

Front page

Voluntary Mobile Source Programs:

Crediting Innovation and Experimentation

(LOGOs)

EPA's Transportation Air Quality Center

Getting there with Clean Air

[Inside Cover]

Examples of Potential Voluntary Mobile Source Emission Reduction Programs

The following examples are representative of voluntary mobile source emission reduction programs (VMEPs) that could be implemented and credited with emission reductions for SIP related purposes. These programs can be designed to be implemented on an episodic, seasonal, or a continual basis.

Airport Strategies

Airport Ground Service Equipment technology improvements and intra/inter-airport transportation VMT reduction strategies have been proven to reduce emissions. Communities and airport planners may choose from a number of strategies to improve airport source emissions.

Clean Fuel Programs

Alternative and cleaner fuel sources are being developed to power multiple classes of vehicles. Some proven emissions-reducing examples include biodiesel, alternative fuels, electric/battery, and compressed natural gas.

Employer Based Transportation Management Programs

Various programs such as: van pooling, car pooling, subscription buses, walking, shuttle services, guaranteed rides home, alternative work schedules, and financial incentives (transit passes and subsidies).

Heavy Duty Engine Catalyst Retrofits

NOx and particulate emissions can be reduced by adding (introducing) approved catalyst technology to Heavy Duty Engines. Examples include intercity bus engines and

other fleets such as garbage trucks have most recently demonstrated improvements.

Parking Cash Out

Beginning with tax year 1998, employers may offer employees taxable cash instead of a tax-exempt parking space without losing the tax exemption for parking.

Parking Management

Management of parking supply and demand, such as: preferential parking prices for carpools and vanpools, fee structures that discourage commuter parking, reduced parking for new developments.

Regional Rideshare Programs

Programs marketing ridesharing services, transit shuttles, computerized carpool matching, vanpool matching, or program implementation assistance.

Seasonal and Episodic Ozone Action Day Programs

These programs inform the public about a region's air pollution problems and promote emissions-reducing activities, particularly alternatives to automobile use, on days with poor air quality.

Small Engine and Recreational Vehicle Programs

Measures targeted at reducing the frequency and duration of small engine and recreational vehicle use.

Work Schedule Changes

Changes in work schedules to provide flexibility to employees to commute outside of peak travel periods, such as: telecommuting, flextime, compressed work weeks, staggered work hours.

[page 1]

EPA announces Guidance on Incorporating Voluntary Mobile Source Emission Reduction Programs in State Implementation Plans (SIPs).

OVERVIEW

This new policy reflects a major change in how EPA has historically dealt with voluntary measures. It provides added flexibility for state and local governments interested in receiving credit in State Implementation Plans (SIP) for voluntary mobile source emission reduction programs (VMEPs). Programs which may qualify for VMEPs emission credits include: seasonal ozone action day programs, heavy duty engine replacement programs, or regional rideshare programs.

[page 2]

Why EPA created this policy?

- EPA supports innovative community-based efforts to improve air quality and public health.
- EPA believes that air quality goals will be advanced by allowing communities to develop solutions which best fit their needs.
- Voluntary programs are already achieving emission reductions in some areas and should be recognized in air quality plans to achieve ambient air quality standards.
- EPA recognizes the need to further develop techniques for quantifying the emission reduction benefits of VMEPs.
- By simplifying the requirements states will be further encouraged to adopt voluntary programs.
- Communities benefit by the shared experience and expertise of others gained through the implementation of innovative programs.

How long is this policy in effect?

- 5 years -- EPA will review the effectiveness of this policy and modify it accordingly.

[Page 3]

Here is how it works!

- The policy allows 3% of the total reductions needed for attainment in your area to be from voluntary mobile source emission reduction programs
- SIP submittal requirements are streamlined. Generally, a State submits a SIP which identifies and describes the VMEP program and projects emission reductions attributable to the program.
- A State may take up-front credit for a VMEP program based upon realistic emission reduction estimates, provided a state agrees in the SIP submittal to ***monitor, evaluate, and report*** the emissions effect of the voluntary program.
- A State must commit to remedy any emission reduction shortfall in a timely manner if the VMEP program does not achieve projected emission reductions.
- Mobile source episodic programs can be approved for SIP credit.

[page 4/5]

EPA Supports Your Efforts!

EPA is supporting your state and local activities by providing access to critical voluntary program information, grant funding sources, tools, and technical assistance to assess your program's emission benefits. Currently available resources include:

A sampling of available resource documents

“Survey and Review of National Episodic Control Programs in the United States”
EPA-420-R-97-006 Includes program descriptions, contacts, web links and outreach materials for 37 metro areas.

“Quantification of Episodic Control Programs” ***EPA - 420-R-07-006*** Discusses the major factors and potential methodologies in quantifying emissions reductions.

Index of Transportation Measure Quantification Efforts: Methodology Matrix, Lists bibliographical information on papers, publications, and other sources that deal with quantifying the emission benefits of transportation measures. A must have for anyone dealing with quantifying emission benefits.

“Blueprint for Program Design” Takes data from existing programs and outlines program design options for creating successful episodic programs.

“Opportunities to Improve Air Quality through Transportation Pricing Programs”
EPA 420-R-97-004 This document explains why pricing can make sense, describes the institutional relationships necessary for pricing measures to work, and highlights some pitfalls to avoid in implementing a program.

On-line national program databases

Market Incentives Resource Center
(www.epa.gov/omswww/market.htm)

Smart Travel Resource Center
(www.epa.gov/omswww/strc.htm)

Office of Mobile Sources Web-site
(www.epa.gov/omswww)

Episodic Measures Database
(www.epa.gov/omswww/reports/episodic/study.htm)

[page 6/7]

Specific Information to Submit

What do I have to do to get SIP credit for my local activities?

Generally, States will be responsible for submitting SIP approvable voluntary programs. So states, communities and citizens will have to work together.

Example of a Voluntary Program

Program scenario: A State air quality agency is approached by a business coalition to begin a regional rideshare program. The State would like to take credit for the emissions reductions from this private sector activity in its 15% plan.

Up-front credit: The State takes credit by predicting the effect of the program in reducing emissions associated with an increase in the number of carpools used to commute to work.

SIP Submittal

General Process

- State notifies EPA of its intent to take credit for voluntary regional rideshare program. Includes program information and technical support documentation and commitment to remedy any emission reduction shortfall in a timely manner.
- Regional Office reviews, provides comments as needed, and approves up-front credit.
- Voluntary activity is implemented by participating businesses.
- State verifies that the program achieved the predicted benefits and generates information for EPA review.
- Regional Office reviews the State SIP submission and determines that the credits have been achieved as predicted. Also approved under milestone compliance.

Program Identification: State submits to EPA its intent to conduct or take credit for the voluntary regional rideshare program in the SIP. The State describes how the program or activity will work in practice. In the submission, the State describes the following program elements:

1. Program participants
2. How the program works
3. Activity effects
4. Emission effects
5. State commitment for evaluation, reporting, remedying emission credit shortfall
6. Technical support documentation

Program Participants

The State identifies the sponsors of the program. In this case, the participating businesses.

How the Program Works

As part of the submittal the State includes a description of the basic program, predicts effect of the program on a given NAAQS criteria pollutant and provides a written commitment to evaluate the program over the desired period of implementation and to remedy any emission reduction shortfall in a timely manner.

In the submittal, the State describes the basic program, including how the business coalition intends to facilitate the activity--regional rideshare program. Participating businesses provide a network for matching up potential riders for carpools.

Activity Effects

The State submits predicted and observed activity effects. Data is generated and analyzed which examines the predicted and actual effect of the program.

In this case, using information provided by the business coalition, the State estimates that 8000 individuals who previously chose to drive to work alone in their personal vehicles now participate in carpools.

[page 8]

Specific Information to Submit, continued

Emission Effects

Activity effects ultimately are translated into emissions benefit calculations (usually in tons per day/per year).

The State is given up-front credit for emission reductions in terms of HC, CO and other NAAQS criteria pollutants estimated from the reduction in motor vehicle use attributable to the regional rideshare program.

State Commitment for Evaluation, Reporting, and Addressing Credit Shortfall

The State is responsible for ensuring that data will be collected regarding participation and the effectiveness of the program. In addition, the State commits to remedy any SIP credit shortfall in a timely manner if the voluntary measure does not achieve projected emission reductions.

The State, as part of the evaluation and reporting commitment, submits to EPA a comparison of the predicted effect of the program with the actual observed levels. In this example the business coalition finds that 8000 employees participated in carpools as predicted. Thus, the predicted reductions are achieved.

Technical Support Documentation

The State submits Technical Support Documents describing the program and the methodology for predicting emissions benefits. Where possible the State identifies data collection methodologies and information necessary for describing implementation, compliance, effectiveness and other relevant information. This information accounts for the following:

Programmatic Uncertainty-Because the program is voluntary in nature, the State is responsible for submitting to EPA the predicted and, eventually, the actual participation levels.

Analytic Methodology-The State describes how they estimated participation levels and the effect of the activity on emissions

[back page]

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