

# **Proposed Amendments to the Emission Inventory Criteria and Guidelines for the Air Toxics "Hot Spots" Program and**

# **Proposed Amendments to the Criteria and Toxics Reporting Regulation**

September 30, 2020

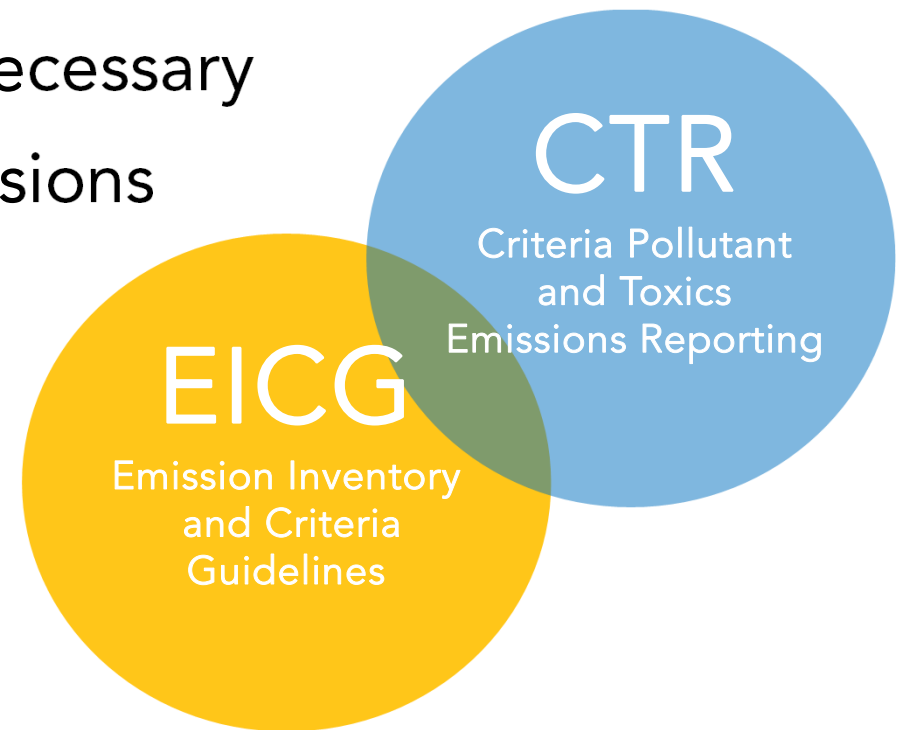
California Air Resources Board  
Air Quality Planning & Science Division



# Welcome & Agenda

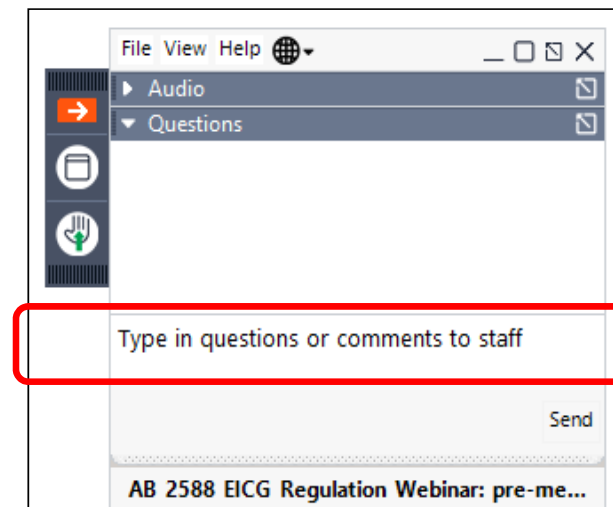


- General Overview
- Why the Amendments are Necessary
- Benefits of Coordinated Revisions
- Common Elements
- Q&A Part 1
- Program-Specific Updates
- Q&A Part 2



# Webinar Logistics

- Workshop and Regulatory Materials:  
EICG: <https://ww2.arb.ca.gov/hot-spots-inventory-guidelines>  
CTR: <https://ww2.arb.ca.gov/our-work/programs/criteria-and-toxics-reporting>
- Comments and Questions
  - GoToWebinar Question Box
  - Please include your affiliation



# Regulatory Schedule

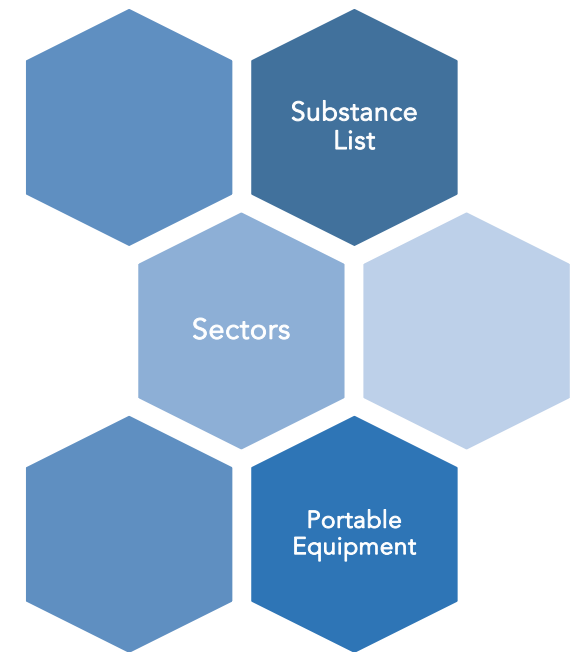


- Staff Reports and proposed amendments now posted
- Formal comment period: October 2, 2020 to November 16, 2020
- Board Meeting: November 19-20, 2020



# Why a Combined Workshop?

- Multiple overlapping elements
- Common pool of facilities subject to reporting requirements
- Need common understanding of both regulations



# EICG Overview



- Requires reporting of toxic emissions
- Applicable to large facilities, and smaller facilities in specified sectors
- Requires source testing for specific processes; estimate others
- Local air districts have primary role in working with facilities

# CTR Overview



- Statewide reporting of criteria pollutant and toxic emissions
- Requires annual data reporting by facilities
- Establishes uniform estimation methods and data reporting requirements

# Need for Amendments

The new data will support

- community health
- toxic control measures
- public right-to-know
- required and voluntary emission reductions
- environmental justice
- scientific research





# EICG – Primary Amendments



- Additional factors for district consideration of facility exemptions/reinstatements
  - Latest risk science and risk assessment methods
  - Population exposure and cancer burden
  - Persistence and bioaccumulation
  - Combined impacts of multiple facilities in an area
- Add more than 900 new substances and 3 broad functional groups
- Update screening approaches for diesel engines and other modeling

# CTR – Primary Amendments



- Expand applicability to ~60,000 facilities
  - “Toxics” sectors subject to reporting (CTR Table A-3 & EICG Appendix E)
  - Reporting thresholds for toxics sectors
- Update toxics lists for reporting
- Reporting portable equipment
- Clarifications and options for additional abbreviated reporting for additional sectors



# EICG & CTR Common Elements

# Common Program Elements



- Toxic substances subject to reporting
- Industrial sectors and reporting thresholds
- Sector phase-in schedule and district groups
- Reporting of portable equipment
- Reporting of amount used or produced when emission quantification method is not available

# Reportable Substances



- Existing list (~400 chemicals) in EICG Appendix A
- About 200 new reportable substances in common
  - New appendix in CTR
  - ChemSet-1 in EICG

# Reportable Sectors



- CTR (Table A-3) and EICG (Appendix E) now using same sector table, sector phases, and reporting thresholds
- Expanded to include additional processes
  - CTR only covers processes with district-issued permits
- Divided into three sector phases for phasing-in facilities subject to reporting

# Phase-In Schedule



- Facility phase-in schedule is determined by three factors:

Initial data year (Table 1)

Air district group (Table 2)

Group A: Districts with AB 617 Year 1 communities

Group B: All other districts

Sector phase assignment (Table 3)

# Sector Phase-In: Table 1



*Proposed Schedule by District Classifications and Sector Phase*

District Group	Sector Phase 1	Sector Phase 2	Sector Phase 3	Ongoing Annual Reporting
A	2022 data, reported in 2023	2024 data, reported in 2025	2025 data, reported in 2026	2026 data on, reported following year
B	2023 data, reported in 2024	2025 data, reported in 2026	2026 data, reported in 2027	2027 data on, reported following year



*One-year gap allowed between Sector Phases 1 and 2 to provide additional implementation time*



# Portable Equipment Reporting

- Reporting for certain facilities only
- Over 50 hp rating



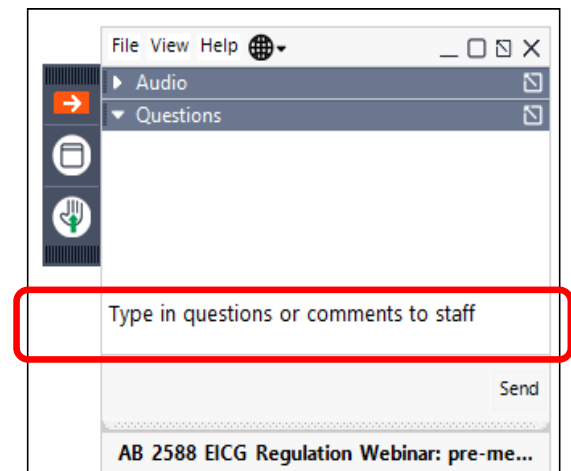
# Reporting Amounts Used or Produced



- Addresses substances that are used or produced, for which emissions cannot be quantified
- Emissions quantification is not required, but facility must report the presence of the substance, and the amount used or produced on-site during the year

# Part 1 Q&A

- Submit questions & comments via GoToWebinar interface
- Use “questions or comments” box
- Please include your affiliation
- Staff will read and respond





5-minute Break

Joint EICG and CTR  
Webinar will resume in:

**5:00**



# EICG Updates

# EICG: Key Updates Proposed



- Appendix A – List of chemicals
- Appendix C – Chemical look-ups by sector
- Appendix D – Source test methods
- Appendix E – Facilities < 10 tpy
- Diesel engine modeling
- Portable engines

# EICG: Appendix A – List of Chemicals



- Evaluated about 1,900 new chemicals; screened out over 700
  - Proposed list includes: >900 (A-I); 13 (A-II); ~160 (A-III)
  - About 60 in existing groups
- Functional groups (isocyanates, halogenated PAHs, and PFAS)
- Phase-in provisions (ChemSet-1 and ChemSet-2)
- Scientific Review Panel

# Chemical List Phase-In



<b>ChemSet-1</b> (2022 or 2023 data)	184 individual substances and 5 chemical classes
<b>ChemSet-2</b> (2026 or 2027 data)	Remainder of chemical list updates



## Factors for ChemSet-1 chemicals selection:

- Available health data
- Carcinogens
- Exempt VOCs
- Fumigants
- Metals and rare earths
- SRP concerns
- High volume
- Persistence
- Those of most concern within large groups (PFAS, phthalates, flame retardants)

# EICG: Reporting Emissions vs. Use



- Emissions reporting is required for substances with a quantification method
- If emissions quantification method is not available, need to report presence and amount used (or amount *present or produced*)
- Revisit at next facility update cycle

# EICG: Appendix C – Chemical “Look Up”



- Look up guidance for chemicals expected to be associated with
  - Particular broad processes (Appendix C-I, e.g., combustion, solvent use), or
  - Industry Sectors (Appendix C-II, e.g., similar to the structure of Standard Industrial Classification code system)
- Staff used data and references to identify known/expected uses of the proposed new chemicals, and to expand coverage of existing chemicals

# EICG: Appendix C-I – Sample Proposed Update



Device/Process Level 1	Device/Process Level 2	...	Types of Emissions	Specific Substances
<u>SOLVENT USE</u>	<u>Degreasing Operations</u>		<u>Gaseous and aerosol organic compounds including but not limited to:</u>	<u>Benzene, Bromoform, t-Butyl acetate, Carbon tetrachloride, Chlorobenzene, 1,2-Dichlorobenzene, 1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene, Chloroform, Cyclohexanol, 1,2-Dichloropropane, Dimethyl disulfide, 1,4-Dioxane, CFC-113, Freons, Hexachloroethane, Methylene chloride, PCBTF, Perchloroethylene, n-Propyl bromide, Tetralin, Toluene, 1,1,1-TCA, TCE, Any other listed substances</u>

# EICG: Appendix D - Source Testing



- AB 2588 Statute emphasizes testing/measurement
  - Also allows appropriate use of **estimation** methods (e.g., emission factors, material/mass balance, chemical speciation, etc.)
  - Small business alternatives
- Latest test methods (CARB, EPA, ASTM)
- 2-step test protocol for fugitives and “open” sources at waste-handling facilities

# EICG: Source Testing



New source testing requirements:

- Secondary aluminum production
- Wastewater treatment, landfills, composting and recycling, scrap metal recovery/metal shredders
  - Address chemical list using 2-step protocol

Unchanged sectors (e.g., cement facility)

- No new source testing requirements
- Address new chemical list using other appropriate methods

# EICG: Appendix E – <10 tpy Sources



- Applicability (and thresholds) harmonized with CTR
- Adds Sector "0" (facilities 4 greater than tons per year)
- 3-stage phase-in of applicable sectors
- Coordinated with phase-in of chemical substances

# EICG: Appendix E – <10 tpy Sources



- Examples of revised thresholds

Process	Old Threshold	New Threshold
Solvent degreasing using a carcinogenic material	55 gallons per year	Any amount
Crematoria	300 bodies per year	Any amount
Diesel engines	3,000 gallons of fuel, or 20 hours of operation	30 gallons of fuel (100 gallons for Tier 4), or 5 hours of operation



# EICG: Screening Assessments

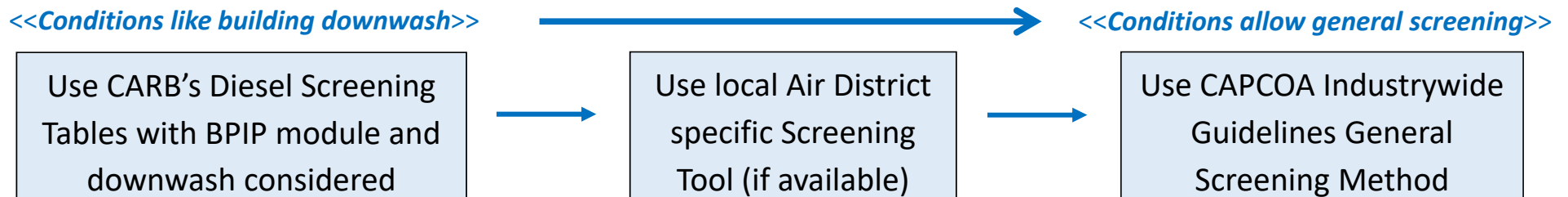


- AERMOD is now the acceptable regulatory model; does not have all-purpose screening meteorology set
- Proposing “stepwise” protocols for determining acceptable types of screening air dispersion modeling and other screening methods (e.g., pre-computed risk screening tables)

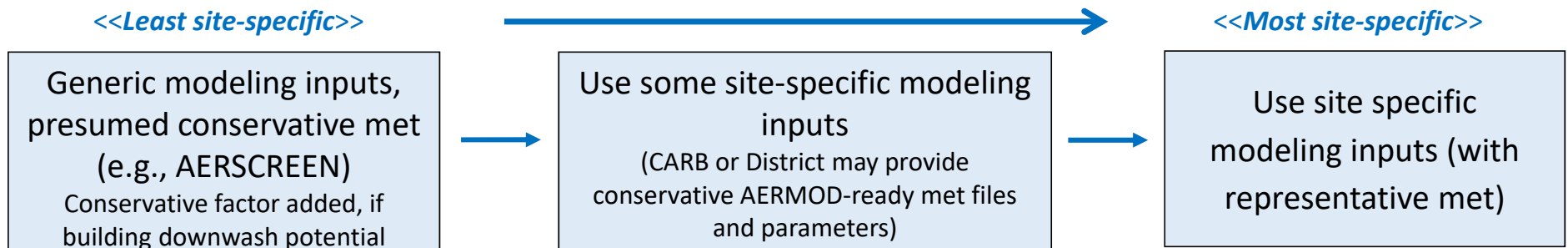
# EICG: Appendix F Screening Assessments



- Example Flow Chart for assessment using screening tables/tools



- Example Flow Chart for step-wise screening using modeling/AERMOD



# EICG: Diesel Engine Screening Tables



- Diesel engine risk screening tables updated
- OEHHA risk methods
- More engine scenarios
- AERMOD
- Building downwash effects

# EICG: Portable Diesel Engines



- Emission reporting for portable diesel engines >50 hp at specified larger facilities
- District determinations regarding smaller engines that may pose public health risk
- On-going/predictable “emergency use” of backup generators
- Strengthened consideration of population-wide impacts

# EICG: Other Topics



- Expand factors districts can consider when determining exemption, reinstatement, update
- Updated OEHHA Risk Guidelines
- Prior guidance regarding:
  - On-site mobile
  - Total particulate matter vs. PM10
  - Pesticide fumigants (waste-gas venting)
- Definitions, etc.



# CTR Updates

# CTR: Key Updates Proposed



- Phase-In Schedule
  - Modifications to provide more time for implementation for Additional Applicability facilities
- Portable Diesel-Fueled Equipment
  - Limited to MRR and >250 tpy facilities and >50 bhp
- Toxic Air Contaminants (TAC)
  - Adding first set of substances (ChemSet1)
  - Presence (quantity) of TAC must be reported if no method exists

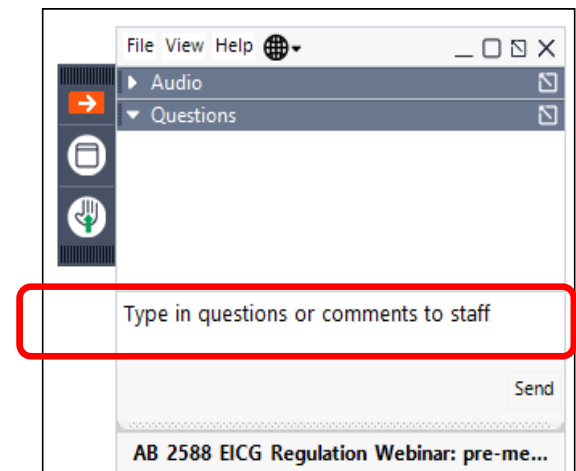


# Comments & Questions



# Part 2 Q&A

- Submit questions & comments via GoToWebinar interface
- Use "questions or comments" box
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# Comments & Questions



Potential topics for feedback:

- Combined EICG & CTR elements
- Inclusion of additional sectors
- Phase-In Schedule
- Additional toxics
- Portable equipment
- Others?

# Next Steps



- Formal comment period: October 2, 2020 to November 16, 2020
- Comment Dockets:
  - EICG: [ww2.arb.ca.gov/rulemaking/2020/hotspots2020](http://ww2.arb.ca.gov/rulemaking/2020/hotspots2020)
  - CTR: [ww2.arb.ca.gov/rulemaking/2020/proposed-amendments-reporting-criteria-air-pollutants-and-toxic-air-contaminants](http://ww2.arb.ca.gov/rulemaking/2020/proposed-amendments-reporting-criteria-air-pollutants-and-toxic-air-contaminants)
- Board Meeting: November 19-20, 2020

# EICG Regulation – Contact Us



- Website:  
<https://ww2.arb.ca.gov/hot-spots-inventory-guidelines>
- Click "[Subscribe](#)" for "Hot Spots" Criteria and Guidelines listserv registration
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# CTR Regulation – Contact Us



- Website:  
<https://ww2.arb.ca.gov/our-work/programs/criteria-and-toxics-reporting>
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