

Chapter 5e: Open Burning and Illegal Dumping

Community Concerns



The Eastern Coachella Valley (ECV) community has a significant amount of agricultural activity that produces grapes, dates, citrus and other crops. The burning of agricultural waste is a common method of disposal in the agricultural industry. Burning material is also a method to prevent crops from freezing. In many cases, open burning is done in a way that minimizes emissions, exposure and visible smoke. The Community Steering Community (CSC) expressed concern about the adverse health effects of air pollution from open burning including, smoke, particulate matter (PM) and potential pesticides burned. The CSC also identified concerns about air quality impacts from open burning near schools, childcare centers and homes. Additionally, the CSC expressed concerns about open

burning that is not permitted and uncontrolled (e.g., the 50-acre mulch fire in 2019 at a recycling center in Thermal that was near three local schools). The CSC also cited concerns about open burning on tribal lands, which falls outside of South Coast AQMD's jurisdiction (i.e., not subject to South Coast AQMD regulations).

The CSC also identified illegal dumping of waste materials as an air quality concern since the materials can subsequently catch fire and produce emissions. Among the open burning types, illegal dumping and burning activities are the most difficult to track and monitor trends.¹

Potential Alternatives to Burning

Health and Safety Code Sections 41801 and 41850 reaffirm that open burning for necessary purposes is allowed. However, the CSC has expressed an interest in exploring alternatives to burning. Potential alternatives may include composting or using heavy-duty equipment (e.g., chipper or grinder) to break material down into smaller pieces that can be disposed of through composting or recycling. There are also alternative methods for frost prevention that do not involve open burning. Composting is when organic waste decomposes naturally under oxygen-rich conditions. One of the actions to address open burning will be to explore the feasibility of other alternatives.

Actions to Address Open Burning and Illegal Dumping

South Coast AQMD staff developed actions for the Community Emissions Reduction Plan (CERP) to address community concerns about open burning and illegal dumping emissions and exposures. Tables 1, 2, 3, and 4 below provide a goal, action, responsible entity, applicable metrics, and an implementation timeline to achieve the emission and exposure reductions due to open burning and illegal dumping.

¹ Illegal dumping does not have air quality impacts and therefore, South Coast AQMD does not have jurisdiction over illegal dumping. Air quality impacts occur when illegally dumped trash is burned; however, these impacts are difficult to monitor and track because they are not permitted.

Table 1 – Goal: Improve Monitoring Network

	Action	Responsible Entity	Metric	Timeline	
				Start	Complete
A	<p>Work with the CSC to establish an air quality sensor network to:</p> <ul style="list-style-type: none"> Gain a better understanding of the PM2.5 levels in various community areas that may be impacted by legal and illegal burning occurring in the community Identify air pollution hotspots and gather more information to help identify potential source(s) of emissions Improve public information on PM2.5 levels in the community (e.g., better characterize the spatial and temporal variability of PM2.5 in the community) Gather information to help identify illegal burning emissions and conduct follow-up investigations, as needed 	South Coast AQMD	<ul style="list-style-type: none"> Air quality sensors deployed Updates provided to the CSC Follow-up investigations, as needed 	3 rd quarter, 2021	1 st quarter, 2026
B	<p>Provide information to the community on how a sensor-network can help identify pollution hotspots and emissions from illegal burning. Specific locations for sensor deployment will be selected after gathering input from CSC and community members and accounting for long-term availability of potential sites. Input from the CSC and community members regarding specific and/or illegal burning events in ECV will also be taken into account in the development of the sensor network and the selection of specific monitoring sites</p>	South Coast AQMD	<ul style="list-style-type: none"> Updates provided to the CSC 	3 rd quarter, 2021	4 th quarter, 2022

Table 2 – Goal: Reduce Emissions from Open Burning

	Action	Responsible Entity	Metric	Timeline	
				Start	Complete
A	<p>Pursue emission reductions from open burning by:</p> <ul style="list-style-type: none"> Developing a list of available technologies, best practices and alternatives to be distributed to farm owners and operators Assessing the feasibility of new requirements for open burning (e.g., alternatives to open burning of agricultural waste) based on the developed list 	South Coast AQMD	<ul style="list-style-type: none"> List of available technologies and feasibility assessment of new requirements provided to CSC and distributed to farm owners and operators 	1st quarter, 2022	4 th quarter, 2023
B	<p>Continue existing and pursue additional collaborative partnerships with:</p> <ul style="list-style-type: none"> Local tribes to identify opportunities to reduce open burning through outreach, enforcement, and/or open burning regulations (e.g., technical guidance, burn and no-burn days, permitting system) Riverside County Fire Department to conduct focused enforcement at illegal burn sites on non-Tribal lands and Tribal lands, when permitted 	South Coast AQMD, local tribes, Riverside County Fire Department	<ul style="list-style-type: none"> Updates provided to CSC on opportunities with tribes, enforcement efforts, complaints and investigations 	3 rd quarter, 2021	1 st quarter, 2026
C	<p>Pursue funding opportunities for equipment or services to be used as alternatives to:</p> <ul style="list-style-type: none"> Agricultural burning (e.g., chippers, grinders, digesters, air curtain destructors, etc.) Emergency burning for freeze prevention (e.g., fan systems) 	South Coast AQMD	<ul style="list-style-type: none"> Number of projects implemented Amount of funding and when available, emission reductions 	3 rd quarter, 2022	1 st quarter, 2026

D	Conduct outreach to farm owners, operators and workers to encourage best burn practices and methods to reduce emissions (e.g., conservation burning, cleaner piles, no rolling, cleaner ignition device)	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) 	3 rd quarter, 2021	2 nd Quarter, 2022
E	Provide community members and farm owners, operators and workers information (e.g., workshops/presentations) relating to rules and regulations on open burning and ways to report suspected illegal burning	South Coast AQMD	<ul style="list-style-type: none"> Material provided Number of workshops and presentations 	3 rd quarter, 2021	2 nd Quarter, 2022

Table 3 – Goal: Reduce Exposure to Open Burning

	Action	Responsible Entity	Metric	Timeline	
				Start	Complete
A	Pursue collaborative partnerships with: <ul style="list-style-type: none"> Riverside County Fire Department to develop informational materials relating to open burning, fire safety, and air pollution Community organizations (e.g., Growing Coachella Valley, Alianza, Leadership Counsel, Communities for a New California) to distribute informational materials relating to open burning, fire safety and air pollution in the community 	South Coast AQMD, Riverside County Fire Department, community organizations	<ul style="list-style-type: none"> Fire safety informational materials provided 	3 rd Quarter, 2021	4 th Quarter, 2022
B	Pursue opportunities to develop an online system (e.g., notification system, database) that informs the community when South Coast AQMD permitted burning is expected to occur	South Coast AQMD	<ul style="list-style-type: none"> Number of successful notifications 	3 rd quarter, 2021	1 st quarter, 2026
C	Identify funding to install and maintain air filtration systems at schools and homes located near frequent burn sites	South Coast AQMD	<ul style="list-style-type: none"> Number of air filtration systems installed 	3 rd quarter, 2021	4 th quarter, 2025

Table 4 – Goal: Reduce Illegal Dumping					
	Action	Responsible Entity	Metric	Timeline	
				Start	Complete
A	<p>Pursue collaborative partnerships with:</p> <ul style="list-style-type: none"> Riverside County Code Enforcement to conduct focused enforcement of illegal dumping laws and to improve the system to report potential dumping violations Riverside County Fire Department to provide guidance and educational materials to the community about potential fire hazards related to illegal dumping and how to report such fires Community-based organizations to establish a complaint-report tracking system to better track illegal dumping activities Waste Management and Riverside County Department of Waste Resources to identify ways to reduce illegal dumping and/or conduct clean-up services (e.g., monthly free waste collection day and related outreach) Local farm owners, landowners, and landscapers to identify ways (e.g., fencing, composting) to reduce illegal dumping on empty lands Combustible Material Task Force to support green waste complaint reporting and follow-up investigations 	<p>South Coast AQMD, Riverside County Code Enforcement, Riverside County Fire Department, community-based organizations, Waste Management and Riverside County Department of Waste Resources, local farm owners, and landscapers, Combustible Material Task Force</p>	<ul style="list-style-type: none"> Number of focused enforcement efforts and follow-up investigations Complaint tracking system Number of illegal dumping incidences tracked Number of outreach events staff participates in the ECV Number of entities the information is shared with (I.e., newsletter distribution) Updates to the CSC on efforts 	3 rd Quarter, 2021	1 st quarter, 2026
B	<p>Conduct outreach to community members and farm workers on how to report illegal dumping activities</p>	<p>South Coast AQMD</p>	<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) 	3 rd quarter, 2021	4 th quarter, 2022

<p>C</p>	<p>Pursue funding opportunities for:</p> <ul style="list-style-type: none"> • Waste collection services (agricultural and non-agricultural waste that has been dumped illegally) • Non-agricultural waste disposal (e.g., tire disposal) • Fencing or berm construction to discourage illegal dumping 	<p>South Coast AQMD</p>	<ul style="list-style-type: none"> • Amount of funding awarded • Amount of waste collected 	<p>3rd quarter, 2022</p>	<p>1st quarter, 2026</p>
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