

**OVERVIEW OF REGIONAL TRANSPORTATION PLANNING AGENCY
PROCESS TO IDENTIFY AND IMPLEMENT
BEST AVAILABLE CONTROL MEASURES
IN SUPPORT OF THE
PM-10 ATTAINMENT PLAN FOR THE SAN JOAQUIN VALLEY**

The San Joaquin Valley is a single air quality nonattainment area containing six Metropolitan Planning Organizations (MPOs) and two rural transportation-planning agencies (TPAs) that conduct transportation planning activities within the Valley. Collectively, the MPOs and TPAs within the San Joaquin Valley are referred to as Regional TPAs (RTPAs). The Valley is home to many diverse communities containing predominantly rural as well as predominantly urban areas populated by individuals from many different parts of the world. This overview describes the process led by the Valley RTPAs to identify and implement potentially best available control measures (BACM) affecting local transportation-related fugitive dust.

Each RTPA covers a county with numerous cities, public interest groups, transit agencies, and a ridesharing agency in some cases. Collectively, the Valley RTPAs are committed to conducting a thorough BACM process that addresses the entire San Joaquin Valley. In order to ensure thoroughness, the RTPAs are coordinating with each other through a Valleywide committee that meets biweekly/monthly to discuss their individual progress on BACM, obtain input and feedback from the other agencies on the committee, and share other relevant information. They also provide documentation regarding the local government control measures and meetings held at the county level to the group through a BACM website. Another feature of the coordination is development of a common format for providing documentation on the BACM process. The Valleywide committee is composed of each RTPA, the Air District, Caltrans, the ARB, the EPA, and the FHWA. This committee provides regular opportunity for the eight Valley RTPAs to obtain input from each other and the other agencies involved in development of the PM-10 Attainment Plan for the Valley.

The Valley RTPAs have limited legal authority to implement emission reduction measures. However, their status as regional transportation planning agencies places them in a position to help coordinate and facilitate consensus among their member jurisdictions, which do have authority to implement some measures. Therefore, the RTPAs led a process to identify and evaluate potential measures affecting local transportation-related fugitive dust. The Valley RTPAs recognize the importance of clean air for their communities and are doing their part in helping to find ways to improve the air. The RTPA role in this BACM process is to lead local agencies in (1) the identification and implementation process for measures that would affect local transportation transportation-related fugitive dust that may be implemented at the local level; and (2) documenting reasons for not implementing measures which are not economically or technically feasible.

The individual jurisdictions within each county have primary control of funding and implementation for local government control measures associated with transportation. However, since the Valley RTPAs are all part of one nonattainment area they have coordinated their process together in order to share ideas offered by the public and jurisdictions to provide consistency for the entire process including approaches to documentation. An overview of the local government control measure process that the Valley RTPAs have followed is depicted in the following figure.

**OVERVIEW OF LOCAL GOVERNMENT
CONTROL MEASURE PROCESS
FOR THE PM-10 PLAN**

STEP 1:

RTPAs review local government control measures that have been implemented in other PM-10 nonattainment areas through committee process.

STEP 2:

RTPA member jurisdictions review measures from Step 1 and conduct evaluation to determine which measures may be potentially feasible to implement. RTPA document Suggested List of Measures for consideration to be accepted by RTPA Boards.

STEP 3:

RTPAs transmit Suggested List of Measures with Model Resolution Package to member jurisdictions for consideration. Each RTPA member jurisdiction reviews list from Step 2 and decides what measures to implement and fund.

STEP 4:

Each implementing agency passes resolution describing the measures to be implemented

- Measure description
- Legal Authority for implementation
- Funding for measures
- Enforcement

STEP 5:

Each implementing agency also describes reasons for rejecting any measures

- Technologically or economically infeasible
- Otherwise unreasonable

STEP 6:

RTPA member jurisdictions submit Model Resolution Package to RTPAs. RTPAs submit Model Resolution Packages to Earth Matters for Summary. Earth Matters submit Summary for each County to the District for the PM-10 Attainment Plan.

STEP 7:

Air District and Valley RTPAs work together to estimate emission reductions associated with the committed measures.

OVERVIEW OF EXISTING MEASURES

The Valley RTPAs and their member agencies have long been involved in examining ways to contribute to improvements in air quality through implementation of local measures as well as provision of funding for measures being implemented by the Air District. PM-10 generally consists of both primary particulates (e.g., soil particles) and secondary particulate matter (e.g., ammonium nitrate and ammonium sulfate) that is formed in the atmosphere from reactions between precursor gases.

It is important to note that the Valley RTPAs and member jurisdictions recently completed a process to identify and implement Reasonably Available Control Measures (RACM) for the Ozone Plan. The control measures evaluated focused on the specific transportation control measures listed in Section 108(f) of the Clean Air Act. Collectively, a broad range of commitments to implement control measures were adopted by the local governments. These extensive commitments demonstrate the level of effort that is being made by the local jurisdictions to reduce emissions and to improve air quality.

The resolutions adopted by the respective entities to commit to implement local government control measures are included in the Regional Transportation Planning Agency Commitments for Implementation Document, April 2002. The document is available for public review at the central San Joaquin Valley Unified APCD office located in Fresno. In accordance with the Air District planning process for the PM-10 Plan, these commitments are incorporated by reference into the PM-10 Plan. The ozone measures will provide emission reductions for precursor gases and help to address the secondary particulate problem.

In general, the existing control measures include transit improvements, ridesharing and ride-matching programs, telecommuting, compressed workweeks, bicycle programs, pedestrian programs such as street design to encourage walking, traffic flow improvements, and numerous land-use programs. In addition, Valley RTPAs have a history of supporting mobile source reduction incentives. Nearly all counties in the Valley have also allocated funding to alternative fuel projects. Money has been allocated to local school agencies for clean fuels infrastructure, as well as to the Air District's Heavy-Duty Motor Vehicle Emission Reduction Program for clean fuels municipal or public fleet purchases.

SUGGESTED MEASURES FOR THE PM-10 PLAN

A key requirement for the PM-10 Attainment Plan is the implementation of Best Available Control Measures (BACM). Since the ozone measures described in the previous section will be used to address the secondary particulate problem, the control measures being pursued for the PM-10 Attainment Plan focus on direct particulates.

The Air District Regulation VIII, Fugitive PM-10 Prohibitions, regulates activities that generate fugitive dust. The Air District conducted a feasibility analysis to identify candidate BACM for Regulation VIII. It is anticipated that the BACM for Regulation VIII will be the primary basis for the fugitive dust control strategy for the PM-10 Plan.

The Air District prepared a draft list of candidate BACM for Regulation VIII. This effort utilized PM-10 Plans developed in South Coast, California, Maricopa County (Phoenix Area), Arizona, and Clark County (Las Vegas), Nevada. As part of this process, the Air District identified fugitive dust source categories that could be strengthened through local commitments.

The Example Local Government Control Measures contains measures that may be implemented at the local level that focus on the control of primary particulates or fugitive dust. A general measure description is provided for informational purposes. It is important to note however, that there may be numerous variations for implementation based on local conditions and local feasibility determinations.

In order to maximize input from individual cities and other jurisdictions, as well as the public, the RTPA-level BACM process is being conducted on an individual county level, with Valleywide coordination provided through a consultant. Each RTPA accepted the Example List and transmitted the measures to their member jurisdictions for consideration.

Example Local Government Control Measures for Particulate Matter

Number	Measure Title	Description	Potential Candidate BACM in Reg. VIII	Measure Recommended for Suggested List? (yes or no)	Reasoned Justification for Measures Not Recommended for Suggested List
1	Paving or Stabilizing Unpaved Roads and Alleys		1. Prohibit the existence of new non-temporary[1] unpaved roads within any incorporated municipality or within a buffer distance (e.g. 5 miles) of any city limit; [1] Non-temporary could be defined as any public or private road that will not be paved or otherwise prohibited from use after a six-month period. 2. Establish provisions for the paving of existing unpaved roads under the purview of any government entity for a cumulative total of 5 miles over a five year period (exemptions could apply to any road more than five miles from any city boundary).		
2	Paving, Vegetating, and Chemically Stabilizing Unpaved Access Points onto Paved Roads (Especially Adjacent to Construction/Industrial Sites)	Mud and dirt carryout from unpaved areas such as construction sites often accounts for a substantial fraction of paved road silt loadings in many areas. The elimination of this carryout may significantly reduce paved road emissions. This measure would involve paving, vegetating, or chemically stabilizing access points where unpaved traffic surfaces adjoin paved roads.			
3	Curbing, Paving, or Stabilizing Shoulders on Paved Roads (Includes Painting Stripe on Outside of Travel Lane)	Preventative measures are very important since mitigation measures are often less effective for paved roads, especially in instances where no dominant or localized source of dust loading can be identified. This measure would require the curbing, paving, or stabilizing (chemically or with vegetation) of shoulders of paved roads.	New/Modified Roads: Paved Roads - Eliminate the ADVT threshold for paving 4 feet from the current ADVT trigger level of 500 for such a paving requirement (consistent with EPA's guidance for BACM). Unpaved shoulders - Commitments from incorporated municipalities to "retrofit" existing unpaved shoulders as follows: 1. Determine cumulative miles of unpaved shoulders according to road ADVT; 2. Pave or stabilize (per Rule 8061) shoulder-miles of top 50% ADVT according to a phase-in schedule: 10% by end of 2004, and an additional 10% by the end of 2005.		
4	Frequent Routine Sweeping or Cleaning of Paved Roads	Paved road sweeping and flushing represents a mitigation measure for paved road surface dust loading. This measure would involve the frequent sweeping or cleaning of paved roads, including the flushing of paved roads. Vacuum and regenerative sweeping are acceptable methods. Another option, roadway flushing, involves the use of high-pressure water sprays.	Require incorporated municipalities to do the following as it applies to new purchases of street sweepers for city or city-contracted fleets: 1. Purchase certified PM10-efficient street sweepers as new or replacement purchases to existing fleet; 2. Purchase at least one such unit within three years of the adoption and/or amendment of an applicable rule for existing street sweeper fleets of two or more (fleet refers to city-owned or contracted—if contractor fleet, the minimum purchase requirement applies separately to each jurisdiction for which the street sweeping contract exists); 3. If fleet contains both certified sweepers and non-certified sweepers, prioritize the use of certified sweepers for dirt-laden streets prior to any routine street sweeping. Municipalities are required to identify such dirt-laden routes and provide the District with a priority list of such routes within one year of rule adoption and/or amendment; 4. Use certified-PM10 efficient street sweeper at least once per month; 5. Operate and maintain such sweepers according to manufacturer specifications.		
5	Intensive Street Cleaning Requirements for Industrial Paved Roads and Streets Providing Access to Industrial/Construction Sites	See Above			
6	Erosion Clean-up		Require incorporated municipalities to: 1. Remove debris/material after wind or rain runoff event by using street sweepers within 24 hours of identification, or prior to opening up traffic lanes in the event lanes were originally shut due to the erosion event; 2. Follow adequate dust control procedures in the removal of the material.		

[1] Non-temporary could be defined as any public or private road that will not be paved or otherwise prohibited from use after a six-month period.

ADOPTED MEASURES FOR THE PM-10 PLAN

The next step in the BACM process was for the local governments to review the measures from the Suggested List for each RTPA. Each RTPA member jurisdiction has determined which measures are technologically and economically feasible for implementation by that entity. Formal resolutions have been adopted by the appropriate governing body to commit to implement control measures. If a jurisdiction decided that a measure on the Suggested List was not feasible for implementation, the jurisdiction documented the “reasoned justification” for non-implementation, as required by EPA for the BACM process. This justification is based on technological or economic infeasibility.

The resolutions adopted by the respective entities to commit to implement local government control measures are included in the corresponding Regional Transportation Planning Agency Commitments for Implementation Document. The document is available for public review at the central San Joaquin Valley Unified APCD office located in Fresno. These extensive commitments demonstrate the level of effort that is being made to improve air quality. These adopted control measures represent additional efforts by the local jurisdictions to reduce emissions and improve air quality.

As previously indicated, a broad range of commitments to implement control measures were adopted by the local governments for the Ozone Plan. These existing measures will also reduce PM-10 precursor emissions. The commitments for the Ozone Plan are included in the Regional Transportation Planning Agency Commitments for Implementation Document, April 2002 and are incorporated into the PM-10 Attainment Plan by reference.

PUBLIC PARTICIPATION

The 1992 Transportation & Air Quality Planning Guidelines, which address public participation, are issued jointly by the U.S. Environmental Protection Agency and the U.S. Department of Transportation. These guidelines are designed to encourage an effective public participation program for the development and implementation of the State Implementation Plan (SIP). According to the guidelines, the objectives of the public participation program should be to:

1. Promote public awareness of the air pollution problem, the SIP revision process, and the effects of various transportation control measures;
2. Encourage active participation from a variety of interest groups in the plan preparation process;
3. Promote public understanding and agreement on the transportation control measures necessary to improve air quality;
4. Provide for the identification of both interested and affected constituencies;
5. Ensure that the agencies and elected officials are responsive to these constituencies; and
6. Encourage a spirit of openness and trust among elected officials, agencies, and the public.

Public Involvement Process for Transportation and Air Quality

With the passage of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), emphasis on public involvement in the metropolitan planning process was expanded. The intent of the public involvement provisions in ISTEA is to increase public awareness and involvement in transportation planning and programming. ISTEA requires that the metropolitan planning organization provide citizens, affected public agencies, representatives of transportation agencies, private providers of transportation and other interested parties a reasonable opportunity to comment on proposed transportation plans and programs. These provisions have been continued under the Transportation Equity Act for the 21st Century (TEA-21).

Title VI Considerations

Title VI of the Civil Rights Act of 1964 prohibits discrimination on the basis of race, color and national origin by recipients and sub-recipients of federal funds and prohibits exclusion from participation, denial of benefits, or being subjected to discrimination under any program or activity receiving federal financial assistance. Additional federal and state laws and directives prohibit discrimination on the basis of age, gender, handicap or disability. The Executive Order of 1994 on Environmental Justice encourages consideration of environmental justice concerns, especially the impact of programs and activities on low-income and minority populations. The Act and its related laws and directives hereinafter are called, collectively, Title VI.

Decision Making Structure and Public Participation

The San Joaquin Valley contains eight counties. The transportation planning process in each county is conducted by a Metropolitan Planning Organization or rural transportation planning agency. Each transportation planning agency performs planning functions in accordance with applicable transportation and air quality planning guidelines and Title VI considerations. These eight agencies are leading the process to identify, evaluate and implement potential BACM measures pertaining to the transportation sector that may be implemented on a local level.

November Public Workshops

The Valley RTPAs participated in 2 PM-10 control-measure workshops conducted by the San Joaquin Valley Unified Air Pollution Control District on November 6, 2002. An overview document that described the process being implemented by the eight Valley RTPAs in the San Joaquin Valley in support of the PM-10 Attainment Plan was provided to the Air District. There were no Public Comments received on the Regional Transportation Planning Agency BACM process at the November Workshops.

April Public Workshops

The Valley RTPAs participated in 5 public workshops on the Draft 2003 PM-10 Plan. An overview document that described the process being implemented by the eight Valley RTPAs in the San Joaquin Valley in support of the PM-10 Attainment Plan was provided to the Air District. The response to comments on the TPA BACM Process is provided on the following page.

It is important to note that the Valley RTPAs have developed a website (located at <http://www.fresnocog.org/aq-modeling/bacm/bacm.htm>) to serve as a resource for each county, as well as to provide the public with detailed information on the BACM process. This page contains relevant BACM guidance documents, agendas, and minutes for the biweekly/monthly RTPA meetings coordinating the BACM process.

RESPONSE TO PUBLIC COMMENTS ON THE TRANSPORTATION PLANNING AGENCY BACM PROCESS

April 2003 Air District Workshops

The TPAs appreciate the comments made during the public workshops on the Draft 2003 PM-10 Plan. The following represents the TPA response to comments received by the Air District that pertain to the TPA BACM Process. It is important to note that comments regarding the California Air Resources Board (CARB) or Air District process are not addressed below

Preliminary EPA Comments, April 21, 2003 Letter from EPA Region 9

Comment: We need to review the Transportation Planning Agencies' commitments, not yet included in the Draft Plan, to fully evaluate BACM for publicly-owned sources.

Response: Documentation regarding the TPA BACM process was included in the Draft 2003 PM-10 Plan in Appendix I. The TPA commitment document is available for review as of the Receive & File date for the Plan.

Kern County Resource Management Agency, April 21, 2003

Comment: The local government commitments should be included in the plan and used to determine whether additional rules (Proposed Regulation VIII revisions) are required.

Response: The TPA commitment document is available for review as of the Receive & File date for the Plan. In addition, the commitments will be reviewed during the rule-making process to comment on the proposed Regulation VIII revisions. Comments will address both local commitments and reasoned justification for non-implementation of local measures.

Kern County Resource Management Agency, Roads Department, April 21, 2003

Comment: The Department has participated with the Regional Transportation Planning Agency in the implementation of BACM. Comments are provided on proposed amendments to Regulation VIII.

Response: The TPA commitment document is available for review as of the Receive & File date for the Plan. In addition, the commitments will be reviewed during the rule-making process to comment on the proposed Regulation VIII revisions. Comments will address both local commitments and reasoned justification for non-implementation of local measures.