

Cumulative Impacts from Air Toxics for CEQA Projects Working Group Meeting #2

5/26/2022

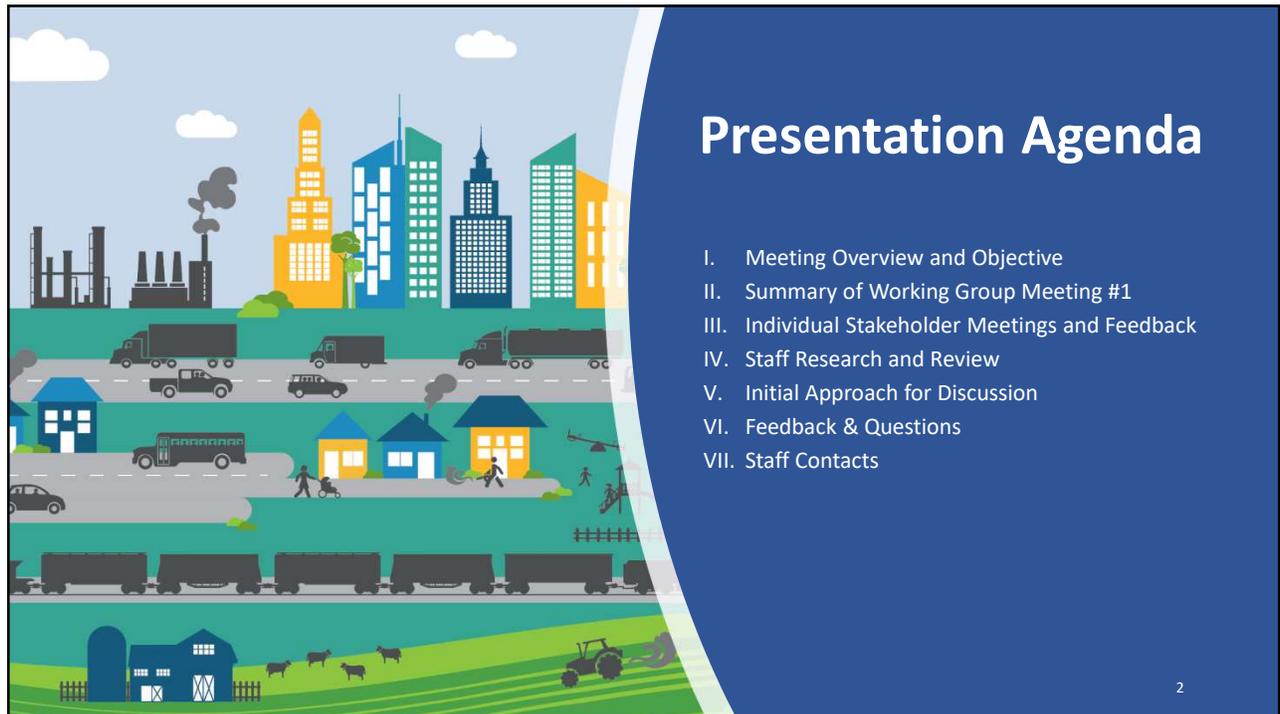
1:00 PM (PST)

South Coast Air Quality Management District
Diamond Bar, California

Join Zoom Webinar Meeting - from PC or Laptop
<https://scaqmd.zoom.us/j/94556369595>

Zoom Webinar ID: **945 5636 9595**
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Presentation Agenda

- I. Meeting Overview and Objective
- II. Summary of Working Group Meeting #1
- III. Individual Stakeholder Meetings and Feedback
- IV. Staff Research and Review
- V. Initial Approach for Discussion
- VI. Feedback & Questions
- VII. Staff Contacts

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Meeting Overview and Objective

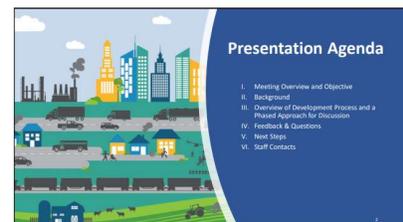
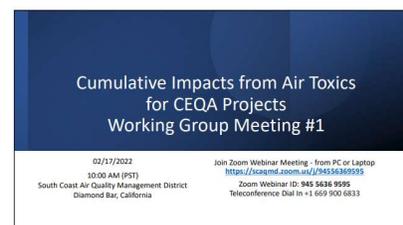
- Following Working Group Meeting #1, staff initiated individual meetings with various stakeholders and conducted research to gather information
- Staff will share stakeholder feedback and information gathered from individual meetings and research with the Working Group in today's meeting
- Staff has developed an initial approach based on stakeholder feedback and information
- The objective is to seek feedback on the initial approach to enhance cumulative air toxics analysis under CEQA

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Summary of Working Group Meeting #1

- Highlighted CEQA requirements for cumulative impact analysis
- Discussed the following topics:
 - South Coast AQMD roles under CEQA and the CEQA Air Quality Handbook
 - Need for additional guidance on how to analyze cumulative air toxics impacts
 - A phased qualitative and quantitative approach to enhance CEQA cumulative air toxics impacts analysis



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Individual Meetings with Stakeholders

- Individual meetings were held with environmental and community-based organizations, public agencies, and CEQA practitioners
- Staff asked stakeholders to provide specific feedback on:
 - Project screening criteria to navigate between qualitative and/or quantitative analysis
 - Geographic scope and extent of cumulative air toxics analysis
 - Development of a significance threshold for cumulative impacts from air toxics

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Specific Stakeholder Feedback from Individual Meetings

Screening Criteria

- Multi-tiered approach (e.g., each tier builds upon the last all the way up to a quantitative analysis)
- Driven by project type, toxic air contaminant (TAC) source type, characteristic, and quantity



Geographic Scope

- Focus on similar or related CEQA projects within a geographic area
- Use existing criteria for identifying environmental justice areas within a geographic location of project
- Concentration drop-offs change by TAC source type, characteristics, and process emitting TACs
- Distances mentioned: 500 feet, 1,000 feet, ¼ mile, ½ mile, 1 mile



Significance Threshold

- Reduced project-level threshold below 10 in a million to trigger quantitative analysis
- Higher threshold to determine significance level for quantitative analysis



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Other Considerations Identified by Stakeholders

Consider framework from existing guidance from other air districts and public agencies

Develop mitigation measures for reducing cumulative air toxics impacts

Include criteria pollutants and greenhouse gases (GHGs) in addition to air toxics

Apply cumulative impacts analysis for South Coast AQMD permitting decisions

Provide periodic updates to guidance

Allow continued use of NDs and MNDs where appropriate

Do not infringe upon local land use authorities

Avoid using socioeconomic factors for CEQA analysis

Explain what constitutes past and probable future projects

Explain what constitutes related project to the proposed project

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Research on Existing or Proposed Guidance for Cumulative Impacts by Other Agencies

- Based on stakeholder feedback, staff researched existing or proposed guidance and tools by other agencies, specifically:
 - CEQA cumulative significance threshold and guidance from three air districts in California
 - Guidance from other agencies that consider cumulative impacts for other resource areas (i.e., waste) or more holistically broader than air quality and CEQA purposes
 - Mapping tool that can be used to characterize existing conditions on the ground
- Purpose is to leverage upon other agencies work and identify potential for collaboration

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Staff Research on Existing Guidance on CEQA Cumulative Impacts Analysis from Other Air Districts

- Bay Area AQMD¹
 - Adopted in 2009, the cumulative significance threshold is 100 in a million based on U.S. EPA guidance of range of acceptable cancer risks
 - Aggregate total of all past, present, and foreseeable future sources (stationary sources and roadways)
 - Geographic scope is within a 1,000-foot radius from a project's fence line (e.g., a new source or new receptor) based on California Air Resources Board's (CARB) Air Quality and Land Use Handbook and the Health and Safety Code Section 42301.6 (judgement is used to decide if significant sources beyond 1,000 feet)
 - Mitigation measures for reducing TAC emissions are available
- San Joaquin Valley APCD² and Sacramento Metropolitan AQMD³ utilize project-level significance threshold for TAC emissions from stationary sources to determine if they are cumulatively considerable
 - Existing guidance for CEQA air quality analysis

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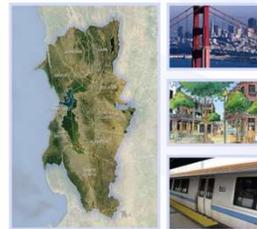
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Bay Area AQMD Air Quality Guidelines Attributes

- Existing guidance for CEQA air quality analysis
- Quantitative cumulative impacts analysis
- Numeric cumulative significance threshold
- Defined geographic scope with fixed distance
- All sources and air toxicity profiles are treated equally under geographic scope
- Reliance on established recommendations for threshold and geographic scope



California Environmental Quality Act Air Quality Guidelines



Note: This May 2017 version of the Guidelines includes revisions made to the Air District's 2010 Guidelines to address the California Supreme Court's 2015 opinion in *Cal. Bldg. Indus. Ass'n v. Bay Area Air Quality Mgmt. Dist.*, 62 Cal. 4th 369. The May 2017 CEQA Guidelines update does not address outdated references, links, analytical methodologies or other technical information that may be in the Guidelines or Threshold Justification Report. The Air District is currently working to update any outdated information in the Guidelines. Please see the CEQA webpage at <http://www.baaqmd.gov/2017-05-01/updates-to-california-environmental-quality-act-ceqa> for status updates on the Air District's CEQA Guidelines or contact Jaclyn Winkel at jwinkel@baaqmd.gov for further information.

May 2017

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U.S. EPA Draft Guidance on Cumulative Impacts

- In 2021, U.S. EPA initiated the development of updates to the 2003 guidelines for analyzing cumulative risks from combined environmental concerns (e.g., air, water, etc.)
 - A key environmental justice policy for EPA
- In January 2022, U.S. EPA released draft white paper to help inform research planning and product development focused on cumulative impacts⁴
- U.S. EPA is soliciting public comments on the draft white paper
- Final Report expected in late 2022

The screenshot shows the EPA website's 'Cumulative Impacts Research' page. It features the EPA logo, navigation menus for 'Environmental Topics', 'Laws & Regulations', 'Report a Violation', and 'About EPA'. The main heading is 'Cumulative Impacts Research'. Below this, there is a paragraph explaining that EPA's Office of Research and Development (ORD) recently released an external review draft of 'Cumulative Impacts: Recommendations for ORD Research'. The draft presents strategies for conducting research on the cross-cutting priority of cumulative impacts—how the total burden of environmental stressors, both chemical and non-chemical, and their interactions with one another, affect health, well-being, and quality of life. A photograph of a playground with smokestacks in the background is included. The text states the purpose of the draft is to help inform research planning and product development focused on cumulative impacts, and is currently open for public comment. A final EPA Report, including updates and improvements based on public comments and consultation, will be published the third quarter of fiscal year 2022. Below this, there is an 'Additional Information' section with two bullet points: one for more information and a direct link to the external review draft, and another stating that the Chartered Science Advisory Board (SAB) consulted with EPA on research needed to improve the state of the science supporting cumulative impact assessments.

CARB Air Toxics Listening Sessions related to Cumulative Impacts

- In December 2021, as part of CARB Air Toxics Listening Sessions, CARB initiated Sessions focused on Health Risk Assessment Capacity Building⁵
 - Between December 2021 and May 2022, held three sessions
 - Engaged stakeholders and highlighted concerns with health risk assessment framework and cumulative health risk
 - No draft guidance proposed at this time on cumulative health risk assessment (timeline unknown)

The screenshot shows the CARB website's 'Air Toxics Listening Sessions' page. It features the CARB logo and navigation menus for 'ABOUT', 'OUR WORK', 'RESOURCES', 'SERVICES', 'RULEMAKING', 'NEWS', and 'EQUITY'. The main heading is 'Air Toxics Listening Sessions'. Below this, there is a paragraph explaining that CARB is committed to involving the community on regulatory development. The Air Toxics Listening Sessions are a series of public meetings with the goal of providing community members access to CARB Transportation and Toxics (TTT) staff and opportunities to voice concerns and ideas on reducing air pollution. Below this, there is a table with columns for 'Topic', 'Meeting Info', and 'Staff Presentation and Additional Resources'. The table lists two sessions: 'Health Risk Assessment Capacity Building Session, Part Three' and 'Health Risk Assessment Capacity Building Session, Part Two'. The first session is scheduled for May 19, 2022, at 10:00 AM PST, and the second session is scheduled for December 14, 2021.

Topic	Meeting Info	Staff Presentation and Additional Resources
Health Risk Assessment Capacity Building Session, Part Three	<p>Open to all attendees' comments and questions during parts one and two of the Health Risk Assessment Capacity Building Session, the California Air Resources Board (CARB), Transportation and Toxics Division (TTT), is holding a third session in this series.</p> <p>Send us your suggestions for future air toxics listening sessions.</p> <p>Date: May 19, 2022 Time: 10:00-12:00pm Register Here (800) 274-0208 (US Toll Free) Conference code: 300717 Spanish Conference Call Info: (949) 803-2348 Participant Code: 1083550</p>	<p>Announcement / Audio Staff Presentation (EPAHQ)</p>
Health Risk Assessment Capacity Building Session, Part Two	<p>The California Air Resources Board (CARB), Transportation and Toxics Division (TTT), is planning two follow-up sessions to the Health Risk Assessment (HRA) Capacity Building Sessions held December 14, 2021. The first of these will continue an introduction to HRA.</p>	<p>Announcement / Audio Staff Presentation (EPAHQ) Resource (EPAHQ)</p>

DTSC Draft Framework on Cumulative Impacts

- In 2015, Senate Bill 673 was signed into law to increase community protection through improvements to Department of Toxic Substances Control's (DTSC) permitting process and criteria for hazardous waste facilities
- In 2017, DTSC initiated the development of cumulative impact standards
- In 2021, DTSC released Draft Framework⁶:
 - Applies to existing facilities for permit renewal, new permit, or certain permit modifications
 - Distances ranging from 0.25 miles to six miles to define geographic scope, based on facility type
 - Uses CalEnviroScreen score to indicate community vulnerability
- DTSC is reviewing comments on the Draft Framework before formal rulemaking proceeds (timeline unknown)



SB 673 Permit Criteria – Community Protection

Background

In October 2015, Governor Jerry Brown signed into law Senate Bill 673. The bill was authored by southern California Senator Ricardo Lara to improve DTSC's permitting process for hazardous waste facilities and increase community protection through stronger permit criteria.

For more information about implementation and past activities, go to our webpages:

- SB 673 Implementation
- Violations Scoring Procedure
- Past Activities and Events



Permitting Links

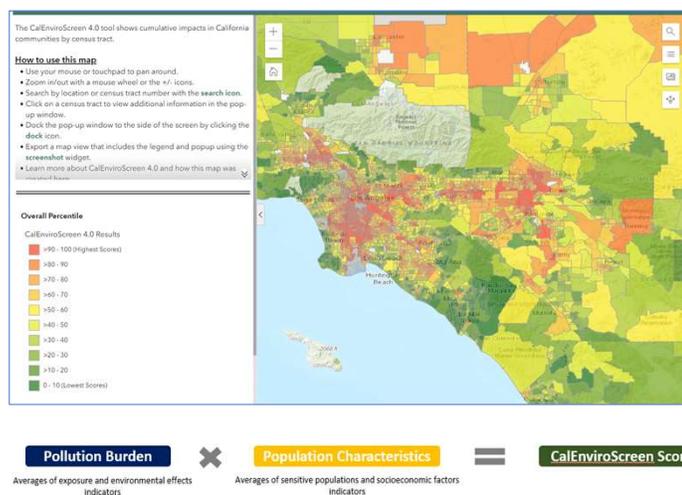
- Permitting Home
- Contact Info
- Managing Hazardous Waste
- Permit Appeals
- Permitted Hazardous Waste

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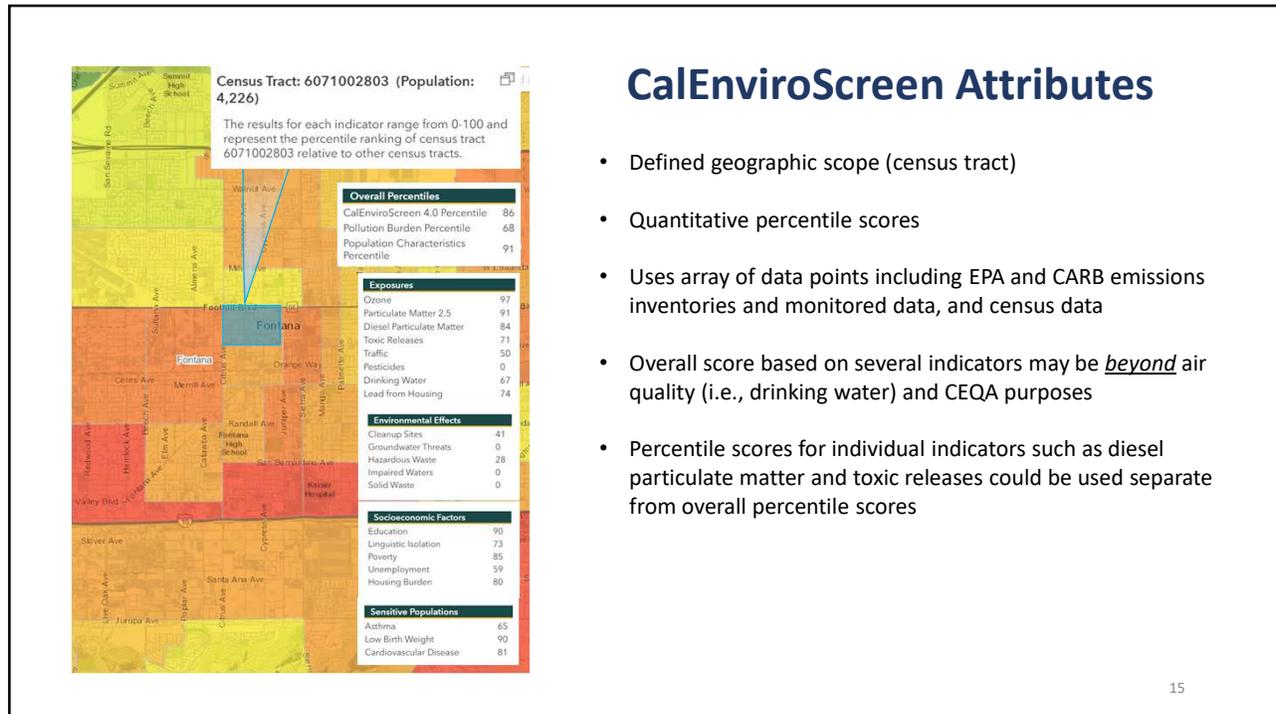
Statewide Mapping Tool – CalEnviroScreen

- A science-based mapping tool developed by CalEPA and OEHHA⁷ that helps identify California communities most affected by multiple sources of pollution and vulnerable to its effects
- Analyzes indicators of pollution burden and population characteristics in each census tract in the state
- Calculates a score measuring the relative pollution burdens and vulnerabilities in one census tract compared to other census tracts (score is not a measure of health risk)
- The most burdened and vulnerable area has the highest score



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Summary of South Coast AQMD Programs

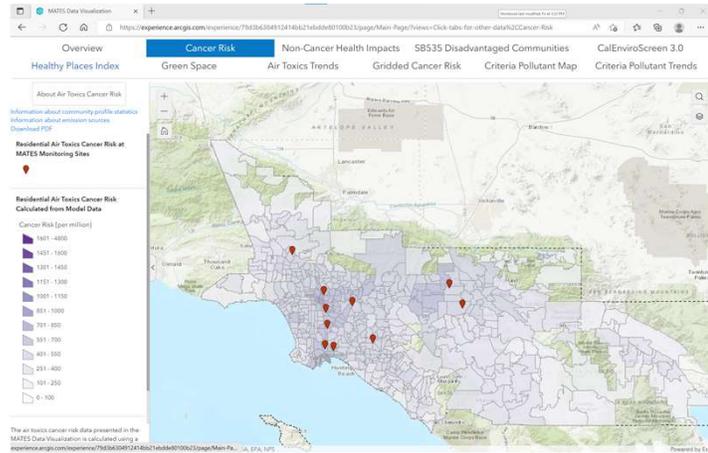
- Based on stakeholder interest, staff has summarized South Coast AQMD Programs and mapping tool that may be used for developing additional guidance:
 - Annual Emissions Reporting Program
 - Air Toxics “Hot Spots” Information and Assessment Act (commonly known as AB2588)
 - Multiple Air Toxics Exposure Study (MATES) V
- Purpose is to leverage upon South Coast AQMD programs and utilize local data and mapping tool to characterize existing conditions on the ground related to air toxics in the South Coast Air Basin (SCAB)

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South Coast AQMD Mapping Tool – Multiple Air Toxics Exposure Study (MATES) V

- A science-based regional mapping tool developed by South Coast AQMD⁸ that characterizes cancer risk from air toxics across the SCAB
- Regional modeling effort; utilizes fixed site monitoring, emissions inventory; data from SCAG and Caltrans
- Calculates cancer risk and relative percentile values
- Concludes exposure to higher air toxics cancer risk occurs along goods movement corridors, and driver of risk is mainly diesel particulate matter*



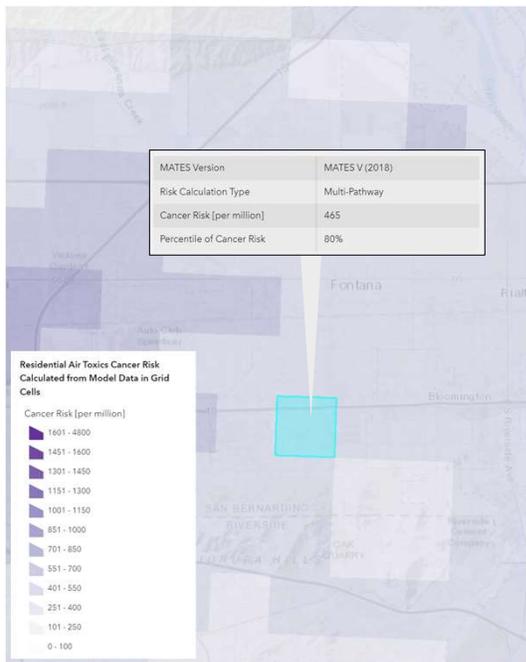
*Reviewed by the South Coast AQMD Governing Board in August 2021

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MATES V Attributes

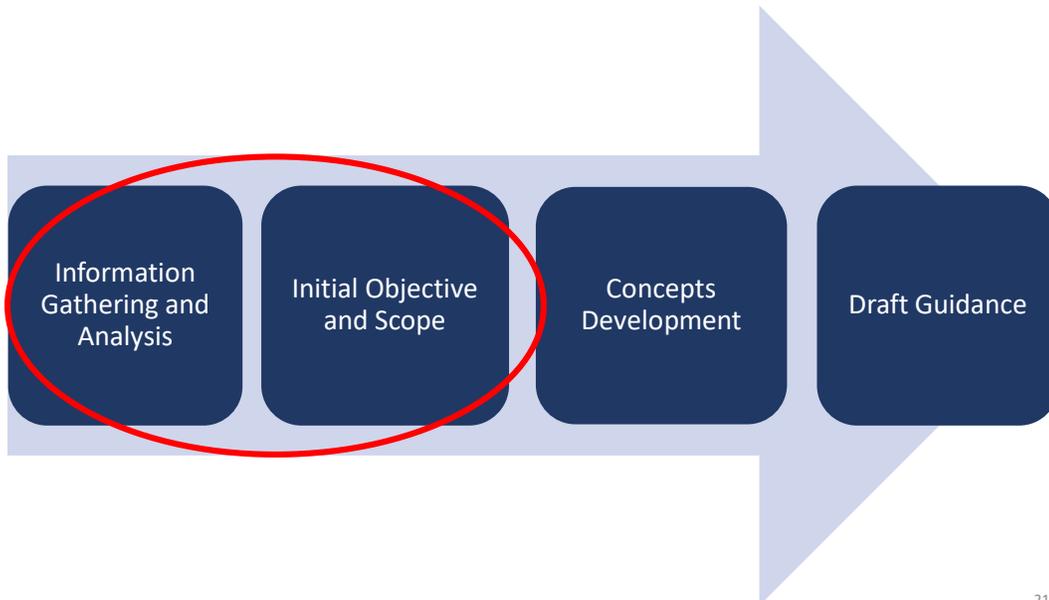
- Part of South Coast AQMD’s Environmental Justice Initiatives
- Regional mapping tool specifically for SCAB
- Has a defined geographic scope (zip code or 2km x 2km grid)
- Calculates cancer risk numerically (per million)
- Summary of MATES V
 - Built upon previous MATES I, II, III, and IV studies
 - Uses 2018 data from stationary and mobile sources
 - Enhanced air toxics monitoring at local scales with a focus on Environmental Justice communities
 - Provides detailed interpretations of air toxics health risk trends



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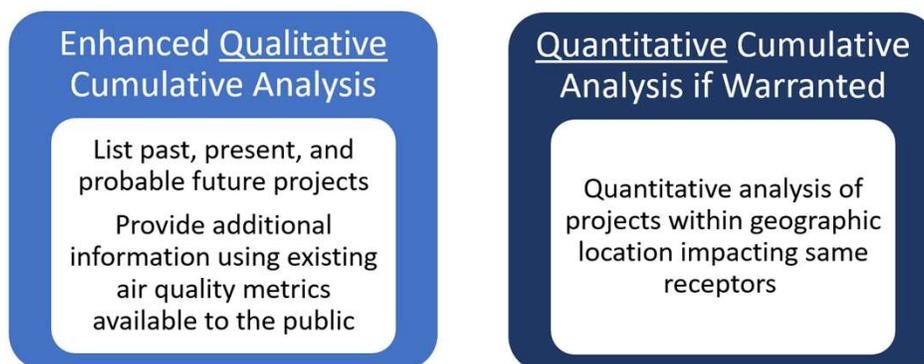
Overview of Development Process



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A Phased Approach to Enhance Cumulative Analysis for Air Toxics under CEQA



Recap Working Group Meeting #1, Slide 15

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Initial Approach for Discussion

Within Initial Approach	Under Consideration	Under Consideration for Future Development
<p>A. Apply to air toxics for projects subject to CEQA</p> <p>B. Expand qualitative discussion to better characterize overall cumulative air toxics impacts</p> <p>C. Use a range of distances to define geographic scope based on project characteristics</p> <p>D. Update periodically</p>	<p>E. Develop reduced project-level threshold or higher cumulative threshold</p> <p>F. Include quantitative analysis methodologies</p> <p>G. Utilize CalEnviroScreen scores in addition to MATES</p> <p>H. Provide mitigation measures for reducing cumulative air toxics impacts</p>	<p>I. Include criteria pollutants and GHGs</p> <p>J. Apply cumulative impacts analysis to South Coast AQMD permitting decisions</p>

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Within Initial Approach and Reasons

<p>A. Apply to air toxics for projects subject to CEQA</p>	<ul style="list-style-type: none"> Staff highlighted the need for additional guidance on how to analyze cumulative impacts from air toxics in Working Group Meeting #1 Recommend projects use the cumulative air toxics guidance once adopted
<p>B. Expand qualitative discussion to better characterize overall cumulative air toxics impacts</p>	<ul style="list-style-type: none"> Expand and enhance qualitative discussion of existing conditions attributable to cumulative impacts from air toxics on the ground Use MATES During the development process staff will explore how qualitative discussion and MATES can be expanded and incorporated

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Within Initial Approach and Reasons

C. Use a range of distances to define geographic scope based on project characteristics	<ul style="list-style-type: none"> Recognize differences among projects (e.g., TAC-emitting processes, project types, and locations) Different project characteristics warrant consideration of a range of distances for defining geographic scope (i.e., not one-size-fits-all)
D. Update periodically	<ul style="list-style-type: none"> A living document Technologies and regulations are expected to improve air quality and co-benefit air toxics emissions overtime Ensure the most recent regional modeling effort and TACs emission inventory from MATES are used as MATES is updated

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Under Consideration and Reasons

E. Develop reduced project-level threshold or higher cumulative threshold	<ul style="list-style-type: none"> Estimated timeframe to develop guidance on qualitative analysis is shorter (e.g., approximately eight to 12 months)
F. Include quantitative analysis methodologies	<ul style="list-style-type: none"> Estimated timeframe to develop a reduced project-level significance threshold to trigger quantitative analysis, specific methodologies, and a higher significance cumulative threshold for quantification is longer (e.g., approximately to 24 months)

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Under Consideration and Reasons

G. Utilize CalEnviroScreen scores in addition to MATES

- MATES provides local toxics data, specific to the South Coast Air Basin
- Economic or social effects may be used as factors in determining whether the physical change is significant (CEQA Guidelines Section 15064(e))
- Proximity to environmental justice communities is an important factor

H. Provide mitigation measures for reducing cumulative air toxics impacts

- CEQA requires mitigation for significant adverse environmental impacts
- Mitigation must be roughly proportional to project impacts (CEQA Guidelines Section 15126.4)
- More thoughts and discussions needed to develop guidance for mitigation measures for reducing cumulatively considerable air toxics impacts

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Under Consideration for Future Development and Reasons

I. Include criteria pollutants and GHGs

- Staff acknowledges this feedback

J. Apply cumulative impacts analysis to South Coast AQMD permitting decisions

- Staff will explore them for future development

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Feedback and Questions

Staff is seeking stakeholder feedback on:

- The initial approach for the updated guidance
- Any other thoughts or concerns that staff should consider
- Visit: [http://www.aqmd.gov/home/rules-compliance/ceqa/ceqa-policy-development-\(new\)](http://www.aqmd.gov/home/rules-compliance/ceqa/ceqa-policy-development-(new))

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Next Steps

- Continue Working Group meetings
- Continue individual meetings with stakeholders
- Provide updates

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Staff Contacts

Guidance for Cumulative Impacts from Air Toxics for CEQA Projects		General Questions
Lead Staff: Alina Mullins, Air Quality Specialist, 909-396-2402, Amullins@aqmd.gov		<p>Michael Krause Assistant Deputy Executive Officer 909-396-3105 Mkrause@aqmd.gov</p>
Contributor: Dung Nguyen, Air Quality Specialist, 909-396-3531, Dnguyen1@aqmd.gov		
Contributor: Evelyn Aguilar, Air Quality Specialist, 909-396-3148, Eaguilar@aqmd.gov		
<p>Lijin Sun Program Supervisor 909-396-3308 Lsun@aqmd.gov</p>	<p>Michael Morris Planning and Rules Manager 909-396-3282 Mmorris@aqmd.gov</p>	
<p>Sign up for the mailing list at: https://www.aqmd.gov/sign-up (select CEQA Updates)</p>		

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References

1. Bay Area Air Quality Management District. California Environmental Quality Act Air Quality Guidelines (May 2017). Accessed at: <https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines>.
2. San Joaquin Valley Air Pollution Control District. Guidance for Assessing and Mitigating Air Quality Impacts (May 2015). Accessed at: https://www.valleyair.org/transportation/ceqa_idx.htm.
3. Sacramento Metropolitan Air Quality Management District. CEQA Guide Chapter 8: Cumulative Air Quality Impacts. Accessed at: <http://www.airquality.org/Residents/CEQA-Land-Use-Planning/CEQA-Guidance-Tools>.
4. United States Environmental Protection Agency. Cumulative Impacts: Recommendations for ORD Research (External Review Draft) (January 2022). Accessed at: <https://www.epa.gov/healthresearch/cumulative-impacts-research>.
5. California Air Resources Board. Air Toxics Listening Sessions. Accessed at: <https://ww2.arb.ca.gov/resources/documents/air-toxics-listening-sessions>.
6. Department of Toxic Substance Control. Senate Bill 673 Cumulative Impacts and Community Vulnerability Draft Regulatory Framework (May 2021). Accessed at: <https://dtsc.ca.gov/sb-673-permit-criteria-implementation/>.
7. California Office of Environmental Health Hazard Assessment. CalEnviroScreen 4.0 (October 2021). Accessed at: <https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40>.
8. South Coast Air Quality Management District. Multiple Air Toxics Exposure Study V (August 2021). Accessed at: <http://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/mates-v>.

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