

Preamble

Open Market Trading Rule for Ozone Smog Precursors

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed policy statement and model rule; Notice of public hearing.

SUMMARY: This notice conveys EPA's strong support for an innovative approach in emissions trading that would bring better, faster, and less expensive progress towards our nation's air quality goals. This innovative approach, known as open market trading, would allow all types of sources to trade emissions of pollutants that cause ground-level ozone and significantly reduce the overall cost of meeting the public health and environmental goals of the national ambient air quality standards (NAAQS) for ozone. An important feature of this approach is that individual trades would not have to be processed as separate State implementation plan (SIP) revisions. Rather, open market trades would provide sources with an alternative means of compliance, and they would be reviewed by State and Federal authorities predominantly during compliance determinations. The EPA believes this open market approach can provide important emissions reduction benefits. It can be put into operation

immediately in places where area-wide emissions budgets and source allocations needed to meet the ozone standard have yet to be determined. The unique character of this approach encourages and permits market participation and innovation by smaller stationary sources and mobile sources. It also encourages sources to make reductions early; these reductions can provide immediate public health benefits. By providing a lower cost compliance alternative, the open market approach can make it easier for States to adopt additional control measures where needed to achieve attainment.

The EPA has developed today's proposed open market trading rule (OMTR) as a new approach that would supplement, and would not modify or limit the adoption by States of other emissions trading approaches available under the Clean Air Act (Act) and existing EPA rules and policies. Today's proposal is in the form of a model rule; any State which adopts the final version of this rule could expect its rule to be immediately approved by EPA. This feature would enable States to begin operation of an open market trading program without delay. The EPA continues to encourage States to take advantage of all market-based programs available to them, including

emissions budget (cap and trade) programs and emissions offsets, as well as emissions averaging programs.

DATES: Comments. Comments must be received on or before (60 days after Federal Register publication).

Public Hearing. A public hearing will be held (28 days after Federal Register publication) beginning at 9 a.m. Persons wishing to present testimony must contact Ms. Shelby Journigan at (919) 541-5543 by (21 days after Federal Register publication). Persons wishing to attend the hearing should contact Ms. Journigan to obtain the location of the hearing.

ADDRESSEES: Comments should be submitted (in duplicate, if possible) to Air and Radiation Docket and Information Center (6102), ATTN: Docket No. A-95-21, Room M1500, U.S. EPA, 401 M Street, SW, Washington, DC 20460; Phone 202-260-7548 or 202-260-7549. Fax 202-260-4400. Docket No. A-95-21, containing information supporting the development of today's proposal, is available for public inspection and copying between 8:00 a.m. and 5:30 p.m., Monday through Friday, at the address listed below. A reasonable fee for copying may be charged.

FOR FURTHER INFORMATION CONTACT: Nancy A. Mayer, U.S. EPA, MD-15, Research Triangle Park, North Carolina 27711,

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SUPPLEMENTARY INFORMATION: The contents of today's preamble are listed in the following outline:

- I. Introduction and Overview
 - A. Emerging Market-Based Approaches for Ozone Control
 - 1. Emissions Budgets ("Cap and Trade")
 - 2. Open Market Trading
 - B. Open Market and Emissions Budgets Can Work in Concert
 - C. Rationale and Principles for Today's Proposal
- II. Summary of Proposed Rule
 - A. Purpose
 - B. Applicability
 - C. State Program Election and Submittal
 - D. Rule and Program Summary
 - 1. Generating DER's
 - 2. Using DER's for Compliance
 - 3. Time and Place Use Limitations
 - 4. Reporting, Recordkeeping, and Public Availability
 - 5. Market Participants
 - 6. Protocol Development and Approval
 - 7. Enforcement
 - 8. Program Audit
- III. Discussion of Issues
 - A. Regulatory and Contractual Liability in the Open Market
 - 1. Option 1: User Liability
 - 2. Option 2: Retaining Pre-Approval Requirement
 - 3. Option 3: Splitting Regulatory Liability Between User and Generator
 - 4. Option 4: Reliance on Third Party Guarantors
 - 5. Proposed Approach
 - a. Generator Certification
 - b. Guidance for Emissions Quantification
 - Protocols
 - c. Third-Party Relationships
 - d. "Good Faith" Purchasers
 - B. DER Generation

1. DER Formation and Baseline
2. Start Date for DER Generation
3. Converting ERC Activity into DER Activity
4. Prohibited Generation Activities
 - a. Shutdowns & Production Curtailments
 - b. Overcompliance with an Alternative Emissions Limit
- C. DER Use and Transfer
 1. Potential Uses
 - a. Use by Regulated Sources
 - b. Advantages to States
 2. Special New Source Review Requirements
 3. Special DER Use Restrictions
 - a. Geographic Restrictions
 - b. Interpollutant Trading
 - c. Seasonal Restrictions
 4. Prohibited DER Uses
 - a. Compliance with Certain Mobile Source Requirements
 - b. Compliance with Certain Technology Standards
 - c. Compliance with Toxics Standards
 - d. Avoiding New Source Review
 - e. Use to Avoid Penalties
 - f. Use to Increase Over 1990 Emissions Levels
 5. Use for Conformity Offsets
 6. Use in Place of Variances
 7. Holding DER's Before Use
 8. Contribution to the Environment
 9. Potential Market Participants
- D. Characteristics of DER's
 1. DER Life
 2. Limited Authorization to Emit and DER Limitation or Termination
- E. Notices, Reporting and Recordkeeping
 1. Notice and Certification of DER Generation
 2. Notice of Intent to Use DER's
 3. Notice and Certification of DER Use
 4. Notice of Intent to Generate Rejected
 5. Public Availability of Information
- F. Federally Enforceable Operating Permits
- G. DER Registries
- H. Protocol Development and Approval
- I. Meeting Related Federal Requirements
 1. Attainment and Maintenance Plans
 2. Rate of Progress (ROP) Requirements
 3. RACT

- J. Enforcement Issues
 - 1. Calculation of Violations
 - 2. State Compliance Determinations
- K. Program Audits and Reconciliation Measures
- L. Interstate Trading
- M. Effect of VOC Trading on Emissions of Air Toxics
- N. Impact of OMTR on Other Programs and Policies
 - 1. Emissions Trading Policy Statement
 - 2. Economic Incentive Program Rule and Guidance
 - 3. Memorandum to Region IX Regarding Surplus Determination
 - 4. Emissions Budget Programs
- IV. Administrative Requirements
 - A. Public Hearing
 - B. Docket
 - C. Executive Order 12866
 - D. Unfunded Mandates
 - E. Paperwork Reduction Act
 - F. Regulatory Flexibility Act
 - G. Clear Air Act Section 117

I. Introduction and Overview

On March 16, 1995, President Clinton and Vice President Gore announced 25 major initiatives for regulatory reinvention at EPA. The number one initiative was an "open market" air emissions trading rule to achieve the public health standard for ozone faster and at lower cost. The Presidential announcement said:

EPA will issue an emissions trading rule for smog-creating pollutants that will allow States to obtain automatic approval for open market trading of emissions credits with accountability for quantified results. Expanding use of market trading on a local and regional level will give companies broad flexibility to find lowest cost approaches to emissions reductions. The rule will encourage experimentation with new trading options, while enabling States to pursue more

quickly allowance-based cap systems, which are already under development in some areas. (Reinventing Environmental Regulations; Clinton/Gore, March 16, 1995)

Today's proposal of a model rule for open market trading fulfills this commitment. It would provide an expedited path by which States, with EPA's cooperation, could quickly implement this new approach.

Together with ongoing initiatives to promote emissions budget (cap and trade) programs, the open market rule signifies a major push to introduce market-based approaches to cleaning up the air: reducing costs, increasing innovation, enhancing flexibility, and accelerating attainment of health standards.

Ground level ozone, the primary constituent of smog, continues to be one of the most pervasive pollution problems in the United States. Exposure to ozone may cause serious respiratory health problems, such as chest pain, coughing, nausea, and congestion. Elevated ozone levels have been associated with observed increases of hospital admissions for respiratory diseases such as asthma and decreased lung function of children attending summer camp. It is estimated that ozone damage to crops, forests, natural systems and synthetic materials is

significant and exceeds \$2 billion per year lost to crops alone. Ozone is not directly emitted into the air, but instead is formed in the atmosphere from reactions of "precursor" pollutants in the presence of sunlight and warm conditions. The major ozone precursor emissions are oxides of nitrogen (NOx) and volatile organic compounds (VOC).

In the last 25 years great progress has been made toward achieving healthy air quality under the Act. However, over 100 million people still live in areas that do not meet the ozone health standard. Continued reductions in ozone precursor emissions are important to protect public health, and represent a tremendous challenge for our nation's citizens and industries.

The 1990 Amendments to the Act established new deadlines for meeting the health standard for ozone and substantially increased EPA, State and industry attainment efforts. All areas that have not yet attained and maintained the ozone standard are categorized as marginal, moderate, serious, severe, or extreme areas. Each category has a compliance deadline, ranging from 3 years (for marginal areas) to 20 years (for extreme areas; e.g., Los Angeles). All such areas have

requirements for reasonably available control technology (RACT) for major stationary sources of VOC and NOx and with the exception of marginal areas have defined rates of progress (ROP) for reducing ozone precursor emissions.

The smog reduction programs in the U.S. are typically based on traditional forms of environmental regulation: source-specific emissions standards (e.g., RACT) set on a uniform basis for categories of similar sources. Even though set as performance standards, these regulations have a tendency to treat all sources within a category the same and to be oriented toward the lowest common denominator, that is, toward sources within the class that have the greatest difficulty and/or greatest cost of control. Such standards simultaneously miss substantial opportunities for cheap emissions controls by "better" sources, and impose a disproportionately high cost (per ton of pollutant reduced) on a smaller group of sources. Government frequently lacks information on untapped but cost-effective control options, and sources have no incentive to be forthcoming. Government also tends to overlook smaller or unconventional sources.

Recognizing some of these problems in traditional regulations, EPA has developed policies permitting an

increasing variety of "emissions trading" approaches since the late 1970's. The EPA "bubble," "netting," and "offset" programs allow certain kinds of trading of emissions reduction obligations within the pre-existing regulatory structure. These programs use the existing command and control regulations as a baseline for trading.

The results of these existing programs have been mixed. Overall, the volume of existing source trading has been small, perhaps due to high transaction costs associated with the bubble policies. New sources have found it possible through netting to avoid both time- and resource-consuming Government review processes. Bubbles, netting and offsets have reduced sources' overall compliance costs. However, there have been significant problems of quality control, reducing the environmental effectiveness of the programs.

A. Emerging Market-Based Approaches for Ozone Control

The 1990 Act Amendments recognized the merit of market-based solutions to pollution control. The Amendments introduced a market-based allowance trading system for sulfur dioxide to control acid rain. The Amendments also included a requirement, in certain cases,

for economic incentive programs (EIP's) to be used as part of States' plans to meet the ozone and carbon monoxide standards in designated nonattainment areas. In 1994, EPA issued the EIP rule, which provided rules and guidance for establishing EIP's. Two market-based approaches have emerged that show particular promise for EIP's or other ozone related trading systems: emissions budget programs and, more recently, the open market approach.

1. Emissions Budgets: ("Cap and Trade")

Emissions budget programs have been highly successful where they have been implemented to date and offer the potential for high integrity achievement of environmental goals and considerable cost savings. Emissions budgets programs are predictable, flexible, offer low transaction costs, and in practice have yielded both unexpectedly high rates of innovation and unexpectedly lower costs. The cost of the acid rain program is proving to be considerably lower than expected--in large part because of the flexibility and innovation allowed under an emissions budget program. Estimated national annualized cost of the program at the time of enactment (1990) was \$4 billion; the current

(December 1994) estimate from the General Accounting Office is \$2 billion (Market-Based Pollution Control Programs, ICF Kaiser, Inc. May 11, 1995). Recent scrubber costs are about half of their historic level and their removal efficiency has increased. Prices for low sulfur coal are also lower than expected because of increased production, increased use of low expense coal cleaning, bundling of allowances with fuel sales, and competition in transportation. The Regional Clean Air Incentives Market (RECLAIM) program is expected to cut Southern California NOx emissions by 80 percent over 10 years while saving about \$58 million annually compared to traditional regulations (ICF Kaiser, 1995). Well-designed emissions budget proposals offer the highest degree of certainty for the environment and sources alike, and EPA wants to do everything possible to support and encourage them. The EPA is currently providing strong support for ongoing State development of emissions budget approaches for large-scale regional control of NOx in the Northeast Ozone Transport Region (OTR), and for VOC emissions in Chicago and Los Angeles.

Notwithstanding their substantial benefits, emissions budget programs are unlikely to capture all of

the market-based opportunities to achieve environmental results with reduced cost and greater flexibility. Emissions budget programs have required considerable start-up time and effort. They require agreement on (1) the universe of covered sources, (2) baseline emissions levels, (3) the emissions cap and its rate of decline, (4) the allocation of emissions allowances, and (5) standardized monitoring and measurement techniques for determining each source's emissions. Experience with RECLAIM and the acid rain program shows that obtaining agreement on these points can take several years. As a result, emissions budget programs have been applied to date mostly to well-measured pollutants from relatively uniform industrial sectors, e.g., oxides of sulfur (SOx) and NOx from utilities. Start-up time should decline, however, as experience is gained. The RECLAIM program and the Chicago program are making great strides in extending emissions budget programs to some categories of VOC sources.

The EPA is committed to continue providing financial and staff support to emissions budget development projects, and the Agency will process emissions budget SIP revisions on an expedited basis. Nonetheless,

opportunities remain for market-based solutions that emissions budgets are not likely to capture in the near term. The EPA is pursuing the open market approach, in addition to emissions budget approaches, to reach more of these opportunities for cost reduction and flexibility while meeting public health protection standards.

2. Open Market Trading

As stated, the open market approach has the potential to reach market-based opportunities that emissions budgets are not capturing, and to serve in some cases as a transitional stage until full emissions budget programs can be developed. Open market trading programs can begin operating without waiting for agreement on a cap, on allocations, or on pre-established emissions measurement methodologies. ¹

They can be implemented before there is agreement on an area-wide or regional budget or other package of emissions reduction measures fully adequate to demonstrate attainment of the ozone smog health standard. They also have the potential to reach more diverse and

¹ The name "open market" was coined to reflect the absence of an emissions budget or cap (so-called "closed market" systems).

numerous types of sources (including mobile sources) than have been covered to date by emissions budget programs.

The OMTR described today builds on the pioneering work done in a major demonstration project overseen by the Northeast States for Coordinated Air Use Management (NESCAUM) and the Mid Atlantic Regional Air Management Association (MARAMA) (Emissions Reduction Credit Demonstration Project, Phase II, Volume I Final Report, April 1995). This project was partially funded by EPA's market-based initiative grant program and has involved many State air pollution officials, EPA staff, environmentalists, and representatives of major corporations in the Northeast.

The open market system differs both in concept and execution from the traditional emissions reduction credit (ERC) programs, "bubbles," "netting," and "offsets." These programs involve trading of contemporaneous emissions rates that extend indefinitely into the future. The open market, on the other hand involves trading of discrete quantities (tons) of emission reductions already made. The discrete reductions are measured from an emissions baseline that is generally defined as the lower of actual or legally allowable emissions at the source.

Retrospective quantification of discrete reductions offers the potential for achieving greater certainty and verifiability for all parties regarding reductions already accomplished.

Administration of ERC programs under the 1986 Emissions Trading Policy Statement has required a heavy investment of State, Federal, and public resources in "up-front" review and clearance of specific trades. In the effort to avoid quality control problems ("paper trades") that existed at points in the past, States typically devote substantial resources and take considerable time to review individual trades. High governmental costs and delays for the private sector have kept the volume of emissions trades quite low.

The open market system would shift review and approval of individual trades from the front end as a SIP revision or a permit change, to the time of use as a compliance determination and enforcement matter. Instead of complying with an emissions limitation through control equipment or process changes on site, a source operating under the open market rule may comply by buying and using an appropriate number of tons of discrete emissions reductions (DER's). This system places responsibility

for the quality of those DER's on the source that uses them for compliance. These features would reduce front-end costs and delays while harnessing private sector resources to assist government in assuring quality control. Responsibility for compliance would motivate arms-length users to inspect carefully and choose wisely among the DER's offered on the market, and to protect themselves through contract indemnification provisions with sellers of reductions, or with third party auditors, and through purchases of extra reductions as "insurance." Trades can take place before governmental review and approval, increasing flexibility and lowering costs.

The likely benefits of this system would be several. The fact that reductions are accomplished before they are traded and used, encourages earlier achievement of reductions. The private sector would be rewarded for revealing, rather than concealing, cost-effective pollution control opportunities. Lower cost curves would make it easier for States to deny variances and promulgate additional needed rules. The open market system would also expand the participating pool of sources beyond those currently subject to direct regulation.

The practical implementation of an open market trading system gives rise to many significant questions. These questions are identified here and addressed in Section III of the preamble to today's notice. How would open market trading be made consistent with air quality goals and legal requirements? What would be EPA's role in assuring market integrity? To promote certainty in the market as well as quality and enforceability of reductions, what level of EPA support for emissions reduction quantification protocols would be necessary? What would be the appropriate degree of compliance oversight?

B. Open Market and Emissions Budgets Can Work in Concert

The EPA believes open market and emissions budget systems can complement each other and even work together. Open market systems can be put into place more quickly because they do not require consensus-building on a budget, allocation disbursement and related infrastructure. Open market systems can involve different source sectors and smaller, more diverse sources that are not easily captured by budgets. Open market systems can operate in concert with budgets and

positively affect areas outside the emissions budget domain.

Emissions budget systems would still offer substantial advantages over open market systems. Under emissions budgets, sources have greater certainty about future allowance allocations and thus greater flexibility and ability to plan operations and trading in the future. Reductions from shutdowns and curtailments, while not compatible with the open market system, can be accommodated under an emissions budget program. Thus, there will be continuing incentives to move from an open market to a budget system, which would allow increased flexibility and cost savings consistent with achieving health and environmental goals.

C. Rationale and Principles for Today's Proposal

The model State rule proposed in today's notice has several features that would clear the way for widespread application of open market trading programs. Today's proposal is designed to eliminate the bottleneck of the single-source SIP revisions for emissions trading. The adoption of the OMTR into the SIP would allow sources to legally substitute DER's for on-site compliance through pollution control equipment. Today's proposal is a model

rule for incorporation into the SIP. Once this rule is made final, EPA proposes to automatically approve SIP revisions that adopt this rule.

The model rule would not displace any other trading rule or option currently approved or under development. It would open a new method of trading and a new route for adopting that method. The model rule describes a set of provisions that EPA has concluded are approvable in all circumstances and in any area of the country. Variations that are more expansive (e.g., trading over greater distances than provided in the model rule) may be approvable in specific areas or under the specific circumstances of a particular State. The EPA would evaluate SIP revisions containing variations of this model rule on a case-specific basis. The EPA is committed to working closely with any State interested in pursuing any such variation. The EPA is available to consult with States on the approvability of potential variations and to provide expeditious review and decisions on any such submissions.

In producing this proposed model rule, EPA has observed the following over-arching principles:

1. Do Not Interfere with Ongoing State Market-Based Programs

As mentioned above, one function of the OMTR is to encourage, enable, and support emerging State trading programs, whether they are classified as open market, emissions budget, or another trading approach. The proposed model rule is neither mandatory nor prescriptive. States would be free to tailor their own programs, which may or may not include an open market trading component, and EPA encourages States to harness compliance tools appropriate to their particular circumstances.

2. Reduce Compliance Costs Without Compromising Environmental Integrity

A key test for any market-based strategy, including the OMTR, is to lower the overall cost to the economy of clean air compliance, in a manner that has equivalent or better environmental integrity.

3. Provide for a Long-Term Benefit to the Environment

The open market rule should benefit the environment in a number of ways. Facilities may reduce emissions beyond their current levels in order to sell the

reductions, and facilities purchasing the reductions would in turn have more flexibility to meeting their compliance obligations, often obviating the need for source-specific emissions limit modifications and exemptions. The open market program should encourage early reductions through banking. It also should create an incentive to try incremental and innovative emissions reduction strategies, as well as reward accurate emissions measurement procedures. To ensure an environmental benefit, the proposed rule requires 10 percent of every credit used to be retired for environmental benefit.

4. Maximize Flexibility and Minimize Transaction and Regulatory Costs

Reflecting one of the President's concerns with the role and effectiveness of the Government in his reinvention initiative, a major goal in this rule development is to improve upon the burdensome oversight, and reporting and recordkeeping requirements that currently exist in many pollution control programs. In this spirit, the rule proposes requirements that are less burdensome yet consistent with the level of quality

necessary to maintain environmental integrity within the open market system.

5. Actively Involve the Public, Industry and States in the Process

The EPA has worked with States, industry, and the public in developing this model rule. This cooperative process will continue as the proposed rule emerges toward its final version.

II. Summary of Proposed Rule

A. Purpose

The purpose of the model open market trading rule is to allow sources to generate and use DER's for compliance with Title I and various Title II VOC and NOx rules while complying with all other applicable requirements of the Act. The model rule would provide VOC and NOx sources with a financial incentive to reduce emissions below levels required by applicable Federal and State requirements and below their actual emissions in the recent past. Sources would be permitted to make more economical decisions regarding how to comply with pollution control requirements applicable to them. These sources would be able to supplement or replace

traditional compliance strategies with a strategy of purchasing and using DER's.

B. Applicability

Today's notice applies to any State that adopts and submits an identical rule to EPA as a SIP revision. The preamble to the proposed model rule serves as a policy statement on open market emissions trading, and explains how EPA would view specific deviations from the proposed model rule.

C. State Program Election and Submittal

The EPA would automatically and immediately approve any State submittal that revises that State's SIP to incorporate the identical language of the model rule. That does not imply, however, that a State could not develop variations on the model rule tailored to its particular needs. The EPA would review any such rule and judge its approvability in accordance with the adequacy and reasonableness of the justifications for any variations from the model rule. Variations could not be automatically approved, but EPA is committed to reviewing them expeditiously.

D. Rule and Program Summary

This section briefly describes, in nontechnical terms, how the open market trading system would work under the model rule proposed in today's notice. It serves as a brief summary of the steps a source would take to generate and/or use a DER, including any limitations. It also describes what, when and how the source would need to tell the State about their DER activity. A brief description of EPA's enforcement strategy is also included.

1. Generating DER's

Any NO_x or VOC source could generate DER's under the OMTR. In contrast with traditional trading programs, where a source must accept a permanent tightening of applicable emissions reduction requirements in order to generate a continuing stream of emissions reduction credits, in the open market program a generating source would not change its legal emissions limitations. The source could generate DER's by any action that reduces its emissions per unit of production or operation (e.g., install pollution controls, make process changes, switch fuels). Qualifying actions may even be temporary (e.g., a temporary fuel switch); after the discrete period in

question, the source would have no obligation to continue emitting below its legal limitations.

To be valid, DER's must meet the requirements of the model rule and of guidance regarding emissions quantification that will be issued by EPA. The DER's must be real, surplus, and verifiably quantified. The DER's must represent real reductions in ozone-forming emissions. In addition, they must be surplus, that is, reductions that were not otherwise required by existing regulatory requirements or accounted for in attainment or maintenance plans. DER's are emission reductions generated over a discrete period of time, measured in units of mass (usually tons). The generating source would be responsible for verifiably documenting the amount of DER's it had produced, and DER's would have to be measured through a valid quantification protocol.

To generate DER's, a source would first determine its baseline, which reflects what the source would have emitted during the generation period absent its DER generation strategy. In general, this would be determined by referring to either the emissions level that would be allowed by current law, or the facility's emissions that would have occurred based on recent actual

emissions rates. After the baseline was ascertained, measurements would be taken and calculations would be made to determine the amount of DER's that resulted from the specific action taken to reduce emissions. This process must follow a valid quantification protocol developed in one of several ways as indicated below. The protocol would take into account an individual source's characteristics (e.g., rates of VOC and NOx production, continuous or batch processes, etc.) and monitoring capabilities. A source could chose to follow a protocol that had been found to be previously acceptable, or it could forge a new protocol following criteria that EPA will issue in protocol guidance.

The generator would quantify its reduction by factoring relevant source-specific information into the quantification protocol to determine the amount of DER's generated. The generator must document DER's in a format that would allow enforcement authorities to verify them, to determine the user's compliance and, where necessary, to enforce in cases of invalid DER's. Once generated, DER's could be used at any later time for compliance with an eligible VOC or NOx emissions reduction requirement. Like other emissions allowances recognized under the Act,

they would not be the holder's property, but instead would be a limited authorization to emit the designated amount of emissions.

After a DER had been generated, the source generating the DER's would submit a Notice and Certification of Generation to the State where the generation had taken place. This notice must contain a certification, made under penalty of law, as to the accuracy of certain information, including:

(a) the name and location of the source that reduced emissions;

(b) the discrete time period over which the emissions reductions occurred;

(c) the amount of emissions reductions that occurred during the ozone season and the amount of reductions that occurred during other parts of the year;

(d) the unique identification number for each ton of DER's created;

(e) the emissions quantification protocols that were used to calculate and document the emissions reductions;

(f) information on existing requirements, if any, to which the generator source is subject; and

(g) a signature of an authorized individual who is certifying under penalty of law that the above information is accurate and complete.

Certain actions described in the rule would not create DER's, such as:

- (a) facility shutdowns;
- (b) temporary or permanent production curtailments;
- (c) emissions reductions resulting from modifying or discontinuing any activity that is otherwise illegal;
- (d) emissions reductions that occur as the result of any applicable Federal or State requirement including compliance with MACT, BACT, LAER, and NSPS requirements, or emission reductions relied on by the State for meeting the ozone NAAQS; and
- (e) actions that occurred prior to the start of the relevant 1995 ozone season.

2. Using DER's for Compliance

Once DER's were generated, they could be transferred to any party for use to comply with eligible requirements. Anyone could hold, purchase and sell DER's. Intermediaries could act as DER brokers to further facilitate the market process. Any source could use DER's to cover eligible compliance obligations.

Common uses for DER's might be: (a) to comply with specified NOx and VOC emissions limits; (b) to cover emissions increases that currently are commonly legitimized by variances; or (c) as offsets under an EPA-approved major new source review regulation.

A source that desired to use DER's for compliance purposes over a specified period must determine the amount of DER's it would need. Thus, the source must estimate its DER requirement through a valid emission quantification protocol, similar to the process described for DER generation, except that the user source must project its underlying activity rate for the use period. The source must retire 10 percent of the DER's it uses; thus it must purchase a fraction more than it needed for compliance purposes in order to help ensure that the flexibility and economic benefits of the open market trading program would also produce a public health protection gain in each future year.

In order for a user source to use DER's for compliance purposes, that source must own such DER's before the applicable date for compliance. The user must notify its State at least 30 days prior to its first actual use of DER's of its intentions to use such DER's.

This notice would not obligate the notifying source to use the specified DER's. The notice would give the State the opportunity, if it wished, to begin inspecting the validity of the DER's before they are used.

The source must "true-up" its original DER need estimate by using the appropriate protocol to determine its DER compliance requirement during or after the period in which DER's would be applied. When a source had actually used specific DER's, it must file a Notice and Certification of Use along with its regular compliance reports to the State no less often than once every year. This notice would become part of the documentation that the State would rely upon to verify that the user had met its compliance obligations.

The model OMTR would prohibit certain DER uses. Such prohibitions include: (a) to avoid penalties or enforcement actions by obtaining DER's after the fact of noncompliance; (b) for netting or other means to avoid NSR/PSD requirements; (c) to meet Act section 111 and 129 NSPS, LAER, BACT or MACT requirements; and (d) to meet requirements for motor vehicle emissions standards, reformulated gasoline, Reid vapor pressure standards,

clean fueled fleets, employer trip reduction programs, or vehicle inspection and maintenance programs.

3. Time and Place Use Limitations

By definition, DER's must be used at a time after their generation. This is known as intertemporal trading. Intertemporal trading could occur, within the same ozone season, from one ozone season to a later one, or from the ozone season to a non-ozone season. However, DER's generated during a time outside of the ozone season could not be used to comply with any emission reduction obligations during the ozone season.

User sources must also comply with certain geographic restrictions to ensure that the new geographic distribution of emissions created by trading would not interfere with a State's obligation to maintain air quality or reach attainment of the ozone smog standard in a timely manner. Due to differences in the role of natural emissions and in how VOC and NOx react to form ozone, the proposed model rule places different geographic limitations on VOC and NOx.

Under the model rule as proposed herein, VOC reductions generated outside any ozone nonattainment area may not be used for compliance inside any nonattainment

area. NOx emissions generated outside a SIP's modeling domain (as defined by urban airshed modeling) may not be used for compliance inside the modeling domain. These limitations could be relaxed in some but not all State-specific OMTR applications due to an area's unique meteorology. If a State submitted appropriate justification, EPA would consider and expeditiously review any area-specific variations on the model rule's geographic limitations.

Consistent with these geographical limitations, interstate trading and use of DER's would be allowed and encouraged, so long as the relevant States had entered into agreements that allowed such transactions. Participating States must provide for an interstate DER tracking system so the States could protect against DER's being used more than once.

4. Reporting, Recordkeeping, and Public Availability

Sources must keep adequate and accurate records so as to ensure that the DER's are real, quantified, surplus and verifiable. In addition to the records they must create themselves, users would be expected to have pertinent records of DER generation from the generator to prove they held valid DER's. The user source then must

hold such records for a minimum of 5 years after the DER's are used.

The notices that are submitted to the State must be made available to the public by the State under the appropriate State law regarding public access to such documentation. This requirement applies equally to both title V and non-title V sources. This will allow the public to monitor specific transactions and contribute to public confidence in the open market system.

5. Market Participants

Both sources that have and do not have title V operating permits could, and are encouraged to, participate in the open market trading program, especially as DER generators. One of the benefits of the open market program is that small stationary sources and mobile sources that are not subject to title V requirements could contribute to reducing overall pollution levels in an area. The Notice of Intent to Use and the Notice and Certification of Use must be filed with any applicable operating permit.

6. Protocol Development and Approval

One key to integrity in the operation of an open market system is accurate quantification of the amount of

surplus DER's created, and accurate quantification of the amount of DER's needed to meet compliance obligations. For the program to be adequately enforceable by State and Federal authorities, these measurements or calculations require emissions quantification protocols that could be recognized by the State and the EPA for use in the open market program. All DER generation and use activities must be documented through the use of DER quantification protocols that either have been approved by EPA, or that correspond to EPA guidance on acceptable protocols. Typically, a protocol would specify the measurement methods, monitoring methods, calculation procedures, and documentation requirements for estimating or measuring emissions for both the source's discrete reduction strategy and its baseline. All protocols must include methods that are credible and replicable.

EPA-approved protocols could come into existence in two ways. First, EPA intends to issue EPA-approved protocols for a number of reduction strategies. Second, EPA would work together with States and industries to jointly review and approve quantification protocols for a variety of source types. As a separate action, EPA also plans to issue guidance on the development of an

acceptable protocol. This guidance would lay out specific criteria that must be met by a protocol developed by a generator or user which had not already been approved by EPA. The EPA intends to issue this guidance by the time the model rule is finalized.

7. Enforcement

The user source would be responsible for complying with all applicable requirements, and therefore would bear the burden of demonstrating that the DER's it relied on were real, surplus, in sufficient quantity to meet its compliance obligation, came from an appropriate place and season, and met all other applicable requirements of the rule. The user would be subject to enforcement proceedings for insufficient or invalid DER holdings. The DER user, not the State, would bear the burden of proof that the amount of DER's purchased were sufficient to cover its compliance obligation including the environmental discount, and that the DER use met all applicable requirements of this rule.

From a compliance and enforcement standpoint, a lack of adequate and credible recordkeeping would be equivalent to a lack of creditable DER's. As stipulated in the Act, each violation (emissions limit or

recordkeeping) would be subject to maximum penalty of \$25,000 per day. Criminal sanctions could also apply as allowed under law. In assessing penalties, EPA enforcement policy does take into account the nature and degree of violation when determining what is an appropriate enforcement action.

8. Program Audit

At least once every 3 years, the State would be required to audit their open market trading program to evaluate the program's performance. The audit would include, but would not be limited to, an examination of the program's effects on requirements for rate of progress (ROP) and timely attainment (credits used compared to credits generated in a given year or ozone season), and the effects of reconciliation measures that might have been taken as a result of previous audit findings.

If the audit indicated a problem with implementing this rule, then the State must consider initiating measures to reconcile the problem. Possible reconciliation measures would include, but would not be limited to: (a) enhancing monitoring requirements; (b) increasing the environmental benefit component of DER

use, or limiting the use of DER's to compensate for the difference between actual emissions and the reductions needed to reach attainment; (c) implementing additional technology-specific emissions reductions; (d) increasing penalties, or (e) restricting trading.

The EPA would also perform a national audit based on the compilation of State audit reports and if necessary, would revise the open market program in accord with the audit's findings.

III. Discussion of Issues

This section provides more detail on the provisions of the OMTR and issues surrounding the development of an open market trading system and requests public comment on several issues. This section also discusses elements of the proposed model rule that States could modify to meet their unique needs. The EPA recognizes that States may develop variations on this rule that are better suited to specific local air pollution problems, and EPA will be flexible with respect to approving a variation to the model rule if the State provides an adequate and reasonable justification.

A. Regulatory and Contractual Liability in the Open Market

Currently, most emissions trades between existing sources are made through single-source SIP revisions that must be approved by both States and EPA. Pre-approval scrutiny of each trade is generally effective in ensuring that trading does not interfere with air quality requirements: for example, that the emission reductions and increases involved are calculated from appropriate baselines and are appropriately quantified. However, individual SIP revisions take considerable time and involve substantial costs for both the private sector and State and Federal governments. At least in part because of these transaction costs, the number of emissions trades between existing sources has been relatively low, and significant potential opportunities to meet air quality objectives at lower cost have not been realized.

The EPA's fundamental objectives in this proposal are to free up the market for a higher volume of cost-effective emissions trading while at the same time maintaining the relatively high level of quality assurance that the current system provides. To meet these objectives, EPA has used the following "design criteria" in designing the proposed open market trading rule. The proposed rule should:

(1) support timely attainment and maintenance of the Clean Air Act's public health protection standards;

(2) reduce private sector compliance costs, making it possible to better protect the environment at lower cost;

(3) reduce governmental costs in administering an expanded emissions trading system;

(4) make maximum use of private sector mechanisms for quality assurance (liability arrangements, contractual guarantees, insurance, third party services, etc.);

(5) give potential market participants the ability to predict with reasonable certainty which emission reduction actions will be found valid and creditable by governmental authorities; and

(6) provide the private sector with strong incentives to comply with all requirements while at the same time giving responsible ("good faith") market participants reasonable expectations on potential exposure to civil or criminal penalties.

The proposed rule, as already noted, is derived from the "open market" concept developed by the EPA-supported NESCAUM-MARAMA demonstration project and elaborated in a

recent article.² This approach avoids the need for single-source SIP revisions by treating emissions trading as a compliance option, that is, as another means of compliance with applicable pollution control requirements contained in the State Implementation Plan (SIP).

At present, most SIP's establish emission limitations directly applicable to specific equipment and operations at facilities. Owners and operators of such facilities must comply with these emission limitations by installing emissions control equipment, making process changes, or changing fuels or other inputs. Failure to comply is a violation of State law and section 113 of the Clean Air Act and exposes the source to enforcement proceedings by the State and EPA. Citizens may also bring actions to enforce these obligations under section 304 of the Act.

Under the open market concept, sources would have the option of complying by purchasing appropriate amounts (tons) of discrete emission reductions (DER's) generated

² Emissions Reduction Credit Demonstration Project, Phase II, Volume I Final Report, April 1995. Developing a Market in Emission Credits Incremental: An "Open Market" Paradigm for Market-Based Pollution Control; Richard Ayres, Bureau of National Affairs Environment Reporter, Current Affairs December 2, 1994.

by others. The governmental role in reviewing emissions trades would be transformed from prior approval during SIP revisions to "post-hoc" scrutiny during compliance determinations. Eliminating pre-approval of reductions and shifting to review at the compliance stage would greatly free up the market and increase trading volume, thereby reducing compliance costs and benefitting the environment.

A key issue identified, however, in the NESCAUM-MARAMA demonstration project and in the above-cited article is how to maintain confidence that DER quality will remain high--that reductions will be taken only from appropriate baselines and rigorously quantified--as government involvement moves from prior approval to compliance auditing.

Maintaining confidence in the quality of DER's is critical from all perspectives. Regulatory authorities and the public need to know that pollution will actually be reduced as projected, and the private sector needs to know that the market will reward high quality reductions and reject defective ones. Yet detailed compliance audits are inherently conducted on only a fraction of sources each year, as limited governmental enforcement

resources must be targeted at a range of high priority environmental problems. In the stakeholder and interagency review processes conducted prior to this proposal, a number of options were put forward for maintaining DER quality assurance in an expanded emissions trading market. The proposal made today is a hybrid of these options that EPA has developed using the "design criteria" described above. The EPA believes this hybrid best serves the twin objectives of freeing up the market for a higher volume of emissions trading while maintaining sound quality assurance incentives.

1. Option 1: User Liability

The first option considered was put forth by the original developers of the open market concept. Building directly on the current regulatory structure, they contemplated that liability for deficiencies in DER's under the Clean Air Act and State air pollution laws would remain with the party who purchased and used the DER's as a compliance option, since that party had the original compliance obligation. The key concepts underlying this option are that (1) DER's are compliance products similar to pollution control equipment, and (2) as such the user source is responsible for compliance

when using DER's just as it is when complying by use of control equipment.

Like sources using purchased control equipment or services, sources using DER's to meet their emission limits would be able to control their compliance risks by choosing carefully among vendors and by negotiating for appropriate guarantees, insurance, or indemnification provisions. Pollution control equipment and services purchased from vendors generally come with guarantees specified in contracts or implied under commercial law, or with specific insurance policies or indemnification agreements as negotiated by the parties. Pollution sources using purchased control equipment or services, however, remain responsible for their own compliance obligations with State and Federal pollution laws, and remain liable to enforcement authorities in cases of non-compliance, even if the non-compliance was caused by a shortcoming in the products or services purchased from a vendor. In that case, sources have recourse to contractual guarantees, insurance, or indemnification provisions. Through these provisions sources can return to compliance (e.g., obtain satisfactory equipment) and be compensated appropriately for damages.

Liability for compliance with State and Federal pollution laws and the prospect of enforcement for non-compliance encourage each source to pay attention to the quality of goods and services offered by prospective vendors of emission control equipment, fuels, and services. In the competition for sources' business, market forces favor vendors with great expertise, good track records for reliability, or the best guarantees. Less capable vendors, who expose their clients to greater risks of non-compliance, generally command lower prices-- if they can get any business at all. Market forces would be expected to operate in the same way for DER's. In order to minimize risk, buyers would look for quality and favor DER's that present low risks of placing users in non-compliance. Users would remain responsible to enforcement authorities in cases of non-compliance, but would be able to use contractual provisions (guarantees, insurance, etc.) to shift the financial consequences to generators or intermediaries that sold them defective goods. The care users would take to reduce their compliance risks would help assure the quality of DER's for the benefit of both governmental authorities and the public.

Many participants in pre-proposal stakeholder discussions expressed support for this option of placing liability for DER validity on the buyer. Some participants, however, expressed concern that this option would not provide appropriate incentives for attention to DER quality if the seller and buyer are not in an independent, arms-length business relationship, such as when DER transactions are internal to a company or between companies that have close ties.

Still other participants expressed concern that buyer liability could create excessive uncertainties and risks for buyers. They predicted that buyer liability would reduce market activity and suggested other options.

2. Option 2: Retaining Pre-Approval Requirement

Several commentors recommended that EPA continue to allow trading only in reductions that have been pre-approved by governmental authorities. They contended that an active market could develop only if buyers have certainty that reductions offered on the market will be accepted by governmental authorities, and that this degree of certainty could be provided only by governmental pre-approval.

These commenters acknowledged, however, that the requirement for a source-specific SIP revision was an expensive and lengthy process for both industry and government and would remain a bottleneck preventing expansion of the market, especially given current governmental budgetary constraints. In response, these commenters suggested process changes such as limiting the time allowed for State review or dispensing with EPA review.

Others commenters, however, expressed concern that these process changes would present too high a risk of approving poor quality DER's. Governmental approval would be given despite reduced scrutiny of DER quality. Neither buyers nor any other party would have incentives to scrutinize the quality of DER's offered on the market once they were governmentally approved. These commenters expressed concern that this would lead to an influx of unsupported DER's, to the disadvantage of generators that were trying to follow the rules, and an increase in actual pollution levels.

3. Option 3: Splitting Regulatory Liability Between User and Generator

Other commenters suggested splitting liability for compliance under State laws and the Clean Air Act among the generators and users of DER's. Under this option, DER generators would bear full liability for the validity of the DER's they sold, and users' liability would be limited to deficiencies in how DER's were used (i.e., inaccurate calculation of a user's compliance "debit"). In other words, users could purchase and use DER's without any legal risk for deficiencies in the generation of those DER's. In a variation of this option, the user would have the limited obligation to make up shortfalls if compliance authorities discovered deficiencies in the DER's it relied on. Commenters stated that one of the advantages of this approach would be that each party would be held responsible for actions under its own control. The transaction costs associated with constructing legal arrangements to give the DER buyer information and certainty about DER generation activities (inspecting potential DER purchases and negotiating for guarantees or insurance) would be avoided, thereby expanding the volume of trading and the cost savings.

Proponents of this option acknowledged that buyers would have fewer incentives to inspect DER's offered to

them, compared to the buyer liability option. They contended, however, that it would be possible to increase the frequency of governmental audits, and the size of penalties, enough to maintain DER quality assurance. Other commenters expressed concern that an increase in governmental auditing sufficient to preserve DER quality would be difficult in light of budgetary constraints, and that it would be difficult to convey appropriate market signals about potential penalties through case-by-case enforcement actions. Legal issues were also raised over whether State authorities could obtain jurisdiction over out-of-state generators, and on whether statutes of limitations with respect to generation violations would begin to run before the DER's are used.

4. Option 4: Reliance on Third Party Guarantors

Another suggested option is to allow independent third parties to guarantee the validity of DER generation and assume the compliance liability for invalid DER's. In this option, independent third parties would become subject to penalties under State laws and the Clean Air Act if DER's were deficient. This liability would give such third parties incentives similar to those of the buyer under Option 1 to inspect DER's carefully and

choose those that are best supported. The user would remain liable for deficiencies in how DER's were used, as in the split liability option above.

Proponents indicated that this approach could be of special value when dealing with small sources that have the potential to generate cost-effective emission reductions, but that lack the knowledge or capacity to seize the opportunities on their own. Likewise, the availability of such third parties might be valuable to small sources that were potential users of DER's, but that lacked the necessary expertise to purchase high quality DER's on their own or the willingness to assume liability for defective DER's. Other commenters raised questions about the legal means by which such third parties would be made subject to regulatory liability, how to define an independent third party, and how to handle the potential bankruptcy of such a party.

5. Proposed Approach

The proposed open market trading rule adopts a hybrid of these options, as well as other measure to address concerns about incentives and uncertainties. The proposal is based largely on Options 1 and 4, while also requesting comment on the issues raised in Option 3. The

EPA believes that the principle of buyer liability will work the best to assure DER quality. The EPA also believes that in addition to their major role through contractual mechanisms, third parties should be allowed to assume regulatory liability in certain circumstances. The proposal also reflects other significant features intended to promote market activity by reducing the uncertainties associated with buyer liability.

Accordingly, under the proposed open market trading rule, sources may use DER's in lieu of direct pollution control measures to demonstrate compliance with their emission reduction obligations under State and Federal law. Today's rule proposes that the user source would be responsible to enforcement authorities for compliance. The EPA has taken four steps in this proposal to reduce the uncertainties and transaction costs associated with this liability structure. Included in these steps are provisions for third parties, in certain circumstances, to assume the legal responsibilities of a generator. In addition, EPA is considering and asking for comment on whether there are appropriate circumstances in which a third party could take on a portion of the legal

liability of certain users, or liability could be divided between user and generator.

a. Generator Certification

First, the proposal would require generator sources to certify, under penalty of law, to the accuracy of the underlying factual information (e.g., the accuracy of monitoring and other data used to calculate the reductions), which supports DER's offered for sale. If subsequent investigation should demonstrate that such information was inaccurate, the generator would be subject to civil and, if appropriate, criminal enforcement. It should be noted that certification is a requirement to which pollution control equipment vendors are not subject, but EPA believes it is an appropriate requirement for DER generators in order to provide a significant added measure of DER quality assurance to prospective users, State and Federal authorities, and the public.

b. Guidance for Emissions Quantification Protocols

Second, EPA proposes to issue guidance containing criteria for emissions quantification protocols. Quantification of the emissions reductions that sources have generated and the amounts that are needed by users

would have to meet the criteria in this guidance. In addition, working with the States, industry, and the environmental community, EPA proposes to create a mechanism for approving specific quantification protocols for priority types of generation and use activities. A number of such protocols would be drafted by industries, and others by EPA or States. They would be reviewed by a multi-stakeholder process prior to an EPA approval decision. The EPA believes these protocol guidance and specific protocols would give generators and users, as well as compliance authorities, a predictable "road map" for distinguishing DER's that have a high likelihood of being considered valid, from ones that are suspect or clearly inadequate.

c. Third-Party Relationships

Third, EPA proposes to encourage the emergence of a variety of third-party relationships that could help the market function. Within the context of Option 1, third parties could, through contractual arrangements, assume many important functions that would assist generators and users. Further, as suggested in Option 4 above, EPA proposes to allow third parties to assume the regulatory liability of generators in certain circumstances.

Finally, EPA is considering and requesting comment on the possibility of allowing third parties to take on a portion of the regulatory liability of certain users.

(i) Third party contractual roles . Under the proposal, generators and users could enter contractual arrangements with third parties to perform a variety of important functions. For example, generators and users could hire technical and legal experts to improve their ability to create and purchase high quality DER's. Technical experts could help generators develop quantification protocols that conform to EPA guidance, and develop the data that plugs into such protocols. Lawyers could provide expert opinions on the applicable State and Federal requirements that determine a source's baseline. Similar technical and legal services could be performed for the user, both to determine the user's need for DER's and to pick the highest quality.

Third parties could also serve as brokers matching sellers and buyers. Some third parties may acquire their own portfolios of DER's and offer guarantees, insurance, or indemnification services to buyers.

Independent third parties could serve as a trusted source of expert opinions establishing the quality of

DER's. Such opinions would not relieve the user of its regulatory liability under State law and the Clean Air Act, but they could serve to reduce uncertainty, distinguish high quality products, and build market confidence. The EPA specifically requests comment on whether an opinion by an independent third party should be required when the generator and the user are not in an "arms-length" relationship.

(ii) Third parties as generators . The EPA also proposes that, under defined circumstances, third parties could directly assume the regulatory liability of generators. Third parties could play an instrumental role when dealing with small batches of cost-effective emission reductions from smaller sources. The EPA recognizes that the requirement for generator certification could discourage participation by small sources with the potential to make highly cost-effective reductions. Buyers may also be reluctant to take on the task of inspecting numerous small DER offerings from such sources. Third parties may be more familiar with the emission reduction methods and the DER calculation protocols than the owners and operators of such generator sources. Third parties could offer the service of taking

operational responsibility for performing and documenting emission reducing actions for such sources, thereby capturing inexpensive emission reductions opportunities that smaller sources would otherwise be unaware of, or that they would be unwilling to seize on their own given the requirement for generator certification. The third party could then take ownership or control of the reductions achieved, aggregate many small batches of DER's, and offer them for sale to users.

To promote such actions, EPA is proposing that third party aggregators of DER's from small sources could take on the responsibilities of generators under the rule in certain circumstances. Specifically, this could occur where the third party enters an agreement with the owner of the small source to take actual operational responsibility for performing and documenting the action that generates DER's. Under the rule, the third party would be considered an "operator" of the sources in question, for the purposes of the Clean Air Act. The third party, not the numerous smaller sources, would file the Notice and Certification of Generation and assume the legal risk associated with the generator's certification as to the accuracy of the information underlying its DER;

the sources whose emissions the aggregator reduced would have no liability. The user would look to the third party operator, not the actual owners of those sources, for the necessary documentation and certification as to the validity of the DER's, and for appropriate guarantee or insurance provisions.

In order to qualify for this role, the third party also would need to demonstrate financial responsibility, in order to insure that it has an adequate stake in generating bona fide DER's, and that the neither subsequent users nor the environment bear an undue risk in case of fraud or bankruptcy. EPA solicits comment on what specific criteria for a showing of financial responsibility should be set forth in the final rule, and whether any additional qualifications or requirements on such third parties would be appropriate.

(iii) Third Parties as Users . EPA is considering and requests comment on whether third parties could play a similar role on the user side. The EPA recognizes that, as on the generation side, some sources with the potential to reduce control costs by using DER's may nonetheless be unwilling to take on the regulatory liability associated with responsibility for the validity

of the DER's. It has been suggested that the rule could allow a qualified third party, by agreement with the user source, to assume the user's liability under State law and the Clean Air Act for the validity of the DER's used. Under this suggested approach, the user would retain legal responsibility for the calculation of the amount of DER's needed for compliance, as well as all other aspects of how the user source is operated. The third party, however, would assume legal responsibility for the validity of the DER's acquired and used.

The EPA is considering and requests comment on this approach should be adopted, and if so, with what appropriate conditions. Specifically, EPA is considering and solicits comment on what conditions would be necessary to maintain DER quality assurance incentives and capabilities for compliance determinations and enforcement actions equal to those associated with user liability alone. For example, to ensure that the third party has the same motivation as would the otherwise liable user to review DER offerings with care and choose on the basis of quality, the third party would have to be functionally independent of the generator from which it acquired the DER's. The third party would also have to

consent expressly to take on the legal responsibility of the user source for deficiencies in the DER's, and to being considered an "operator" of user source for that purpose. The user and third party would have to file a single, unified Notice of Intended Use. They would have to do likewise for the Notice and Certification of Use, which would have to include certifications under penalty of law by responsible corporate officers of both the user and the third party as well as to the accuracy of the facts underlying their respective portions of the documentation. The third party would have to acknowledge the jurisdiction of the user source's State, and that any statutes of limitations on DER validity run from the time DER's are used, regardless when they were generated. The third party would have to commit to be present and make records available, on the same basis as the user, present with the user itself, for any inspections or related interaction with compliance authorities. As on the generation side, a demonstration of the third party's financial responsibility would assure that it has a sufficient stake to motivate diligence in determining the validity of DER's, and would protect the environment from undue risks of fraud or bankruptcy. As above, EPA

solicits comment on what specific criteria should govern a showing of financial responsibility. The EPA is also considering and requests comment on how this approach would affect compliance determinations and enforcement proceedings in terms of complexity, resource demands, and effectiveness.

d. "Good Faith" Purchasers

Fourth, EPA proposes to develop a penalty or enforcement response policy in conjunction with the final open market trading rule that would lay out in greater detail how EPA intends to respond when DER's are determined to be deficient, despite users' "good faith" efforts, and the criteria upon which good faith would be judged. Enforcement of the Clean Air Act has a number of objectives, including remediation of environmental harm and deterrence of further non-compliance. The penalty or enforcement response policy will address the case where a source has fully acted in good faith in the purchase of DER's, including exercising due diligence in the inspection and selection of those DER's, and yet the DER's are subsequently determined to be deficient by compliance authorities. The policy will make clear that EPA's focus would be on remedying the harm to the

environment from deficiencies in the DER's (i.e., the harm from excess emissions). This could be accomplished by requiring the user only to purchase and retire a sufficient number of DER's (perhaps with a multiplier) to recoup the deficiencies in the DER's originally used. The EPA requests comments on the steps a purchaser might take to be considered a good faith purchaser and on the appropriate multiplier, if any, should be applied in cases where replacement DER's are to be acquired.

The EPA believes these four features of the proposal would provide generators, users, and government authorities with sufficient guidance and certainty so that an active market in high quality DER's would develop.

After careful consideration, EPA rejected Option 2 (pre-approval requirement). The EPA agrees with concerns expressed by some commenters that retaining prior approval would maintain the bottleneck in the current system, and that proposals to limit State governmental review time or dispense with Federal review would run too high a risk of giving governmental sanction to poor quality DER's.

It should be noted that nothing in the proposed model rule is intended to prevent a State or other authorities from examining the quality of a particular DER prior to the compliance determination phase. Indeed, the Notice and Certification of Generation and the Notice of Intent to Use would give a State the opportunity to review a particular DER at an earlier stage, if it so chooses. The EPA expects also that many sources may seek informal consultations with States or EPA on the appropriateness of an emissions quantification protocol, the correct application of a monitoring method, the applicable baseline requirements, or other issues. The availability of such informal consultations could play an important role in providing certainty and predictability to the market. The EPA intends to continue working with stakeholders to explore mechanisms for informal early review of particular DER's.

With respect to Option 3, eliminating the user's responsibility for the quality of the DER's it purchased would reduce transaction costs and thereby expand the scope of trading leading to economic and environmental benefits. It would also increase the importance of governmental scrutiny during compliance determinations as

a check on DER validity and a means of ensuring achievement of the environmental benefits. Only a fraction of sources are subject to detailed compliance inspections each year. If users are responsible for making up deficiencies, they will have some incentive to inspect the DER's offered to them to assure that they are real, surplus, and appropriately quantified.

Nevertheless, it is possible that more unsupported or invalid DER's would be sold. This would increase pollution, damage public health, and undermine confidence in the market. The EPA is also concerned that both of these approaches could put the most scrupulous DER generators at a competitive disadvantage as compared with others that may exercise less care in their DER generation activities, unless compliance determinations are an effective check on the supply of defective reductions.

The EPA requests comment on these issues. The EPA also requests comment on how, under a split liability approach, States would address jurisdictional issues over out-of-State generators, or issues of responsibility for DER's generated in the past by sources no longer in business.

The EPA requests comments on all aspects of its proposed approach to liability.

B. DER Generation

1. DER Formation and Baseline

Under the proposed OMTR, participating sources may create reductions by reducing their emissions for a specific period of time below levels allowed by the approved SIP, State adopted rules (if more stringent and not yet in the approved SIP), applicable Federal requirements (e.g., NSPS), or historical actual emissions, whichever is more stringent. The source would not be required to remain at that new lower level permanently, but instead could reduce for a discrete time period. During that period, reductions may be calculated by determining the difference between what the source's emissions would have been under the baseline emissions rate (actual or allowable emissions without the DER generation strategy) and the actual emissions for the discrete period of operation at the new lower emissions level, times a measure of the source's operational level. The source would calculate its DER's in one ton units.

The generation baseline establishes a benchmark for what is surplus to all the source's applicable Federal

and State requirements, including those contained in the area's SIP. Therefore, for sources located in areas where the attainment or maintenance plan is based on a source's actual emissions, the generation baseline would be the lower of the source's expected actual or allowable emissions. In areas that have fully approved attainment or maintenance plans which are based on sources' allowable emissions, the State has the option to let sources use their allowable emissions as the generation baseline. For sources not subject to any applicable VOC or NOx requirements, and located in areas that are not required to have attainment or maintenance plans, the baseline would also be based on the source's actual pre-generation strategy emissions.

In some cases, the sources "actual" baseline emissions could be measured directly, for example, as the pre-control device emissions. In other cases, the baseline could be determined by reference to emissions rates for the two years immediately prior to the generation period in question, unless some other time period was deemed to be more representative of the operation of the source. In such cases, the expected actual emissions would be the product of the historical

baseline emissions rate per unit production and the actual production during the generation period. The expected allowable emissions would be the product of the allowable emissions rate per unit production and the actual production during the generation period.

Some commenters have expressed concern about the establishment of the emissions baseline for sources generating DER's in areas which have failed on a prolonged basis to submit and gain EPA approval of (a) measures needed to meet rate of progress (ROP) requirements, (b) attainment demonstrations, or (c) maintenance plans. These commenters have argued that if a State has not yet adopted the additional emissions control measures that would be necessary to rectify such a SIP deficiency, DER generating sources would be operating from an inappropriately high baseline. The commenters have suggested that steps would need to be taken to address such situations, for example, (a) barring further DER accrual by generators until the ROP, attainment demonstration, or maintenance plan deficiency is remedied, or (b) discounting DER generation by an amount proportional to the area's overall reduction deficiency.

Other commenters have argued that while a DER generator's baseline would be inappropriately high in such cases, all sources' baselines would be inappropriately high, whether the sources are participating in the open market program or not. These commenters believe that including in the OMTR a requirement to address such SIP problems by selectively targeting DER generators and users is unwarranted, since all sources reap an economic benefit from not having a lower baseline and tighter control requirements. They also believe that singling out open market participants would act to discourage participation in the open market system by creating undue regulatory uncertainty about the ability to create and use DER's, thereby sacrificing the efficiency gains provided by this regulatory approach. They have argued that States should rectify such attainment problems without singling out open market participants.

The EPA believes that both arguments raise valid concerns, and requests comments on whether the OMTR should require action to address DER generation in cases where States have such attainment problems, and, if so, what those actions should be.

2. Start Date for DER Generation

DER's that may be used for compliance under this model rule must have been generated after the start of the 1995 ozone season (May 1, 1995 in most cases) and must meet all other requirements of the model rule. One of the objectives of this model rule development process has been to make trading possible during the 1995 ozone season. Earlier dates were considered but rejected because of the potential to overwhelm the market with pre-existing reductions that by definition were not motivated by the prospect of creating a tradable product of value. Another objective of the rule is to create an incentive for sources to make additional reductions beyond those they would otherwise have made. It would not be consistent with this objective to give retroactive credit for actions taken before this rule was developed and which were made for other reasons. The EPA is also concerned that crediting earlier reductions could lead to an imbalance in the first years after a State program is in place. Thus, if a large-scale use of pre-1995 reduction stockpiles occurred in that period, before large-scale generation of new DER's had developed, it could lead to elevated ozone levels during the use years,

creating human health consequences and jeopardizing an area's compliance with underlying Act requirements.

The EPA acknowledges that some stationary sources in the Northeast have participated in the NESCAUM-MARAMA Demonstration Project, and have made discrete reductions before the 1995 ozone season which they intend to sell as DER's. While EPA has acknowledged and encouraged these potential trades, they cannot fall within this model rule. These facilities may need to proceed through source-specific SIP revisions. The EPA will continue to work with the NESCAUM-MARAMA participants to process revisions expeditiously.

3. Converting ERC Activity Into DER Activity

The EPA recognizes that there are beneficial emissions reductions that will occur in the future under the current ERC program. Emissions reduction activity intended for ERC use would be creditable as DER's, provided that the activity met all applicable requirements of the OMTR. However, the same emissions reduction activity may not be used in both programs; the source would have to choose one program to the exclusion of credit in the other. Reductions made before the 1995

ozone season by an activity approved as an ERC could not, however, be used as DER's.

4. Prohibited Generation Activities

a. Shutdowns & Production Curtailments

Under the proposed model rule, DER's would be generated by actions that reduce the rate of emissions of a source per unit of production. Typically, these actions would consist of installing control equipment, making process changes, or changing fuels or other inputs so as to reduce emissions per unit of production. The proposed model rule would not allow shutdowns or production curtailments to generate DER's.

Many participants in stakeholder meetings have argued that shutdowns and curtailments would not be undertaken, or hastened, to generate DER's (i.e., they would have happened anyway). The EPA has no evidence at this time that shutdowns and curtailments would occur earlier on account of the economic benefit derived from generating DER's. Shutdowns and curtailments generally occur due to economic conditions, and they do not result in an improved efficiency of emissions per product. In addition, EPA is concerned that for major sources under emissions rate limits, economic-related curtailments

could be used to generate DER's with no requirement to offset higher emissions through use of DER's during full production boom periods. Therefore, EPA believes that in general, allowing DER's to be generated from shutdowns and curtailments could lead to increased emissions from sources using DER's without real, additional reductions having been made by DER generators.

As noted previously, a major purpose of this proposed rule would be to promote innovative approaches to controlling and preventing air pollution, involving the full range of major, minor, area, and mobile source sectors. The EPA believes banking of DER's created from shutdowns could provide a massive supply of inexpensive DER's that would inhibit investment by others in measures that actually reduce emissions per unit of production from sources that continue in operation. The EPA believes this glut of DER's from actions that would have otherwise occurred and that produced no additional reductions could also lead to emissions spikes and therefore jeopardize compliance with underlying Act requirements for attainment of the ozone standard.

In addition to concerns about the effect of shutdowns on attainment, EPA is also concerned with load-

shifting that could occur when sources shut down. If small sources (e.g. gas stations or print shops) reduce emissions by shutting down, their economic activity will likely be picked up by new or existing sources in the same areas. Since emissions created by increased operating rates by other existing sources are not limited, and since new small sources are not subject to an offset or cap requirement, the net effect of allowing shutdowns to generate DER's would be to increase overall emissions.

The EPA does recognize some situations in which DER's generated from activities that appear to be shutdowns and curtailments might be consistent with an open market system. For example, for mobile sources, reductions in use levels should be allowed to generate DER's if such reductions occur in the context of a formal plan to shorten or obviate trips and are generated with an appropriate emission quantification protocol. Such use level reductions would not be considered curtailments. An example of a program that could reduce motor vehicle use levels is an employee commute option that generates emissions reductions beyond what might be

required for an area under section 182(d)(1)(B) of the Act.

Another example would be the early automobile retirement program known as scrappage. The EPA does not consider mobile source scrappage to be a shutdown, and scrappage programs would be allowed to generate DER's under the proposed rule. This would be acceptable because scrappage programs conforming to EPA guidance actually would achieve earlier retirement of old, high-emission vehicles than would otherwise occur.

In the process of developing this rule, a number of industry and State groups offered other examples where shutdowns and curtailments might be consistent with an open market system. One example is the concept of allowing DER's to be generated from shutdowns and curtailments when such reductions can be captured within a "closed loop" of existing and new sources. Facilities that replace small boilers with a central energy source and thus create fewer emissions might create a net environmental benefit through small boiler shutdowns. This differs from the more common shutdown case, where a facility closes and the production load could shift to another unrelated source. In general, establishing

conditions by which closed loop or other potentially beneficial shutdowns could be considered in the open market program would add complexity to the proposed rule and still might be problematic with respect to the intent of the rule as outlined above. The EPA requests comments on language that would allow for acceptable, environmentally benign or beneficial exceptions to the common shutdown circumstances.

The EPA is also interested in public comment on whether a State that has an approved attainment demonstration or maintenance plan that does not rely on emission reductions from shutdowns and curtailments may permit such shutdowns and curtailments to generate DER's. In such cases, EPA believes that the use of DER's generated from shutdowns and curtailments would not jeopardize attainment, since the SIP would already contain enough emission reductions from other sources to satisfy the attainment demonstration requirement of the Act. Thus, it might be appropriate to allow States to credit emission reductions from shutdowns and curtailments.

On the other hand, except where shutdowns are used for new source offsets, air quality improves as sources

shut down. Shutdowns are already available as offsets for new sources. In the major new source offset program, Congress decided that encouraging continued economic development in nonattainment areas by allowing emission reductions from shutdowns to offset new source emissions was worth the sacrifice of the natural improvement in air quality that results from sources that shut down. If existing sources are allowed to relax otherwise applicable emission limits by using DER's generated from shutdowns and curtailments, States would be giving up this built-in air quality improvement. The EPA believes that allowing DER's to be generated from shutdowns could be inconsistent with Congress's intent to encourage economic development, since the value of DER's generated from shutdowns would be expected, on the margin, to encourage sources to shutdown. The EPA is interested in comment from the public on this matter.

In the event that shutdowns and curtailments were allowed to generate DER's in areas with approved attainment demonstrations or maintenance plans that do not rely on such reductions, EPA requests comment on the period of time into the future that a shutdown source would be allowed to continue generating credit. The EPA

also requests comment on the effect that allowing DER's to be generated from shutdowns and curtailments would have on incentives for owners and operators of existing, ongoing sources to invest in innovative pollution control or prevention measures. The EPA also requests comment on how to treat discrete increases in emissions that result from full production boom periods if discrete decreases due to production curtailments are creditable.

While EPA is proposing that the use of credits from shutdowns be restricted under the proposed open market system, this does not imply that such reductions cannot be used in other programs. Emission reductions from shutdowns remain creditable in the offset program for major new sources discussed previously, and can be used in emissions budget systems. In emissions budget systems, the integrity of the agreed emissions budget cannot be violated by emissions credits from shutdowns and curtailments, since the closed system ensures that the stated emissions target will be attained and maintained.

The Department of Defense (DoD) was especially concerned about the impact of the rule on military base closures and the civilian redevelopment of closure

properties, as well as the ability of DoD to use shutdown reductions to support other military installations of other federal activities. In particular, DoD highlighted the fact that most redevelopment of closed bases occurs over a long period of time in a phased process. Credits for shutdown reductions are not only needed at the time of the shutdown, but need to have an extended life to be available to support actions 5, 10, or 15 years in the future.

The EPA believes that its current new source review (NSR) rules and soon-to-be proposed changes to those rules will support base closure redevelopment needs. For areas with approved attainment demonstrations, current NSR regulations allow the use of emission reductions that are contained in the emissions inventory at time of use--including emissions from shutdowns and source curtailment--to be used to comply with the NSR offset requirement.

In areas without approved attainment demonstrations, current EPA regulations restrict the use of shutdown/source curtailments to be used as NSR offsets where the reductions occur prior to submittal of the permit application by the new source (with the exception

of replacement facilities). However, EPA is already planning a regulatory change as part of the NSR update package that proposes to relax this restriction in the Federal NSR requirements. This package is scheduled to be proposed this fall. This would mean that under EPA's proposal, emission reductions from shutdowns held by DoD or the local redevelopment authority (LRA) would be available until needed for NSR offset purposes.

The DoD was also concerned about the availability of shutdown reductions to satisfy general conformity requirements. Since the preamble of the general conformity rule references the NSR rules to define offsets, any emission reductions that are consistent with EPA guidance regarding NSR offsets are also available for conformity offsets. This means that any mobile or stationary source emissions increase needing conformity offsets may obtain them from both mobile or stationary source reductions, including reductions resulting from shutdown or curtailments if such sources are contained in the emissions inventory at time of use. The EPA also confirms conformity offsets from shutdown (closure reductions) could be retained by DoD or the LRA indefinitely, freely transferred, and used for conformity

purposes when needed. The EPA requests comments on these determinations.

b. Overcompliance With An Alternative Emission Limit

In many States, sources are given flexibility from RACT requirements when the State grants them an alternative emission limit (AEL) that is less stringent than the RACT standard. The OMTR would not allow sources to generate DER's by reducing emissions below levels required by an AEL but still above levels required by the otherwise applicable RACT standard. Sources subject to AEL's could, however, generate DER's by reducing emissions below the levels associated with the otherwise applicable RACT standard.

C. DER Use and Transfer

1. Potential Uses

One key to a strong DER market and to minimizing compliance costs is enhancing the demand for DER's created by allowing as many and varied uses as possible. One use of DER's would be as a substitute for compliance with an applicable RACT standard. However, EPA expects that there would be many other uses as well. The philosophy of the model OMTR is that any use not prohibited in the rule is a valid use. The EPA

encourages States that adopt this OMTR to adopt this approach.

a. Use by Regulated Sources

The EPA believes appropriate use of DER's by sources would include, but not be limited to:

(1) use for delayed RACT compliance;

(2) use as compliance insurance margins to cover uncertainties in the value of DER's or variations in process emissions or control device efficiency;

(3) use as a substitute for reductions to be achieved through certain non-statutory mobile source requirements not otherwise prohibited in the rule;

(4) use as offsets for new stationary sources used either by a new source or by States as an incentive for economic development;

(5) use as part of a noncompliance settlement to compensate the environment for past violations.

b. Advantages to States

States could also benefit from the adoption of an open market program because the existence of DER's could give the State more flexibility in attainment planning. For instance, a State could eliminate the granting of alternative emission limits or variances, or regulate

emissions from occasional small-scale research and development activities. Sources could comply with applicable requirements through the use of DER's. These measures could increase rule effectiveness.

2. Special New Source Review Requirements

Any proposed major stationary source or major modification applying for a permit to construct in an ozone nonattainment area may employ DER's to satisfy the requirements for offsets. Offsets are governed by EPA and State regulations for new source review (NSR).³ Nothing in today's notice would alter EPA NSR requirements or exempts owners or operators from compliance with applicable preconstruction permit requirements under section 173 of the Act or regulations contained at 40 CFR 51.165(a).

Today's model rule establishes specific criteria which the State must ensure would be met if DER's were used for offsetting new source emissions. In general, emissions reductions used as offsets must be real,

³ States have rules concerning the preconstruction review of major stationary sources and major modifications applying for permits to construct in nonattainment areas. These rules must be consistent with the minimum requirements set forth under Federal regulations at 40 CFR 51.165(a).

surplus, enforceable, permanent, and quantifiable. In addition, section 173 of the Act sets forth specific requirements for emissions offsets which must be satisfied by a proposed major stationary source or major modification.

Section 173 of the Act requires that the emissions reductions be Federally enforceable before the construction permit may be issued (section 173(a)(1)), and achieved by the time the source or modification commences operation (section 173(c)(1)). In using DER's for offsets, it would be necessary for the new major source or modified source to secure a series of DER's over the life of the source. The EPA believes that it is reasonable to require that sufficient DER's be obtained to offset the source's emissions on at least an annual basis. The first year's DER's should be submitted to the permitting authority prior to the public notice announcing the proposed construction permit. The determination of the amount of offset needed must take into account the prescribed offset ratio for the nonattainment area of concern. The permit must contain an enforceable condition requiring the source, each year, to have demonstrated to the permitting authority that, at

that time, it held sufficient DER's to meet offset needs for at least the next year of operation. Failure to obtain any required offsets in a timely manner would be a violation of the source's permit.

Section 173(c)(2) of the Act prohibits emissions reductions otherwise required by the Act from being used as offsets. For example, reductions required to meet RACT, MACT, acid rain reductions, and the phase-out of chlorofluorocarbons pursuant to statutory requirements are not creditable as emissions offsets.

3. Special DER Use Restrictions

The proposed model OMTR would limit the use of DER's with respect to certain generation and use characteristics of the DER. Relevant characteristics include pollutant type, the modeling domain or nonattainment status of the area where the DER was generated, and the time of generation. The proposed OMTR would provide for these limiting provisions, in part, to assure that in nearly all cases the uses would be helpful toward reducing peak ozone concentrations. That is, the connection between generation and use must be correct, considering the distance between the generator and user sources and the patterns of pollutant transport in the

relevant area (direction). States would be encouraged to assess their own unique situations, and devise an OMTR that contains special DER use limitations that are consistent with relevant modeling analyses that are in the SIP.

a. Geographic Restrictions

Ozone smog formation is a difficult problem that has resulted in various approaches aimed at resolving it.

Prior to the 1990 amendments to the Act, ozone attainment plans largely focused on emission reductions in nonattainment areas. More recently, attention has been focused on the issue of long-range transport and its contribution to ozone formation and to violation of the ozone standard. Ozone precursor pollutants mix and react together as they travel long distances over several days, thus creating a serious problem. For example, high ozone concentrations in the northeast occur on scales of over 1,000 km and can persist for many days. Our current understanding of ozone formation suggests that the relative importance of VOC and NOx control varies with the location and scale of the ozone problem. In general, VOC control is most likely to be effective in urbanized nonattainment areas, and less effective in the

surrounding countryside where local natural VOC emissions can overwhelm those from human activities. On the other hand, NOx control tends to be most beneficial over larger distances. Therefore, the model OMTR would restrict VOC DER use to the same area in which the DER was generated, and would permit NOx DER trades to occur within the larger modeling domain.

While considering the general relationships among VOC, NOx and ozone formation, it is also important to consider unique local effects that might be characterized in a specific SIP modeling analysis. DER uses should be consistent with relevant modeling analyses that are in the SIP to preserve the integrity of the SIP. In these modeling analyses, distance and direction effects are considered by analysis of various episodes, meteorological regimes, and boundary conditions. SIP's may define locations where emission reductions are most helpful, marginal, or even counterproductive.

Some SIP's may have a regional NOx strategy component. A regional strategy means that emission reductions are planned to occur across a large area that may include sources located both within the local urban airshed modeling domain and outside the modeling domain.

A modeling domain is the geographic area covered by an air quality model used to support an attainment or maintenance demonstration. The domain can be thought of as a rectangular box which is superimposed over the area being modeled. For the current (1994) revisions to State implementation plans (SIP's) for ozone, 23 modeling domains have been defined for different locations in the United States. Typical domain size ranges from 100 km x 100 km to 350 km x 350 km. Specifications for each of the 23 modeling domains are available through the U.S. EPA's Technology Transfer Network (TTN). In addition, maps should be available from the State agency having lead responsibility for the modeling analysis. Lead State agencies are also identified in the TTN.

In the regional strategy knowing the precise location of each emissions reduction is not as critical as understanding the general distances and directions emission reductions travel from the nonattainment area. In such cases, the modeling analysis shows ozone reductions in the nonattainment area through both local emission reductions within the modeling domain and by reduced regional, boundary concentrations coming in to

the area due to emission reductions outside the modeling domain.

The above considerations are reflected in SIP attainment demonstration or other modeling analyses conducted in support of the SIP. Thus, in some cases a SIP's control strategy may simply call for local reductions in a nonattainment area and, in other cases, the SIP may be supported by modeling analyses which indicate that both local and regional emission reductions are needed.

In general, EPA would view NOx DER's used within the same urban airshed modeling domain as they were generated as acceptable as long as they: (1) are consistent with the regional concept in the SIP strategy, and (2) address distance and direction concerns. The EPA acknowledges that in special cases, NOx trades within a modeling domain could result in higher NOx emissions in an urbanized area, and may increase already high ozone levels in that area; in this case, the use of NOx DER's in that area might not be consistent with attainment demonstration and in such cases should be disallowed.

In addition, EPA believes that DER uses would be generally beneficial where NOx or VOC DER's generated

inside a nonattainment or maintenance area were used by sources not located in a nonattainment area, maintenance area or modeling domain. Trades which crossed or were entirely outside of modeling domain boundaries could be ineffective where the distances are great or the direction of pollutant transport showed little benefit in reducing peak ozone concentrations from such a trade.

Because of the complexity that would be required of EPA to list in the model rule all possible combinations of distance and direction for NO_x and VOC trades in all areas wanting to adopt open market trading programs, the model rule proposes to allow NO_x DER use only if the NO_x DER was generated within the same modeling domain, and VOC DER use only if the VOC DER was generated in the same area. States would be encouraged to assess their own unique situations, and propose an OMTR that allowed NO_x trades from outside the modeling domain at an appropriate discount, or allowed VOC trades with adjacent nonattainment areas, after taking into account and justifying the distance and direction considerations.

In addition, States could choose to adopt rules which allowed NO_x trades without discount where certain distance and direction criteria were met. For example,

EPA would approve a State OMTR that allowed trades without discounting for distance and direction where the rule included the following criteria. Regarding distance, the generator and user sources should be within either 200 km or 2 days transport of each other. The transport criterion should be determined by examining the average wind speed which occurs on days with ozone exceedances near the user source. In all cases, the direction of the prevailing wind near the generator source and the user source should be within a ± 22.5 degree sector of a straight line between the two sources. Average wind speed and prevailing wind direction should be based on data from National Weather Service stations near both the generator and user sources. The prevailing direction and average speed should be calculated over the period 7 a.m. to 7 p.m. This period captures the time of day when emissions are typically highest, as well as to include the portion of the day when surface wind measurements are most representative of overall transport within the mixed layer. In calculating the prevailing wind direction, one could include those days with exceedances near the user source during the years used for classification of the nonattainment area. As an

alternative, one could base the direction calculation upon all days in the "ozone season" for any year used for classification purposes in the area of the user source. For distances or directions which extended beyond these criteria, EPA believes that discounting may be necessary.

In general, EPA encourages States to propose their own geographic requirements based on the characteristics of their areas. The model OMTR would contain generic restrictions that States could modify to more appropriately meet their air quality objectives. The EPA is committed to working with States in creating the most beneficial geographic restrictions for their specific areas.

b. Interpollutant Trading

Interpollutant trades are defined as trades that occur between the two classes of ozone precursor pollutants, VOC and NO_x. The available scientific and modeling information suggests both positive aspects and risks with an interpollutant trading program. Certain trades have the potential to be complementary, leading to greater reductions in ozone than would otherwise occur (e.g., a facility sells NO_x DER's to a buyer who operates a VOC source in a rural area within the Northeast Ozone

Transport Region). Others, however, may be counterproductive. For example, if a modeling analysis in the SIP identified a specific geographical area as an area where VOC reductions were needed and NOx reductions were not helpful over a local or regional scale, then a reduction in NOx emissions in that area should not be exchanged for required reductions in any other area. Since EPA cannot account for all possible site-specific cases where interpollutant trading is beneficial, the proposed model OMTR would not include interpollutant trading.

States are nevertheless encouraged to submit as variations on the model OMTR, rules of their own that would permit interpollutant trading if adequate prior analyses had been performed which indicated that the nature of trades meeting specific criteria was consistent with expected lower ozone concentrations. These prior analyses might be performed by the State(s) or by others in support of one or more SIP's. Although a user could perform modeling analyses to support each proposed use of specific DER's, this would not be required. In general, interpollutant trading rules should encourage excess VOC emission reductions in geographic locations where ozone

is limited by available VOC or encourage excess NOx emission reductions in locations where ozone is limited by available NOx. In the event a user and generator were in different States, review responsibility should be consistent with the policy on interstate trades. Where such interpollutant trades were permitted by States, the applicable rule should address distance and direction considerations as they applied to allowable interpollutant trades. The EPA would expeditiously review any such variations.

c. Seasonal Restrictions

Whereas DER's generated in the ozone season might be traded to meet emissions requirements either during or outside the ozone season, DER's generated in the non-ozone season could be used only to meet non-ozone season emissions requirements. Using DER's during the ozone season that were generated outside the ozone season should not be allowed since such uses clearly would run counter to programs designed to attain or maintain the ozone standard and to meet ROP requirements. Ozone season reductions are the only ones effective in reducing peak ozone concentrations and are needed then. Thus, the rule would not allow DER's generated during a time

outside of the ozone season to be used to comply with any air quality obligations during the ozone season.

The time of year in which areas experience ozone concentrations above the standard varies with location. In general, areas with greater intensity of sunlight will experience longer ozone seasons. Thus, southern areas tend to have longer ozone seasons than northern areas of the country. The EPA has defined the ozone season for each State at 40 CFR part 58, Appendix D. The purpose of this definition is to set the time of year during which States must monitor ozone concentrations. Ozone violations are not expected to occur outside the defined ozone season.

4. Prohibited DER Uses

The proposed model OMTR prohibits several uses of DER's for a variety of statutory and policy reasons. The following sections explain the rationale for each specific prohibition, and where appropriate, seek comment on specific issues relating to the prohibition. In general, EPA requests comment on any DER use that would be expressly prohibited by the proposed model OMTR. Comments that explain in detail how EPA could allow the prohibited uses given the language in the Act and the

rationale for current EPA policies would be particularly helpful.

a. Compliance With Certain Mobile Source Requirements

The EPA believes that compliance with national mobile source programs (i.e., national exhaust and evaporative emission standards for cars, trucks, and nonroad equipment under sections 202 and 213 of the Act, plus any national fuel standards under section 211 of the Act) cannot be avoided through the use of DER's generated by other control measures. Some of these national mobile source control programs have internal averaging, banking and trading provisions, and EPA is currently examining whether more flexibility can be built into them. However, the statutory provisions by their terms appear to preclude compliance through DER's generated from other sources. In addition, using DER's generated outside of these programs (e.g., between different mobile source programs) would be inappropriate in instances where reductions associated with these programs occur nationally, and stationary and area source DER's generated in a specific region would be used to increase emissions nationally. The EPA is currently considering

whether DER's generated regionally can be credited toward meeting same-source national requirements within a specific program (e.g., a scrapped outboard engine could create a DER in the national marine engine average standard structure).

The EPA also believes the Act would not allow the use of DER's generated from other programs to meet the requirements of certain regional or local mobile source control programs. Many local or regional mobile source control programs, such as vehicle inspection and maintenance under sections 182(b)(4) or (c)(3) of the Act, employer trip reduction programs under section 182(d)(2)(B) of the Act, or clean fuel fleet requirements under section 246 of the Act, have provisions that appear to preclude compliance through DER's generated from other sources. However, unless prohibited by other provisions of the Act, DER's could be used to meet any regional or local mobile source requirements that are in addition to those specifically mandated by the Act. The EPA requests comment on whether the Act would allow the use of DER's to meet Federal mobile source requirements and whether EPA should adopt such an approach.

The EPA believes that emission reductions generated in the context of an existing averaging, banking, and trading (ABT) program specific to a particular mobile source program should not be used to generate DER's. The same rule applies to fuel producers. The reason for this restriction would be to avoid double use of DER's, especially since the State may not be aware of the use of the ABT DER in the context of the relevant program.

The EPA is concerned about quantifying DER's generated for upstream and downstream emissions reductions strategies. An example of an upstream activity is fuel distribution emissions--providers of natural gas may seek to generate a DER to reflect reductions in gasoline distribution emissions that result from sales of natural gas for alternative fuel vehicles. In this case, the use of an additional clean fuel vehicle does not necessarily take a known quantity of gasoline out of the conventional fuel distribution system. However, these kinds of emission reductions may be allowed to generate DER's if an adequate quantification method can be devised and approved by EPA. The EPA solicits comments on whether and under what conditions

these emission reduction strategies should be allowed to generate DER's.

b. Compliance With Certain Technology Standards

Today's proposal is consistent with the EIP rule (59 FR 16696 (1994)) in that DER's could not be used to meet Act sections 111 and 129, new source performance standards (NSPS), best available control technology (BACT) standards, or lowest achievable emissions reduction (LAER) standards.

The EPA believes it is important to begin investigating whether compliance flexibility and costs savings can be offered to new sources. In this regard, the Agency has proposed in the model rule that DER's be used for offsets that satisfy new source review requirements. However, EPA questions whether additional flexibility and cost savings can be achieved by allowing sources subject to NSPS, BACT or LAER to utilize the open market program to meet these control technology requirements. In certain cases, the compliance requirements for NSPS, BACT or LAER may inhibit new low-pollution facilities from replacing older, high-pollution facilities as quickly as would have occurred otherwise. If DER's were used to lower the economic hurdle in these

cases, both the environment and the economy would be better off in the long run.

The EPA requests comment on how to allow the use of DER's under the open market program to meet NSPS, BACT and LAER requirements.

c. Compliance With Toxics Standards

Today's proposal would not relieve sources participating in the open market trading of the obligation to meet all requirements under section 112 of the Act. Standards promulgated under section 112 require sources to meet maximum achievable control technology (MACT) standards for air toxics. Often, section 112 standards apply to the same emissions point at a facility as RACT requirements. For example, a RACT requirement and a MACT requirement could both require control of an emissions point to a level achieved by a flare. In such a case, the source could not use a DER to meet the RACT control requirement because the MACT standard imposes an independent obligation to achieve the specified level of control. This ensures that trading would not result in higher levels of hazardous air pollutant emissions from a source than are permitted by Federal air toxics control requirements.

d. Avoiding New Source Review

While allowing the use of DER's to satisfy the requirement for offsets, EPA believes that it would be unlawful to allow DER's to be used to avoid new source review requirements altogether. Therefore, the model rule would specifically prohibit the use of DER's to "net out" of review.

In addition, sources that had previously agreed to operational limitations in order to avoid the new source review requirements, could not use DER's to subsequently increase their emissions to major source levels, and thus circumvent the provisions requiring retroactive review as a major source or major modification.

e. Use To Avoid Penalties

The proposed model OMTR would require sources to purchase DER's before using them. A user could not defer purchase until after failing to comply. The EPA believes allowing such a retroactive acquisition of DER's would encourage sources to avoid their compliance obligations until such time as they were determined to be out of compliance. However, as described elsewhere in today's preamble, EPA does not wish to preclude the purchase of

DER's as part of a settlement agreement for a violation or as a potential component of EPA's penalty policy.

f. Use To Increase Over 1990 Emissions Levels

The EPA recognizes the possibility that a source may want to use DER's to allow that source to relax current costly compliance obligations. Such use of DER's may, in some cases, allow a facility to emit levels of pollution greater than levels accounted for in the 1990 emissions inventory. The EPA requests comment on whether in order to prevent excessive degradation of air quality near a particular source the OMTR should prohibit sources from using DER's to revert to pre-1990 levels. The EPA acknowledges that it may be difficult to effectively enforce such a provision since the State may not know with certainty the lower of actual or allowable emissions from a particular source prior to 1990.

5. Use for Conformity Offsets

The EPA's General Conformity rule allows the conformity requirements to be met by a Federal agency obtaining emissions offsets (40 CFR §§ 51.858, 93.158). The rule requires the offsets to come from within the same nonattainment or maintenance area.

The definition of emissions offsets in the conformity rule is intended to assure that offsets within the air programs are calculated and credited consistently and that the term is used the same in the conformity rules as in the EPA NSR program. All offsets must therefore be quantifiable, consistent with the applicable SIP attainment and ROP demonstrations, surplus to reductions required by--and credited to--other applicable SIP provisions, enforceable at both the State and Federal levels, and permanent within the time-frame specified by the program. DER's used in accordance with the OMTR could meet these requirements. Thus, the current conformity rule allows DER's to be used as conformity offsets where they occur in the same nonattainment or maintenance area.

Since the purpose of conformity is to assure that Federal actions are consistent with SIP's, SIP's which explicitly allow the use of DER's should logically allow the use of DER's as part of their conformity SIP. That is, DER's which meet the SIP requirements should also be considered to be DER's which conform to the SIP. Thus, if a State adopts an OMTR into their SIP, such DER's should be available for conformity offsets.

6. Use in Place of Variances

Many States currently provide for source-specific variances in the form of compliance extensions and alternative emissions limits for circumstances where it would be economically or technically infeasible to install controls. States are encouraged to consider discontinuing variances in areas where open market trading exists. Several States have already included such provisions in their proposed EIP's. Instead of granting variances, the State could achieve universal application of a RACT standard and allow sources that might otherwise be granted variances to comply through use of DER's. Discontinuing variances has the potential to improve "rule effectiveness" by allowing more timely rule compliance. This benefit could be reflected in attainment demonstrations or maintenance plans, if approved by EPA.

7. Holding DER's Before Use

The model OMTR would require that DER's intended to be used by sources for compliance purposes must be held before the intended use period. This means that a particular DER generation activity must be completed prior to the start of the use period. To meet this

requirement, a stream of DER's generated from an ongoing generation activity could be broken and parcelled prior to the start of the use period. This approach ensures the benefits of retrospective quantification described elsewhere in today's preamble. Under the OMTR, near-simultaneous trades similar to ERC trades could occur. For example, two facilities could arrange beforehand a series of transactions where one facility made reductions that were creditable to another facility. The EPA believes this type of transaction could facilitate same-season trading.

However, this near-simultaneous transaction must comport with the 30-day advance Notice of Intent to Use requirement. One way to enable this transaction would be to prearrange such transactions 30 days in advance and maintain a 30 day lag-time between the continuous generation and use of the DER's. Another method might be to make an exception for this special transaction, such that steps are taken to assure the benefits of retrospective quantification while allowing near-simultaneous trading. The EPA requests comment on how near-simultaneous trading could occur or be improved in light of the 30-day advance notice requirement.

The EPA recognizes that the near-simultaneous use and generation might increase transactions costs since the Notice and Certification of Generation and the Notice of Intent to Use, as well as the underlying generation and use documentation, would have to accompany each transaction. While these notices could be made routine and could be kept in electronic form, EPA requests comment on procedures that could be used in the open market trading program without compromising the program's enforceability, that maintain the benefits of retrospective quantification, but result in reasonable transactions costs for the sources that wish to engage in near-simultaneous trading.

8. Contribution to the Environment

The final economic incentive program (EIP) rules (59 FR 16690 (1994)) and guidance establish as a goal for all EIP's that they be designed to benefit both the environment and the regulated entities. The rule and guidance requires States to design programs that would meaningfully meet this goal, while providing flexibility to the States in determining how best to accomplish such benefit-sharing in the context of each specific program.

Requiring that at least ten percent of the DER's traded be retired would meet this benefit sharing goal.

The EPA believes this ten percent requirement is justified because the OMTR has the ability to greatly reduce costs to regulated industry and it is fair that some of those savings should be used to achieve further emissions reductions. Such a discount is clearly appropriate in the case where intertemporal trading is permitted. Intertemporal trades can increase the risk of emissions spiking, which in extreme circumstances could, in some years, negate the benefits of the early reductions provided by banking. The discount decreases the risk of spiking, and provides additional confidence that a retrospective approach to auditing the effects of the program will be sufficient.

Therefore, EPA would approve the component of a State OMTR that required a user to retire any specific percentage of at least ten percent of the DER's it purchases for compliance use.

9. Potential Market Participants

An active market with a large number of participants helps to promote economic efficiency in air pollution control. Subject to the limits specified by the rule,

any source that emits NOx or VOC in an area that adopts an OMTR could participate in the open market system as a DER generator, and any source subject to a VOC or NOx emissions reduction requirement could participate as a DER user. The open market system would provide an incentive for VOC and NOx sources that have traditionally not been regulated to make pollution reductions. Large sources, small sources, area sources, mobile sources and non-title V sources could all participate.

The EPA anticipates that DER's will be handled much like any other tradeable emissions reduction. They could be bought and sold by service-providing intermediaries, brokers, or even speculators. DER's could also be purchased and permanently or temporarily retired solely for environmental benefit by environmentally minded individuals or charitable organizations.

D. Characteristics of DER's

1. DER Life

The maximum length of time between DER generation and use is the DER life. The proposed OMTR places no limit on DER life. The EPA considered a variety of approaches to limiting DER life, and concluded that longer lives promote market stability and diminish the

risk of emissions "spiking." Market confidence increases as the life increases, because DER holders are assured that barring unusual circumstances, their DER's will not "die" before they are needed for use. Spiking risks appear to diminish in proportion to longer DER lives because the timing of DER use presumably becomes more random and less tied with anticipated DER expiration. DER's with unlimited lives would also require less recordkeeping and tracking burdens.

In recognizing the value of long DER lives, EPA found no obvious basis for any particular number of years that DER's should last. Any limit to DER life--however long-- might encourage DER's being stockpiled for future use, which creates the risk of spiking. Moreover, no procedural or environmental problems have been found to date with the unlimited lives granted for allowances in the acid rain trading program. The EPA is therefore inclined to adopt the same convention for DER's in the open market program. The EPA requests comments on whether and for what reasons a long finite life might be more appropriate than an unlimited DER life.

2. Limited Authorization to Emit and DER Limitation or Termination

Just as under the Title IV SO2 emissions trading program, the OMTR would not confer property rights to the DER holder. Section 403(f) of the Act states:

An allowance allocated...is a limited authorization to emit sulfur dioxide... Such allowance does not constitute a property right. Nothing in this subchapter or in any other provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization. (42 U.S.C. §7651b)

Congress included this requirement to ensure that allowance holders understood that they were barred from claiming a governmental taking under the 5th Amendment of the U.S. Constitution. Like the acid rain SO2 allowances, DER's would not be property, but would be limited authorizations to emit the regulated pollutant. Property status is unnecessary to secure a stable commercial setting for DER trading and could produce undesired and perverse results, such as requiring a government agency to compensate the owner of a pollution source when its emissions are limited. A tradeable reduction derives its value wholly from the regulation under which it was created. DER holders could exercise a specific license to use DER's in the manner set out under the model OMTR.

Program audit and reconciliation provisions in the model rule would authorize the participating air pollution control agency to limit or terminate DER use in extreme circumstances. States should consider this an option only when other options have failed to provide for meeting the State's underlying Act obligations. Although EPA would not expect this to occur, and would expect that the program will achieve real and cost-effective emissions reductions without having to resort to DER limitation, this contingency measure must be available to provide confidence that States will make continued progress toward their air pollution control goals.

E. Notices, Reporting and Recordkeeping

As with all environmental compliance programs, appropriate reporting and recordkeeping would be necessary to allow for the proper enforcement of all applicable requirements and the tracking of the overall compliance program. In addition, there is a need for the public to obtain access to sufficient information to monitor the performance of industry and government in meeting their obligations. In an emissions trading program of this type, these reports are essential for

ensuring the integrity of the system and the confidence of the public that air quality goals are being met.

Each record that must be kept, or report that must be filed, puts a resource burden on the entity required to produce it. Therefore, it is important to reduce the amount of recordkeeping and reporting to the minimum necessary to ensure a high-integrity market. Three notices would be considered necessary: (1) a notice of generation of DER's, (2) a notice of intent to use DER's for compliance purposes, and (3) a notice of use of DER's for compliance.

1. Notice and Certification of DER Generation

A DER generator would be required to file a Notice and Certification of DER Generation with the State containing information on the creation of DER's. This notice must be submitted within 90 days after a generation action is complete, or 1 year after commencement of the generation action, whichever is sooner. A responsible corporate officer must certify under penalty of law that the information in this notice is true, accurate and complete, based upon information and belief formed after reasonably inquiry.

This notice would provide potential buyers, the States (in their role as prospective compliance authorities), and the public the opportunity to review the records concerning the methods (protocols) used to generate reductions, the specific data (emissions rates, production volumes, etc.), and the relevant baseline (lower of actual or allowable) to verify that the DER's are real, surplus, and accurately quantified. Second, this notice, coupled with the user's responsibility to report a DER use, would serve as the necessary "tracking" record to assure that a specific DER was used only once, since the tracking system should uncover the case of multiple use of a ton with the same serial number. Third, the notice would provide pertinent information for audits of the overall emissions trading program by the State.

To provide systematic certainty and integrity to the program, the State would assign a unique serial number to each ton of reduction. This would allow a subsequent Notice and Certification of DER Use to be matched to the exact tons which were generated and ensure that such tons came from a relevant geographic location and were used only once. Each State could establish its own numbering

system, or could collaborate with other States to design a regional or national system.

2. Notice of Intent to Use DER's

The Notice of Intent to Use DER's for compliance purposes would be required in order to alert the State and public that a source intended to use DER's. The State and the public would have the opportunity thereby to examine a DER compliance strategy prior to use and prior to the possibility of any environmental harm. The notice must be filed at least 30 days prior to the source's first use of DER's and renewed at least annually in cases of continued or repeated use. This notice would serve to ensure that a prospective user held sufficient DER's prior to use. It also would allow the State to consider the level of inspection oversight to employ with the user. This notice only signals intent to use DER's; a notifying source would not actually have to use them.

As part of their Notice of Intent to Use, States may want to require sources to submit the price paid for each DER. The EPA believes that knowledge of DER price could serve to assist States in determining which DER's were high quality and which were low quality. Therefore, price could serve as a signal to target a State's

enforcement resources. For example, a generator would be likely to charge premium prices for DER's they created that were supported with high quality documentation, whereas a generator of a less supportable DER might tend to lower its DER price in order to compete. The lower-priced DER in this context would denote a lower quality, or higher risk product. Of course, in other instances low price may indicate no more than that the generator has found a low-cost control opportunity. Nonetheless, price might serve as a signal to a State to examine specific DER's more carefully during compliance reviews. The EPA requests comment as to whether price should be a required submission in the model rule.

3. Notice and Certification of DER Use

The Notice and Certification of DER Use would be required in order to provide the State with information on the actual amount of DER's used by a particular source for compliance purposes. It would include information on the methods by which both the amount generated and the amount needed for compliance purposes were calculated. A duly authorized corporate officer must certify under penalty of law that the information in this notice was true, accurate and complete, based upon information and

belief formed after reasonable inquiry. Based on receipt of this notice, the State could conduct compliance determinations and inspections to ensure that the source had met all of its obligations through the use of DER's. This notice is essential for the purposes of compliance assurance and enforcement.

No action would be required by the State when it received a notice, other than to make it publicly available as discussed below. The Notice and Certification of Generation and the Notice and Certification of Use, however, would be the State and Federal authorities' main compliance and enforcement tools for generators and users of DER's.

To lessen the paperwork burden on sources, the information in each of the proposed notices has been reduced to the minimum necessary. However, the source would be required to keep full records of all of the documentation associated with the generation and/or use of DER's at their facility.

4. Notice of Intent to Generate Rejected

The EPA has considered creating a Notice of Intent to Generate which would be filed before any generation activity, but prefers not to require it in the model

OMTR. Proponents advocated the notice so as to provide the State with advance notice of the time period over which DER's would be generated and the method that would be used to generate them ("Emission Reduction Credit Demonstration Project," Phase II, Volume I; Final Report, April 1995). Proponents cited reasonable justifications for such a notice. The notice could provide some preemptive assurances against invalid DER generation, and hopefully could result in a higher level of scrutiny which would lead to a system with enhanced environmental integrity. However, EPA believes this benefit is outweighed by the resource burden required to be placed on each participating source and State, since the notification is, by definition, a non-binding assertion of intent that some facilities may and will ultimately decide not to follow. Although the model OMTR would not require a Notice of Intent to Generate, a State may decide that in its particular case that the benefits of the notice outweigh the burdens. Therefore, EPA would approve specific OMTR's that require this notice.

5. Public Availability of Information

Adopting the model rule into the SIP would replace the need for single-source SIP revisions. Such SIP

revisions, however, serve the purpose of providing the public with notification of each proposed trade. Without some other vehicle for public notice, the public would not be aware of DER trades. The EPA believes public confidence is essential to the success of the open market program. Members of the public have a legally recognized role in compliance assurance and enforcement through the citizens suit provisions under section 304 of the Act. The public must have fair access to the information related to DER generation and use activity.

The proposed model rule would require the State to make all of the notices received available to the public. For sources with a title V permit, the information must be filed with or attached to the permit and made available where the permit is available. For non-title V sources, the State would make the notices available in a similar manner to the title V sources. Facility documentation that is not included in, but supports the information in, the notices must be made available through the State's "freedom of information" or other laws, if applicable, relating to the public's access to a source's compliance documentation.

The EPA is concerned that not all States will have laws that allow the documentation underlying the notices to be reasonably accessed by the public if it is not submitted to the State along with the required notices. The Agency considered a range of requirements that would facilitate the public availability of such documentation. At one end of the range, the Agency considered a rule requirement for sources to make the documentation available to the public upon request. At the other end of the range, the Agency considered a rule requirement that all source documentation be submitted to the State along with the required notices so that the State could make the information available. A middle ground option would require sources to submit the underlying documentation to the State, but waive the requirement if the source agreed to make the documentation available to the public upon request. The Agency requests comment on the appropriate way to ensure that the public has reasonable access to a source's compliance documentation without unreasonably burdening either the source or the State.

F. Federally Enforceable Operating Permits

The purpose of the title V program, codified in 40 CFR Part 70, is to ensure effective implementation of all applicable requirements of the Act for those sources subject to a Federally enforceable operating permit. The title V program rules impose various important administrative and procedural provisions (e.g., permit fees, opportunity for public participation). The title V program does impose a limited number of requirements relevant to source operation that supplement the applicable requirements of the Act in order to enhance their implementation. For example, a source's title V permit must specify methods for monitoring and certifying compliance, and must address these if the applicable requirement fails to otherwise provide them. The provisions of the Part 70 rule that provide for individual source emissions trading under permit-specific caps and for trading under a SIP are currently the subject of rulemaking.

If adopted into a State's SIP, the provisions of the OMTR become part of the underlying requirements reflected in a source's operating permit. Therefore, changes in a source's operating permit language are not necessary for the source to participate in the open market program.

However, for the benefit of both the source and the public, language that specifically addresses the ability of the source to comply with applicable requirements through emissions trading could appear in the permit. The EPA intends to issue permit writing guidance that would include language on open market trading that could be incorporated into individual permits.

G. DER Registries

Open marketplace participants would require access to information that enabled them to make accurate and informed decisions about the supply, demand, quality and expense of DER's. This information could be efficiently transferred among participants through one or more registries that sent and received relevant DER information. Registries should provide convenient and inexpensive public access, should not interfere with the ability of "small" market players to participate, and should help assure that specific DER's are not used more than once.

Comprehensive, high-quality information should be readily available at reasonable cost to all participants and the public. Such information might include: DER source listings, generator source type, location, contact

name of DER holder or holder's agent, DER generation period, DER price, specific use restrictions if applicable, generator and user nonattainment area classification, and DER user's needs and requirements.

The EPA also believes that small market players, i.e., generator or user sources that generate or use relatively small market quantities, should not be disadvantaged by registry access requirements or the listing fee structure. The EPA does not wish in any way to discourage small sources from taking advantage of the benefits of open market trading.

The EPA has addressed the issue of double-counting of DER uses through the proposed rule's notice requirements. States must ensure that unique identification is assigned to each ton of DER's generated and reported in the Notice and Certification of Generation that each generator source would be required to submit. States could then check that a specific DER was used only once by cross-referencing DER use notices with the DER generation notice. This check would be more complicated in a case where use occurred in a State other than the generator source's State. Therefore, the proposed OMTR would require that States that allow such

uses must have a memorandum of understanding (MOU) or similar agreement approved by the EPA, which facilitates checking for double-use of DER's.

While EPA recognizes that this function might best be performed through a national registry, a question remains as to whether EPA, State governments, or the private sector should provide these services. The EPA is inclined to encourage registry development in the private sector. For resource and efficiency reasons, EPA believes the private sector is a more appropriate choice than EPA. Thus EPA requests comment on (1) whether the private sector should provide such services; (2) whether registries should be subject to regulation to assure access and coverage of relevant information; (3) whether EPA or the State should operate registries; and (4) whether a national registry, as opposed to multiple regional or local registries, is necessary for the open market program to function properly.

H. Protocol Development and Approval

A key to integrity in the operation of the open market trading system is accurate quantification of the amount of surplus DER's created and of the amount needed to meet compliance obligations. Emissions quantification

is generally divided into two conceptual components. First, emissions quantification protocols specify the type of data needed on emissions rates and operating rates (e.g., monitoring methods, emissions factors, production rate or other activity measures) and address other critical methodological issues (e.g., data quality and statistical considerations). Second, specific data must be developed pursuant to such protocols and used to calculate specific results. Quantification protocols can be defined to varying degrees of specificity in advance of particular emissions reduction actions. The actual data used in particular cases, naturally, can be developed and evaluated only case-by-case.

A number of cross-cutting factors must be considered regarding the development of emissions quantification protocols. On the one hand, both emission sources and compliance authorities have strong interests in certainty. Federal and State authorities want to be sure that methods are technically sound and that sources can be held to follow them. Sources want methods they can use with assurance of predictable outcomes at the time of compliance determinations. Based on these concerns, some State and industry stakeholders have urged that protocols

be reviewed and approved by EPA before DER's are introduced into the market. This would give both sources and compliance authorities a common yardstick with which to gauge the validity of DER's and the greatest certainty of outcomes, without requiring redundant resource investment by multiple States.

On the other hand, a protocol pre-approval requirement would greatly strain governmental resources and significantly dampen development of the open market system. Given the variety of source types eligible to participate and the variety of emissions reduction strategies available to them, dozens (possibly hundreds) of specific quantification protocols would be needed. Resource constraints on EPA and States could severely limit the number of such protocols that could be developed and approved in the near future, even with the benefit of partnerships with industry and others. Many DER generation and use actions could be delayed or precluded by the unavailability of pre-approved protocols and the lack of a route for proceeding without such protocols.

In response to these cross-cutting considerations, EPA has tried to develop a middle ground that provides a

sufficient measure of certainty and predictability with due regard for governmental resource constraints and the need for flexibility to adapt to new situations. The EPA intends to issue guidance containing criteria for acceptable emissions quantification protocols. The criteria would set forth meaningful standards for the kinds and quality of data required to support the calculation of amounts of emissions reduced by generators or needed by users. DER Generators and users would be able to employ these criteria to develop specific quantification protocols for their applications. Compliance and enforcement authorities would be able to use these criteria to determine whether submitted protocols, and associated data, are sufficient to establish compliance. The guidance would be issued with the final model OMTR and revised and expanded as necessary from time to time. Generators and users would be able to rely on, and would be held to, the guidance in effect at the time they generated DER's or at the time they determined their need for DER's to meet compliance obligations, respectively.

In addition, EPA intends to create a mechanism for working with States, industry, and the environmental

community to develop and approve specific quantification protocols for priority types of generation and use activities. It is envisioned that some such protocols would be drafted by industries, and others by EPA or States. They would be reviewed by a multi-stakeholder process prior to an EPA approval decision. The EPA believes that in many cases emissions quantification protocol development may not be a large additional burden. This could be especially true for protocols that determine the amount of DER's needed to be in compliance, since user sources subject to emissions limits may be already familiar with the task of evaluating their emissions levels.

The EPA specifically requests comments on two variations on this basic approach. In both cases, sources would develop their own protocols subject to EPA's protocol guidance criteria where no pre-approved protocol existed. Where EPA-approved protocols existed, however, two options could be followed. In one case, a source would be required to use the pre-approved protocol unless it obtained EPA's approval of an alternative protocol. In the other case, a source would be allowed to use an alternative of its own design in lieu of the

pre-approved protocol, so long as the alternative conformed to the criteria in EPA's protocol guidance.

The model rule would allow State OMTR's to incorporate EPA's protocol guidance and specific pre-approved protocols by reference. In this way, a source which generated or used DER's would be on notice that it was legally bound by the protocol guidance or specific protocols (as applicable) that were in effect at the time of their generation or use action. Incorporation by reference would provide fair notice and binding effect while avoiding the need for continual SIP revisions as new specific protocols were adopted and as EPA's protocol guidance was revised. In the interest of assuring enforceability, EPA is also considering whether each EPA-approved protocol and/or the EPA protocol guidance should be incorporated directly into State SIP's and requests comment on the sufficiency of the incorporation by reference approach.

The EPA acknowledges, however, that there are risks for both sources and authorities associated with allowing operation under protocol guidance as proposed. Generators would be allowed to introduce DER's into the market based on specific protocols that they devised

pursuant to the guidance, without advance approval. Compliance agencies would have to determine the protocol's consistency with the guidance at the time of the compliance determination, after sources had made use of the reductions. Despite the fact that the proposed rule assigns users the burden of proof of DER validity, it may be more difficult at this stage for compliance authorities to reject DER's based on unsound methodologies. Further, at least a portion of the resource burden associated with evaluating protocols in advance would be shifted to shifted to State and Federal compliance authorities later in the process. The EPA requests comment on these issues.

The EPA believes this combination of protocol guidance and specific protocols would give generators and users, as well as compliance authorities, a predictable "road map" for distinguishing DER's that have a high likelihood of being considered valid from ones that are doubtful or clearly inadequate. The EPA requests comment on all aspects of this approach.

I. Meeting Related Federal Requirements

The Act requires SIP's to include provisions to meet specific rate of progress (ROP) requirements applicable

to certain ozone nonattainment areas under section 182. The Act also requires SIP's to provide for the attainment and maintenance of the NAAQS. SIP's must include specific emissions limits within a nonattainment area to meet ROP and, in moderate or above nonattainment areas, as well as certain marginal areas, the SIP must require RACT. SIP's may also include modeling analyses which result in emissions limits over an area larger than the nonattainment area--the modeling domain--as needed to attain the NAAQS. Emissions trades between sources far apart could cross multiple nonattainment areas and modeling domains and, thus, impact ROP, RACT and attainment requirements contained in more than one SIP.

As noted above, the proposed rule would limit certain DER uses with respect to pollutant, modeling domain, and nonattainment area. These provisions recognize the regional nature of the ozone nonattainment problem and the specific limitations are intended to help assure consistency with any attainment or maintenance plan and ROP requirements.

In addition, the model rule would require an audit of the trading program to evaluate, among other items, the effect of the program on the attainment demonstration

and ROP requirements. The provisions would require a retrospective look at the effects of the trading program at least once every three years. Where an inconsistency with the attainment or maintenance plan or ROP is determined by the State, the State must institute measures to correct the problem.

1. Attainment and Maintenance Plans

The EPA recognizes that the intertemporal use of DER's may, under certain circumstances, place pressure on an area's attainment requirements. If numerous DER's generated prior to the attainment date were used near the attainment date, the additional emissions from sources that avoided otherwise required reductions could lead to violations of the NAAQS and delay attainment.

In addition, emissions trades between sources far apart could cross multiple nonattainment areas, States, and modeling domains and, thus, impact ROP and attainment or maintenance plan requirements contained in the SIP's.

The validity of attainment and maintenance plan modeling analyses could be eroded by trading if the location and amount of emissions significantly changed from the initial plan assumptions. Such shifts would add uncertainty to predictions of the ozone levels expected

on peak ozone days. In a worst-case scenario, reductions created during non-episodic conditions could be used during episodic conditions, exacerbating peak ozone levels.

The EPA must evaluate these potential planning concerns in light of section 110(1) of the Act, which provides that EPA--

shall not approve a revision of a plan if the revision would interfere with any applicable requirement concerning attainment and reasonable further progress...or any other applicable requirement of this Act.

Whether DER use would interfere with an attainment demonstration depends on numerous factors involving the amount, timing, and location of trades. Limitations in the model rule (e.g., spatial limitations) could reduce the risk of such interference. Based on available information, EPA does not have evidence at this time that would lead it to believe that an overly large number of DER's will be used during the year of an attainment deadline, or at any other time that could precipitate exceedances of the standard. Rather, it seems reasonable to assume that DER's will be generated fairly steadily as opportunities for better controls arise, in response to continuing demand by DER users. Moreover, certain

sources may require use of DER's over a long period of time; under these circumstances, it is doubtful that the intertemporal or spatial aspects of the OMTR would interfere with attainment. The EPA acknowledges, however, that generation of DER's could be bunched at particular points in time, such as new control deadlines, by sources that are able to implement controls prior to the required date. Also, use of DER's could be bunched just after such deadlines. If this phenomenon occurs on a large enough scale and at a particular time, attainment could be jeopardized. On balance, EPA has concluded in this proposal that current information does not establish a sufficient risk of this scenario to constitute interference with attainment. Although the open market trading program adds an element of uncertainty to the attainment planning, attainment demonstrations have many other unavoidable uncertainties which may include growth projections, biogenic emissions, mobile source emissions, rule effectiveness, model boundary conditions, and model precision. The EPA invites comments on its analysis and conclusions on this point.

It is possible to imagine trades that could adversely affect a SIP's attainment or maintenance

strategy by creating "spikes" over permissible aggregate emissions levels. The mere possibility of such events does not mean that the program would necessarily interfere with attainment planning. It does, however, offer support for the need of periodic trading program audits to monitor trading.

2. Rate of Progress (ROP) Requirements

ROP requirements must be met in nonattainment areas.

Section 182(b)(1)(A) of the Act, applicable to ozone nonattainment areas classified as Moderate or higher, provides that the SIP--

shall provide for such specific annual reductions in emissions of volatile organic compounds and oxides of nitrogen as necessary to attain the national primary ambient air quality standard for ozone by the attainment date applicable under this Act.

Section 171(l), applicable to all nonattainment areas, contains a similar requirement. Section 182(b)(1)(A) further requires a 15 percent reduction in VOC by the end of 1996. Section 182(c)(2)(B), applicable to areas classified Serious and higher, generally requires a 9 percent reduction in VOC or NO_x for each 3 year period thereafter, until attainment.

An area's success in meeting ROP requirements depends on many factors, including growth rate, rule

adoption schedule, and control effectiveness. In many cases, trading would clearly not impact ROP: for example, in areas not covered by ROP programs; in areas trading NOx emissions and affected by VOC-only ROP programs; for same pollutant trades within a single nonattainment area; and for trades involving emissions reduction from sources in one nonattainment area over one ozone season. In addition, where the SIP's nonattainment area reductions were greater than ROP requirements, VOC trading within that margin would not affect ROP and, thus, would be acceptable. In general, EPA believes that an audit program should be part of a State's ROP planning, because, like attainment planning, it may be affected by trades under an OMTR. The intertemporal aspect of trades, as well as trades across nonattainment areas, raise the possibility that under certain circumstances, trading could jeopardize ROP.

The EPA has made use of a computer model which allows a rough approximation of the impact of intertemporal trades on attainment and ROP plans, under various simplified assumptions about overall market activity and some alternative policy choices. As discussed above with respect to attainment planning,

hypothetical circumstances may arise in which large quantities of DER's are generated in year 1 and used in year 2, or generated in one area and used in a neighboring area, to a degree that interferes with reduction targets in year 2 or in the neighboring area.

However, for much the same reasons discussed above with respect to attainment planning, EPA believes it reasonable to assume that intertemporal trading will not be of the magnitude necessary to interfere with the 1996 and subsequent ROP targets. For the same reasons, EPA believes it reasonable to assume that OMTR trading will not cause annual emissions spikes that may interfere with the section 182(b)(1)(A) requirement concerning annual reductions as necessary to attain. In any event, EPA believes that even if annual "spikes" were likely to occur as a result of an OMTR program, this requirement should be interpreted in light of the purpose of the OMTR, which is to encourage early reductions in exchange for an opportunity to trade the DER's so generated. If year 2 emissions are higher than in year 1 because DER generation causes emission reductions to occur a year early, EPA would not conclude that DER use interfered with the section 182(b)(1)(A) requirement. The EPA

invites comment on its analysis and conclusions concerning ROP.

3. RACT

Act section 182(b)(2) requires a SIP revision implementing RACT for VOC sources for ozone nonattainment areas classified as "moderate" and higher. Section 182(f)(1) imposes the same requirement on NOx sources. The Act does not define RACT; instead, EPA defines RACT as the lowest emissions limitation that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility (44 FR 53762 (1979)). VOC RACT has traditionally been met on a 24-hour basis unless the State has shown that a longer averaging time is needed because of recordkeeping difficulties or control infeasibility. Many RACT rules adopted by States include emissions rate limits based on daily or 30 day averaging times.

For many years, EPA has interpreted RACT as a performance standard, which normally manifests itself as an emissions limitation based on a particular control technology, as opposed to a requirement for the technology itself. The EPA has applied RACT on an

aggregate basis in the EIP rule, so that some sources may meet RACT limits through averaging (59 FR 16706 (1994)). However, under the model OMTR, DER's that were generated before a RACT compliance deadline could be used after the deadline. This raises the possibility that stationary sources subject to RACT requirements, in the aggregate, would not meet their otherwise applicable SIP RACT limits in the period after the RACT compliance deadline.

The EPA believes that it has the discretion to define "reasonable available control technology" to allow intertemporal averaging that may occur around a RACT compliance deadline under the OMTR. In the EIP rule, EPA considered air quality factors in determining whether stationary sources subject to RACT could emit at levels higher than levels otherwise deemed RACT if the excess emissions were more than offset by reductions among non-RACT sources. The EPA concluded that this system was consistent with the definition of RACT because the higher emissions levels of the RACT sources would be considered to be reasonable in light of the exceptional environmental benefits of the additional offsetting reductions.

A comparable analysis applies in the case of the OMTR. The OMTR would encourage early reductions by both RACT and non-RACT sources in year 1. In year 2, DER use might cause higher-than-current RACT levels of emissions. However, because DER generation would have provided early environmental benefits in year 1, and because 10 percent of the DER's used in year 2 would be retired for environmental benefit, EPA could conclude that the emissions levels in year 2 continue to reflect RACT.

J. Enforcement Issues

1. Calculation of Violations

The proposed rule provides for the calculation of violation days as consecutive days with a DER shortfall after first taking into account all valid DER's. This standard is applicable when emissions or emissions rates are measured on a daily basis. For example, if a source exceeds its emissions rate for 10 days and can demonstrate that it held sufficient DER's to cover its emissions overages for only the first 5 days, the source would be subject to penalties for the last 5 days. In circumstances when sources use a longer period of time for measuring emissions (e.g., a 30 day average period),

violation days would be calculated based on the number of days of the measurement period for which there is any DER shortfall. For example, if a source measured emissions over a 30 day period and it was determined to have had a shortfall of DER's beginning any day during the measurement period, the enforcement action and penalty calculation would be for 30 days of violations. The EPA believes that this would encourage market participants to develop better, more accurate emissions measurement methods that will enable sources to measure emissions on a daily basis.

2. State Compliance Determinations

Sources subject to the title I permit requirements would be required to submit compliance certifications annually. States monitor compliance of other stationary sources on a periodic basis. This rule would not impose a particular time period or frequency for States to review the validity of DER uses. However, it is EPA's expectation that States would develop inspection plans which address both generator and user sources in a manner consistent with EPA's Compliance Monitoring Strategy and other applicable guidance. In addition, because the integrity of the open market trading program relies so

heavily on retrospective review, it is likely that EPA would identify the OMTR as a national priority in the early years of implementation. As a result, States would be expected to address a wide range of OMTR participants in their inspection planning. In this regard, DER use would be treated exactly the same as other air pollution control programs. The EPA solicits comment on whether a particular time limit within which to review particular DER uses should be imposed, in light of the fact that OMTR is a new program that carries risks concerning, for example, the quantification of DER's.

K. Program Audits and Reconciliation Measures

The OMTR would require States to conduct periodic audits of the open market trading program and implement reconciliation measures if appropriate. The State must evaluate and report on the following program elements:

- (1) The amount and timing of emissions reductions (e.g. DER's used compared to DER's generated in a given year or ozone season);
- (2) Compliance by generators and users;
- (3) The effect of the program on temporal and spatial assumptions in the attainment demonstration and ROP plans;

(4) The effect of trading on emissions of hazardous air pollutants; and

(5) The effects of remedial measures, if applicable, implemented as a result of previous audit findings.

Unlike the EIP requirement (59 FR 16700 (1994)), under the OMTR program, reconciliation measures would not have to be automatically executing, and therefore, an appropriate "trigger" for the automatic execution of reconciliation measures would not be necessary. However, in the event the program audit revealed problems attributable to the trading program that were likely to persist, EPA encourages States to adopt remedial measures.

The following list of contingencies should be considered depending upon the nature of the problem that is uncovered by the audit:

(1) restrict trading (limit trading so that the difference between DER generation and use is reconciled in a one-year period); increasing the environmental benefit component of DER's or limiting DER's or portions of DER's to compensate for the difference between the projected and actual emissions inventory;

(2) enhanced monitoring (increase monitoring or quantification requirements for facilities in the OMTR program to better determine impacts on progress and attainment from the participating sources);

(3) implement specific additional emissions reduction measures; and

(4) increase enforcement and/or penalties (for use in the case where the discrepancy between actual and projected data is related to non-compliance with the OMTR program).

Audits must occur at least every 3 years, coinciding with a ROP milestone determination, or, if none applies, simply every three years after State adoption of the OMTR.

In conjunction with the triennial audits proposed above, EPA would work cooperatively with States that adopt open market programs to assess on a three-year basis the nationwide performance of open market trading programs. Using the results of State audits, an analysis would be prepared to assess the open market program's effectiveness. In the event that the triennial assessments showed that programs based on the OMTR jeopardized particular areas' ability to attain the

NAAQS, to demonstrate required progress, or to meet other Act requirements, then EPA could issue specific SIP calls or, in the extreme case, adjust the OMTR program to compensate for such shortcomings.

The EPA solicits comment on all aspects of the audit requirements, in particular: (1) the frequency of the audits (more or less frequent than every three years); (2) the components of the audit program that should be required; (3) whether a mechanism for triggering reconciliation measures should be required; and (4) which, if any, reconciliation measures should be required.

L. Interstate Trading

The proposed OMTR limits interstate trades to areas which have Memoranda of Understanding (MOU's) to assure the success of the trading program in each State. This provision recognizes the regional and interstate nature of the ozone nonattainment problem and the specific limitation is intended to help assure consistent compliance programs and facilitate information exchange between the States.

After States adopt the model rule, sources might wish to effect trades across State lines. Such VOC

trades could occur within interstate nonattainment areas; for NOx, modeling domains are frequently interstate. A mechanism would be needed to assure that an emissions reduction in one State was recognized in another State and that trades were made consistent with the requirements of the respective State's rules. Further, a trading program needs enforcement provisions that assure proper monitoring and enforcement in all participating States. Therefore, EPA believes that States must sign a MOU or equivalent document. The MOU must include the following provisions:

(a) The State where the generator is located must agree to provide the State where the user is located in a timely manner with all relevant information it possesses concerning the DER's and the generator, including, but not limited to, information on the generator's SIP limits and permit, as well as a copy of the notice of generation proffered by the DER user;

(b) The user State must agree to provide the generator State in a timely manner with all relevant information, including the notice of intent to use and the notice of use;

(c) The State where the generator is located must agree to notify the State where the user is located as to whether the DER has been used previously;

(d) The State where the user is located must agree to enforce its individual State emissions requirements as modified by any valid trades.

The EPA solicits comment on all aspects of the interstate trading issue, including whether States should be permitted to include interstate trading only after EPA approval of its MOU's with other States.

M. Effect of VOC Trading on Emissions of Air Toxics

Many volatile organic compounds (VOC's) are listed as hazardous air pollutants (HAP's) under section 112 of the Act. Emissions of these toxic pollutants are often reduced incidentally by compliance with VOC limitation. Citizens groups have been concerned that by relaxing site-specific VOC limitations, VOC trading programs might lessen public health protection from air toxics at some facilities. The EPA is considering whether open market trading programs should contain safeguards (beyond the continued requirement to meet section 112 standards) to reduce the chance that a facility using off-site DER's in lieu of meeting otherwise applicable VOC limits, would

have higher HAP emissions than if it directly met the VOC limits with on-site controls.

Overall, EPA believes that open market trading programs would encourage quicker reductions of VOC emissions, including HAP's that are VOC's, by reducing the cost of Act control requirements and providing incentives for early reductions. This could reduce aggregate risks from toxic air emissions.

At the facility-specific level, however, results may not be geographically uniform. For example, if a facility emits VOC's that are toxic air pollutants, and buys DER's to satisfy a RACT requirement, the facility's emissions of air toxics would be higher than if the facility had installed controls. Conversely, if the facility chooses to make extra emissions reductions and sell them as DER's, toxic emissions from the facility should be lower than without trading.

The EPA has considered several options for dealing with potential changes in toxics emissions as a result of open market trading. The first option would require all sources participating in the open market system to disclose to the public when DER generation or use would cause HAP increases (or forgone decreases), and that

States should retroactively study the effect of open market VOC trading on aggregate and facility-specific hazardous air pollutant emissions.

A second option would be for EPA to prohibit a source from using a DER for RACT compliance if the effect would be to increase hazardous air pollutant emissions.

A third option would require States to include in their programs some mechanism to prevent trades that could pose significant toxics concerns, with the mechanism to be determined by the State. Such mechanisms could include screening assessments to provide an indication of whether health or environmental risks from a facility might increase significantly, or a fuller risk assessment. As a variation of this option, a requirement for sources to notify the public of HAP increases due to trades could be among the options available to a State.

The fourth option would be for EPA to leave to State discretion the issue of whether State programs should include restrictions, disclosure, or other safeguards to ensure that toxic emissions changes are acceptable. The EPA could issue guidance on ways to determine whether a VOC trade should be considered unacceptable due to toxics impacts.

The EPA has decided to propose a disclosure requirement which might serve many purposes. Citizens who live near a facility could use the information to determine whether the trade posed a health concern. In many instances, this information may be reassuring, where perceived HAP emissions were larger than actual amounts. The State could also use disclosed information to help ascertain whether to use State regulatory authorities to curb any HAP increases (or to ensure attainment of expected decreases).

Many facilities already are subject to annual toxic release inventory reporting required by the Emergency Planning and Community Right-to-Know Act of 1986 and Pollution Prevention Act of 1990. These reports include estimates of annual emissions of all but eight of the 189 hazardous air pollutants listed under section 112 of the Act. Using the same methodologies it uses for toxic release inventory (TRI) reporting, the facility could estimate HAP emissions with and without DER generation or use. DER generators would include this information in their generation certification notices submitted to the State. DER users would include the information in their notice of intent to use DER's and in their post-use

compliance certifications. As described in other sections of this preamble, the rule would require States to make these notices available to the public.

Some commentors have expressed concern that a toxic pollutant disclosure requirement would stigmatize the use of DER's with the detrimental effect of "chilling" the use of DER's and discourage market participation. These commentors have further argued that plant-specific fluctuations in HAP emissions resulting from the generation and use of DER's are not likely to be significant, and that they will in most cases be below the level of Federal and State regulatory concern. Toxic emissions that do not fall below this level are already (or will be soon) regulated under Section 112 of the Act.

The EPA solicits comments as to whether it should balance this concern against the potential lack of knowledge about toxic pollutant emissions changes.

The EPA seeks comment on all aspects of this possible disclosure requirement. The Agency seeks comment on the suitability of TRI emissions estimation methodologies for the purposes of this rule. In addition, EPA seeks comment on alternative ways to estimate the difference in emissions of each HAP that

would result from DER use or generation, especially for facilities not subject to TRI.

The EPA is also soliciting comments on the approach that States should take in studying the effects of open market VOC trading on the aggregate level of risk from air toxics, and on such risks from individual facilities. Depending on the results, the study could either allay concerns of significant increases in risk, or suggest a need for changes in open market trading or air toxics programs. One component of this study might be to evaluate the information that would be available as a result of the proposed disclosure requirement.

N. Impact of OMTR on Related Programs and Policies

1. Emission Trading Policy Statement

The final Emission Trading Policy Statement (ETPS), published in the Federal Register on December 4, 1986 provides a general framework for EPA-approvable emission trading. This policy requires that all reductions used in trades be enforceable, permanent, surplus and quantifiable. This policy provides guidance for States to develop model trading rules that would allow specific two-source trades without source-specific SIP revisions, as well as approval criteria for trades submitted as

source-specific SIP revisions. The OMTR does not change the requirements of the ETPS, or the types of emissions trading that can occur under the ETPS.

2. Economic Incentive Program Rule and Guidance

The EPA's most recent policy on emissions trading is embodied in the Economic Incentive Program (EIP) rules that were promulgated on April 7, 1994. The 1990 Amendments of the Act required EPA to promulgate EIP rules for certain areas that must implement an EIP as part of their ozone and carbon monoxide attainment strategy. These rules also serve as guidance for all other areas that choose to develop and implement EIP's. The types of trading programs envisioned in the EIP are emissions limiting strategies (such as RECLAIM), market-response strategies, and directionally-sound strategies. The model rule proposed here would establish the ground rules for one type of market-response strategy, namely open market emissions trading of ozone precursor emissions. The model rule proposed today in no way limits the use of other strategies.

The open market program would differ from the requirements for EIP programs in many respects, including, among others:

(1) the intertemporal, spatial, and inter-pollutant trading requirements and restrictions;

(2) requirements for trading between RACT and non-RACT sources;

(3) notifications by generators and users;

(4) lack of pre-approval for trades; and

(5) requirements for program audits and reconciliation measures.

In light of these differences, EPA is considering amendments to the final EIP rules and guidance, so that the model OMTR would meet all the criteria for an EIP mandated under section 182(g). These amendments could affect the final EIP decisions in such areas as the definition of surplus, the averaging time for RACT, and the requirement that protocols be approved by EPA before they are used.

3. Memorandum to Region IX

Regarding Surplus Determination

On August 26, 1994 EPA issued a guidance document on the use of pre-1990 ERC's and adjusting for RACT at time of use. In this memo EPA stated that for banked ERC's it was not sufficient to determine surplus at time of generation, but ERC's must be discounted at time of use

to account for any new RACT requirements that may have occurred since the ERC was banked.

ERC's are reductions in the rate of emissions (e.g., pound per day or tons per year). When a source creates an ERC it takes an action which reduces the rate of emissions on a continuous basis. The ERC's are used to offset increases (or lack of decreases) in the rate of emissions on a contemporaneous basis. Thus the reduction created by the ERC must be surplus at the time of use. DER's, on the other hand, would be created and documented before they were used. Thus, barring any restrictions at the time of use, DER's would be surplus only at the time of creation.

The Memorandum also ties surplus to the 1990 and other subsequent emissions inventories as well as attainment demonstrations and ROP plans. The EPA believes that this policy is still valid for ERC programs but would only be partially applicable to DER programs. Several aspects of the proposed open market program illustrate this point. First, one purpose of the proposed open market rule would be to encourage early reductions, and this incentive would be reduced or lost if there were not a reasonable expectation that the

reductions could be used at a later date because they were no longer surplus. Second, the proposed rule would not allow pre-1995 reductions to qualify for credit, which would reduce the likelihood that a large amount of banked reductions could be used in the future. Finally, the proposed rule would retain the link to emissions inventories, attainment demonstrations and ROP plans for determining surplus at the time of generation, but would rely on retrospective program audits to ensure that DER use would not chronically interfere with progress toward attainment or attainment.

4. Emissions Budget Programs

Since the 1990 amendments to the Act there has been considerable activity in developing emissions budget programs for attaining the ozone standard. These programs determine the quantity of emissions an area can emit and still demonstrate attainment. This emissions budget is then allocated among the sources in the nonattainment area in the form of emissions allowances. Sources are then allowed to trade their allowances. The EPA has proposed conditional approval of the NO_x/SO_x Regional Clean Air Incentives Market (RECLAIM) program in the Los Angeles area, which is the most fully developed

ozone program of this kind. Various cap and trade programs are also being developed in Illinois for VOC, and in the Ozone Transport Region for NOx. The model rule would not inhibit the development and implementation of these programs. The EPA continues to strongly encourage States to develop cap and trade programs as part of their attainment strategies.

The EPA envisions that open market trading programs could be complementary to emissions budget programs. It is typically difficult to include all of an area's VOC and NOx sources in an emissions budget due to administrative costs or difficulty in quantifying the sources' emissions. For these reasons, smaller stationary sources and mobile sources are omitted. An open market program could offer sources not covered by the emissions budget a cost-reducing compliance option, as well as provide a continuous incentive to those sources to quantify their surplus emissions reductions.

IV. Administrative Requirements

A. Public Hearing

A public hearing will be held to discuss the proposed standards in accordance with Section 307(d)(5)

of the Act. Persons wishing to make an oral presentation on the proposed model OMTR should contact the Agency in accordance with the instructions given in the **DATES: Public Hearing** section of this preamble. Oral presentations will be limited to 15 minutes each. Any member of the public may file a written statement before, during, or within 30 days after the hearing. Written statements should be addressed to the Air Docket section address given in the **ADDRESSES** section of this preamble, and should refer to Docket No. A-95-21.

B. Docket

The docket is an organized and complete file of all the information submitted to or otherwise considered by the Agency in the development of this proposed rulemaking. The principle purposes of the docket are: (1) to allow interested parties to readily identify and locate documents so that they can intelligently and effectively participate in the rulemaking process; and (2) to serve as the record in case of judicial review (except for interagency review materials) (Section 307(d)(7)(A) of the Act).

C. Executive Order 12866

Under Executive Order 12866 (58 FR 51735 (1993)), the Agency must determine whether a regulatory action is "significant" and therefore subject to OMB review and other requirements of the Executive Order. The Order defines a "significant regulatory action" as one that is likely to result in a rule that may:

(1) Have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities;

(2) Create serious inconsistency or otherwise interfere with an action taken or planned by another Agency;

(3) Materially alter the budgetary impact of entitlements, grants, user fees, or loan obligations of recipients thereof; or

(4) Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order."

It has been determined that today's proposed model rule is a significant action because it raises novel

policy issues arising out of the President's priorities. This action was submitted to OMB for review in accordance with the Executive Order, and changes made in response to OMB suggestions or recommendations will be documented in the public record.

D. Unfunded Mandates Act

Section 202 of the Unfunded Mandates Reform Act of 1995 ("Unfunded Mandates Act") requires that the Agency prepare a budgetary impact statement before promulgating a rule that includes a Federal mandate that may result in expenditure by State, local, and tribal governments, in aggregate, or by the private sector, of \$100 million or more in any one year. A "Federal intergovernmental mandate" excludes "a duty arising from participation in a voluntary Federal program," unless the regulation "relates to a then-existing Federal program under which \$500,000,000 or more is provided annually to State, local, and tribal governments under entitlement authority," if the provision would "increase the stringency of conditions of assistance" or "place caps upon, or otherwise decrease the Federal Government's responsibility to provide funding. A "Federal private sector mandate" includes a regulation that "would impose

an enforceable duty upon the private sector, except (i) a condition of Federal assistance; or (ii) a duty arising from participation in a voluntary Federal program."

The proposed model OMTR would be a voluntary program that State and local governments could adopt. If adopted, the rule would govern the voluntary participation of private sector entities in an emissions trading program. Because the program would be voluntary for State and local governments and private entities, the Agency has not prepared a budgetary impact statement.

E. Paperwork Reduction Act

Today's proposal contains voluntary information collection requirements that are subject to review by the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1980, 44 U.S.C. 3501, et seq.

This collection of information has an estimated reporting burden averaging of 73.5 hours per trade and an estimated annual recordkeeping burden averaging 60 hours per respondent. These estimates include time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to Director, Regulatory Information Division, EPA, 401 M St., S.W. (Mail Code 2138), Washington, D.C. 20460, and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503, marked "Attention: Desk Officer for EPA."

F. Regulatory Flexibility Act

The Regulatory Flexibility Act of 1980 and applicable EPA guidelines revised in 1992 require Federal agencies to identify potentially adverse impacts of Federal rules upon small entities. Small entities include small businesses, organizations, and governmental jurisdictions. In instances where significant impacts are possible on a substantial number of these entities, agencies are required to perform a Regulatory Flexibility Analysis.

Today's proposal does not of itself impose an requirements on small entities, nor require or exclude small entities participation in open market trading in the future. As a result, the EPA has determined that the

proposed rule will not have a significant impact on a substantial number of small entities.

Therefore, as required under section 605 of the Regulatory Flexibility Act, 5 U.S.C. 601 et seq., I certify that this rule does not have a significant impact on a substantial number of small entities.

G. Act Section 117

In accordance with section 117 of the Act, publication of this proposal was preceded by consultation with appropriate advisory committees, independent experts, and Federal departments and agencies. The Administrator welcomes comment on all aspects of the proposed model rule, including health, economic, technological, and other aspects.

Date

Carol M. Browner
Administrator