

## **APPENDIX C**

### **RESPONSE TO COMMENTS**

[PREFACE: The Draft 2002 CVSIP was released for public comment from May 10 to June 7, 2002. Additionally, a Public Workshop was held in Palm Desert on May 23, 2002. Appendix C includes a summary of the public comments received and AQMD staff responses. Formal comment letters received on the Draft 2002 CVSIP are included in Appendix D].

## Introduction

As mentioned elsewhere, the Coachella Valley Association of Governments (CVAG) Executive Committee established the Coachella Valley PM10 Ad Hoc Air Quality Task Force (CV Task Force) on February 14, 2002. At the March 14, 2002, Task Force kick-off meeting, sub-groups were established to review proposed control strategies. These sub-groups (Construction Activities, Agricultural Activities, Roadways/Open Areas, Enforcement, and Funding) met in mid-April and reported back to the Task Force at the April 25, 2002 meeting. In addition to Task Force and sub-group meetings, AQMD staff conducted a Public Workshop on May 23, 2002. The Public Workshop notice was mailed to over 1,700 interested individuals and was included in the Desert Sun and the Riverside Press Enterprise Coachella Valley edition. Over 140 persons attended the Public Workshop and AQMD staff accepted public testimony.

Throughout this process, AQMD staff accepted comments from Task Force members, industry, and the public. Some of the comments were general and were made by several groups while others were very specific to an individual control measure. For clarity, the comments and responses are differentiated between general comments and comments specific to individual control measures. In addition to the oral comments, staff received several written comments specific to the 2002 CVSIP proposal. The written comments are included in Appendix D. This appendix provides AQMD staff responses to all of these comments.

## General Comments

Comment 1: The Coachella Valley is caught between competing interests of regulatory agencies at the federal level. On one hand, portions of the Coachella Valley are designated as protected lands and blow-sand is encouraged for the protection of certain habitats. At the same time, the very blow-sand that is encouraged by the U.S. Fish and Wildlife Service is proving to be detrimental to the aims of the U.S. EPA, that being the health of the citizens of the Coachella Valley. The U.S. EPA has stated that continued high PM10 levels are hazardous to the young, old and those with breathing problems. It is a fact that heavy blow-sand emanates from the Coachella Valley Fringe-toed lizard preserve and so-called sand-source areas designed to feed the preserve. This cannot continue. It is time that the U.S. EPA and U.S. Fish and Wildlife Service decide whether it is the health of humans or lizards that is paramount in the Coachella Valley. To this extent, we strongly recommend that SCAQMD revise the 2002 CVSIP and propose a stabilization sand-source plan for protected lands (including the Coachella Valley Fringe-toed lizard preserve), which will properly balance the needs of both agencies while protecting the health of our citizenry.

*Staff Response:* The AQMD staff is very aware of the unique circumstance associated with blowing sand from Coachella Valley preserve areas. Beginning with the first State Implementation Plan (SIP) prepared in 1990, efforts have been made to control man-made dust sources and mitigate, to the extent allowed, impacts from blowing sand. AQMD staff studies from previous SIPs show that although disturbed

areas (non-natural) are the major contributor to the high annual average levels of airborne PM10, natural areas do deposit large amounts of sand on downwind areas, particularly during high-wind events. (The AQMD addresses airborne PM10 from natural and controlled disturbed areas during high-wind events through the Natural Events Action Plan, which calls for feasible mitigation and protection of public health through warnings and recommended actions to prevent exposure). Preventing the disturbance of the natural surface by restricting access (e.g. fencing) can minimize the smaller amounts of direct airborne PM10 from natural lands during non-high-wind events. As described in Chapter 5, the 2002 CVSIP includes a SIP commitment for AQMD staff to work with BLM and large Coachella Valley land owners to reduce PM10 emissions and maintain habitat for sand-dependant species. Preliminary control strategies included in the draft California Desert Conservation Area Plan Amendment for the Coachella Valley include reduction in the number of unpaved routes upwind of sensitive receptors, increased enforcement of existing closed areas, installation of sand fencing where permitted, and dust control plans for permitted uses on BLM lands.

Comment 2: The Coachella Valley has experienced one of the driest years on record. Under these extremely dry conditions, blowsand from preserves and undisturbed desert areas begins to move at wind speeds as low as 10 to 15 miles per hour. This material blows onto paved roads where it is subsequently resuspended by passing cars and trucks. The 2002 CVSIP should take into consideration these unique circumstances and ensure that blowing sand and dust from the undisturbed desert and preserve areas are not counted against the Valley's PM10 attainment status.

*Staff Response:* Larger sand particles from the natural lands that deposit on streets can be ground up and entrained into the air by vehicle traffic. These deposits can be prevented using sand fencing or mitigated using post-event street sweeping, which are elements of the current Clean Streets Management Program implemented using federal Congestion Management and Air Quality (CMAQ) funds. AQMD staff will continue to work with stakeholders, including the Bureau of Land Management, U.S. Fish and Wildlife, developers, and local governments, to identify and implement these types of controls for areas impacted by sand movement from the natural lands, as called for in the SIP commitment in the 2002 CVSIP. Please also refer to response to comment number 1.

Comment 3: The Coachella Valley is a desert environment that is subject to high winds. Blowing sand and dust in such an environment is inevitable and can not be controlled. There is not sufficient water available to the Coachella Valley to control blowing sand and dust.

*Staff Response:* Chapter 1 of the 2002 CVSIP contains a discussion of the Coachella Valley's meteorology, climate, winds, and blowsand. As with previous dust control efforts, the intent of the 2002 CVSIP control program is not to eliminate dust but to reduce man-made sources to the greatest extent feasible as required by the federal Clean Air Act (CAA). Alternatives to water application for dust control include revegetation, chemical stabilizers, washed gravel, wind fencing, and paving.

Comment 4: What is the legal justification or citation that prohibits the control of fugitive dust originating from the Coachella Valley preserve and other undisturbed portions of the desert?

*Staff Response:* As described in the 2002 CVSIP, the Coachella Valley Fringe-toed lizard is classified as a threatened species under the federal Endangered Species Act (ESA). Based on information provided by the U.S. Fish and Wildlife Service (FWS), the blowsand ecological process is indispensable for the survival of the Coachella Valley Fringe-toed lizard and dust control treatments that attenuate the sand transport process would adversely effect on the extent and quality of lizard habitat. Such adverse effects would violate the prohibition against “take” under Section 9(a)(1)(B) of the ESA of 1973, as amended (16 U.S.C. 1538). Certain controls and mitigations can possibly be implemented (e.g., access-restriction through fencing and sand fencing) and the 2002 CVSIP contains commitments to work with BLM, FWS, and other government agencies to implement feasible control projects. Please also refer to response to comment numbers 1 and 2.

Comment 5: Dust control should be required on Indian Tribal lands.

*Staff Response:* Local Indian tribes, including the Cabazon, Aqua Caliente, and Torres Martinez tribes, control approximately 70,000 acres within the Coachella Valley. The AQMD, local and state agencies are generally precluded from regulating Indian lands, but many of the tribes have already adopted current dust control ordinances and the plan review guidance. They have indicated to AQMD staff their intention of adopting the revised regulations and dust control handbook when they are developed as part of the implementation of the 2002 CVSIP. The Torres Martinez tribe is working with U.S. EPA to create an air quality plan for their lands, which will better quantify local PM10 sources and identify control measures to be implemented. AQMD staff will continue to work with local tribes and to assist them in their dust control efforts.

Comment 6: The environmental community has been working toward the preservation of several species of plants and animals they anticipate will become threatened or endangered. The Coachella Valley Multi-Species Habitat Conservation Plan (CV MSHCP) is currently in its final draft form for the Cities and the County of the Coachella Valley to review. This HCP will create approximately 1,250,000 of undisturbed land that will become a major source of blowing sand.

*Staff Response:* AQMD staff continues to monitor development of the CV MSHCP, which is intended to preserve (not create) undisturbed land. Within the planning area, 517,931 acres (45 percent of total) is privately held land. Lands within the CV MSHCP will be assigned a conservation management level from one to four. Areas classified as level one have the primary management objective of species’ habitat protection with level 4 lands managed primarily for intensive human uses. As described in Chapter 5, areas with man-made dust sources will be subject to local jurisdiction/AQMD regulations. Please also refer to response to comment numbers 1, 2, and 4.

Comment 7: The Whitewater Storm Channel bisects the Coachella Valley from west to east. It is a natural channel that is designed to allow the percolation of water as it travels through the system. It has been a primary source of airborne sand since its creation.

*Staff Response:* As described in the proposed 2002 CVSIP control measure discussion, anthropogenic (man-made) activities on water district lands are currently subject to AQMD regulations and this program is proposed to be upgraded to enhance dust control. Proposed enhancements include issuance of an AQMD-approved dust control plan for activities that disturb more than one acre, or import/export more than 100 cubic yards of material per day, or trenching activities greater than 100 feet in length will be required to obtain an AQMD-approved dust control plan. Recognizing that certain work will be routine in nature (e.g., maintenance activities), the proposed control strategy would allow one dust control plan to be prepared and submitted to the AQMD for review provided sufficient detail is provided to ensure compliance determinations. Additionally, Coachella Valley Best Available Control Measures (CV BACM) will be required for earth moving, weed abatement, trenching, track-out, and wind erosion from man-made soil disturbances.

Comment 8: What is being done to control emissions from turf overseeding operations? How about dust being kicked up from leaf blowers?

*Staff Response:* Control measure CV CTY - 1, included in Chapter 5 of the 2002 CVSIP outlines the various programs that have voluntarily been implemented to control emissions from turf overseeding activities. As described in the text, CVAG staff conducted an education and outreach program with the HiLo Desert Golf Course Superintendent Association. This program stresses a light application of water prior to scalping and turf vacuuming activities. Additionally, CVAG developed and distributed a bi-lingual informational brochure for the Valley's homeowners and landscape maintenance contractors that describes the preferred methods for turf overseeding. As mentioned in Chapter 5, these programs are considered to implement previous SIP control measures for this source category.

Regarding particulate emissions from leaf blowers, a 1996 study estimated that PM10 emissions from this source may contribute to a localized nuisance but are very minor on a regional basis.<sup>1</sup> Accordingly, it may be advisable for residents to work with local jurisdictions to develop an ordinance, or to strengthen an existing ordinance in order to control the use of leaf blowers. Numerous jurisdictions, including the Cities of Palos Verdes Estates, Lomita, West Hollywood and Pasadena, have already developed ordinances related to this subject.

Comment 9: Improved enforcement of existing regulations is needed to reduce blowing sand and dust from construction sites.

---

<sup>1</sup> AeroVironment Inc, Fugitive Dust Study Characterization of Uninventoried Sources (AV-94-06-214A), March 1996.

*Staff Response:* AQMD staff concurs. It is acknowledged that enforcement activities represent a key component to the Valley's PM10 reduction program. As mentioned in Chapter 1, enhanced compliance activities began in 1999 when PM10 levels were approaching federal PM10 standards. This enhanced enforcement program included compliance-training classes, development of a new guidance document for preparing dust control plans, meetings with local contractors, and assignment of a full-time AQMD inspector assigned specifically for dust control. As described in Chapter 5, these efforts will continue and through a variety of mechanisms such as a Memorandum of Understanding (MOU) between local jurisdictions and the AQMD. The intent of the MOU is to solidify the dust control commitments and responsibilities of local jurisdictions and the AQMD. The MOU or other mechanisms would be developed in conjunction with the model dust control ordinance and the Coachella Valley Dust Control Handbook.

Comment 10: AQMD regulations need to be adopted sooner than the current schedule to reduce fugitive dust emissions from sources not under local jurisdiction control (e.g., utilities, Caltrans, etc.). A commitment is needed for AQMD to immediately enforce all of the regulations currently in place.

*Staff Response:* The 2002 CVSIP commitment states that the AQMD regulations will be adopted prior to January 1, 2004 and since the AQMD rule will serve as a backstop to local ordinances, they cannot be finalized until the local ordinances are adopted (no later than October 2003). AQMD staff will develop the regulations as soon as feasible; however, there are many mandated steps (public workshop, staff report, socioeconomic report, etc.) prior to adoption of an AQMD regulation. AQMD staff continues to enforce existing rules and regulations in the Coachella Valley and continues to assist enforcement of existing local dust control ordinance requirements.

Comment 11: Many of the proposed thresholds used for requiring submittal of a dust control plan or treatment of unpaved roads/parking lots and disturbed vacant lands are too high. Dust control should be required for all dust sources regardless of size or activity level.

*Staff Response:* As mentioned, the proposed control measures are based on the most stringent measures contained in other serious PM10 non-attainment areas that can feasibly be implemented in the Coachella Valley. This is a federal Clean Air Act requirement for areas, such as the Coachella Valley, that are requesting an extension of a PM10 attainment date. The control measures outline general requirements to reduce dust and corresponding PM10 emissions. Thresholds in the control measures are set based on the diminishing effectiveness and higher cost for incremental additional reductions. Specific requirements will be developed through adoption of dust control ordinance and AQMD regulations and will be subject to cost and technical feasibility considerations. Development of these regulations will be a public process and will afford affected industries and the public to comment prior to adoption.

**Comments Relative to Construction Activity Control Measure**

Comment 12: Clark County and Maricopa County require dust control permits for construction activities greater than 0.25 and 0.1 acre, respectively. The preliminary CVSIP control measure discussion for “sources not under local jurisdiction control” specifies that dust control plans are required for sites greater than five acres, or those that import/export more than 100 cubic yards of material per day, or trenching activities greater than 100 feet in length. The AQMD should consider lowering the thresholds for plan submittals to be more in line with Clark/Maricopa County regulations.

*Staff Response:* Based on this comment and similar comments made by Task Force members, the proposed thresholds for requiring a dust control plan for sources not under local jurisdiction control have been reduced to sites more than one acre, or those that import/export more than 100 cubic yards per day, or trenching activities greater than 100 feet. Please also refer to response to comment number 11.

Comment 13: Due to current low rainfall conditions, the sand from the undisturbed natural desert begins moving at lower wind speeds (i.e., 10 to 15 miles per hour) than in previous years. The AQMD staff should revisit the 25-mile per hour (mph) threshold currently used to remove PM10 data on high-wind days.

*Staff Response:* Chapter 2 includes information on average rainfall and notes that Palm Springs experienced a historical low 0.76 inches of rain in 1999. The 25-mph threshold was developed in association with AQMD Rule 403.1 and is applicable to agricultural tilling prohibitions and increased dust control for man-made sources. The 25-mph threshold is not used to determine if it is a high-wind event day. As detailed in the 1996 CV Plan, Coachella Valley natural events are documented through a variety of procedures and wind data is only one component. For example, one natural event was attributable to thunderstorm activity that picked up material from natural sand areas in northern Mexico. The entrained dust was then brought up to Imperial County and the Coachella Valley by a southeasterly monsoonal flow. During this event (July 26, 1996), winds in the Coachella Valley were light (generally less than ten mph). This case presents an example of the various methods used to document natural events in the Coachella Valley. Wind speed thresholds for compliance determinations (e.g., increased specific requirements for high wind speeds) can be evaluated during development of the Coachella Valley dust control handbook.

Comment 14: Soil moisture content appears to be a good indicator of the wind-erodibility of soils. There have been numerous studies that have been used to correlate soil moisture content with evaporation rates. Perhaps a look-up table or spreadsheet could be developed to quantify the amount of water necessary at various times of day and throughout the year (e.g., winter versus summer) to ensure an adequate soil moisture content to control fugitive dust.

*Staff Response:* AQMD staff agrees that improved techniques for determining the appropriate amount of water necessary to control construction site dust would improve PM10 reduction program effectiveness. Opportunities to explore these

concepts will be afforded through development of the Coachella Valley Dust Control Handbook.

Comment 15: AQMD staff enforcement of local jurisdiction dust control ordinances and the Coachella Valley Dust Control Handbook (including associated work practice requirements) should be approved by the AQMD Governing Board after public workshops and a public hearing. Also, the AQMD staff should conduct training courses for dust control monitors in estimating opacity, visible plume length, silt loading, and drop ball/threshold friction velocity compliance test methods. Was the cost-effectiveness calculation of \$198/ton of PM10 for control measures adopted in Rule 403 updated to include the additional costs associated with implementing the CVSIP? There should be recognition somewhere in the plan that construction projects such as housing tracts and golf courses provide permanent cover and thereby reduce PM10 generation.

*Staff Response:* As mentioned in Chapter 5, AQMD staff enforcement of local jurisdiction ordinances that are more stringent than AQMD regulations is presently allowed under California Health and Safety Code Section 40449. The Coachella Valley Dust Control Handbook and Dust Control Ordinance (including applicable work practice requirements) will be developed through a public process comprised of local jurisdictions, industry stakeholders, and the public and is scheduled for adoption prior to October 1, 2003. AQMD “backstop” regulations are scheduled for adoption prior to January 1, 2004. Any AQMD regulations that reference the Coachella Valley Dust Control Handbook will be subject to applicable California Health and Safety Code requirements for public workshop and public hearing requirements.

Regarding compliance training, 2002 CVSIP control measure BCM-1 (Construction/Earth-Movement Activities) includes a SIP commitment to evaluate the various compliance test methods and conduct training classes for local jurisdiction and industry staff. Please also refer to response to comment number 9.

The \$198/ton cost-effectiveness described in CV BCM-1 is based on the 1997 BACM amendments to Rule 403, which represents most, but not all (e.g. increased signage requirements), of the upgrades proposed in CV BCM-1.

As mentioned in CV BCM-1, construction dust can have substantial temporary impacts on air quality. It is not clear that a finished project would result in an overall PM10 reduction. This would be dependent on emissions associated with the finished project, including traffic emissions, and the emissions from the original vacant land, e.g., whether it was disturbed or undisturbed.

### **Comments Relative to the Agricultural Activities Control Measure**

Comment 16: Dust from agricultural areas is visibly one of the worst offenders that the Valley has, yet there seems to be no way for the cities or Riverside County to control it since it is not a business that is controlled by construction permits. In our Valley there are often cases where agricultural areas are gradually being turned into subdivisions and land developments. Often they are still harvesting dates from some

remaining trees even while the buildings are being framed. Would these types of situations be considered agricultural parcels or land developments?

*Staff Response:* AQMD staff recognizes the difficulty for cities and Riverside County to address dust emissions from agricultural activities. Accordingly, the intent of agricultural activities control measure (CV BCM 5) is to develop an AQMD regulation that builds on previous AQMD experiences with Western Riverside County producers. Definitions to classify lands as either agricultural or urban development will be included in this process.

Comment 17: Why are farmers allowed a one-day exemption from the existing AQMD Rule 403.1 tilling prohibitions when high-winds have been forecasted for the previous two days? Is fugitive dust and the corresponding PM10 emissions from farming activities on the third day less of a health concern than the dust originating from a construction site or disturbed surface area?

*Staff Response:* The AQMD Rule 403.1 exemption from multiple-day tilling prohibitions was developed based on consultations with local producers. Specifically, producers are limited to crop planting windows and if the process is not completed within this window, the producer would be required to wait for subsequent planting cycles. This is a unique situation experienced by producers that is different from other Coachella Valley dust-producing industries where activity delays due to high winds are similar to rain delays experienced in other part of the country. As with all rules, the requirements are to minimize PM10 dust without preventing the activity (e.g., farming, construction, or travel).

Comment 18: The 2002 CVSIP control measure for agricultural activities relies on the Rule 403 Agricultural Handbook conservation practices that were developed for producers in Western Riverside County. Farming practices in the Coachella Valley are significantly different than those in Western Riverside County. For example, the “active” conservation practices source category in the Rule 403 Agricultural Handbook requires at least one of the following conservation practices in addition to the tilling prohibition during high-winds: soil moisture monitoring, irrigation systems, minimum tillage, and mulching. For a variety of reasons, none of these additional conservation practices is feasible for Coachella Valley vegetable farmers. Accordingly, it would not be appropriate to impose the Western Riverside County agricultural conservation practices onto Coachella Valley producers.

*Staff Response:* AQMD staff is aware of the differences between agricultural practices in the Coachella Valley and in Western Riverside County. To that end and based on comments received, the agricultural activities control measure (CV BCM 5) includes a SIP commitment to convene a working group to tailor agricultural conservation practices to be specific to Coachella Valley producers. During this process AQMD staff will seek additional information on why certain conservation practices are considered infeasible and seek alternative conservation practices that meet program goals. The intent of this program is not to prohibit agricultural production but to ensure that the industry is implementing all feasible measures to

reduce dust, as is required by all other sources. Please also refer to response to comment number 11.

Comment 19: The San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) includes agricultural activity dust control regulations. Why does the CVSIP not include these agricultural MSMs?

*Staff Response:* As discussed in Chapter 4, the SJVUAPCD agricultural reduction program (Regulation 8081) is applicable to off-field sources and specifically exempts on-field (tilling) activities. Based on the AQMD Rule 403 agricultural practices developed for Western Riverside County, the Coachella Valley agricultural conservation practices will include control requirements for both on- and off-field sources. Appropriate off-field control requirements contained in SJVUAPCD Regulation 8081 will be considered in conjunction with development of the Coachella Valley agricultural conservation practices. Please also refer to response to comments 17 and 20.

Comment 20: The 2002 CVSIP includes an estimate that farming activities and windblown dust from agricultural parcels generate approximately 17 tons per day or approximately 33 percent of the entire Coachella Valley PM10 emissions inventory. This estimate appears too high. Additionally, if the majority of agricultural activities are down wind from the Indio PM10 monitor, how can these activities contribute so significantly to the Coachella Valley PM10 problem?

*Staff Response:* The agricultural source PM10 emission estimates are based on local crop production data supplied by the County Agricultural Commissioner's Office applied to the appropriate emission factor. Due to time constraints for 2002 CVSIP preparation, previous year inventories were grown using the previous CVSIP growth factors. As mentioned in Chapter 8, the 2002 CVSIP AQMD Governing Board resolution contains a SIP commitment to revise the Coachella Valley emissions inventory in 2003 based the latest approved version of EMFAC (mobile source model) and related planning assumptions. Based on previous consultations with CARB, the agricultural windblown dust emissions inventory may decrease when emission factors are finalized. This inventory update is also proposed to include a PM10 fugitive dust emission inventory review based on local data and the most recently approved emission factors developed by either the California Air Resources Board (CARB) or the U.S. EPA.

Regarding the location of agricultural sources relative the estimated contribution to the Indio monitoring site, the AQMD staff agrees that the predominant wind direction in the Coachella Valley is from the northwest. Wind rose data included in the 1990 CVSIP, however, shows that a secondary maximum wind direction is from the southeast. Winds from this direction can be associated with thunderstorm activity that occurs from during the summer and early fall months. There are also days when the prevailing winds, not associated with thunderstorms, are from the southeast. As described in Chapter 6, the AQMD uses the Chemical Mass Balance (CMB) receptor model to estimate PM10 ambient air quality based on available emission inventory information.

Comment 21: Agricultural activities are conducted over land adjacent to miles of roadways. The track-out prevention methods contained in the draft SIP must not be applied to agricultural operations, as they are not economically feasible.

*Staff Response:* AQMD staff recognizes the challenges posed to Coachella Valley producers in controlling the track-out of material onto paved roads, however, several methods are available that warrant further discussion. For example, maintaining end of the row turn around areas within the agricultural fields would keep machinery and the associated material off of paved roads where it would be suspended by passing vehicles. If sufficient space is not available for this type of procedure, the roads impacted by machinery could be cleaned following the activity with a water truck or street sweeper. Preliminary indications are that many Coachella Valley producers have water trucks available on-site. Please also refer to response to comment number 11.

Comment 22: Why is there an exemption proposed for farming activities that are less than ten acres? There are a number of smaller farming plots in the Valley that also need control.

*Staff Response:* The proposed exemption for farming operations on sites less than ten acres was obtained from the AQMD Rule 403 program developed for Western Riverside County and was based on the fact that PM10 emissions from tree farms, orchards, neighborhood organic farms (generally ten acres or less) would be minimal on a regional basis. The proposed exemption will be revisited during development of the Coachella Valley agricultural PM10 reduction program. Please also refer to response to comment number 11.

Comment 23: Why do the proposed agriculture regulations only require unpaved agricultural roads to be treated during the harvesting season? These roads are used constantly for crop maintenance and watering and should be controlled throughout the year.

*Staff Response:* The intent of unpaved road treatments is to stabilize roads with high traffic levels as dust and corresponding PM10 emissions are proportionate with traffic activity and speeds. Dust controls are proposed during harvesting activities as this has been identified as a high-use period for unpaved agricultural roads. This proposed requirement will be evaluated, as with the proposed exemption for small agricultural producers, during development of the AQMD regulations for agricultural sources. Please also refer to response to comment number 11.

### **Comments Relative to the Roadways/Open Areas Control Measures**

Comment 24: The preliminary control measure discussion for reducing paved road dust emissions included requirements for stabilizing shoulders and medians for new road construction. The AQMD should consider requiring that stabilization of unpaved shoulders and medians for existing roads.

*Staff Response:* Based on information provided by smaller Coachella Valley jurisdictions, sufficient funding is presently not available to maintain existing roadway travel lanes let alone to fund a program to stabilize roadway shoulders. Several opportunities, however, are currently being explored to reduce paved road dust emissions to the greatest extent feasible. First, for safety considerations, roadway shoulders are periodically graded to remove vegetation and sand build up. Under the proposed construction activities control measure, these activities would be required to apply water during grading activities and then subsequently stabilize the area. The concept is that this approach would cost much less than a separate project to pave the shoulder or install curbing as the watering truck used for pre-wetting the area could be used to apply a chemical stabilizer for an incremental increase in costs. Second, as mentioned in Chapter 1, federal CMAQ funds are currently available to Coachella Valley jurisdictions to reduce transportation-related PM10 emissions. Using these funds, a program could be developed where chemical stabilizers are applied to unpaved road shoulders. This program could be similar to the existing regional street-sweeping program currently implemented by Sunline Transit Agency.

Comment 25: Why is there a threshold of 5,000 square feet for unpaved parking lots? All unpaved parking lots are a source of PM10 and should be controlled. Why is there an exemption for unpaved parking lots used less than 35 days per year? This would be impossible to enforce. Who will be responsible for counting cars?

*Staff Response:* As with unpaved roads, the control concept for unpaved parking lots is to pave or stabilize high-use areas as PM10 emissions are proportionate with size and activity. Very small or low-use unpaved parking areas will have negligible emissions on a regional basis and paving such areas may detract from efforts to pave or treat large or high-use areas. To assist with program implementation, the 2002 CVSIP BCM 3 (PM10 Emissions from Unpaved Roads and Parking Lots) control measure includes a requirement for owner/operators to report unpaved road locations and ADT estimates and parking lot size to the local jurisdiction within six months of ordinance adoption. Local jurisdictions will compile this information and make it available annually to the AQMD.

Comment 26: The draft CVSIP specifies that controls (paving or a chemical dust suppressant that maintains a stabilized surface) will be required for unpaved roads with more than 150 average daily trips (ADT). This threshold should be lowered to 20 ADT as there are many unpaved roads with 30 trips that are large dust producers.

*Staff Response:* Please refer to response to comment numbers 11, 20, and 23.

Comment 27: A preliminary review of the proposed control strategy for unpaved roads specifies that local jurisdictions will be required to pave all unpaved roads with 150 or more ADT within two years of ordinance adoption. Riverside County currently maintains approximately 158 miles of unpaved roads within the Coachella Valley. It can cost up to \$375,000 to pave a mile of unpaved road up to County standards. Such a requirement may involve a capital outlay of nearly \$60 million that would exceed the entire Riverside County pavement repair program of \$13 million. Also, the CVSIP identifies speed control for unpaved roads with between 20 and 150

ADT. The County is concerned that posting of speed limits will be ineffective for dust control as this represents a low-enforcement priority for local jurisdictions and the California Highway Patrol (CHP).

*Staff Response:* As indicated in the comment, the proposed control strategy is to pave existing unpaved roads with high traffic levels (greater than 150 ADT). It is unlikely that all of the 158 miles of County-maintained unpaved roads would have traffic levels in excess of 150 ADT. Regardless, recognizing the extensive unpaved road network operated by the County of Riverside and the financial burdens associated with an extensive paving program, the unpaved road control measure (BCM-3) specifies that jurisdictions with more than six miles of unpaved roads are required to pave only a minimum of two miles or chemically stabilize a minimum of four miles of qualifying unpaved roads annually until all qualifying unpaved road segments have been treated. To assist with program implementation, the 2002 CVSIP BCM-3 control measure also includes a requirement for local jurisdictions to compile an inventory of qualifying unpaved roads and submit the information within six months of ordinance adoption.

Regarding the effectiveness of speed control as a PM10 mitigation strategy for unpaved roads, studies have shown that PM10 emissions from unpaved roads are proportionate with vehicular travel speeds (higher travel speeds generate more PM10 emissions). AQMD staff recognizes the enforcement challenges associated with speed control on unpaved roads, but has retained the speed control option to minimize costs to local jurisdictions. Under the program, local jurisdictions would have the option of paving roads with lower ADT levels. During the Task Force process, a local government representative made a suggestion that speed control signs could be black and orange cautionary signs to improve speed control effectiveness. This suggestion and others will be discussed during development of the revised dust control ordinance. Please also refer to response to comment number 11.