AB 2588 "HOT SPOTS" EMISSION INVENTORY CRITERIA GUIDELINES REPORT UPDATE

2019 CAPCOA Engineering Symposium

Michael Goldman Engineering Division Manager

> Santa Barbara County Air Pollution Control District

> > October 9, 2019 Folsom, CA

Presentation Overview

- What is the AB 2588 "Hots Spots" Program?
- Why are we revisiting the Program now?
- What's been done so far?
- Who is subject to the Program?
- The Air Toxics Emissions Inventory Plan (ATEIP)
- The Air Toxics Emissions Inventory Report (ATEIR)
- CARB's Proposed Updates to EICG Report ("Guidelines")
- CAPCOA Initial Concerns
- Help! Useful References

What is the AB 2588 "Hots Spots" Program?

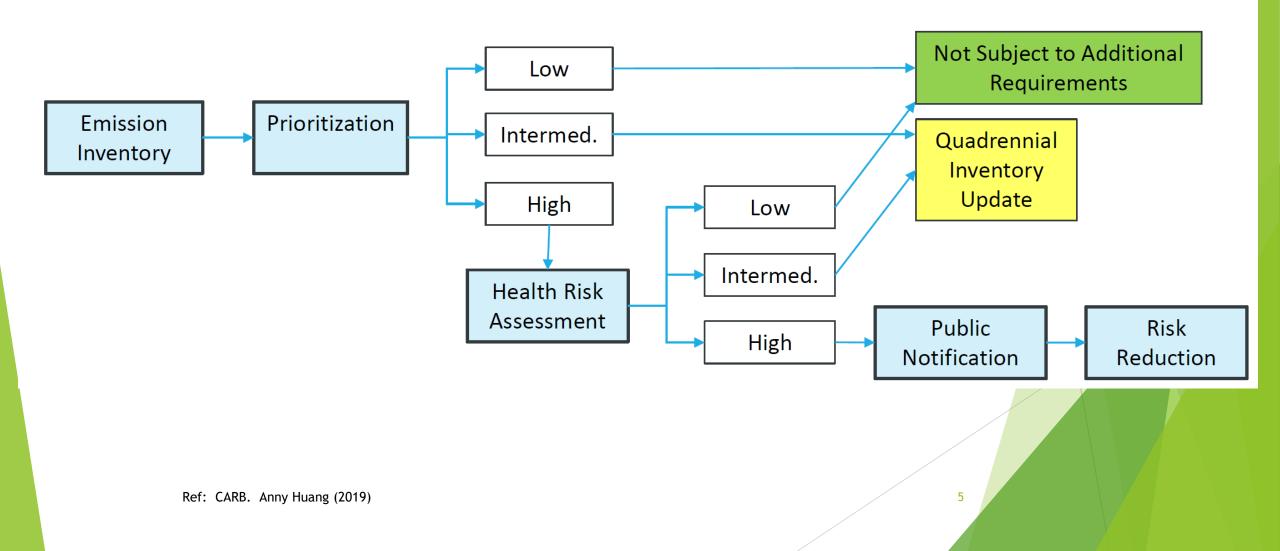
- Adopted in 1987 Public right-to-know law
- Required detailed inventory of air toxics emissions, with prioritization, HRA, public notice (if necessary)
- Appendix A of Guidelines Substances of Concern
- Routine and predictable operations of a facility
- Amended in 1992 (SB 1731) to require Risk Reduction
- A highly successful program

The Four Basic Steps

Quantify - Air Toxics Emissions (500+ compounds)

- Assess Offsite Impacts of Emissions
- Notify Neighbors if Emissions Pose Significant Risk
- Reduce Risk to Less-than-Significant Level

AB 2588 Process



Why Revisit the Program now?

OEHHA updated Risk Assessment Guidelines 2015

- Responds to SB 25 Children's Environmental Health Protection (1999)
- AERMOD Dispersion Model replaced ISC-ST3
- Revision to the CAPCOA Prioritization Guidelines
- Updates to Consolidated Table of Health Values
- Diesel Engines
- Have not addressed facility-wide toxic impacts since mid-1990's

What's been done so far?

- OEHHA The Air Toxics "Hot Spots" Program Guidance Manual for Preparation of Health Risk Assessments (March 2015)
- CARB HARP 2 Update (2015)
- CARB/CAPCOA Risk Management Guidelines (July 2015)
- CAPCOA Prioritization Protocol Update (August 2016)
- District Developed User Tools (e.g., screening tools, user guides)
- CAPCOA/CARB IW Guidelines, Training, Emission Factor dBase

Who is subject to the Program?

- Facility emits > 10 tpy TOG, PM, NOx, SOx
- Applies to existing, new, and modified facilities that emit Appendix A Substances
- Appendix E Facilities < 10 tpy TOG, PM, NOx, SOx</p>
 - "Industrywide" Facilities District prepares the inventory, etc.
- Facilities identified as Posing Concern to Public Health (not in Appendix E)

The AB-2588 Air Toxics "Hot Spots" Emission Inventory Criteria and Guidelines Regulation

- The original Guidelines Report Adopted April 1989
- Amended numerous times. Last amendment in August 2007
- H&SC §93300.5. Incorporation by Reference. Requires subject facilities to comply with the Guidelines
- Amendments to the Guidelines require Board/OAL approval
- ▶ This is the Emission Inventory part of the AB 2588 process
- ATEIP Air Toxics Emission Inventory Plan
- ATEIR Air Toxics Emission Inventory Report
- Next Steps: Prioritization, HRA, Public Notification, RRAP

The ATEIP (Plan)

- ATIEP = Air Toxics Emission Inventory Plan
- Details Matter! GIGO (Garbage In -> Garbage Out)
- Defines the methods used to calculate the toxic emissions
- Detailed device, process, and stack data
- Includes all assumptions (e.g., load factors, control efficiencies, etc.) and documentation for those assumptions
- Detailed process flow diagrams and aerial photo map required
- Emissions Basis details on the estimation methods, source test methods or other measurement methods that will be used to determine the toxic emissions
- Allows for Pooled Source Testing for groups of related facilities

The ATEIR (Report)

- ATEIR = Air Toxics Emissions Inventory Report
- Results of all sampling and source testing
- Facility diagram
- Emission calculations of facility air toxics data by device/process/stack
- Core Data Fields Form Information (Electronic data submittals accepted)
 - Facility, Stack, Device, Process
 - Emissions
- District-approved Alternative Submittal Formats are Allowed

CARB's Proposed Updates - EICG Guidelines

- Appendix A List of Substances. Possible addition of 400+ Substances
- Appendix C Facility Guideline Index. Facility Lookup Table
- Appendix D Source Testing. Requirements and alternatives
- Appendix E Requirements for Smaller Facilities (< 10 tpy criteria pollutants)</p>
 - De Minimis Usage Thresholds. Usage or activity-based levels (e.g., gallons of fuel or solvent used). Examples: print shops, wastewater treatment plants, crematories, boat and ship building/repair, ethylene oxide sterilizers, diesel engines
 - "Industrywide" Facilities
- Appendix F Criteria for Screening HRAs

CARB's Proposed Updates - Continued

- Appendix G Updates to the Incorporated References (OEHHA Risk Guidelines, CAPCOA Prioritization)
- Section XI Diesel Engine Reporting Requirements. Risk tables and modeling
- Other regulatory and technical updates to the main body of the Guidelines
- Timeline
 - Started 2018 Current focus is Appendix A
 - Scientific Review Panel Input on Appendix A changes October 2019

13

- Workshops expected in early 2020
- CARB Board adoption expected November 2020

CAPCOA - Initial Concerns

- Workload
- Training
- ► Tools
- Diesel E/S Engines
- Gasoline Stations
- Coordination with AB 617 Criteria Reporting Appendix A and Appendix E

HELP! Useful References

- ► AB 2588 H&SC §44300-§44394: <u>https://ww3.arb.ca.gov/ab2588/general.htm</u>
- OEHHA HRA Guidance Manual: <u>https://oehha.ca.gov/air/air-toxics-hot-spots</u>
- CARB HARP 2: <u>https://ww3.arb.ca.gov/toxics/harp/harp.htm</u>
- CARB Hot Spots Guidelines: <u>https://ww3.arb.ca.gov/ab2588/2588guid.htm</u>
- CARB/OEHHA Health Values: <u>https://ww3.arb.ca.gov/toxics/healthval/healthval.htm</u>
- CAPCOA Prioritization Guidelines: <u>http://www.capcoa.org/</u>
- CARB/CAPCOA Risk Mgmnt Guidelines: <u>https://ww3.arb.ca.gov/toxics/rma/rma.htm</u>
- CARB Health Risk Assessments Training: Introductory and Intermediate Courses

Questions?