified the source for a compliance extension. Since the control method will vary in each situation, the monitoring and reporting requirements will be determined on an individual basis. All such requirements will be described in the permit.

A9. When a submittal is made that contains confidential information, should the submittal be made in duplicate with one copy containing the confidential information and the other having no confidential information?

The Agency does not require that two separate copies be sent, but it would be convenient to have the confidential information separated in the submittal. A notice published in the Federal Register (56 FR 7042, February 21, 1991) details EPA's procedures for handling confidential information.

A10. Define the "responsible official" who commits to the early reduction. Can this be a plant manager? If he has written delegated authority?

Yes, the "responsible official" can be a plant manager. The definition of "responsible official" given in the proposed regulation states that a responsible official may be "the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25 million (in second quarter 1990 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures..."

A11. What are the chances that compounds will be added or deleted from the list of 190?

As new information becomes available, compounds may be added. It is unlikely that there will be frequent changes to the list.

A12. What advantages, if any, would a HAP area source (i.e. non-major HAP source) have by participating in the Early Reductions Program. [SOURCE]

The Early Reductions Program allows a six-year compliance extension for any 112(d) standard. Section

112(d) standards are not limited to major sources, and standards for area sources may be published. Therefore, any source, major or area, that is covered by a 112(d) standard may be granted an extension from compliance. In addition, the definition of a major source may change if lesser quantity cutoffs (LQC) are established. The LQC's can cause an area source to become a major source.

A13. I am considering getting into the program. Is there a vehicle for exchanging emission control technology within my industry?

The EPA maintains a Control Technology Center (CTC) that may be helpful to facilities considering participation in the Early Reductions Program. The toll free number for the CTC is (919)-541-0800.

A14. For an R&D Facility, what are the regulatory incentives for entering the early reduction program?

Title III of the Clean Air Act Amendments recognizes research facilities as a separate source category. The EPA may promulgate standards for research facilities and, therefore, a compliance extension for an applicable 112(d) standard could be obtained by entering the Early Reductions Program.

A15. In meeting the significance threshold for a source, should base year emissions be expressed as metric tons or U.S. tons?

The unit "ton" in the regulation refers to U.S. tons, or 2,000 pounds.

## SECTION B - SOURCE

B1. When is a single emission point a source for purposes of the Early Reductions Program?

> A single emission point is a source if it is a building, structure, facility, or installation; or if it emits more than 10 tons per year (TPY) of HAP (or 5 TPY of HAP at a facility that emits 25 TPY or less of HAP).

B2. If a contiguous facility leases a portion of the facility to another operator, can the host facility take credit for emission reductions which occur in the leased portion of the facility?

> No. The host facility is not responsible for emissions from the leased portion and may not take credit for any emission reduction achieved by the leased portion. The leased portion is not included as part of the contiguous facility because it is not under "common ownership or control." The operator of the leased portion must apply separately for an extension under the Early Reductions Program.

B3. If a portion of a contiguous facility is owned jointly between the owner/operator of the entire facility and another entity (i.e., a joint venture), can the host facility take credit for HAP reductions in the jointly owned portion of the facility?

> Only if the host facility has control of emissions. If the host facility does not have complete control over emissions, then the portion of the facility under joint ownership must apply separately for an extension.

B4. Within a contiguous facility, can a company define multiple sources with different base years for individual sources?

> Yes. Facilities may choose to define multiple sources within a facility. Each source may have its own base year as long as each source meets the criteria established by the early reductions rule. However, within a defined source the base year must be the same for all emission points.

B5. If a corporate research facility is located at the same site as the production facility, must it be included in the "contiguous facility" definition of source?

A research facility on the plant site is included as part of the contiguous area under common ownership or control. The research facility, however, does not have to be included as part of the source as defined for the Early Reductions Program. The early reductions definition of source is flexible and allows any combination of emission points that meet the significance criteria. Therefore, an owner/operator does not have to include research operations in the early reductions source.

B6. Can sources include emission points that have been eliminated due to shutdown of a certain unit or portions of a contiguous facility? [EXPANSIONS]

Yes. If the emission point was operating in the base year chosen and will continue to remain unoperational throughout the six-year extension period, the emission reduction resulting from the shut down may be included in the demonstration of early reduction. A requirement for that point or set of points to remain shut down will be included as an operating condition in the issued permit. In addition, reduced operating hours can be a valid means of reducing emissions, if made a permit condition. However, if the shutdown unit is replaced by equipment elsewhere in the contiguous facility or production hours are increased elsewhere at the facility to compensate for the reduced operating hours of the defined source, the HAP emissions from these emission points are considered part of the source and must be included in the demonstration. Additionally, if the owner or operator wishes to restart the shutdown portion of the facility or increase operating hours during the extension period, the owner or operator must maintain the 90 (95) percent reduction of HAP within the early reductions source and would have to make compensating reductions in HAP emissions to offset any HAP emissions from the restarted unit or increased operation.

B7. Suppose a refinery and bulk terminal are located on contiguous property but have different SIC codes and, therefore, may have different regulatory schedules under section 112(d) of the Act. In such an example, do the requirements needed for participation in the Early Reductions Program have to be met prior to proposal of a 112(d) standard for either source category?

Yes, As described in Section 63.81 of the proposed rule, if parts of an Early Reductions Source are subject to different 112(d) standards, the requirements for an extension must be met prior to

the proposal of the first applicable 112(d) standard. Alternatively, the facility could define two sources and make separate submittals prior to proposal of the applicable 112(d) standard.

B8. If the early reductions source is defined as the entire plant site and an additional process unit is added after proposal of a 112(d) standard, is the additional process unit considered a "new source" versus an existing source and, thus, not eligible for the Early Reductions Program?

Since the early reductions source is the entire contiguous facility, the process unit addition is considered part of the early reductions source. If such a unit is added, sufficient HAP reductions must be made at the contiguous facility to maintain the 90(95) percent reduction from base year emissions.

B9. If a process unit is within an early reductions source, and sometime during the six-year extension period the company wants to expand or modify the process unit, may the source be redefined to exclude the process unit as long as the 90(95) percent reduction of the remaining part of the early reductions source is still maintained? [EXPANSIONS]

No. Once a source is defined for the Early Reductions Program and alternative emission limitations are granted in the permit, the source may not be redefined.

In the situation described, the owner/operator may make the expansion/modification if offsetting emission reductions can be made within the early reductions source to maintain the overall 90(95) percent reduction.

B10. How will the source definition in the Early Reductions Program correspond to the source definition for establishing a 112(d) standard? [MACT]

The "source" for each particular 112(d) standard will be determined in that rulemaking. The definition of source in Section 63.73 of the proposed Early Reductions Rule encompasses the range of definitions that may be adopted in 112(d) standards.

B11. Can marine loading/unloading operations be included in the sources?

Yes. As long as the marine loading/unloading operations are part of the contiguous facility under common ownership or control.

B12. Can we define a source to include a barge loading and unloading terminal located on non-contiguous property approximately 5 miles from the main facility?

No. The "source" for purposes of the Early Reductions Program may be part or all of the HAP emission points from a "contiguous area under common control or ownership," but may not be an aggregation of emission points from non-contiguous properties. The terminal could be defined as a source by itself.

B13. If an owner or operator has defined a source (e.g., including all the emission points from production of chemical X), can any of the same emission points be included in another demonstration of early reductions for some other defined source within the facility?

No. If a facility has identified a group of emission points as a source for the Early Reductions Program, none of those emission points can be used in another early reductions source.

B14. What advantages, if any, would a HAP area source (i.e. non major HAP source) have by participating in the Early Reductions Program. [ADMIN]

The Early Reductions Program allows a six-year compliance extension for any 112(d) standard. Section 112(d) standards are not limited to major sources, and standards for area sources may be promulgated. Therefore, any source, major or area, that is covered by a 112(d) standard may be granted an extension from compliance. In addition, the definition of a major source may change if lesser quantity cutoffs (LQC) are established. The LQC's can cause an area source to become a major source.

B15. If a facility submits an enforceable commitment in November 1991 with a control plan to add an incinerator on Stream A, then later in November 1992 realizes that an incinerator on Stream B would get the same percent reduction with less cost, but Stream B is not part of the definition of source, can Stream B be substituted for Stream A?

No. In general, once an enforceable commitment is submitted, the definition of source should remain constant throughout the Early Reductions Program. In this case, Stream B could be substituted for Stream A only prior to proposal of a Section 112(d) standard applicable to the early reductions source. If a 112(d) standard has been proposed,

Stream B could not be added to the source definition. In addition, if an enforceable commitment is submitted prior to the promulgation of the early reductions rule, the definition of source can be changed in response to changes in the rule from the proposed version.

As an additional note, if Stream A and Stream B were included in the definition of source and the control plan indicated that the incinerator would be added to Stream A, the source may change the control plan and put the incinerator on Stream B. The control plan outlined in the enforceable commitment is not binding or enforceable. The control plan is simply a general plan provided to the permitting authority to indicate that the facility is serious about the commitment and has considered possible emission reduction techniques to reduce emissions by the necessary 90(95) percent.

B16. If a facility makes emission reductions on some equipment, can other uncontrolled equipment be included in the source definition to delay controls on this other equipment?

Yes, if the source meets the requirement for an overall emission reduction of 90(95) percent.

B17. If part of my wastewater emissions are greater than 10 tons per year (eg., pond emissions), can I exclude the rest of the wastewater emissions, such as those from the collection system, from my early reductions source definition? If so, what are the implications?

It is possible to identify part of the wastewater system as an early reductions source. However, the part not included in the early reductions source will be subject to 112(d) standards. In addition, reductions from a wastewater system will most likely be related to reductions at the point of generation of the wastewater. It is anticipated that the wastewater portion of the 112(d) standard covering the chemical industry will define "source" for wastewater systems as the point of generation. Therefore, including individual wastewater components as part of an early reductions source will probably not result in a compliance extension for the entire wastewater system unless reductions are demonstrated at the point of generation.

B18. Is there a de minimis level of a HAP in a source that does not have to be measured? (Example: in the distillation of methyl methacrylate [MAA], 99.99% of emissions are probably MMA, but hydroquinone is used as an inhibitor at 10 to 100 ppmw and it is not volatile. Would I have to measure for hydroquinone?)

There is no established de minimis level for measurement of HAP. All HAP emissions must be accounted for if they are expected or known to be emitted.
If calculations based on engineering principles, emission factors, or material balances can be used to show that the mass rate of the hydroquinone is insignificant compared to the total rate of HAP emissions from the source, then source testing for hydroquinone is not required.

B19. Must all HAP be included in the determination of 90(95) percent reduction (i.e., can you single out a portion of the HAP at a given source)? For example, a source will require two control technologies to reduce mercury, toluene, and formaldehyde emissions. The company wants to install the 112(d) controls for mercury but reduce early the toluene and formaldehyde and get an extension for the toluene and formaldehyde 112(d) standards. Is this possible, or must the reduction be 90 percent actual weighted average for all HAP at the source?

A 90(95) percent reduction must be obtained counting all HAP emitted by the early reductions source, but you may be able to define the early reductions source such that it does not include the mercury emission points.

B20. If an entire facility is included in the early reductions definition of source or sources, does the early reductions permit, in effect, become the HAP "Title V" permit for the facility? [BASE YEAR]

Yes, the Early Reductions Program is administered through the Title V permitting program. A permit issued for an early reductions source is, therefore, a Title V permit. The early reductions permit application must include all requirements applicable to the early reductions source such as those from other sections of the Clean Air Act.

An exception to this is that if the State does not have an approved Title V permitting program and the EPA Regional Office, therefore, is the permitting authority which will receive the early reductions permit application, then the owner/operator may submit a permit application just for the early reductions demonstration. In this case, the permit application for other Clean Air Act requirements would be submitted later to the State, after approval of the State's permitting program under Title V.

## SECTION C - BASE YEAR EMISSIONS

C1. Must the same base year be used for all emission points within a source?

Yes, the base year must be the same for all emission points within a defined source. However, test data for different years can be used to support emission levels. For example, if test data for various emission points within the source are available from different years, the applicant may be able to use the data to establish emissions for a single base year, if the applicant can show that the data also represent emission levels for the base year, or make adjustments to the data (such as for production rate differences between the test year and the base year) so that it represents base year conditions.

C2. Are Toxic Release Inventory (TRI) submissions acceptable as base year emissions?

In general, TRI data alone are not sufficient to support base year emissions. The early reductions rule requires more rigorous support for emissions data than is required by TRI. If the data submitted to TRI has supporting data that meets all the requirements of the Early Reductions Program, then it is acceptable, as long as the supporting data is provided in the early reductions submittal.

C3. Do all emissions within permit levels qualify as not artificially or substantially higher emissions?

No. The source owner/operator must provide actual data demonstrating that the base year emissions were not artificially high. Permit levels are maximum limits and often do not reflect actual emissions.

C4. What is the base year if the source is constructed and begins operation just prior to proposal of a 112(d) standard?

The Early Reductions Program was not intended for sources that are built just prior to proposal of an applicable 112(d) standard and in most cases it will not be possible for such sources to participate. First, the regulations require that actual and verifiable base year emissions be

C8. How do you measure base year emissions if you are currently in a startup mode and will not have a full year of operation until 1992?

It would be difficult to use 1991 as a base year because emissions from the startup period would probably not be representative of a full year of operation. In this situation, 1992 would have to be the base year.

C9. Can emission reductions for emissions not in compliance with permit levels be credited toward the 90(95) percent reduction? For example, in 1987, a facility submitted data to the Toxic Release Inventory (TRI) based on existing permits and calculations. In 1988, the measured emissions were higher than those allowed by the permit. In 1988-89, the facility paid penalties for higher emissions, installed equipment and lowered emissions. Can this reduction be counted toward the Early Reductions Program?

No, if an emission is considered routine, it must be in compliance with all applicable regulations to be acceptable as a base year emission. Emissions in excess of permitted levels cannot be credited toward early reductions. However, the amount of reduction below original permitted levels can be counted.

C10. How will non-routine or upset emissions such as safety releases or start-up/shutdown emissions be considered in the base year and post-reduction rate?

The Early Reductions Program is for routine HAP emissions. The definition of routine does not include emissions associated with a malfunction, including startup and shutdown emissions. If startup/shutdowns are regularly scheduled during the year such as for routine maintenance, then these emissions could be included. States and EPA will work with facilities on a case-by-case basis on classifying emissions.

C11. Should accidental releases be included in base year and post-reduction emissions or only routine emissions?

The intent of the Early Reductions Program is to reduce routine HAP emissions from sources. The definition of actual emissions states that it "does not include excess emissions from a malfunction." Base year and post-reduction emissions that include "abnormally high emissions such as could be caused by equipment malfunctions, accidents,..." are considered artificially or substantially greater emissions and are not acceptable for the Early Reductions Program. There are some situations where standards have been written for what may be considered accidental releases. If malfunctions are preventable, it may be possible to consider them not accidental. The State and EPA will work with facilities on a case-by-case basis if there is some question as to whether a particular emission is considered accidental or routine. The facility must keep in mind that if an emission is considered routine it must be in compliance with all applicable regulations to be acceptable as a base year emission.

C12. The Early Reductions Program indicates that emissions exceeding permitted limits are not to be included in base year emissions. What about a situation where emission points in a plant are presently not subject to any regulatory requirements? Can these be included in the base year for early reductions?

Yes, as long as the emissions are actual and verifiable, can be satisfactorily documented, and are within all regulatory requirements that are applicable to those emission points.

C13. Prior to expanding our plant, we took measures to significantly reduce emissions. Expansion of the plant resulted in a new operating permit. Can we still take credit for the emission reductions we achieved prior to being issued the new operating permit?

Yes. To qualify for a compliance extension a source must demonstrate that it has reduced HAP emissions by 90 (95) percent from base year emission levels. Therefore, credit will be given for the control measures taken before plant expansion, as long as these reductions were achieved after the chosen base year. It should be noted that any emission increases resulting from expansion must be included in the post-reduction emission.

C14. To be acceptable, do the base year emissions (1987 or later) have to have been submitted on a State inventory?

No. Base year emissions will be accepted on the merit of supporting information submitted.

C15. A facility is permitted to emit up to 100 tons/year of a HAP. However, from 1987 through 1991 the facility has been operating at 50 percent of capacity, or 50 tons/year. The 50 tons has been reported in the TRI. Is the base year for the early reductions production program 100 or 50 tons?

Base year emissions for the Early Reductions Program are based on actual, not permitted levels of emissions. If the 50 tons/year can be demonstrated according to the criteria in the regulation and is not artificially or substantially higher than emissions in other years, the base year would be 50 tons/year, not 100.

C16. Can more than one base year be used for two or more sources on the same site using the enforceable commitment approach? For example, in 1987 only a portion of the plant was operating and a couple of years later, the rest of the plant started up.

For a single source, only one base year may be used. Facilities can define more than one source, and use a different base year for each specific source.

C17. May an emission source that was not previously documented be included in base year data?

Yes. Base year emissions will be accepted on the merit of supporting information submitted.

C18. What if volatile organic compound (VOC) data are on file with the Administrator? Can it be used to establish a 1985 or 1986 base year?

No, the information must be specifically for HAP emitted by the source, not VOC, in order to qualify a source to use 1985 or 1986 as a base year.

C19. If you have no test data, what are the chances of your early commitment being approved?

Base year and post-reduction emissions must be actual and verifiable. The program rules, as proposed, establish the

presumption that source test data are the best estimates for emissions. However, testing may not be required in a number of circumstances. It depends on the character of the emission points included in the defined source. The EPA recognizes that source testing is not always the best method for establishing base year emissions. Specific situations for which calculations may be accepted in lieu of testing are provided in the proposed rule.

C20. Can an existing State permit program (not yet under Title V) be used to document prior emission reductions?

If emission reductions have been properly documented, they could be acceptable for the Early Reductions Program. The documentation required of a source under the Early Reductions Program is the same regardless of whether the source's emissions are covered in a State permit. All reductions must be actual and verifiable, and are subject to the review process, including public review.

C21. What action needs to be taken if the base year emissions data conflict with data previously submitted to the Toxic Release Inventory (TRI)?

The Early Reductions Program requires more rigorous support for base year emissions than is required by TRI. It is possible that the process of more rigorously determining emission data will result in emissions data different from what was reported to TRI. In most instances, it will not be possible for the reviewing agency to compare these data because TRI data is reported for the entire facility, whereas the early reductions application will likely include only a portion of the facility. If the facility realizes that emissions are different than those reported under TRI, the facility should submit a modification to the TRI data.

C22. If the base year chosen has one-half year of reductions on a point source, can the "full year" uncontrolled amount be used as a base?

The actual emissions in the base year must be used. If half the year represents control, that must be used. A source cannot prorate uncontrolled emissions from part of a year to the entire base year unless that represents actual emissions.

C23. If data for 1985 were submitted to EPA in response to a request under section 114 of the Clean Air Act, and later test data showed emissions to be greater than were previously estimated, can the test data be used in lieu of the 114 data to establish 1985 as a base year?

No, only data submitted as part of the 114 request can be used to establish 1985 as a base year. If the data in the 114 response has been superseded by later data, then 1985 could not be used as the base year.

C24. A State Air Permit in 1987 stated point source emissions of:

Toluene - 10 TPY
Acetone - 8 TPY

Source test measurements in 1988 revealed that actual emissions were:

Toluene = 25 TPY
Acetone = 4 TPY
MeOH = 100 TPY

Controls then were added to bring emissions to:

Toluene = 10 TPY (-15)
Acetone = 3 TPY (-1)
MeOH = 2 TPY (-98)

Can 1988 be claimed as the base year and the 114 TPY reduction claimed as part of 90% reduction?

The owner or operator has the freedom to choose 1987 or any later year as the base year. Therefore, 1988 can be chosen as the base year. Additional supporting information is required to determine whether or not all of the 114 TPY reduction could count under the Early Reductions Program. In addition to being actual and verifiable, the base year emissions must reflect compliance with all existing regulatory requirements. If the actual emissions measured in 1988 were within permitted levels and in compliance with all state and local requirements, then it is possible that the entire 114 TPY reduction will qualify. If, however, the actual emissions in 1988 exceeded regulatory requirements, any emissions in excess of permitted levels cannot be counted as 1988 base year emissions.

It is also worth noting that the source is not limited to choosing 1988 as the base year simply because the emission measurements were conducted in 1988. The 1988 data could be used to extrapolate back to 1987, allowing for changes in production and other factors that affect emissions.

C25. Reference has been made to controlling continuous releases. Can controls placed on start-up emissions be counted toward early reductions?

Example: A refinery has an incinerator to control emissions. However during start-ups, emissions are vented through a water scrubber because start-ups have a large volume of emissions unsuitable for the current incinerator.

Yes, if the emissions are considered routine and can be documented, then reductions in these emissions can be credited.

C26. Do base year emissions submitted for early approval need to be resubmitted during application? [PERMITS]

The complete Title V permit application will include base year and post-reduction emission estimates. Therefore, the permit application for early reductions should either contain another copy of the previously submitted enforceable commitment (or base year) or make reference to the previously submitted enforceable commitment or base year already on file at the permitting authority's office.

C27. How do you evaluate "actual emissions" for a production facility which produces two or three different products? Production time per year for each product depends upon market demand and could vary from no production of a "product" to year-long production of another. How do I participate and maintain operational flexibility on product mix?

Under the Early Reductions Program you are required to establish "actual and verifiable" base year emissions that are not "artificially or substantially" greater than other years before control is employed. Within these parameters it is possible to establish base year and post-reduction emissions even for sources that have a variable nature. Nonetheless, once a source's base year emissions are established, the source must achieve and <u>maintain</u> a 90(95) percent reduction to qualify for a compliance extension. This effectively places a cap on a sources's post-reduction

emissions until a compliance extension expires, which may in turn restrict a highly-variable source's production flexibility.

C28. If an entire facility is included in the early reductions definition of source or sources, does the early reductions permit, in effect, become the HAP "Title V" permit for the facility? [SOURCE]

Yes, the Early Reductions Program is administered through the Title V permitting program. A permit issued for an early reductions source is, therefore, a Title V permit. The early reduction permit application must include all requirements applicable to the early reductions source such as those from other sections of the Clean Air Act.

An exception to this is that if the State does not have an approved Title V permitting program and the EPA Regional Office, therefore, is the permitting authority which will receive the early reductions permit application, then the owner/operator may submit a permit application just for the early reductions demonstration. In this case, the permit application for other Clean Air Act requirements would be submitted later to the State, after approval of the State's permitting program under Title V.

C29. Is submittal of unacceptable base year emission data the only basis for denying an enforceable commitment? [EC]

No. However, the base year emission data are the primary basis for denial or acceptance. In addition to acceptable base year data, the enforceable commitment must satisfy all of the requirements listed under §63.75 of the regulation. This includes a signed commitment that satisfies the requirements and also a general control plan. The base year emissions are the most critical data provided. Hence, most denials will be based on some deficiency in establishing base year emissions.

C30. In determining base year emissions, must all wastewater streams be accounted for?

Wastewater streams must only be accounted for if the source defined for the Early Reductions Program includes the wastewater system. (Also see answer to B17)

C31. What methods are available for quantifying emissions from wastewater systems in determining base year emissions?

Wastewater emissions are very difficult to measure directly. The emission estimating document (Procedures for Establishing Emissions for Early Reduction Compliance Extensions, EPA-450/3-91-012a, July, 1991) describes some acceptable approaches for estimating emissions from wastewater.

## SPECIFIC QUESTIONS & ANSWERS PERTAINING TO EQUIPMENT LEAKS

C32. Can equipment leak emissions be included in an early reductions "source?"

> Yes, as long as equipment leaks for an entire process unit (or multiple entire process units) are included. A process unit consists of all equipment from the feedstock storage tanks through end product disposition. Equipment leaks from part of a process unit cannot be included.

C33. If some of the emission points from a process unit are included in the source definition submitted to the Early Reductions Program, do the associated equipment leak emissions for the process unit also have to be included in the source definition?

> No, equipment leak emissions need not be included in the source definition. If they are included, then the equipment leak emissions from the entire process unit must be included.

C34. If my source is subject to an existing equipment leak NESHAP (prior to the Clean Air Act Amendments) and will be subject to the negotiated rulemaking for equipment leaks to be proposed in the near future, can I use the Early Reductions Program to get out of both requirements?

> No. You cannot get out of complying with existing regulations promulgated under the Clean Air Act (e.g., benzene and vinyl chloride NESHAP). However, reductions made after 1987 to comply with regulations under section 112 do qualify as early reductions, and can be used to obtain a six-year compliance extension from future 112(d) standards, including the negotiated rulemaking as long as the equipment leak emissions are acceptably documented.

C35. If my source includes equipment leaks and I achieve 90% reduction, does that mean that the source does not have to comply with the forthcoming negotiated regulation for equipments leaks to be proposed with the SOCMI Hazardous Organic NESHAP?

> Yes, provided acceptable emission estimates are made for the emissions from equipment leaks and that the base year emissions for the source meet the significance threshold in the source definition.

C36. If a process is shut down, can emission reductions from equipment leaks be credited toward the 90(95) percent reduction even if the equipment leak emission points are not included in the defined early reductions source?

No. Any emission reductions must occur within the source as defined by the applicant.

C37. If the regulatory negotiation will be MACT for equipment leaks, doesn't the proposal date of the regulatory negotiation set the deadline for sending in an early reductions enforceable commitment date?

Not for all enforceable commitments. This deadline varies according to the proposal date of the standard applicable to a source. The proposed standard resulting from the regulatory negotiation for equipment leaks will be published as part of the Hazardous Organic NESHAP (HON) proposal. If a source is covered by the HON, then the enforceable commitment must be submitted prior to the HON proposal.

C38. Can a mass balance approach be used to estimate emissions from all emission points in a process unit, even if the process unit contains equipment leaks?

In some cases, a mass balance approach may be as good or better than actual emissions testing. In this situation, a mass balance must account for emissions from each emission point, and the method for calculating the emissions from equipment leaks must be as good or better than the leak/no leak method described in the procedures document ("Procedures for Establishing Emissions for Early Reduction Compliance Extensions, EPA-450/3-91-012a, July 1991). The burden of proving the validity and acceptability of the emissions estimates will be on the owner/operator submitting the enforceable commitment or permit application.

## SPECIFIC QUESTIONS & ANSWERS PERTAINING TO TEST METHODS & PROCEDURES

C39. If test methods used to establish emission reductions become obsolete (i.e. a more sensitive test becomes available), will facilities have to re-test and subsequently achieve more reductions as a result of the new test's sensitivity?

> No, once data are accepted using test methods currently available, the data will be good for the duration of the facility's participation in the Early Reductions Program.

C40. What will be an acceptable validation for tank emissions?

> The accepted technique for establishing HAP emissions from tanks is a computation technique prescribed in the procedures document. These techniques are based on AP-42 with some additional information from recent studies.

C41. What would be an acceptable method of estimating base year emissions from a laboratory hood?

> Emissions from a laboratory hood most likely will be small and intermittent and therefore not easily source tested. In most cases an engineering estimate based on the operation being performed and the types of chemicals involved will be acceptable.

C42. If a waste stream condenses after cooling, but the control systems treat the waste stream while it is in the vapor phase, which reduction requirement must be met - 90 or 95 percent?

> Determination of the percent reduction required primarily is based on the stream characteristics at the point of discharge to the atmosphere, which also will determine the type of control required. If the stream is gaseous at the point of discharge, then the required reduction is 90 percent. If the discharge is particulate, 95 percent must be achieved.

C43. Wastewater emission estimates per the procedures document talks about "potential emissions." This is not actual and verifiable emissions. Is modeling using the Surface Impoundment Modeling System (SIMS) acceptable for "wastewater pond" actual and verifiable emissions?

The language in the procedures document is being revised and expanded to address how SIMS and CHEMDAT7 can be used to establish actual HAP emissions.

C44. Transfer operation (loading/unloading) emissions equations in AP-42 are based on bulk gasoline dispensing/tank filling. Are these acceptable for HAP?

Yes. Although the equations were developed based on gasoline loading operations, the equations require the material vapor pressure as an input. By using the vapor pressure of the HAP material being loaded, EPA feels that these equations are appropriate for HAP as well as gasoline.

C45. Are bagging factors acceptable for base year calculations?

Yes, as long as the protocols outlined in "Protocols for Generating Unit-Specific Emission Estimates for Equipment Leaks of VOC and VHAP" (EPA-450/3-88-010, October 1988) are followed.

C46. What are the testing requirements for emission points from batch processes?

Due to the unique characteristics of a batch process, engineering calculations or material balances may be the most accurate and preferred method for establishing emissions and emission reductions. It will be the responsibility of the owner/operator submitting the data to demonstrate the accuracy and validity of all calculations.

## SECTION D - TIMING

D1. What are the major criteria to consider when choosing between the route of permit application or the route of enforceable commitment to participate in the Early Reductions Program?

The timing of the proposal of an applicable 112(d) standard and whether the emission reductions have already occurred are the most important factors in deciding between a permit application or an enforceable commitment. Only if the 112(d) standard is proposed prior to January 1, 1994, may a source submit an enforceable commitment. Submission of an enforceable commitment allows a source until January 1, 1994 to achieve the 90(95) percent reductions and allows a source to submit a permit application as late as December 1, 1993. A source can also rescind the commitment by December 1, 1993, without penalty. When submitting a permit application without an enforceable commitment, the 90(95) percent reductions must have been achieved prior to proposal of the regulation, the application must also be submitted by the proposal date of the earliest applicable 112(d) standard or 120 days subsequent to the approval of the Part 70 or Part 71 regulations and once a permit is submitted, it may be more difficult to withdraw. In general, for the early standards the enforceable commitment route will allow the source more time and flexibility to participate in the Early Reductions Program.

D2. What enforcement action will be taken if an early reductions permit application is denied?

If an early reductions permit application is denied, no enforcement action will be taken. The source will have to meet any applicable 112(d) standard according to the compliance schedule. However, if an owner/operator makes an enforceable commitment for sources within their facility, the commitments are subject to enforceable action if they are not achieved by January 1, 1994, or rescinded by December 1, 1993. If an enforceable commitment is rescinded, no enforcement action will be taken.

D3. At the end of the six-year compliance extension, does the source have to continue to comply with the alternative emission limitation for emission points not covered by the 112(d) standard?

Nothing in the Early Reductions Program requires continued compliance with the alternative emission limitation after the

six-year compliance extension. States, however, may choose to continue this requirement when issuing the renewal permit.

D4. If a 90(95) percent reduction is achieved prior to MACT proposal but there is no State Title V permit program, what must be done and by when to participate in the Early Reductions Program?

Generally, a facility that has achieved early reductions prior to proposal of an applicable standard must also submit a permit application to the permitting authority prior to proposal of the standard. However, if permitting regulations or the State permitting program is not in place, the applicant should wait to file a permit application but must submit an application within 120 days after promulgation of Part 71 (Federal permitting) regulations or 120 days after the State obtains approval of a Title V permitting program, whichever occurs first. Prior to approval of the State Title V program, the EPA Regional Office will be the permitting authority.

D5. What happens to a company that signs up for early reduction, and then finds out it cannot meet the reductions?

Companies that submit an enforceable commitment may rescind the commitment by December 1, 1993, without penalty if the company cannot achieve the necessary reductions. Facilities that submit a permit application that is disapproved will simply meet the 112(d) standard according to the compliance schedule.

D6. If an enforceable commitment is made based on calculations and the basis is rejected, can testing be done after the proposal date of an applicable 112(d) standard?

Yes. For an enforceable commitment, the applicant may submit additional data, including test data, in response to adverse comments by the reviewing agency.

D7. Can the six-year extension be rescinded? For example, will the extension be rescinded in the case where a facility achieves the necessary 90(95) percent reduction, but future plant expansion causes additional emissions of HAP so that the facility no longer achieves the 90(95) percent reduction? [EXPANSIONS]

If a facility increases emissions of HAP at a portion of the plant that is included in the source definition, then compensating reductions would have to be made so that the 90(95) percent overall emission reduction is maintained and in order to stay in the Early Reductions Program. The six-year extension would not be rescinded but the source could be subject to penalties until the source reduced emissions by the necessary quantities to comply with the permit requirements or the source complied with all applicable section 112(d) standards. If the increases in HAP emissions occur at the facility but not from emission points included as part of the source that has been granted a six-year extension, the emissions increase will not affect the Early Reductions Program.

D8. Does participation in the Early Reductions Program delay the timing of residual risk regulation?

No. Participation in the Early Reductions Program has no impact on the compliance date for residual risk regulations.

D9. When will there be public comment/public review for early reductions? [ADMIN]

Public review will take place at two points in the Early Reductions Program. First, the public will have a chance to review enforceable commitments and base year emissions that are submitted for early review. Second, there will be a public comment period for permit applications.

D10. What are the components of public review? [ADMIN]

With respect to enforceable commitments, the components of public review are outlined under section 63.76 of the proposed rule. For permit applications, including the demonstration of early reductions, the components of public review are outlined in the permit regulations.

In summary, the components of public review of enforceable commitments are as follows. Once EPA has determined that the base year emissions are approvable, a notice providing the

aggregate base year emissions will be published by advertisement in the area affected. The advertisement will explain that the base year emissions are being proposed for approval and note the availability of additional nonconfidential information contained in the enforceable commitment. A 30 day public comment period will be provided, with an opportunity to extend it to 60 days and/or hold a public hearing upon request by an interested party. In the event that adverse comments are received, the reviewing agency has the authority to determine which, if any, public comments need to be addressed for the base year emissions to be approved. For those comments that need to be addressed, the Agency will work with the applicant to make revisions.

D11. Does the submittal date refer to the date the submittal is postmarked or to the date it is received by EPA? [ADMIN]

The submittal date refers to the date the submittal is postmarked.

D12. Does the proposal date refer to the date a proposed regulation is signed by the Administrator or to the date it is published in the Federal Register? [ADMIN]

The proposal date refers to the date the rule is published in the Federal Register.

## SECTION E - ENFORCEABLE COMMITMENTS

E1. Suppose I make an enforceable commitment, get 90 percent reduction, and obtain a compliance extension. If an applicable 112(d) standard is proposed that requires 98 percent reduction, do I have to reduce by 98 percent the 10 percent of emissions that I did not reduce when the compliance extension expires? [MACT]

> No, 112(d) standards will be numerical limits, work practices, or equipment standards, that reflect the maximum achievable control relative to uncontrolled conditions.

E2. If an applicable 112(d) standard turns out to be less than 90 percent control, can the source rescind its enforceable commitment?

> A source may rescind any enforceable commitment prior to December 1, 1993, for any reason without penalty. After this date, the facility must comply with its commitment.

E3. If several sources are combined in one enforceable commitment letter for early reductions and one of the sources cannot meet the commitment, can the commitment for one source be rescinded?

> Although only one letter is submitted, each defined source, in effect, would be treated as a separate application. The owner/operator may rescind the commitment for one source, leaving the commitments on the other sources intact.

E4. What are the penalties for not meeting enforceable commitments?

> Sources have until December 1, 1993, to rescind an enforceable commitment. If a commitment is not rescinded by that date, the source must be in compliance with the alternative emission limitation by January 1, 1994, or be subject to penalties. Penalties will depend on the extent of the violation and other factors. Consideration will be given to companies that make a good faith effort and fail.

E5. If the 30 and 60 day review guidelines for enforceable commitments are not rigid, then are the schedules for revisions and submittal by the applicant also not rigid?

The submitter generally has 90 days to respond when notified of a need for additional information or revisions. Additional time to complete revisions would be granted by the EPA Regional Office, if requested by the submitter. It is important to note that if no response by the submitter is received within 90 days, the submittal is considered withdrawn and a letter will be sent to the submitter by EPA informing them that the source is no longer eligible for the Early Reductions Program.

E6. If a source fails to meet an enforceable commitment, how long is it subject to penalties?

The source is subject to penalties until it achieves 90(95) percent reduction or meets all applicable 112(d) standards. If the source has made a good faith effort to achieve the enforceable commitment and/or the emission reduction meets what has been proposed as the 112(d) standard, such efforts will be taken into consideration in establishing penalties.

E7. Is submittal of unacceptable base year emission data the only basis for denying an enforceable commitment? [BASE YEAR]

No. However, the base year emission data are the primary basis for denial or acceptance. In addition to acceptable base year data, the enforceable commitment must satisfy all of the requirements listed under §63.75 of the regulation. This includes a signed commitment that satisfies the requirements and also a general control plan. The base year emissions are the most critical data provided. Hence, most denials will be based on some deficiency in establishing base year emissions.

E8. If, during the review of an enforceable commitment submittal, EPA and the facility cannot agree on base year emissions for an emission point(s) which is one of many emission points in the source definition for purposes of the Early Reduction Program, can the facility remove the emission point(s) from the definition of source? [BASE YEAR]

Yes, the source is allowed to amend the commitment to take into account evaluation decisions made by the reviewing authority.

## SECTION F - STATE INVOLVEMENT WITH THE EARLY REDUCTIONS PROGRAM

F1. What happens if the source is granted an alternative emission limitation in a permit issued by the EPA Regional Office and the State later attempts to require greater than 90 (95) percent reduction, when it receives permitting approval under Title V? [PERMITS]

Once an alternative emission limitation is granted in a Title V permit by the EPA or a State Agency under the Early Reductions Program, it remains in effect for the entire six-year compliance extension period. Under this program, neither the State nor EPA can revoke the permit or require an alternative emission limitation more stringent than that already approved by the permitting agency, until the end of the six-year period. However, the six-year extension applies only to 112(d) standards and does not necessarily exempt a source from compliance with any other regulations (e.g., State air toxics regulations).

F2. If a company participates in the Early Reductions Program, won't the company be penalized if the State comes out with more stringent requirements for control?

Possibly; the company should keep close contact with the State agency and be aware of their actions regarding control of HAP.

F3. A source makes an acceptable enforceable commitment to the EPA but later submits the permit application to the State because it has an approved Title V permitting program. Can the State require greater than 90(95) percent reduction as a condition of granting the permit? [PERMITS]

Once a State has an approved permitting program under Title V, a State may require greater than 90 (95) percent reduction under the Early Reductions Program as a condition of granting the compliance extension. In concept, a source owner or operator could make a commitment to reduce HAP emissions by 90(95) percent and later have the State require a greater than 90(95) percent reduction. However, the program implementation process should minimize or eliminate this situation. The company should know prior to making the commitment if the State will require more than 90(95) percent reduction.

The EPA's implementation program focuses on close communication and coordination between the States, EPA

Regional Offices, and EPA Headquarters. The State will receive a copy of the enforceable commitment at the same time as the EPA Region and will review the enforceable commitment concurrent with EPA review. The EPA Regional Office will discuss the commitment with the State early in the review process and State comments on the enforceable commitment will be solicited by the EPA Region.

F4. Can States grant extensions for less than six years?

No. The provision in Section 112(i)(5)(A) states that, "Nothing in this paragraph shall preclude a State from requiring reductions in excess of those specified in this subparagraph as a condition of granting the extension...". The provision allows for States to require greater reduction (e.g., greater than 90 or 95 percent) of HAP emissions, but does not allow the State to restrict the extension to less than six years.

F5. If a source is granted a compliance extension and is issued a permit according to the Part 71 regulations, when the permit expires after five years, may the State reviewing the application require BACT (95 percent or higher) when there is still one year left on the extension? [PERMITS]

If a compliance extension is granted, the extension will last for six years beyond the normal 112(d) compliance date. The program cannot shield against BACT standards the State may impose under other provisions of the Clean Air Act or other State regulations.

F6. In what ways can States prevent participation in the Early Reductions Program?

States may not prevent the participation of any source in the Early Reductions Program. However, sources making early reductions also must meet applicable State regulations as well.

F7. If a source obtains a compliance extension under the Early Reductions Program, may the States require additional reductions from the source to help with ozone attainment under Title I? [EARLY REDUCTIONS]

Yes, States have the right to impose additional requirements needed to meet Title I mandates for attaining ambient air quality standards. The EPA plans to issue a policy statement upon promulgation of the early reductions rule that will discuss the interaction of Title I requirements with the Early Reductions Program. The intent of the policy will be to minimize the adverse effects of overlapping requirements while preserving the goals of Early Reductions and Title I.

F8. If an early reductions permit application is submitted to EPA and accepted, but denied by the State, is there a problem?

The permit application will be subject to only one level of review. The application will be reviewed by either the EPA or the State, depending on who has responsibility for review and approval of applications in a given State. Therefore, the application can only be denied or approved by one permitting authority. However, States are responsible for enforcing their own VOC and/or air toxics requirements. Facilities interested in participating in the Early Reductions Program should coordinate their actions with State agencies.

F9. What is the schedule for delegation of the Early Reductions Program to the State?

Delegation criteria will be available by the time the early reductions rule is promulgated so that a State may receive delegation authority prior to approval of a Title V permitting program.

F10. Under what circumstances will States handle enforceable commitments?

Under two circumstances, States will handle enforceable commitments. First, if a State permitting program is approved during the time enforceable commitments still are being made (theoretically, until December 31, 1993), then the State would be the permitting authority and would handle any enforceable commitments. Second, any State delegated authority to review submittals under the Early

Reductions Program prior to obtaining permitting program approval also would handle the commitments.

F11. Will States be given funding to cover their time and effort in reviewing early reductions applications? [PERMITS]

Permit applications for the Early Reductions Program will be submitted according to Part 70 regulations just as any other Title V permit. The applicant, therefore, will be required to pay fees for the Title V permit application. A sufficient fee system will be established by the State to cover the time and effort involved in reviewing early reductions permit applications.

F12. The Northeast States for Coordinated Air Use Management(NESCAUM) has said they don't want to participate in the Early Reductions Program. Does that preclude participation for sources within those States?

The EPA is working toward for full acceptance of the Early Reductions Program by all States and is working with NESCAUM States to mitigate differing viewpoints on program implementation. State support and involvement is critical to success of the program. For this reason, it is important for applicants to coordinate their early reductions activities with their State agency.

F13. If we need to obtain a Construction Permit from the Texas Air Control Board (TACB), will BACT review force us to do other extra things that we had not planned to do for the early reductions commitment?

It is possible that State requirements may mean that a source must do things above and beyond what is required to qualify for an extension under the Early Reductions Program. For this reason, EPA encourages sources to contact the State prior to making commitments to ascertain what other requirements must be met. Participation in the Early Reductions Program does not shield a source from any other State regulations.

F14. At present, the Louisiana Department of Environmental Quality (LDEQ) proposes to exempt ammonia from MACT controls provided the modeled fence line concentrations are less than 1/42 of the threshold limit value (TLV). If EPA adds ammonia to the list of HAP, will they honor LDEQ guidelines for MACT on ammonia?

Both Federal and State requirements will need to be met.

## SECTION G - PERMITS

G1. If a source obtained a compliance extension through an approved permit and, due to revisions of the hazardous air pollutant list, one of the pollutants emitted by the source is now considered a HAP and the source would no longer qualify for the Early Reductions Program, what happens to the existing permit?

> The EPA is considering two approaches to deal with this situation. The first would allow the source to be "grandfathered" and no action would be taken on the existing permit. The second would be to give the source some period of time to make additional reductions so that the source achieves 90(95) percent reduction for the new HAP.

G2. If a source is granted a compliance extension and is issued a permit according to the Part 71 regulations, when the permit expires after five years, may the State reviewing the application require BACT (95 percent or higher) when there is still one year left on the extension? [STATES]

> If a compliance extension is granted, the extension will last for six years beyond the normal 112(d) compliance date. The program cannot shield against BACT standards the State may impose under other provisions of the Clean Air Act or other State regulations.

G3. May sources whose application for an extension under the Early Reductions Program is denied apply for a compliance extension under Section 112(i)(3)(B) of the Clean Air Act Amendments (this section of the Act allows for a one year extension if the time is needed to install controls)? [MACT]

> Yes. The early reductions rule states that facilities not meeting requirements of the Early Reductions Program must comply with the requirements of an applicable 112(d) standard. In complying with a 112(d) standard, the facility may apply for an extension under Section 112(i)(3)(B). The facility is treated as if it had never applied for the Early Reductions Program.

G4. Will States be given funding to cover their time and effort in reviewing early reductions applications? [STATES]

> Permit applications for the Early Reductions Program will be submitted according to Part 70 regulations just as any other Title V permit. The applicant, therefore, will be required to pay fees for the Title V permit

application. A sufficient fee system will be established by the State to cover the time and effort involved in reviewing early reductions permit applications.

G5. Do base year emissions submitted for early approval need to be resubmitted during application? [BASE YEAR]

The complete Title V permit application will include base year and post-reduction emission estimates. Therefore, the permit application for early reductions should either contain another copy of the previously submitted enforceable commitment (or base year) or make reference to the previously submitted enforceable commitment or base year already on file at the permitting authority's office.

G6. What happens if the source is granted an alternative emission limitation in a permit issued by the EPA Regional Office and the State later attempts to require greater than 90 (95) percent reduction, when it receives permitting approval under Title V? [STATES]

Once an alternative emission limitation is granted in a Title V permit by the EPA or a State Agency under the Early Reductions Program, it remains in effect for the entire six-year compliance extension period. Under this program, neither the State nor EPA can revoke the permit or require an alternative emission limitation more stringent than that already approved by the permitting agency, until the end of the six-year period. However, the six-year extension applies only to 112(d) standards and does not necessarily exempt a source from compliance with any other regulations (e.g., State air toxics regulations).

G7. A source makes an acceptable enforceable commitment to the EPA but later submits the permit application to the State because it has an approved Title V permitting program. Can the State require greater than 90(95) percent reduction as a condition of granting the permit? [STATES]

Once a State has an approved permitting program under Title V, a State may require greater than 90(95) percent reduction under the Early Reductions Program as a condition of granting the compliance extension. In concept, a source owner or operator could make a commitment to reduce HAP emissions by 90(95) percent and later have the State require a greater than 90(95) percent reduction.

However, the program implementation process should minimize or eliminate this situation. The company should know prior to making the commitment if the State will require more than 90(95) percent reduction.

The EPA's implementation program focuses on close communication and coordination between the States, EPA Regional Offices, and EPA Headquarters. The State will receive a copy of the enforceable commitment at the same time as the EPA Region and will review the enforceable commitment concurrent with EPA review. The EPA Regional Office will discuss the commitment with the State early in the review process and State comments on the enforceable commitment will be solicited by the EPA Region.

G8. If there are existing grandfathered facilities (i.e. no existing State or local permit) where significant reductions are planned, and these facilities are part of the "source" as defined by the early reductions plan, will these facilities need state air permits obtained prior to January 1, 1994? If grandfathered facilities are included in a contiguous facility, will these facilities need state air permits before an early reductions permit is issued?

No, participation in the Early Reductions Program does not depend on a source having State permits. Qualification for the program on the federal level depends on demonstration of base year and post-reduction emissions which are in compliance with any existing State, local, or federal requirements. In any case, you need to assure that all State regulatory requirements are met and provide supporting documentation for emission levels claimed.

## SECTION H - THE RELATIONSHIP OF THE EARLY REDUCTIONS PROGRAM WITH OTHER REGULATORY PROGRAMS

H1. If a facility closes a process line in order to build a new line with greater capacity and the process closure was used under the Prevention of Significant Deterioration (PSD) rules to offset emissions from the new line, can the closed line be bubbled into other units (not including the new line) under the Early Reductions Program to get an extension on the bubbled units. [EXPANSIONS]

The regulation clearly states that if any shutdown equipment is replaced by new equipment, any HAP emissions from the new equipment shall be counted in the post-reduction emissions from the source. Therefore, only if the new line emitted fewer HAP than the original line would any emission reductions be counted for the Early Reductions Program.

H2. If a facility achieves reductions of HAP and is granted a six-year extension, the emission reductions cannot be used for offsets under Title I. If the facility makes the same reductions of HAP but does not apply for a six-year extension, the reductions may be used for offsets under Title I.

Possibly, but not if the reductions are required under some other part of the Clean Air Act. Section 173(c)(2) of Title I does not allow emission reductions required by other sections of the Act to be used as offsets. Once a permit is issued to allow a six-year extension, the emission reductions are then considered to be required by section 112 of the Act. If the emission reductions are not a part of the permit requirement, they may be used for Title I offsets until an applicable 112(d) standard is promulgated, at which time the reductions become "required" and not usable as offsets.

H3. Can the reductions made under the Early Reductions Program be used by the State for State Implementation Plan (SIP) percent VOC reduction requirements (15 percent by 1996, 3 percent thereafter)? (Focusing on non-attainment areas)

Yes. However, only those early reductions achieved after November 15, 1990, are creditable towards the Title I requirements to achieve "reasonable further progress."

H4. Can previously achieved emission reductions that have been used as VOC offsets for a plant addition also be used as qualifying reductions under the Early Reductions Program?

Yes, as long as the offset reductions were made after 1987 and prior to passage of the Clean Air Act Amendments (November 15, 1990).

H5. If I take out all 190 HAP, will I still have to meet a control technique guideline (CTG)?

Possibly, you still have to meet requirements for any criteria pollutants that remain after all HAP are removed.

H6. Is there any benefit for reducing the VOC as part of early reduction?

Surplus HAP reductions (those beyond what is required to obtain the compliance extension) can be used for offsets under Title I. Any VOC reduced as part of an early reductions demonstration can be used for "netting" purposes. Any coincidental reductions of non-hazardous VOC also can be used for netting or offsets.

H7. If a source obtains a compliance extension under the Early Reductions Program, may the States require additional reductions from the source to help with ozone attainment under Title I? [STATES]

Yes, States have the right to impose additional requirements needed to meet Title I mandates for attaining the ambient air quality standards. The EPA plans to issue a policy statement upon promulgation of the early reductions rule that will discuss the interaction of Title I requirements with the Early Reductions Program. The intent of the policy will be to minimize the adverse effects of overlapping requirements while preserving the goals of Early Reductions and Title I.

H8. Is a reduction in HAP that occurred as a result of a NESHAP regulations considered a credit for the 90 percent reduction?

Yes, if the reduction was achieved after 1987.

H9. Louisiana's VOC (ozone) regulations are statewide and include implementation of Category 3 CTG controls. Some states have not required this. It seems like

Louisiana industries will not get credits that some other state facilities may get simply because the State did not implement CTG earlier.

The reductions will be creditable if made after 1987.

H10. Can HAP emission reductions resulting from criteria pollutant (i.e., VOC, PM) offsets be credited toward early reductions in HAP?

Yes, reductions achieved for any reason are creditable toward early reductions. The one exception is where reductions are made to remedy violations of existing air pollution regulations.

H11. Can reductions in HAP emissions resulting from participation in the 33/50 Industrial Toxics Project be credited toward early reductions in HAP?

Yes. The reductions in HAP emissions are creditable under the Early Reductions Program. However, the Early Reductions Program requires more stringent documentation of emission reductions to obtain a benefit (compliance extension). As long as the early reductions requirements are met, 33/50 reductions can be used.

H12. Is there any "shield" from future rules that will motivate a facility to control uncontrolled pieces of equipment within the early reductions source?

The Early Reductions Program only offers compliance extensions for section 112(d) standards. An uncontrolled emission point included as part of an early reductions source is "shielded" from an otherwise applicable 112(d) standard for the duration of the compliance extension. The program does not provide a shield against other rules issued under the Clean Air Act or State rules.

## SECTION I - GENERAL QUESTIONS ABOUT SECTION 112(d) STANDARDS AND MACT CONTROLS

I1. If you have to install MACT on all emission points to get 90 percent reduction, what is the reason to get into this program?

> In this instance, there may not be an economic advantage to participating in the program. Congress set 90 percent as the goal for the Early Reductions Program because it is expected that most 112(d) standards will require greater than 90 percent reduction. A more likely scenario for a source participating in the program is that MACT (i.e. greater than 90 percent) could be applied to some emission points in the source while leaving others uncontrolled to achieve an overall 90 percent reduction from the source. This scenario would result in an economic advantage.

I2. How will the source definition in the Early Reductions Program correspond to the source definition for establishing a 112(d) standard? [SOURCE]

> The source definition may or may not be the same. Facilities will have to define their early reductions source before a 112(d) standard is proposed. This could lead to differences in source definitions, especially since the Early Reductions Program allows the source owner considerable latitude in determining which emitting units at a plant site can be used to establish a source.

I3. May sources whose application for an extension under the Early Reductions Program is denied apply for a compliance extension under Section 112(i)(3)(B) of the Clean Air Act Amendments (this section of the Act allows for a one year extension if the time is needed to install controls)? [PERMITS]

> Yes. The early reductions rule states that facilities not meeting requirements of the Early Reductions Program must comply with the requirements of an applicable 112(d) standard. In complying with a 112(d) standard, the facility may apply for an extension under Section 112(i)(3)(B). The facility is treated as if it had never applied for the Early Reductions Program.

14. Once defined, will MACT ever change?

Yes, it may. The statute requires periodic review and revision if necessary.

15. I use one of the 190 HAP as a solvent. Do I have regulatory incentives to consider the Early Reductions Program?

The EPA intends to list and regulate all categories of major sources and appropriate area sources. Therefore, you likely have an incentive to consider the Early Reductions Program.

16. Will polyethylene and polypropylene plants be regulated by the forthcoming 112(d) standard for chemical plants (otherwise known as the Hazardous Organic NESHAP) because some of the solvents (hexane, methanol) are used in some of the processes?

No. However, they will be regulated under the polymers manufacturing 112(d) standards which are not far behind HON. Section 112(d) standards for polymers production are expected to be proposed prior to November 1993.

17. If 112(d) standards are technology based and based on the best performing 12 percent of existing similar sources, how do you know it will be "far" more than 90 percent?

Section 112(d) standards will be specific to a source category. They may require more or less than 90(95) percent, but it is anticipated that MACT technologies for most categories will be well in excess of 90 percent.

18. Is the focus of EPA going to be the control of HAP or regulating sources?

The EPA's focus is on regulating source categories and subcategories of HAP rather than the individual HAP. It is the goal of EPA to control all major and appropriate area sources of HAP listed in the statute. The mechanism Congress has directed the Agency to use is to investigate industry categories and applicable controls for all HAP emitted from these source categories. This contrasts from prior Agency practice where EPA focused on an individual pollutant and regulated sources that emitted that pollutant.

I9. When do you think 112(d) standards for refineries will be proposed?

Petroleum refineries may be in the four-year group and if so, regulations would be promulgated before November, 1994. Allowing a year between proposal and promulgation, standards are expected to be proposed about November, 1993.

I10. How does the Hazardous Organic NESHAP (HON) interact with refineries?

Organic chemical manufacturing operations and petroleum refineries will be regulated under separate standards. However, certain petrochemical manufacturing operations (eg. benzene, toluene, and xylene production) located in refineries will be covered by the HON.

I11. Can you say what the Hazardous Organic NESHAP (HON) will cover?

The HON will cover 5 types of emissions from about 400 synthetic organic chemical manufacturing operations. The five emission types covered include: process vents, equipment leaks, storage tanks, loading operations, and wastewater.

I12. What happens if I install abatement of 93 percent on a source of HAP and MACT is identified later as 95 percent; will EPA force the additional 2 percent reduction, or will there be some tolerance?

The source will be required to meet MACT as specified after the six-year compliance extension expires.

I13. Will there be a de minimis emissions level below which a 112(d) standard will not be required?

Some standards may not apply to all emission points in a source. Applicability criteria will be determined separately for each standard.

I14. Suppose I make an enforceable commitment, get 90 percent reduction, and obtain a compliance extension. If an applicable 112(d) standard is proposed that requires 98 percent reduction, do I have to reduce by 98 percent the 10 percent of emissions that I did not reduce when the compliance extension expires? [EC]

No, 112(d) standards will be numerical limits, work practices, or equipment standards, that reflect the maximum achievable control relative to uncontrolled conditions.

I15. A process produces a product not on the MACT source category list. Toluene is a byproduct of this process. Is this a toluene production process?

Possibly, it depends on how EPA defines "production" in the applicable regulation. In cases where a HAP is the normal byproduct or coproduct of a production process, EPA is likely to include the process under the definition of production. In cases where the HAP is a consequential byproduct in trace quantities, it is unlikely that EPA will include such production under the production category.

I16. One of our facilities emits a regulated Clean Air Act Substance (eg., Hexane) from a source that is not yet identified by the EPA as a Source Category. Am I correct in assuming that this source is not yet subject to MACT standards?

Currently, there are no sources subject to MACT standards as none have been proposed to date. The EPA has published a draft list of source categories for which MACT standards will promulgated (Federal Register, June 21, 1991, 56 FR 28548). This list is intended to be a comprehensive list of source categories of the 190 HAP listed in the Act. There is the possibility that EPA has not included a source category because of incomplete information or because your source is included under another broadly defined source category. Additionally, EPA may add or delete sources as new information becomes available.

I17. Will there be "de minimis levels" below which 112(d) standards will not apply? In other words, if you have very small releases of a chemical, will you be subject to a standard?

If a source category or subcategory emits a very small amount of HAP, it will likely not be listed in the first place. If a particular plant within a listed source category emits a small amount of HAP, it may not have to install controls if the standard has cutoffs. Therefore, there is the possibility that small emitters of HAP will not have to control under a 112(d) standard. However, small emitters of HAP may be

subject to residual risk standards under section 112(f) of the Act, if additional controls are warranted.

I18. Are benzo pyrans considered hazardous pollutants? Dibenzo pyrans are similar to dibenzo dioxins with one oxygen rather than two.

Yes, benzo pyrans are products of combustion and are therefore considered to be polycyclic organic matter (POM). POM will be considered as a group of compounds by EPA.

I19. If I make reductions and receive a six-year extension and an enforceable permit under Part 70 or 71, am I still subject to enhanced monitoring regulations when they are promulgated?

Enhanced monitoring will be part of any emission limit, including alternative limits issued under the Early Reductions Program. The enhanced monitoring requirements will be part of an applicable Title V permit and required as a condition to certify compliance.

## SECTION J - EXPANSIONS / MODIFICATIONS / RECONSTRUCTIONS

J1. If a company has an approved six-year extension under the Early Reductions Program and later wants to expand a part of the source, what options are available?

> The owner/operator always has the option to upgrade to MACT within the early reductions source. Another option may be to offset the incremental emission increases at one portion of the early reductions source with emission reductions at another portion to maintain overall 90% reductions. In order to do this, the permit would have to be modified to allow such changes. The facility should try to anticipate any possible expansions when applying for the permit and work with the State in developing a permit that will allow the necessary flexibility. The source may also reduce emissions by greater than 90(95) percent initially to allow for expansions later.

J2. Can the six-year extension be rescinded? For example, will the extension be rescinded in the case where a facility achieves the necessary 90(95) percent reduction, but future plant expansion causes additional emissions of HAP so that the facility no longer achieves the 90(95) percent reduction? [TIMING]

> If a facility increases emissions of HAP at a portion of the plant that is included in the source definition, then compensating reductions would have to be made so that the 90(95) percent overall emission reduction is maintained and in order to stay in the Early Reductions Program. The six-year extension would not be rescinded but the source could be subject to penalties until the source reduced emissions by the necessary quantities to comply with the permit requirements or the source complied with all applicable section 112(d) standards. If the increases in HAP emissions occur at the facility but not from emission points included as part of the source that has been granted a six-year extension, the emissions increase will not affect the Early Reductions Program.

J3. If a major expansion occurs between the base year and the post-reduction year, can the base year be adjusted to reflect the expanded plant conditions?

> No, the base year emissions are only those that are actual emissions in the base year. Facilities need to carefully consider their source definitions and anticipate possible expansions.

J4. Is there no allowance for business increases under this program?

For a source participating in the Early Reductions Program, increases in production would be allowed as long as emissions from the source remained 90(95) percent less than base year emissions.

J5. If a facility closes a process line in order to build a new line with greater capacity and the process closure was used under the Prevention of Significant Deterioration (PSD) rules to offset emissions from the new line, can the closed line be bubbled into other units (not including the new line) under the Early Reductions Program to get an extension on the bubbled units. [EARLY REDUCTIONS]

The regulation clearly states that if any shutdown equipment is replaced by new equipment, any HAP emissions from the new equipment shall be counted in the post-reduction emissions from the source. Therefore, only if the new line emitted fewer HAP than the original line would any emission reductions be counted for the Early Reductions Program.

J6. If a process continues to meet the 90% reduction criteria, can changes be made in the process during the extension period?

Yes. However, adjustments or modifications may need to be made to the permit.

J7. Suppose reconstruction of an existing source causes that source to be considered a "new" source after the source has entered the Early Reductions Program (i.e. made an enforceable commitment or permit application). If the reconstructed source still achieves a 90 percent reduction from the base year, what is the deadline for compliance with an applicable 112(d) standard?

An existing source may participate in the Early Reductions Program. The fact that the source was reconstructed later does not preclude participation in the program. Such a source can be granted the six-year compliance extension.

J8. If a process unit is within an early reductions source, and sometime during the six-year extension period the company wants to expand or modify the process unit, may source be redefined to exclude the process unit as long as the 90(95) percent reduction of the remaining part of the early reductions source is still maintained? [SOURCE]

No. Once a source is defined for the Early Reductions Program and alternative emission limitations are granted in the permit, the source may not be redefined.

In the situation described, the owner/operator may make the expansion/modification if offsetting emission reductions can be made within the early reductions source to maintain the overall 90(95) percent reduction.

J9. Can sources include emission points that have been eliminated due to shutdown of a certain unit or portions of a contiguous facility? [SOURCE]

Yes. If the emission point was operating in the base year chosen and will continue to remain unoperational throughout the six-year extension period, the emission reduction resulting from the shutdown may be included in the demonstration of early reduction. A requirement for that point or set of points to remain shut down will be included as an operating condition in the issued permit. In addition, reduced operating hours can be a valid means of reducing emissions, if made a permit condition. However, if the shutdown unit is replaced by equipment elsewhere in the contiguous facility or production hours are increased elsewhere at the facility to compensate for the reduced operating hours of the defined source, the HAP emissions from these emission points are considered part of the source and must be included in the demonstration. Additionally, if the owner or operator wishes to restart the shutdown portion of the facility or increase operating hours during the extension period, the owner or operator must maintain the 90 (95) percent reduction of HAP within the early reductions source and would have to make compensating reductions in HAP emissions to offset any HAP emissions from the restarted unit or increased operation.

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