



South Coast Air Quality Management District

Community Meeting

Regarding All American Asphalt

September 28, 2022

Agenda

- Welcome
- Background
- Emissions Reporting
- Air Toxics Health Risk Assessment
- Title V Permitting
- Public Comment

Background

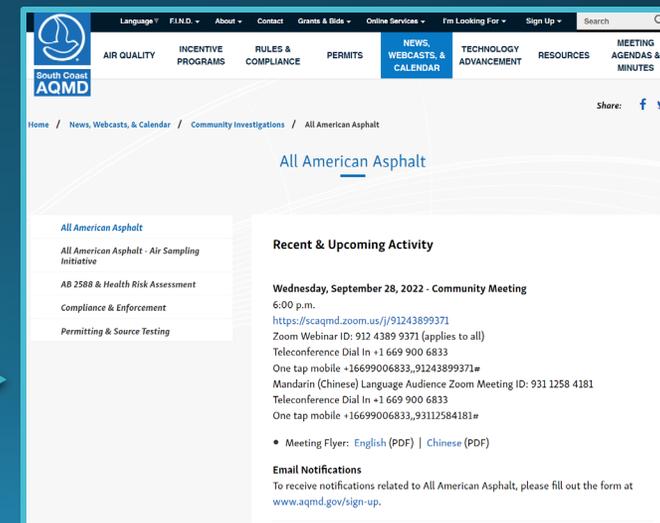
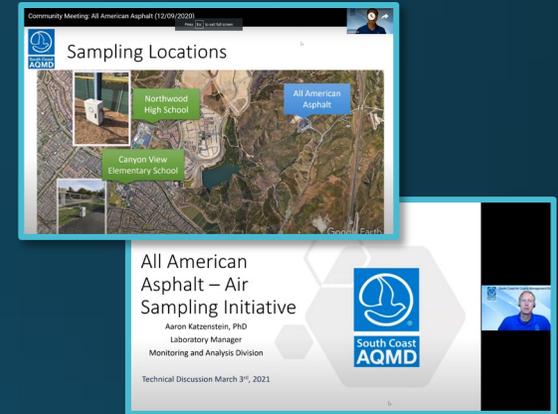
South Coast AQMD

- Multi-county air pollution control agency
 - ~17 million people (>40% of CA)
- Governed by a Board of local elected and appointed officials
- Responsible for monitoring air quality and meeting federal and state air quality standards
- ~28,000 permitted sources
 - Refineries, power plants, gas stations, etc.



Background Information

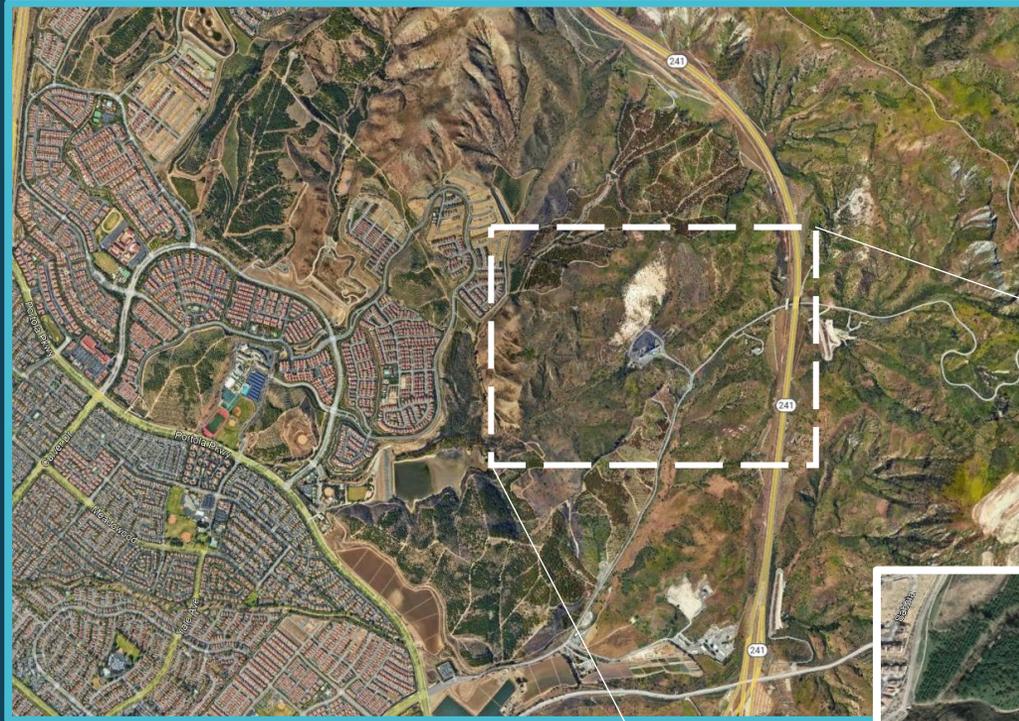
- South Coast AQMD has held two community meetings
 - Dec. 9, 2020 & March 3, 2021
- South Coast AQMD has evaluated emissions impacts from AAA through:
 - Air monitoring
 - Complaint response
 - Onsite inspections
 - Communication with City of Irvine and public
 - Emissions Reporting
 - Health Risk Assessment
 - Permitting
- Detailed information and resources available online: www.aqmd.gov/AAA



Emissions Reporting

All American Asphalt (AAA)

- Located at 10671 Jeffrey Road in Irvine, CA
- Hot mix asphalt plant
- Business in operation since early 1990s



 Boundary of All American Asphalt

South Coast AQMD Annual Emissions Reporting (AER) Program

- About 1,500 permitted facilities self-report annual emissions data to South Coast AQMD, including:
 - Facilities that emit \geq four tons of NO_x, SO_x, VOC, PM or \geq 100 tons of CO*
 - Facilities subject to state regulations
 - AB 2588 “Hot Spots” Program
 - CARB’s Criteria and Toxic Reporting Regulation
- Facilities must follow South Coast AQMD guidance when reporting
- Emissions data posted immediately to FIND website (www.aqmd.gov/FIND)
 - South Coast AQMD sends data to CARB to post on their website

Annual Emissions Reports include the facility’s onsite emissions

All American Asphalt – Original Unaudited AERs

- South Coast AQMD staff
 - Identified discrepancies between AAA’s submitted 2016 and 2017 AERs
 - Initiated an audit of AER data

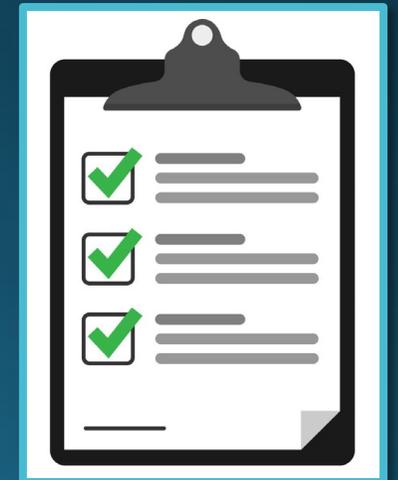
Facility Activity Data (Throughputs)	2016	2017	Percent Difference
Natural Gas (mmscf)	179	179	0%
Residual Oil (Mgal)	5,042	5,406	7%
Diesel Fuel (Mgal)	231	193	-16%
Aggregate (ton)	675,348	695,181	3%

Pollutant Examples	2016	2017	Percent Difference
VOCs (tons)	3.4	7.0	~100%
Benzene (pounds)	2.5	275.7	~11,000%

Differences are not due to actual increased emissions. Due instead to reporting errors.

AER Audit Process

- Staff screens all ~1,500 facilities and prioritizes which facilities to audit each year
- Staff communicates with facility identified for auditing to obtain records and other data for verification and use in the AER
- Key components reviewed during audit:
 - Processes and emission sources
 - Throughputs and material usage
 - Emission factors and control equipment efficiencies
 - Review and approval of source tests and lab samples
 - Emission calculations
 - Inspection reports



Key Issues Identified During Audit of AAA AERs

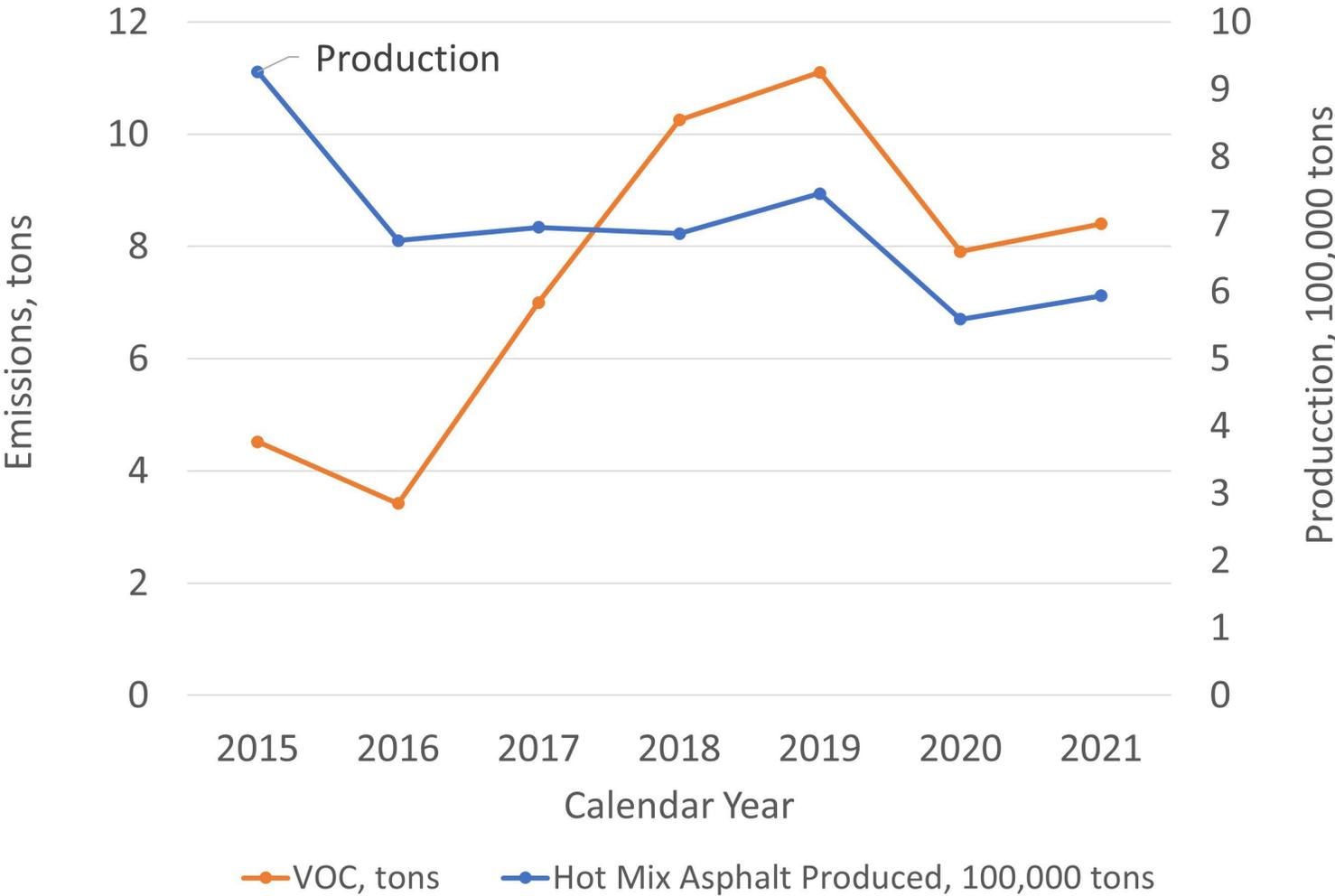
- Incorrectly applied controlled factors for VOC and associated toxic emissions from the dryer, silo, and load out processes
- Double-counted PM control efficiencies for dryer, silo, and load out
- Incorrect emission factor for ammonia for various combustion equipment
- Missing toxic metal emissions from material handling, storage pile, haul roads, and crumb rubber system
- Source test for dryer was for another facility

Staff Actions for Amended AERs

- AAA required to use source test data rather than ‘default’ data based on USEPA nation-wide estimates
 - Source tests are most detailed analysis possible of a polluting device’s emissions
 - Source tests follow EPA and CARB approved methods, and conducted by South Coast AQMD-approved, independent, third-party contractor and observed by staff
- AAA required to correct identified deficiencies in 2015-2021 AERs
 - AAA required to revise 7 years of AERs
 - Typical AER revisions go back no more than 5 years
 - Emissions before 2015 will remain unaudited
- Updated emissions currently on FIND
 - Amended AER emissions have been submitted to CARB

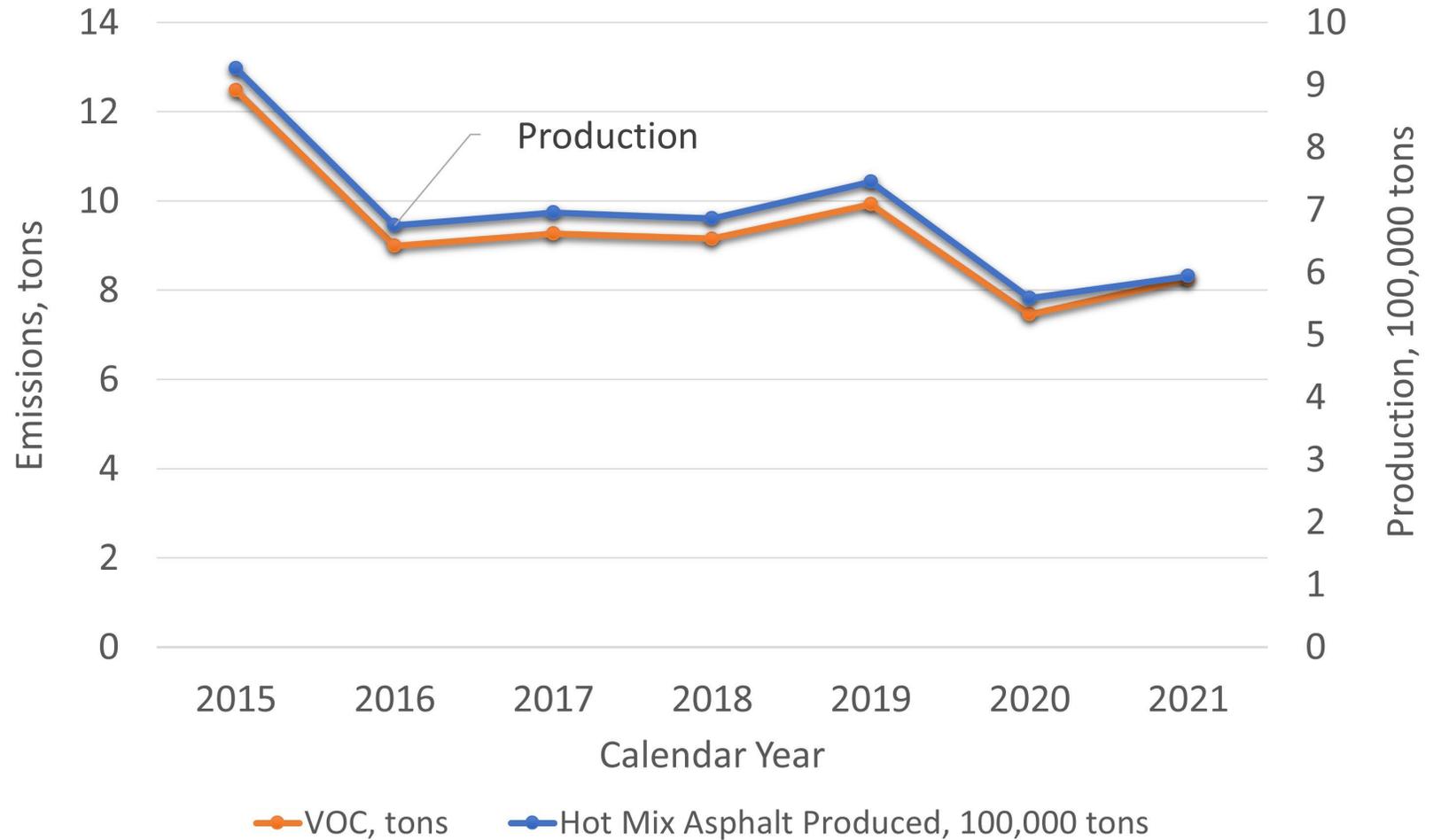
Unaudited Reports – VOCs

Original AER - VOC Emissions and Production from 2015 - 2021



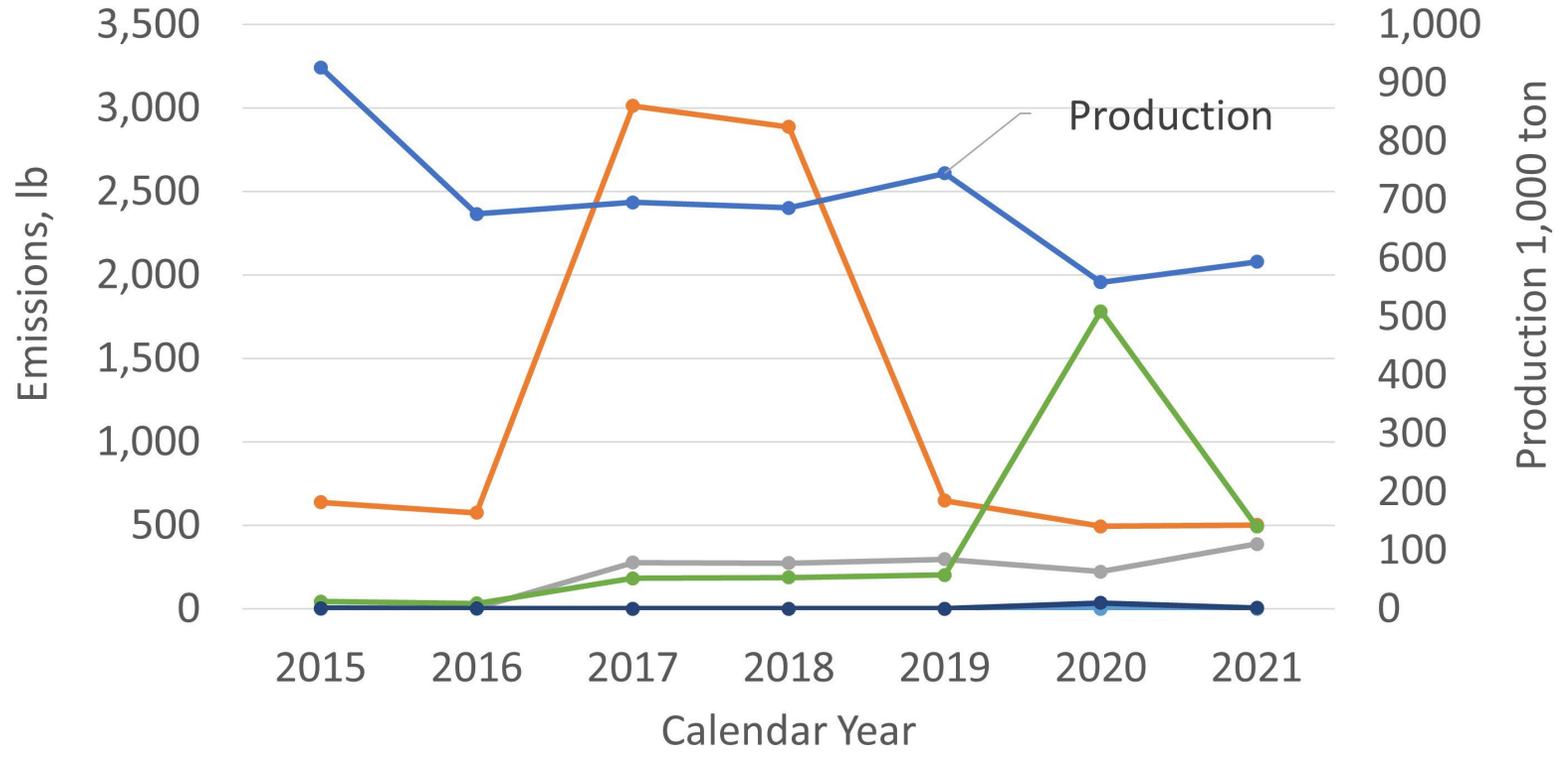
Audited Reports - VOCs

Amended AER - VOC Emissions and Production from 2015 - 2021



Unaudited Reports – Key Toxics

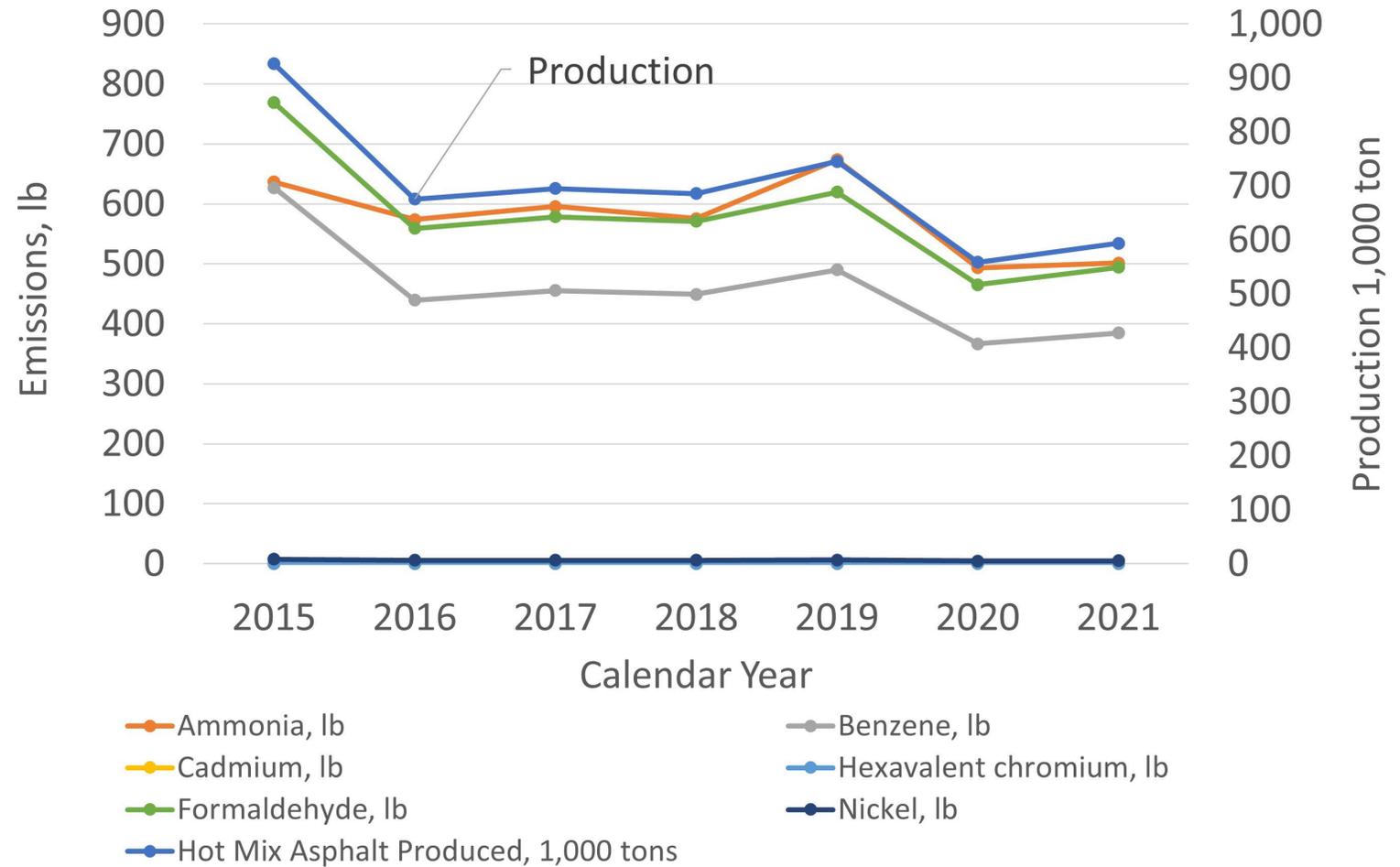
Original AER - Select TAC Emissions and Production from 2015 - 2021



- Ammonia, lb
- Benzene, lb
- Cadmium, lb
- Hexavalent chromium, lb
- Formaldehyde, lb
- Nickel, lb
- Hot Mix Asphalt Produced, 1,000 tons

Audited Reports – Key Toxics

Amended AER - Select TAC Emissions and Production from 2015 - 2021



Health Risk Assessment

Air Toxics “Hot Spots” Program (AB 2588)

- Purpose
 - Collect toxic emissions data every 4 years
 - Identify facilities having potential localized impacts
 - Evaluate potential health risks through Health Risk Assessments
 - Evaluates entire facility’s onsite emissions, not just one permit unit
 - Public notification if potential health risks above South Coast AQMD thresholds
 - Facility risk reduction, if above South Coast AQMD thresholds
- South Coast AQMD Rule 1402
 - Implements requirements of AB 2588
 - More stringent requirements than state law

Toxic Emissions Reporting

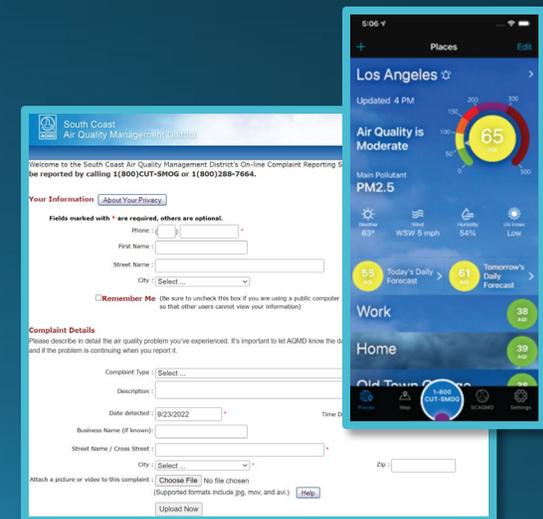


Health Risk Assessment (HRA)

- Estimates chance a person will experience a health effect from a toxic air contaminant
- Based on a "snapshot" of emissions from an inventory year reported in ATIR
 - "Snapshot" year assumed to persist over many decades
- Standardized methodology used for all facilities
 - Allows for comparisons between facilities and threshold-based follow-up actions
- All AB 2588 HRAs required to follow state guidance
 - Conservative assumptions built into HRA methods to reduce chance of any under-reporting of health risk

Odors and Health Risk Assessments

- HRA does not evaluate odor impacts
 - Short-term exposure to strong foul odors can cause people to experience health symptoms such as headaches and nausea
 - Presence of foul odors does not necessarily indicate that toxic air pollutants are present at levels that would cause more serious health impacts
 - Odorous pollutants with identified toxic effects are evaluated in HRA (e.g., cancer and non-cancer effects)
- Public can continue to call 1-800-CUT-SMOG for odors or other air quality concerns
 - Complaints can also be submitted using the South Coast AQMD app or online at:
<http://www3.aqmd.gov/webappl/ComplaintSystemOnline>



All American Asphalt HRA Pursuant to Rule 1402

- AAA required to prepare ATIR in February 2020
 - AAA required to prepare HRA October 2021 based on preliminary ATIR results
 - ATIR approved 12/16/21 (includes audited AER data)
- HRA conditionally approved on 8/19/22
- HRA based on 2016 emissions
 - 2016 was the AB 2588 quadrennial year
 - No substantial changes to equipment since 2016, except for installation of additional controls
- AB 2588 process for 2016 cycle is concluded at this time – quadrennial reporting still required for future inventory years
 - New HRAs possible if future reported emissions are expected to substantially change the health risk



Rule 1402 Health Risk Thresholds

Cancer Risk

(increased probability for cancer)

Significant Risk*

Cancer Risk \geq 100 in one million

Risk Reduction

Cancer Risk \geq 25 in one million

Public Notification

Cancer Risk \geq 10 in one million

Cancer Burden

(increase in occurrence of cancer cases in population)

Risk Reduction

Cancer Burden \geq 0.5

Non-Cancer Risk

(acute and chronic exposure)

Significant Risk*

Non-Cancer Hazard Index \geq 5

Risk Reduction

Non-Cancer Hazard Index \geq 3

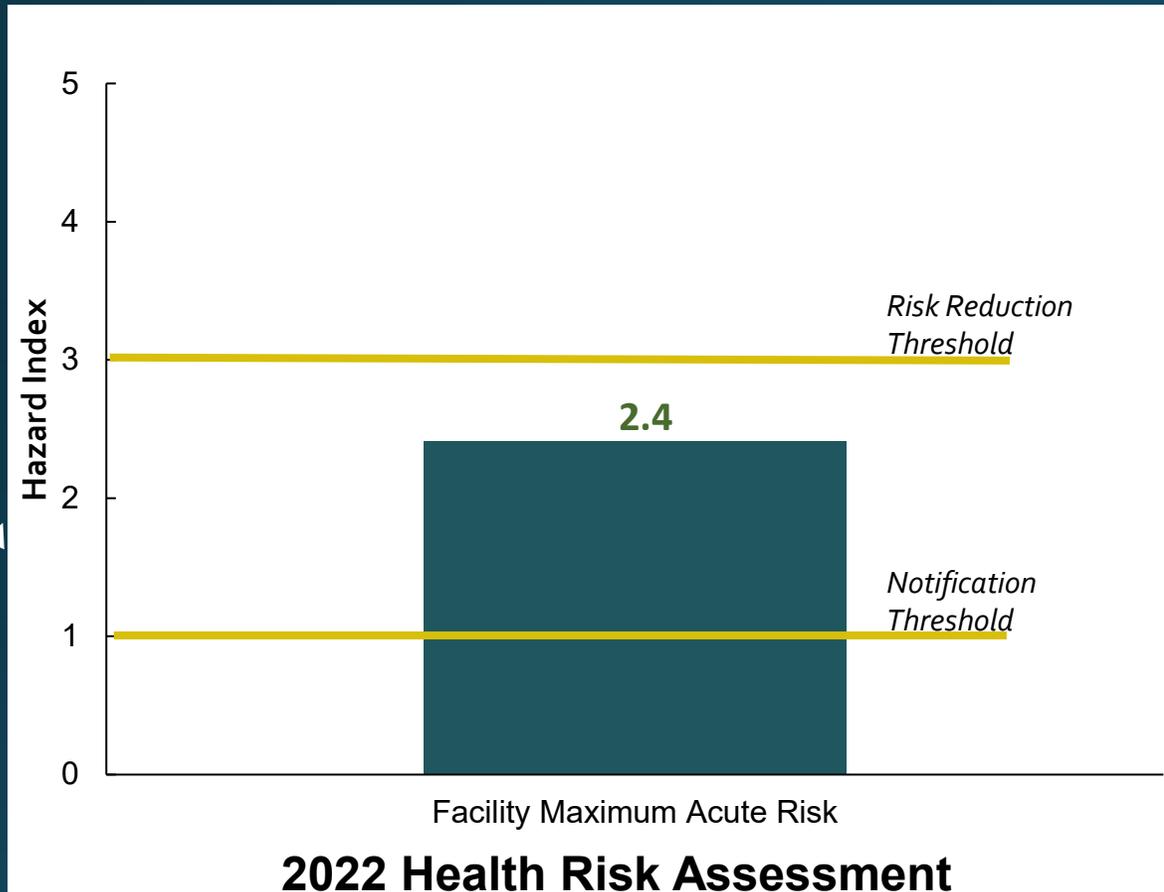
Public Notification

Non-Cancer Hazard Index \geq 1

AAA HRA Results

* Highest priority - facilities are required to expedite actions

Estimated Short-Term Health Risks & Impacts

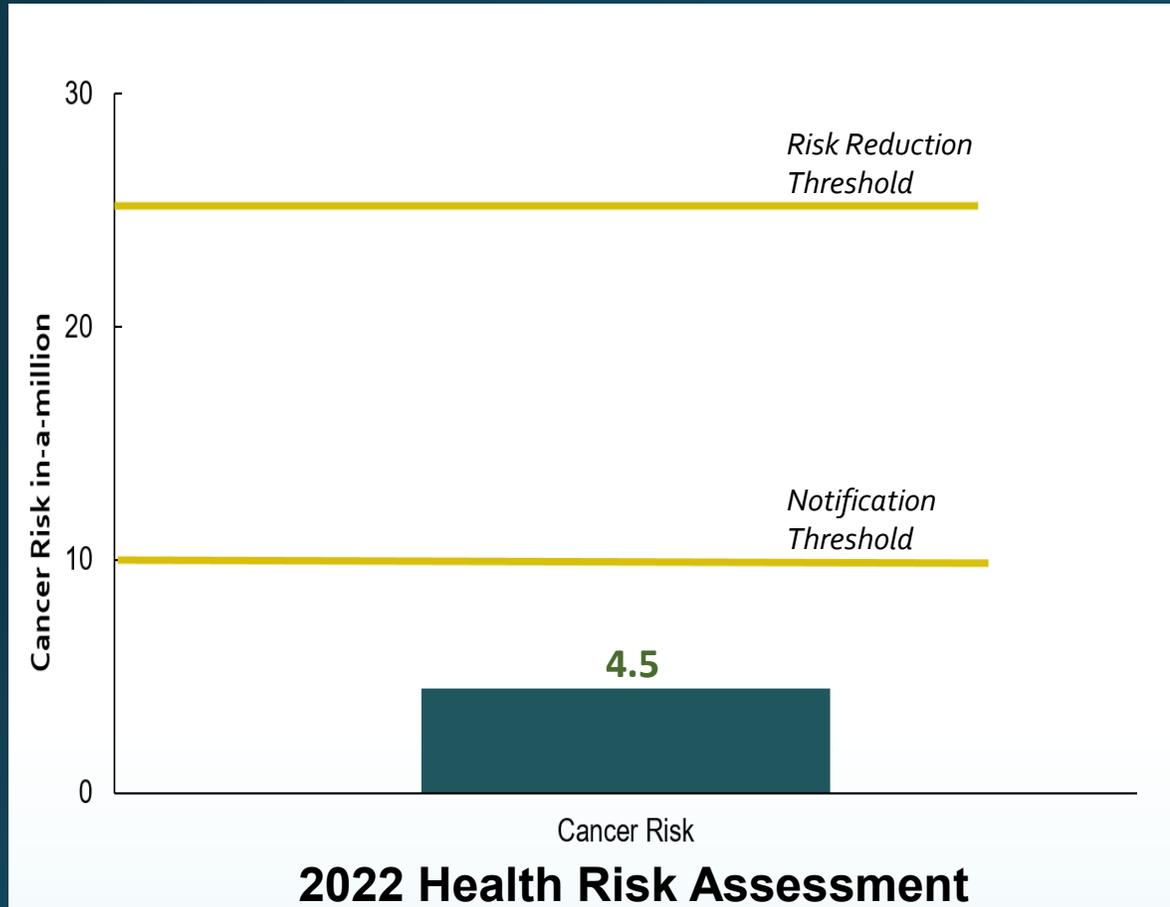


- 2016 estimated acute (short-term) risk exceeded the notification threshold
 - Exceedance occurred in the immediate area surrounding the facility (only accessible to firefighters & nature conservancy staff)
- HRA results show nickel as main risk driver from welding and operation of the Hot Mix Asphalt plant
- Acute effects of nickel
 - Main health effects are short-term contact dermatitis and respiratory track irritation
 - Examples: skin rash (similar to poison ivy) or asthmatic reaction

Hazard index = 1 indicates the most sensitive individuals could experience a health effect

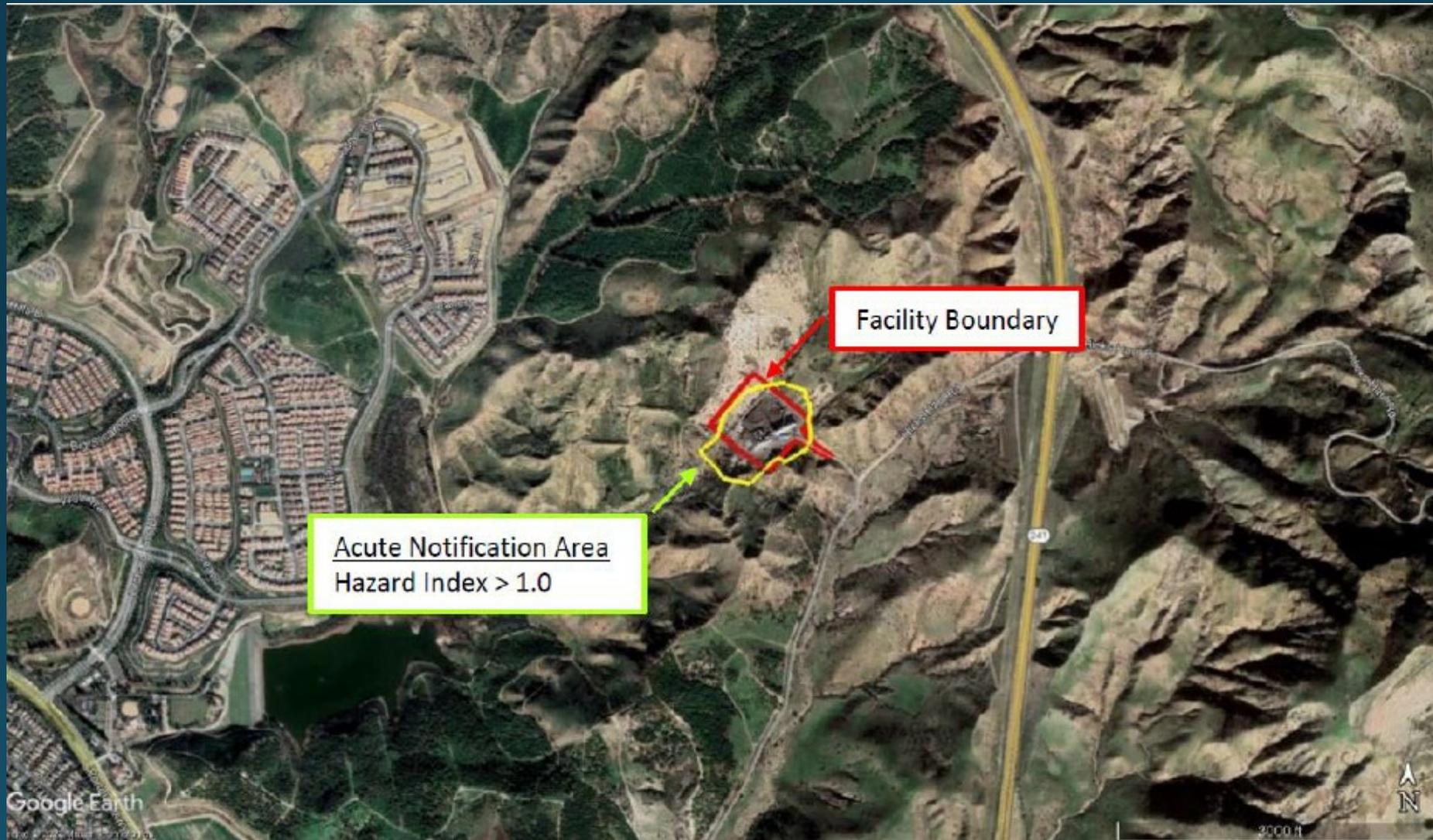
Long-term non-cancer hazard index from all sources is between 5 to 9 across the air basin

Estimated Cancer Risk



- 2016 estimated cancer risk is 4.5 in a million chances
- No cancer risk above South Coast AQMD thresholds
 - Public notification is 10 in a million chances
 - Risk Reduction is 25 in a million chances

Acute Risk Notification Area

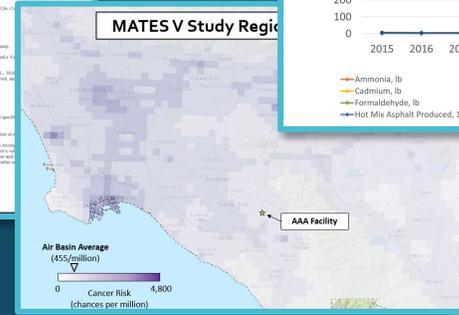
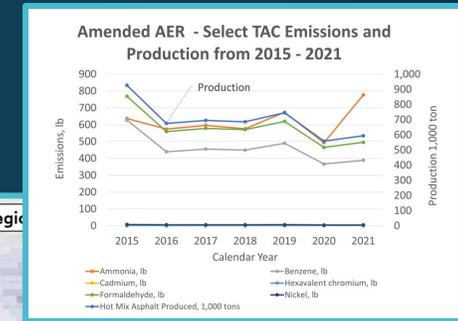


HRA Results Consistent With Multiple Lines of Evidence

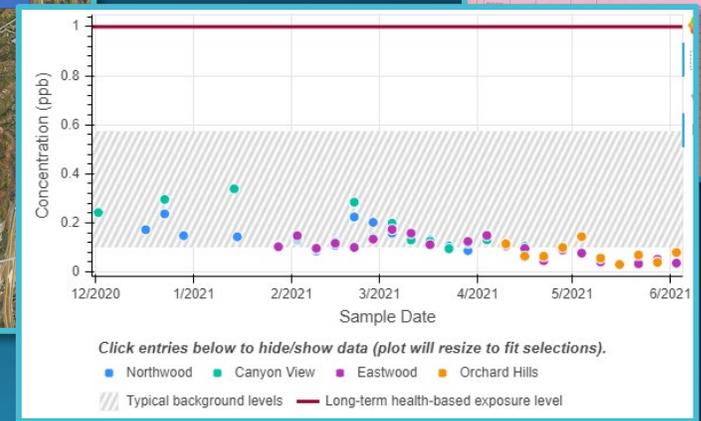
- Emissions reports
- Source testing
- Permitting evaluations
- Onsite inspections
- Regional health risk study
- Neighborhood air monitoring

South Coast Air Quality Management District
2280 Century Blvd, Orange, CA 92667
PERMIT TO OPERATE

Source Test Report
All American Asphalt
10071 Jeffrey Road
Irvine, CA 92602
Source Tested: One (1) Carbon Absorption Unit
Test Dates: March 17-19, 2021
AST Project No. 2021-0883
Prepared By: Alliance Source Testing, LLC
3883 W 2270 S, Suite E
West Valley City, UT 84210



NOTICE OF VIOLATION
P 74016
All American Asphalt, All American Asphalt
10071 Jeffrey Rd Irvine CA 92602
10/20/2021
\$277



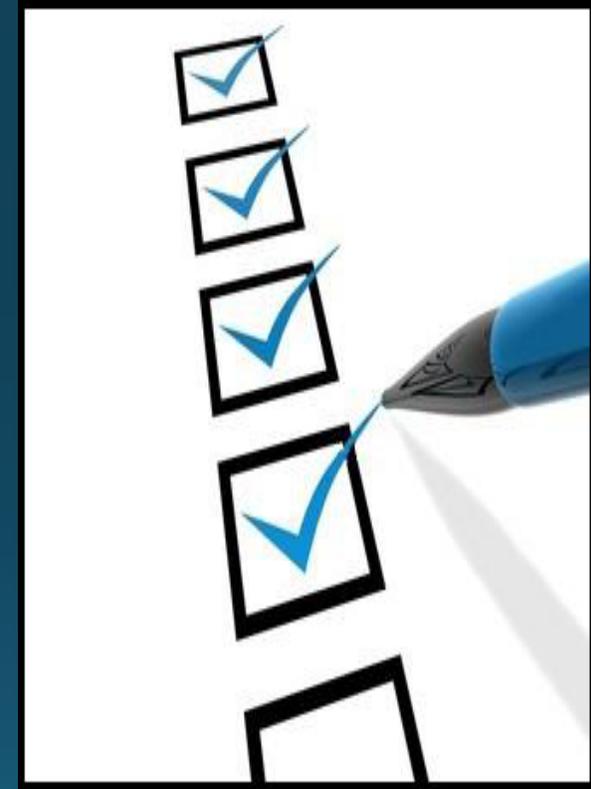
More Information on the AB 2588 Program

- South Coast AQMD AB 2588 Website
 - <http://www.aqmd.gov/home/rules-compliance/compliance/toxic-hot-spots-ab-2588>
- Link to the 2016 Approved HRA
 - <http://www.aqmd.gov/docs/default-source/planning/risk-assessment/all-american-asphalt-irvine/all-american-asphalt-redacted-hra.pdf>
- Email: ab2588@aqmd.gov
- Hotline: 909-396-3616

Title V Permitting

South Coast AQMD Permitting

- Any equipment which may release or control the release of air contaminants requires an air quality permit
 - Some exemptions for low-emitting equipment
- Permits are evaluated for regulatory compliance prior to issuance
- Permits to construct are subject to New Source Review standards
- Compliance evaluated on Potential to Emit air contaminants
- Permitting programs based on emissions for:
 - Minor sources (~ 25,000 sources)
 - Small facilities. E.g., gas stations, autobody shops, dry cleaners
 - Major sources (Title V) facilities (~ 320 Title V facilities)
 - Large industrial facilities



What is Title V?

- All American Asphalt is transitioning from minor source permitting to Title V permitting
 - No new equipment is being permitted
- Title V is a federal program designed to standardize air quality permits and the permitting process for major sources of emissions nationally
- The name "Title V" comes from Title V of the 1990 federal Clean Air Act Amendments, which requires USEPA to establish a national operating permit program
 - USEPA adopted regulations requiring states and local permitting authorities to develop and submit a federally enforceable operating permit program for approval
 - Adopted Regulation XXX – Title V Permits in 1993
 - Title V program was approved on November 30, 2001



Who is Subject to Title V?

- Title V only applies to "major source" facilities that emit, or has the potential to emit any criteria pollutant or hazardous air pollutant at levels equal to or greater than the Major Source Thresholds
- A facility is subject to Title V permitting when:
 - Facility modification results in increased Potential to Emit greater than Major Source Thresholds, or
 - Facility reports annual emissions greater than Major Source Thresholds
- All American Asphalt reported VOC emissions in AER were greater than threshold and required to apply for initial Title V permit

Major Source Thresholds

Pollutant	Actual Reported Emission Threshold Levels Per Facility Location		
	South Coast Air Basin (tpy)	Riverside County Portion of Salton Sea Air Basin (tpy)	Non-Palo Verde, Riverside County Portion of Mojave Desert Air Basin (tpy)
VOC	8	20	80
NO _x	8	20	80
SO _x	80	80	80
CO	40	80	80
PM-10	56	56	80
Single HAP	8	8	8
Combination of HAPs	20	20	20

Initial Title V Permit Process

Permit Application

- Due within 180 days of a facility becoming subject to Title V

Permit Consolidation

- Initial Title V permit consolidates of all existing individual equipment permits

Permit Conditions

- Reviewed to ensure they meet current rule requirements

Evaluation

- Statement of Basis (SOB) is prepared
- Facility background, applicable rules, emissions summary, and compliance history

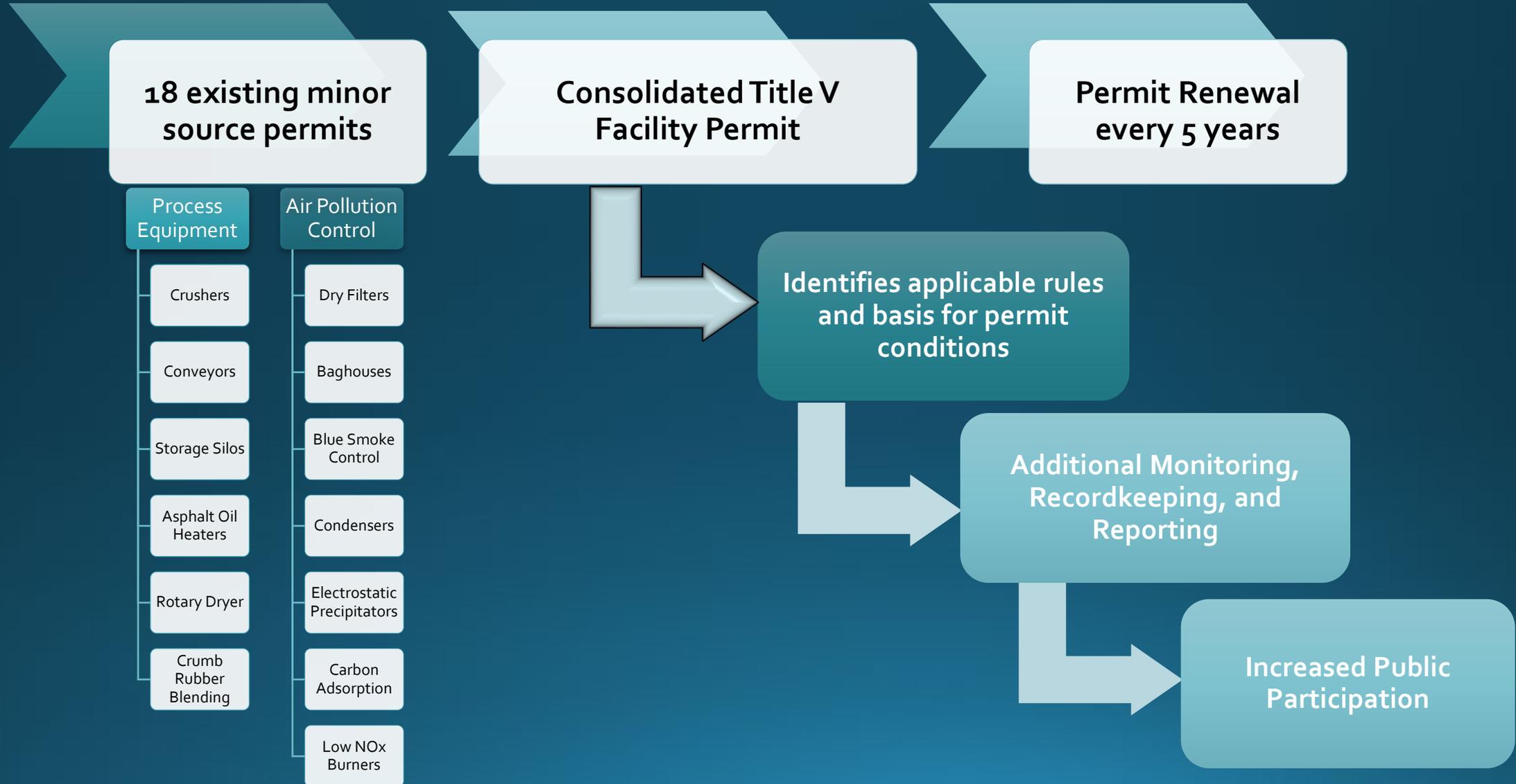
USEPA Review

- Proposed Facility Permit and SOB are reviewed by USEPA
- 45-Day Review

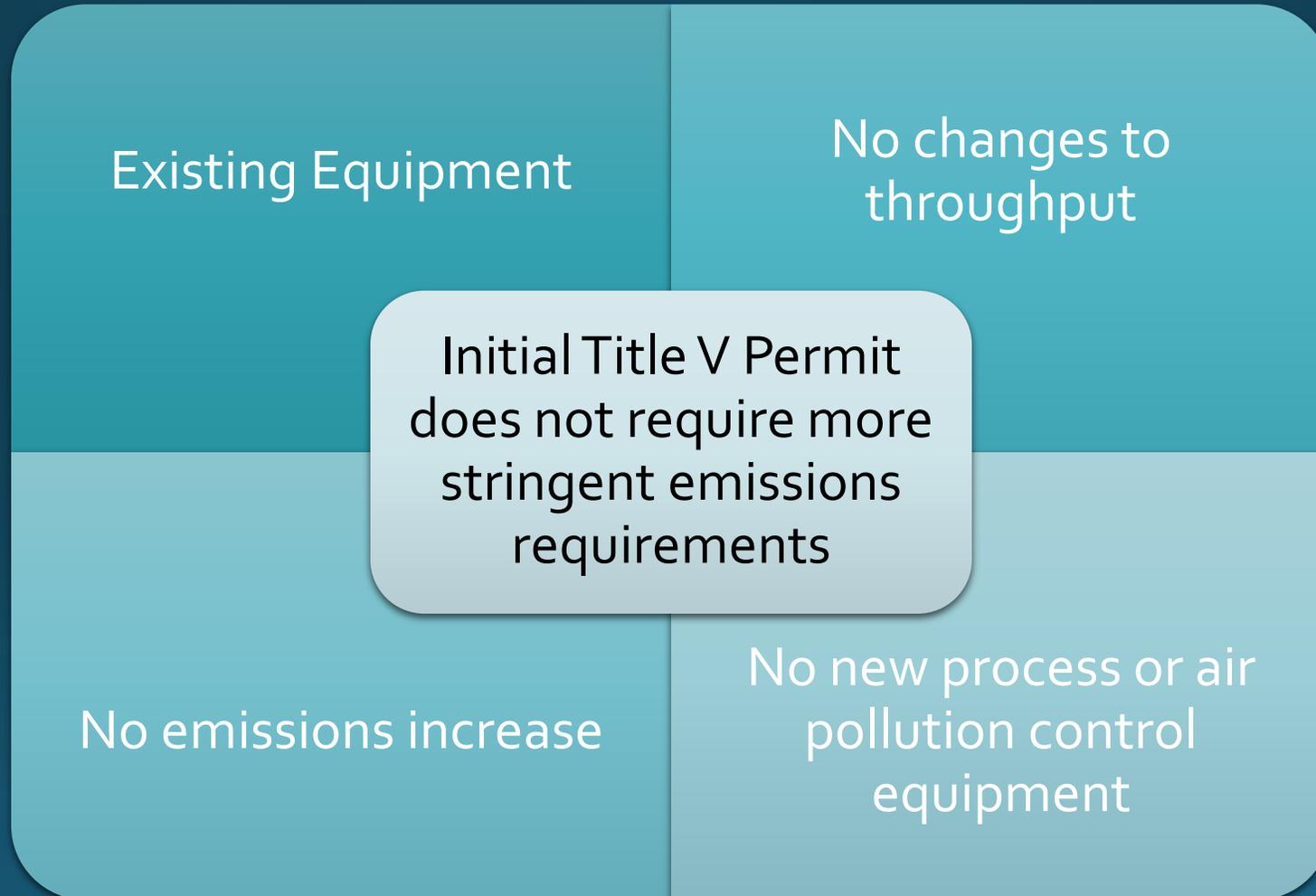
Public Review and Comment

- 30 –Day Public Comment Period.
- All comments received are responded to prior to issuance

Initial Title V Permit Process for AAA



Initial Title V Permit Process for AAA



Review of AAA's Title V Permit

- AAA's Proposed Title V Permit and Statement of Basis were:
 - Sent to USEPA for a 45-day review period (starting September 27, 2022)
 - Released for a public review and comment period of at least 30-days (from September 28, 2022 to October 28, 2022)
- Public may request a Proposed Permit Hearing by submitting Form 500-G (Hearing Request Form) by October 13, 2022
- Requests for additional information, requests for Public Hearing, or comments should be sent to:

Jillian Wong, Ph.D., Engineering & Permitting
South Coast AQMD

21865 Copley Drive, Diamond Bar, CA 91765

Or via email to: jwong1@aqmd.gov



Public Notice

- Public Notice posted at:
 - South Coast AQMD Permitting Public Notices webpage (Facility ID 82207)
 - <http://onbase-pub.aqmd.gov/publicaccess/DatasourceTemplateParameter.aspx?MyQueryID=222>
- South Coast AQMD AAA Permitting webpage
- <http://www.aqmd.gov/home/news-events/community-investigations/all-american-asphalt/AAA-permitting>

Public Comment End Date October 28, 2022



Public Comment