

Chapter 5d: Fugitive Road Dust

Community Concerns

The ECV CSC expressed concerns regarding health effects from inhalable particulate matter (PM10) emitted from unpaved and paved roadways and from dust resuspended by off-road vehicles. Thus, they requested additional PM monitoring in the community. CSC members also mentioned that roadway paving projects implemented in the past have improved PM10 levels for residents in the immediate area, although dust impacts from the surrounding desert areas may continue to have an impact on their overall PM10 exposures.



Actions to Address Fugitive Road Dust

To address community concerns about emissions from fugitive road dust in ECV, South Coast AQMD staff developed actions for the Community Emissions Reduction Plan (CERP). Tables 1, 2, and 3 below provide goals, actions, metrics and a timeline to achieve the emission or exposure reductions for fugitive road dust.

Table 1 - Goal: Expand monitoring networks

	Action	Responsible Entity	Metric	Timeline	
				Start	Complete
A	<p>Identify opportunities to expand the current South Coast AQMD PM10 monitoring network in the ECV community to:</p> <ul style="list-style-type: none"> • Provide near real-time PM10 and wind data and inform community members of PM10 levels in the ECV, and assess how levels compare to Federal and/or State ambient air quality standards • Track the concentration trends of PM10 levels over time to help determine the effectiveness of emission reduction strategies 	South Coast AQMD	<ul style="list-style-type: none"> • Monitors installed • Data collected through air monitoring • Updates provided to the CSC 	1 st quarter, 2021	4 th quarter, 2025
B	<p>Seek new opportunities and work with the CSC to create an air quality sensor network to:</p> <ul style="list-style-type: none"> • Provide real-time PM10 data • Supplement the PM10 monitoring network in the ECV and cover a larger area in the community, prioritizing locations identified by the CSC, areas where the public spends a significant amount of time (e.g., schools and residential areas) and areas close to sources of fugitive dust • Co-locate air quality sensors with reference PM10 monitor at one of South Coast AQMD air monitoring stations to verify sensors performance prior to deployment and implement a data calibration and correction protocol to enhance sensor PM10 data quality after deployment 	South Coast AQMD	<ul style="list-style-type: none"> • Air quality sensors deployed • Data collected through air monitoring • Updates provided to the CSC 	1 st quarter, 2021	4 th quarter, 2025

Table 2 - Goal: Reduce emissions from fugitive road dust

	Action	Responsible Entity	Metric	Timeline	
				Start	Complete
A	Pursue a collaborative partnership with homeowners' associations and the County of Riverside to pave unpaved roads and mobile home parks	South Coast AQMD, homeowners' associations, County of Riverside	<ul style="list-style-type: none"> • Square miles of paved roads and parks • Updates provided to the CSC 	1 st quarter, 2021	4 th quarter, 2025
B	<p>Pursue a collaborative partnership with the cities within ECV, tribes, and the County of Riverside to identify opportunities and funding to reduce emissions, such as:</p> <ul style="list-style-type: none"> • Restrict unnecessary public access to unpaved roads (e.g., installing signs and physical barriers) • Reduce speed limits on unpaved roads • Identify funding to plant natural vegetation on unpaved surfaces no longer being used as roadways; • Stabilize loose road surfaces with grading and gravel on unpaved roads and maintain treated roads (based on Vehicle Miles Traveled (VMT)); and • Identify funding to expand street sweeping services beyond existing service levels 	South Coast AQMD, City of Coachella, City of Indio, City of La Quinta, County of Riverside, the Twenty-Nine Palms Band of Mission Indians Tribe, the Cabazon Band of Mission Indians Tribe, the Torres-Martinez Desert Cahuilla Indians Tribe, and the Augustine Band of Cahuilla Indians Tribe	<ul style="list-style-type: none"> • Number of projects completed or supported (e.g., reduced speed limits) • Number of restricted roads • Number of treated unpaved roads or square miles of unpaved roads treated with chemical stabilizers • Number of miles swept • Amount of funding identified • Updates provided to the CSC 	1 st quarter, 2021	1 st quarter, 2026
C	Pursue a collaborative partnership with Comité Civico del Valle (CCV) to obtain complaint data from their IVAN community-based reporting system to address road dust- related air quality concerns within the ECV community. For example, this data may help identify potential high priority areas for surface stabilizing projects (e.g., road paving)	South Coast AQMD, CCV	<ul style="list-style-type: none"> • Data collected from CCV • Updates provided to the CSC 	1 st quarter, 2021	4 th quarter, 2025

D	Conduct outreach to off-road equipment operators on Rules 403 and 403.1, and practices to reduce fugitive dust from roads	South Coast AQMD	<ul style="list-style-type: none"> • Number of outreach events staff participates in the ECV • Number of entities the information is shared with (i.e., newsletter distribution list) 	1 st quarter, 2022	4 th quarter, 2022
E	Conduct outreach to the general public on how to file dust complaints	South Coast AQMD	<ul style="list-style-type: none"> • Number of outreach events staff participates in the ECV • Number of entities the information is shared with (i.e., newsletter distribution list) 	1 st quarter, 2021	4 th quarter, 2022

Table 3 – Goal: Reduce exposure from fugitive road dust

	Action	Responsible Entity	Metric	Timeline	
				Start	Complete
A	Conduct community outreach on subscribing to air quality alerts using the South Coast AQMD app to check air quality information (e.g., high wind advisories, air quality index and air quality forecasts)	South Coast AQMD	<ul style="list-style-type: none"> • Number of outreach events staff participates in the ECV • Number of entities the information is shared with (i.e., e-newsletter distribution list) 	1 st quarter, 2021	1 st quarter, 2026
B	Identify funding to install and maintain air filtration systems at schools, community centers and homes to reduce exposure to dust emissions	South Coast AQMD	<ul style="list-style-type: none"> • Number of air filters installed in ECV 	4 th quarter, 2021	4 th quarter, 2025

C	Identify funding to implement home weatherization projects	South Coast AQMD	<ul style="list-style-type: none"> • Number of weatherization projects implemented in ECV 	1 st quarter, 2021	4 th quarter, 2025
---	--	------------------	--	-------------------------------	-------------------------------