



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

Update on Wood Smoke Program

**Stationary Source Committee Meeting
September 18, 2017**

Wayne Kino

Director of Compliance and Enforcement

Winter PM2.5 Seasons

Year	Days > 35 $\mu\text{g}/\text{m}^3$ <small>(micrograms per cubic meter of air)</small>	Winter Spare the Air Alerts
2011/2012	11	15
2012/2013	1	10
2013/2014	15	30
2014/2015	6	23
2015/2016	0	1
2016/2017	0	7

Wood Smoke Enforcement

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
WSTA Alerts	4	15	10	30	23	1	7
PM_{2.5} Excesses	1	11	1	15	6	0	0
Complaints	1,373	3,777	2,316	5,091	3,834	1,302	1,564
Info Packets	592	11,476	3,720	1,768	2,029	577	577
Violations	61	359	178	267	155	1	91
Exemptions	49	76	91	150	193 + 23 Seasonal	215 + 1 Seasonal	129 + 1 Seasonal

Enforcement Highlights

- **Violations: 91**
 - 69 - 1st NOV Wood Smoke Awareness Course or \$100 penalty
 - 21 - 2nd or 3rd NOV \$500 (increased with additional NOVs)
 - 1 Visible Emissions Violation
 - 117 Total Exemptions – 116 registered EPA Certified Devices, 1 non-functional heater
- **Complaints: 1,564**
 - 40 addresses with 5 or more complaints
 - 5 addresses with 20 or more complaints
 - 2 address with 50 or more complaints
 - 84 complaints by 1 person



Winter Spare the Air Campaign

- Emphasize wood smoke health effects
- Highlight indoor and outdoor impacts
- Targeted 'hot spot' outreach
- Door-to-Door in neighborhoods
- Social media
- Multi-cultural surveys this season



WSTA 2016-17

REGIONWIDE

(Includes multi-cultural)

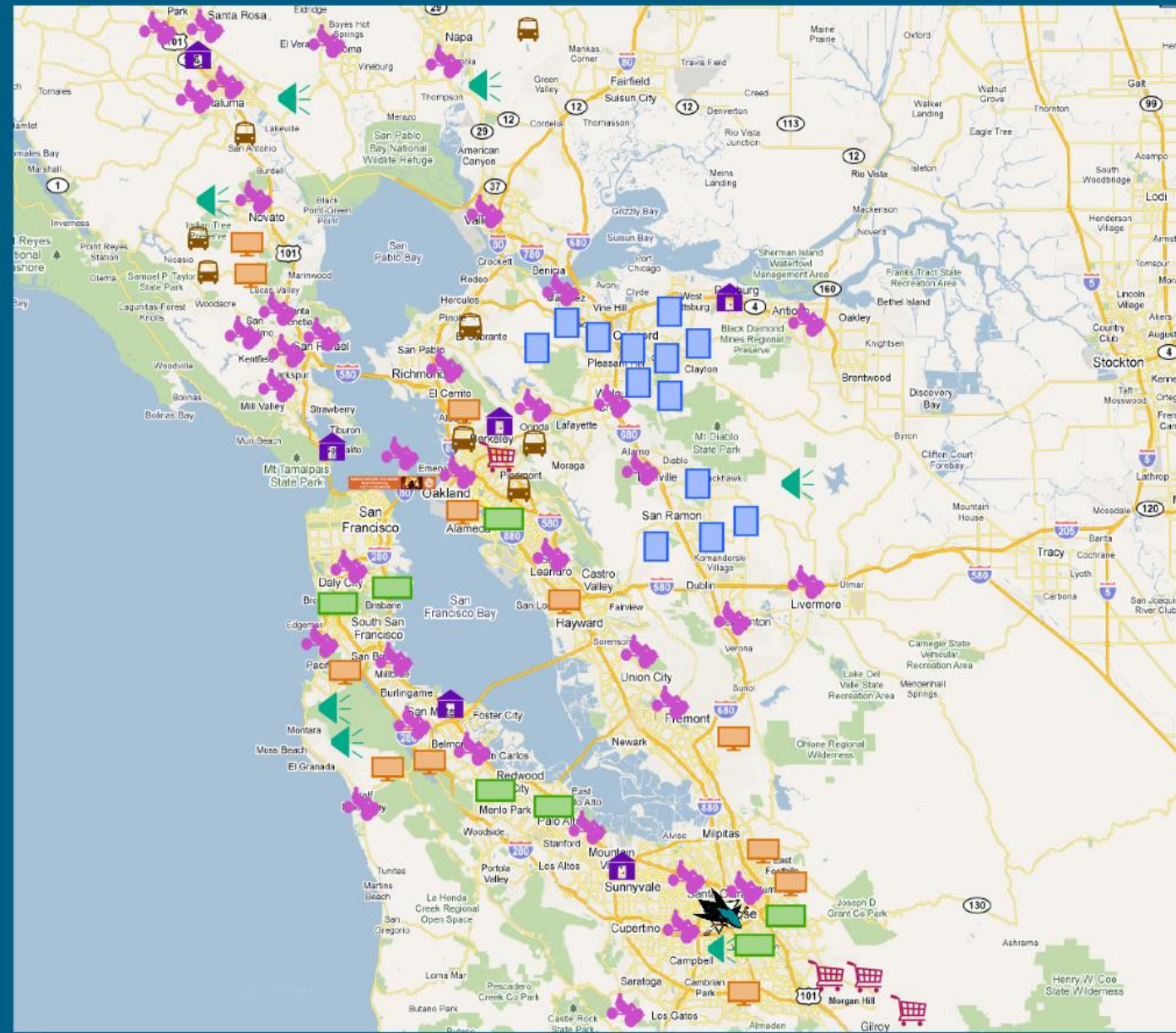
- BROADCAST TV
- CABLE TV
- HULU
- MOBILE
- ONLINE
- PANDORA
- PRINT
- RADIO
- SPOTIFY

TARGETED

-  TREASURE ISLAND BANNER
-  DOOR-TO-DOOR
-  BICYCLE
-  BILLBOARDS
-  TRANSIT SHELTERS
-  ZONED COMCAST
-  ZONED RADIO
-  GROCERY STORES
-  SAN JOSE SHARKS

BUS ROUTES

-  GOLDEN GATE TRANSIT
- MARIN/SONOMA COUNTIES
- WESTCAT
- WESTERN CONTRA COSTA TRANSIT AUTHORITY
- AC TRANSIT
- EAST BAY



Wood Smoke Reduction Incentive Program



\$750 to
Decommission



\$1,000 for natural
gas device



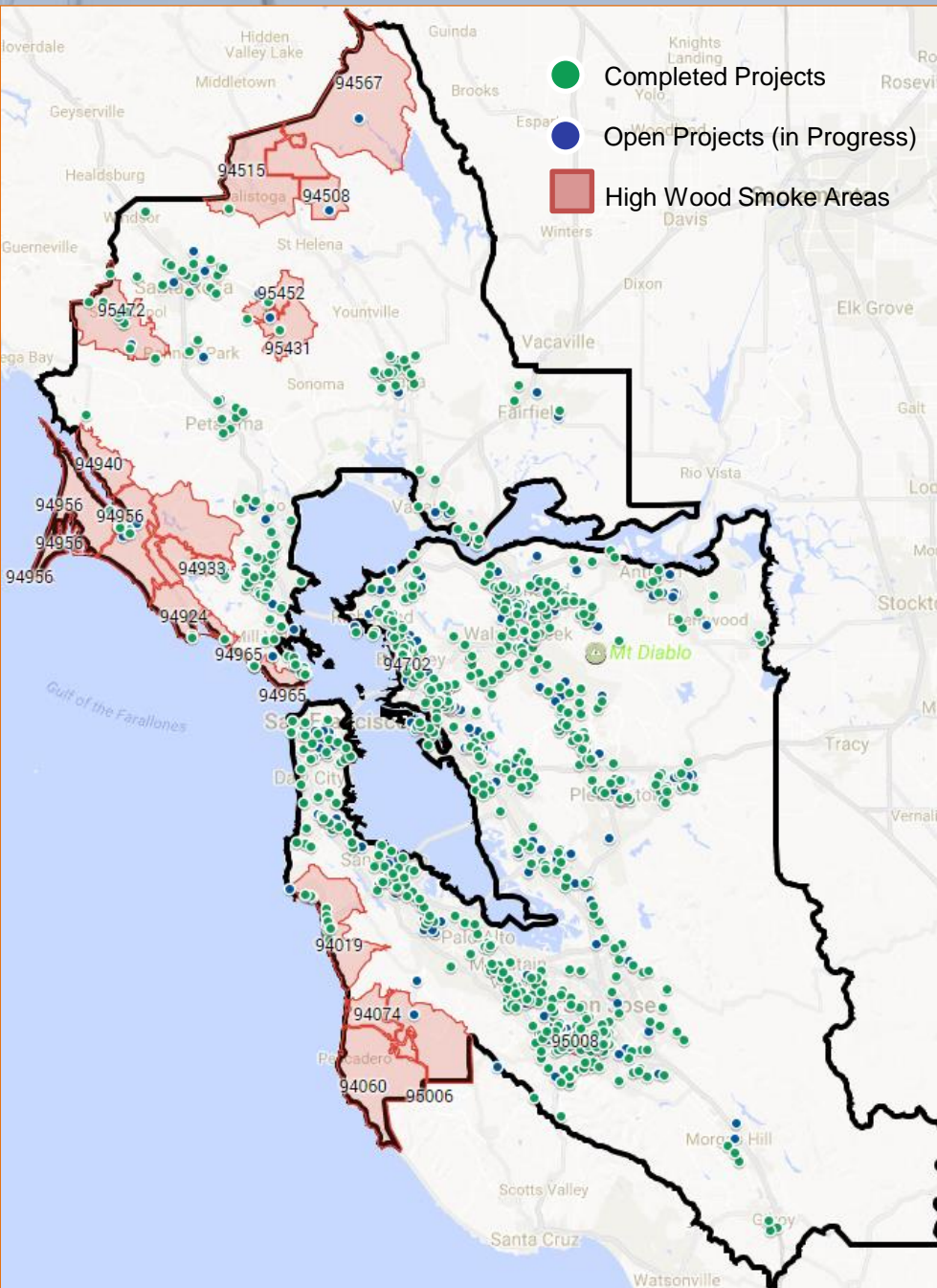
\$3,500 for electric
heat pump

40% of funding reserved for applicants who meet one or more **Highly Impacted Resident (HIR)** criteria:

High wood-smoke area

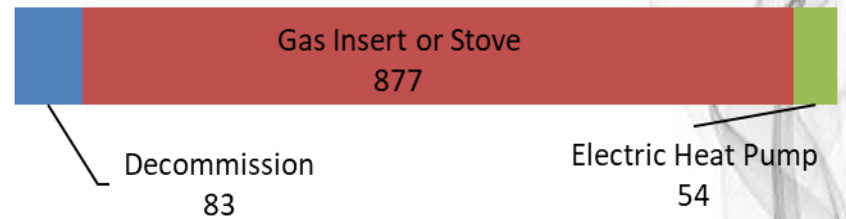
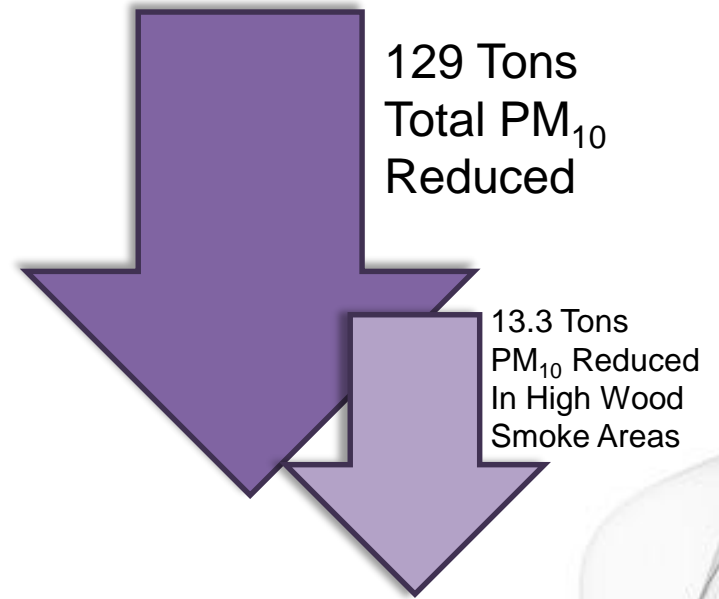
Sole source of heat

Low-income



Results

Projects	#	\$ Awarded
Total	1,014	\$2,303,094
Highly Impacted Resident (HIR)	275	\$1,534,287



Next Steps

- Close-out open projects (~300 out of 1,000)
- Continue coordinating with ARB/CAPCOA to secure state funding to augment future District funding
 - Approved - \$5 million state-wide for 2018/2019
 - Proposed - \$50 million state-wide in subsequent years
- Focus outreach, monitoring, enforcement and remaining grant funds on high wood smoke areas during 2017/2018 to measure program effectiveness
- Return to Committee with recommendations for future grant programs in Spring 2019



**DRAFT REGULATION 11, RULE 18:
REDUCTION OF RISK FROM AIR TOXIC
EMISSIONS AT EXISTING FACILITIES**

**Stationary Source
Committee Meeting**

September 18, 2017

Jack Broadbent

Air Pollution Control Officer

Jaime Williams

Director, Engineering Division

AGENDA

- **Background**
- **Overview of Proposed Rule 11-18**
- **Implementation Approach**
- **Public Engagement**
- **Next Steps**

TOXIC AIR CONTAMINANTS

“[A]n air pollutant which may cause or contribute to an **increase in mortality or in serious illness**, or which may pose a **present or potential hazard to human health.**”

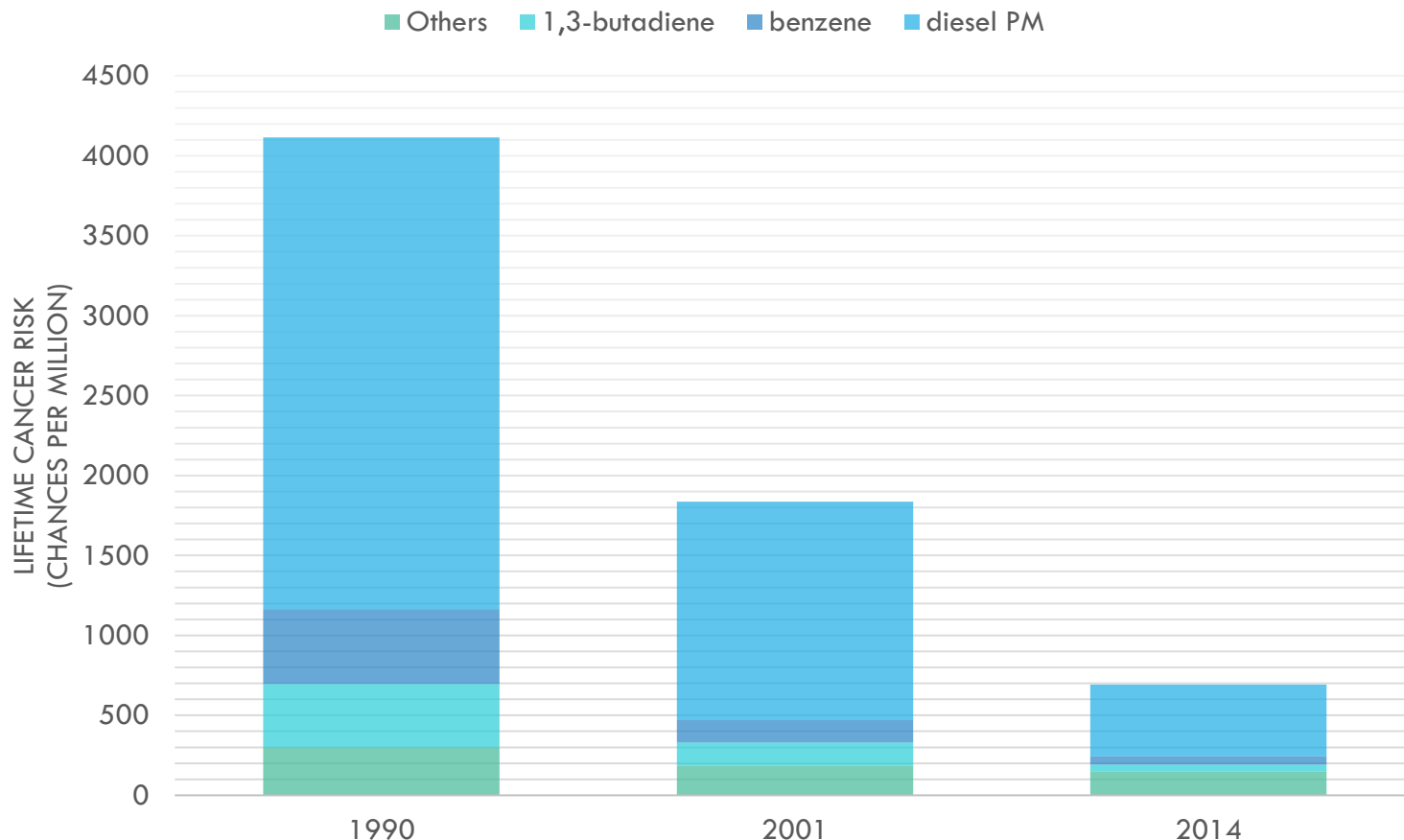
- California Health & Safety Code 39655(a)

KEY RISK & IMPACT MEASURES

- **Cancer Burden** – The theoretical probability of contracting cancer when continually exposed for a lifetime (70 years) to a given concentration of a substance. Presented as the number of chances in a million of contracting cancer.
- **Acute Hazard Index** - The potential non-cancer health impacts resulting from a one-hour exposure to toxic substances.
- **Chronic Hazard Index** - The potential non-cancer health impacts resulting from exposure to toxic substances usually lasting from one year to a lifetime.

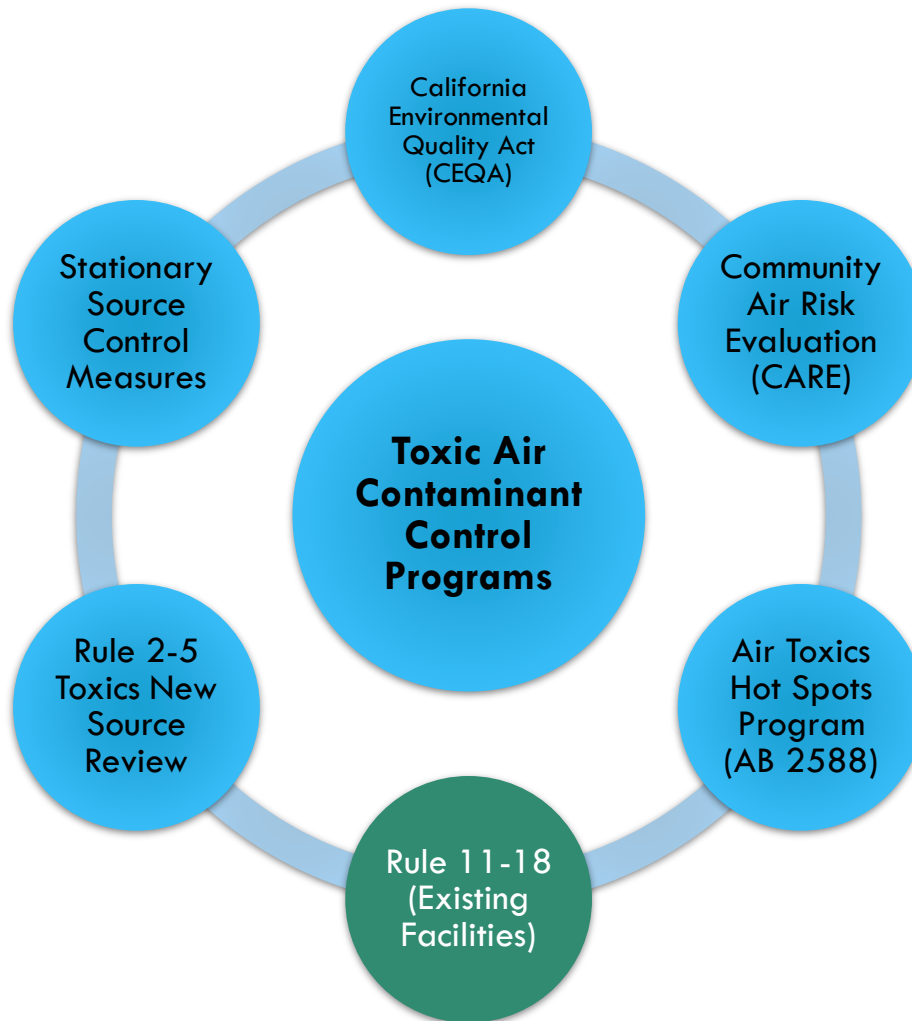
EFFECTIVENESS OF CONTROL PROGRAMS

Bay Area Lifetime Residential Cancer Risk* from Toxic Air Contaminant (TAC) Exposure



* Cancer risk is based on average ambient air monitoring data and the risk assessment methodology presented in the OEHHA's 2015 HRA Guidelines.

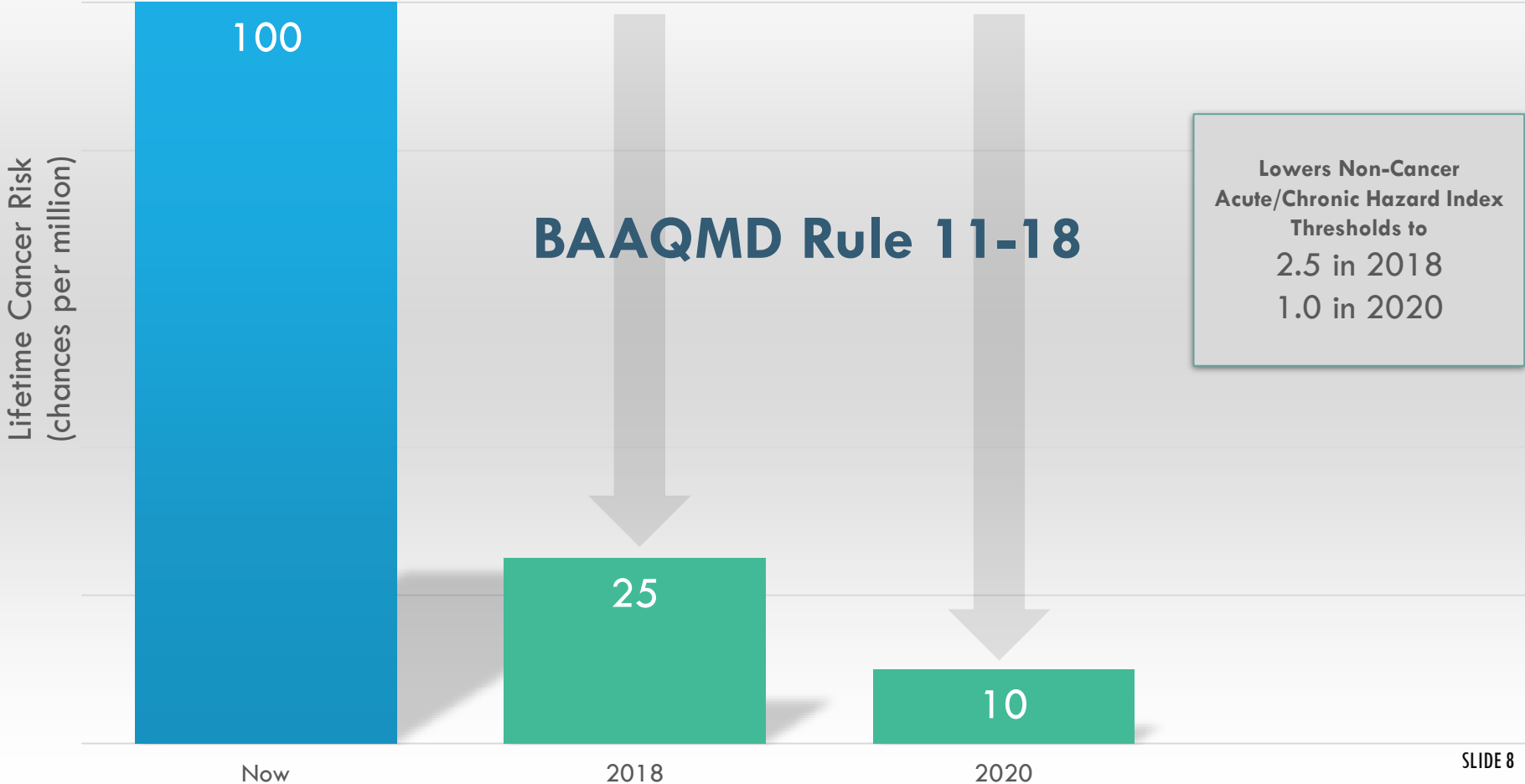
TAC STATIONARY SOURCE CONTROL PROGRAMS



REGULATION 11, RULE 18 OVERVIEW

- **The most comprehensive and health protective regulation in the Nation to address community health impacts risks from toxics air contaminants emitted by stationary sources**
- **Utilizes air toxics modeling and incorporates latest science from the Office of Environmental Health Hazard Assessment (OEHHA) to establish health risks to nearby communities**
- **Requires facilities to reduce their risk below the most stringent threshold (10/Million) in the Nation or implement the best available control technologies**

NEW RISK ACTION THRESHOLDS



DRAFT REGULATION SCOPE

~400 Facilities

**Refineries • Power Plants • Hospitals • Foundries
Military Facilities • Landfills • Chemical Plants • Data Centers
Schools/Universities • Crematoria • Sewage Treatment**

Exemptions*

Retail Gas Stations (Prioritization score < 250)

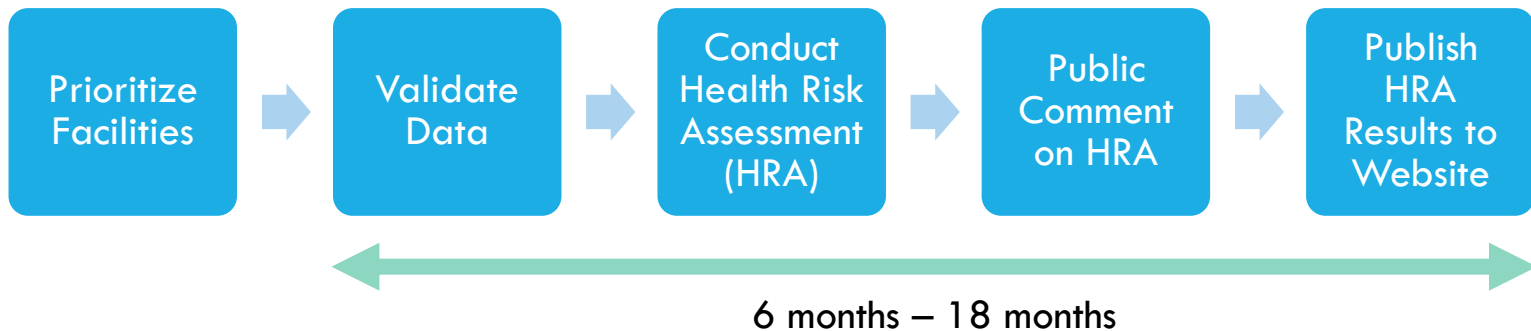
Facilities with only Diesel Backup Generators (Prioritization score < 250)

* Will be addresses by targeted rule making and implementation of industry-wide guidance in coordination with the California Air Pollution Control Officers Association (CAPCOA) and California Air Resources Board (CARB)

DRAFT REGULATION 11, RULE 18 OVERVIEW

- **Facilities above risk action level must:**
 - Develop a risk reduction plan for Air District approval
 - Execute plan according to plan schedule
- **Potential Risk Reduction Measures**
 - Installation of Best Available Retrofit Control Technologies for Toxics (TBARCT)
 - Modification of operating hours and activity levels
 - Modification of emissions points

IMPLEMENTATION: RISK CHARACTERIZATION



Phase 1: ~100 Facilities (Prioritization Score > 250)

- Conduct Health Risk Assessments (2018-2019)

Phase 2: ~300 Facilities (Prioritization Score > 10)

- Conduct Health Risk Assessments (2019-2021)

IMPLEMENTATION: RISK REDUCTION



PUBLIC ENGAGEMENT

- **Open Houses/Workshops:**

- March 27, 2017 Cupertino
- March 28, 2017 Benicia
- March 29, 2017 Hayward
- March 30, 2017 Richmond
- November 2016 Richmond, Oakland, San Francisco,
San Jose, Martinez and Fremont

- **Draft EIR & Rule Language Public Comment Periods:**

- October 11 through December 2, 2016
- March 2 through April 30, 2017

ADDITIONAL PUBLIC ENGAGEMENT

- Meeting with Bay Area Clean Water Agencies (BACWA) on August 17, 2017
- Meeting with CA Metals Coalition on August 23, 2017
- Meeting with California Council on Environmental & Economic Balance (CCEEB) on August 28, 2017
- Conference Call with Hospital Council on August 30, 2017

NEXT STEPS

- **Published Final Hearing Package (September 2017)**
 - Public Hearing Notice
 - Proposed Rule
 - Staff Report
 - Socioeconomic Analysis
 - Recirculated Draft Environmental Impact Report (CEQA)
 - TBARCT Workbook
 - Public Comments Due: **October 16th**
- **Board Hearing for Adoption (November 15, 2017)**



QUESTIONS

