Draft Risk Management Guidelines for Stationary Sources of Air Toxics

- Public Workshops -

June 16, 2015 - Diamond Bar, California June 18, 2015 - Sacramento, California





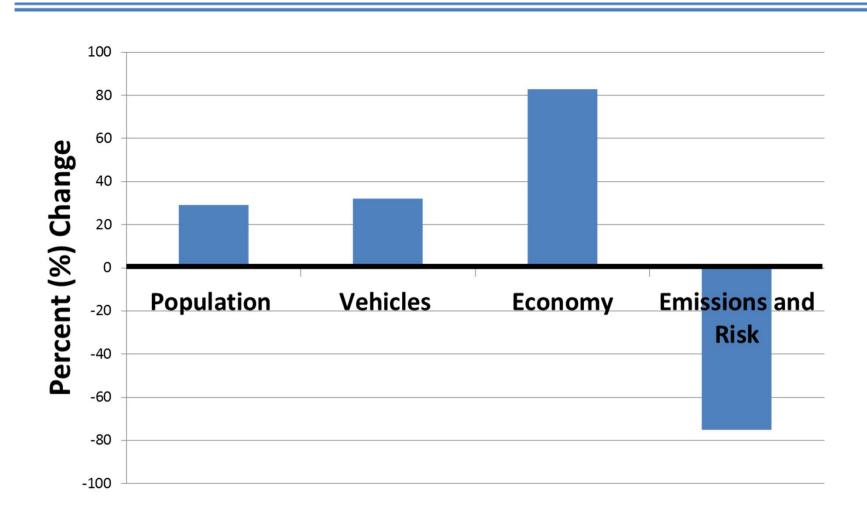
What are some key sources of air toxics in California?

- Diesel engines account for about 60% of air toxics risk statewide; highest risk around freight hubs
- Combustion/evaporation of gasoline used in vehicles, lawn and garden equipment, watercraft, etc.
- Other stationary sources including metal finishing/plating, manufacturing, generators, gas stations, and refineries

California's air toxics program: background

- Over 200 air toxics included
- 35 independent Local Air Districts and State Air Resources Board have mature programs
- Controls and process changes are effective in reducing emissions and health risk
 - Investment by industry
 - Involvement of public, industry, and environmental community
- Significant progress; but, more to do

Over 70% reduction in air toxics statewide since 1990



What has changed?

- Updated risk assessment guidance from Office of Environmental Health Hazard Assessment (OEHHA)
 - —New studies on childhood sensitivity
 - —New data on exposure
- Impacts of the updates
 - Inhalation cancer risk estimates likely to increase for most sources
 - -Greater responsibilities for facilities and agencies to notify public and reduce risk
 - —Districts/ARB assess toxics programs

Key factors affecting new inhalation risk estimates

Overall Increase Approximately 1.5 to 3x

Increases Risk Estimates

Age Sensitivity Factors
Daily Breathing Rate

Decreases Risk Estimates

Fraction of Time at Home Exposure Duration

Spatial Averaging vs. Single Point

No Change

Cancer Potency Factors

Programs affected by risk assessment guidelines

Permitting

AB 2588

- AB2588 Core Facilities
- AB2588 Industry-Wide

Revised OEHHA
Guidance

Public Noticing

- New or Modified Permits
- AB2588 Facilities

CEQA

- Air Toxics Analysis for
 - Construction Phases
 - Operational Phases

Risk Management - History

- Previous Risk Management Guidelines developed in 1993
 - 1993 Guidelines covered permitting only
 - Provided suggested ranges to assist districts in setting their rules and policies
- New draft risk management guidance addresses permitting, AB 2588, use of breathing rates

Draft Risk Management Guidelines Public Process

- Released March 27, 2015
- Two public workshops
 - —Diamond Bar June 16, 2015
 - -Sacramento June 18, 2015
- Public comments on draft due June 26
- Proposed guidelines out early July
- ARB Board Meeting in Sacramento -July 23

Programs addressed in draft risk management guidelines

Permitting

√ AB 2588

- AB2588 Core Facilities
- AB2588 Industry-Wide

Draft Risk
Management
Guidance

Public Noticing

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Draft Risk Management - Objectives

- 1. Increase public health protection
 - More sources will install Toxics Best
 Available Control Technology (TBACT)
 - Pursue further opportunities to reduce risk from the highest risk source categories, considering technical feasibility and cost
- 2. Recognize State law gives each air district discretion to set its own risk management policies, except when state rule sets a floor

Objectives, continued

- 3. Sustain continued operation of essential goods and public services
- 4. Ensure that future program changes will not result in less health protective program requirements relative to rules or programs in place prior to the 2015 OEHHA Manual
- 5. Support public participation and access to information

Organization of draft risk management document

- Introduction
- Overview
- Background and communication
- Guidance*:
 - Permitting and AB 2588 levels
 - Use of breathing rates
- Future actions (District and ARB work plans)

^{*} Guidance to districts recommends (but does not require) action levels or ranges

Appendices

Appendix	Topic
Α	Applicable Air Toxics Legislation
В	Guidance for Permitting New and Modified Sources
С	Guidance for AB 2588 Hot Spots Program
D	Risk Management Policy for Risk Assessments Using the Inhalation Pathway
Е	ARB Risk Management Work Plan
F	List of Existing ARB Regulations for Air Toxics
G	Table of 2014 Permitting Levels for Various Agencies and Programs
Н	Table of 2014 AB 2588 District Prioritization Scores and Risk Threshold Values
I	References

Recommendations for permitting

Action	Cancer Risk-Action Level (chances per million)	Non-cancer Risk- Action Level (Hazard Index)
Require TBACT	>1	>1
Permit Approval	10 to 25	<u><</u> 1
Source-Specific Approval/Denial	Less than or greater than permit approval levels based on source- specific considerations	Less than or greater than permit approval levels based on source-specific considerations

Recommendations for AB 2588

Requirement	Cancer Risk Action Level (chances per million)	Non-cancer Risk Action Level (Hazard Index)
Prioritization	Update CAPCOA Prioritization Score Procedure/Guideline	Update CAPCOA Prioritization Score Procedure/Guideline
Notification	TBD by Districts	TBD by Districts
Risk Reduction Audit &Plan	TBD by Districts and Not to Exceed 100	TBD by Districts and Not to Exceed 10

Recommended Breathing Rate Policy

- Uses new science on childhood sensitivity
- Recommends use of combination of 95th and 80th percentile breathing rates
 - 95th percentile (high-end) breathing rate for last trimester through age 2
 - 80th percentile breathing rate for other age groups

District Risk Management Activities

- Update AB 2588 prioritization methods/guidelines
- Evaluate risk management methodologies and potential impacts
- Consider current programs, rules guidelines, and policies
- Work with stakeholders through a public process if changes are needed

ARB Risk Management Work Plan

- Release HARP software (March 2015)
- Update existing Risk Management Guidance w/CAPCOA (draft May 2015)
- Update the Hot Spots Emission Inventory Criteria and Guidelines/Fee Rule
- Industrywide Guidelines w/CAPCOA
 - gasoline dispensing facilities, emergency standby diesel engines

ARB Work Plan, continued

- Screen and assess existing ARB air toxicsrelated regulations
- If needed, reevaluate existing regulations
 - Focus on those with risk-based provisions to ensure they remain health protective (e.g., chrome plating)
- Develop further controls for mobile sources via Sustainable Freight Strategy, State Implementation Plan, and Scoping Plan
- Update the Land Use Handbook



Risk Management Related Websites

- Risk Management Actions (list serve) can be found at: http://www.arb.ca.gov/toxics/rma/rma.htm
- Risk Management Guidance for Stationary Sources of Air Toxics Discussion Draft can be found at: http://www.arb.ca.gov/toxics/rma/rma_guidancedraft052715.pdf
- More information on the new OEHHA methodology can be found at: http://oehha.ca.gov/air/hot_spots/hotspots2015.html

Contacts

Greg Harris, Staff

Transportation & Toxics Division Air Resources Board gharris@arb.ca.gov (916) 327-5980

Robert Krieger, Manager

Transportation & Toxics Division Air Resources Board rkrieger@arb.ca.gov (916) 323-1202

Jill Whynot

Assistant Deputy Executive Officer
Planning, Rule Development & Area Sources
South Coast Air Quality Management District
jwhynot@aqmd.gov

(909) 396-3104

