

Update on Stationary Sources within Community Boundary

Fresno AB 617 Community Steering Committee Meeting
January 12, 2022

Stationary Source CERP Commitments

- During Community Emissions Reduction Program (CERP) development, CSC & District identified measures to reduce emissions from various stationary sources, focusing on community-identified sources of concern
 - Biomass facilities, glass manufacturing, petroleum storage facilities & chrome plating operations
- South Central Fresno CERP Commitments for Stationary Sources:
 - **IS.1**-Incentives to reduce chrome plating emissions
 - **IS.4**-Enhanced inspection frequency of sources with emissions violations
 - **IS.7**-Evaluation of Best Available Retrofit Control Technology (BARCT) requirements
 - **IS.8**-Evaluation of rules beyond BARCT
 - **IS.9**-Expedited facility risk assessment under Air Toxics Hot Spot Information and Assessment Act (AB 2588)

Stationary Source CERP Commitments (cont'd)

CERP commitments for Stationary Sources will reduce criteria pollutant and air toxics emissions

NO_x

Precursor to ozone and PM_{2.5} formation

Primarily from combustion of fuel, including mobile sources, & industrial sources

PM_{2.5}

Directly emitted

Primarily from cooking, wood burning, road dust, equipment at industrial sources

SO_x

Precursor to PM_{2.5} formation

Primarily from burning of fossil fuels

VOC

Precursor to ozone formation

Primarily from cleaning & surface coatings, architectural coatings, & industrial sources

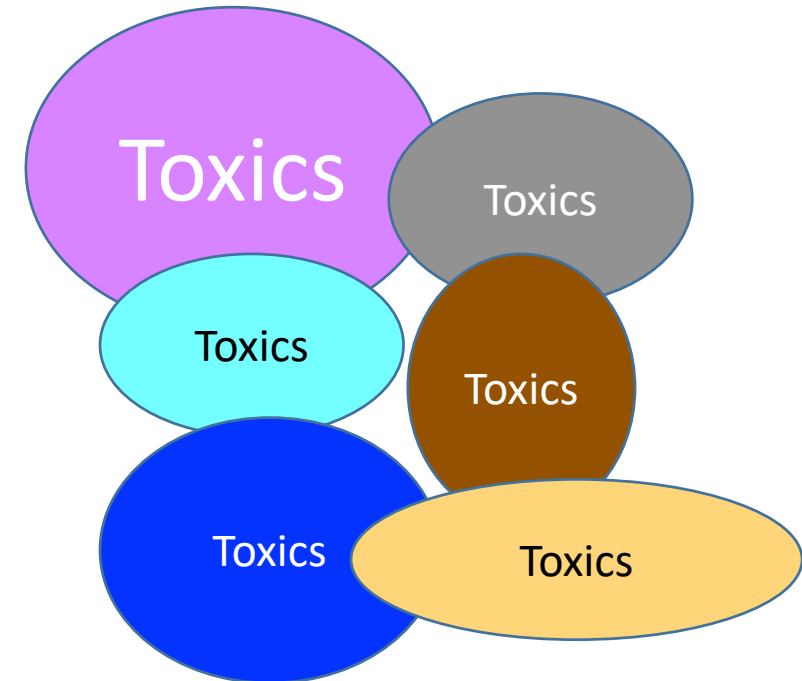
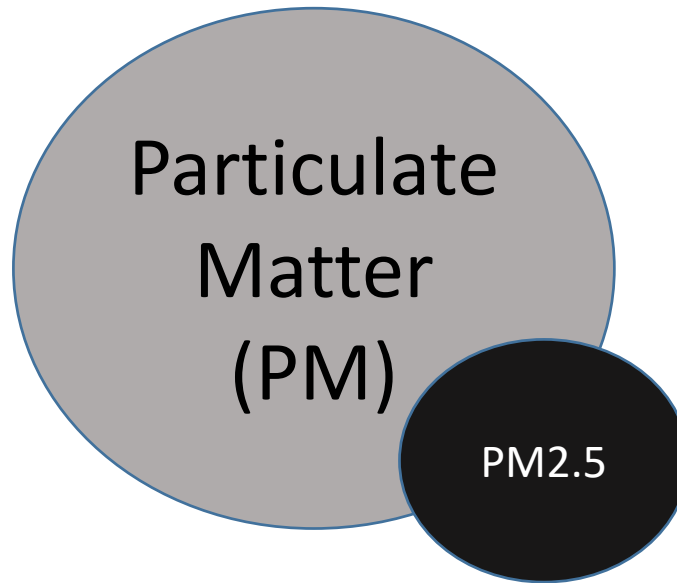
Air Toxics –hundreds of toxics, including:

Diesel Particulate Matter (DPM) from combustion of diesel fuel, primarily from heavy duty trucks

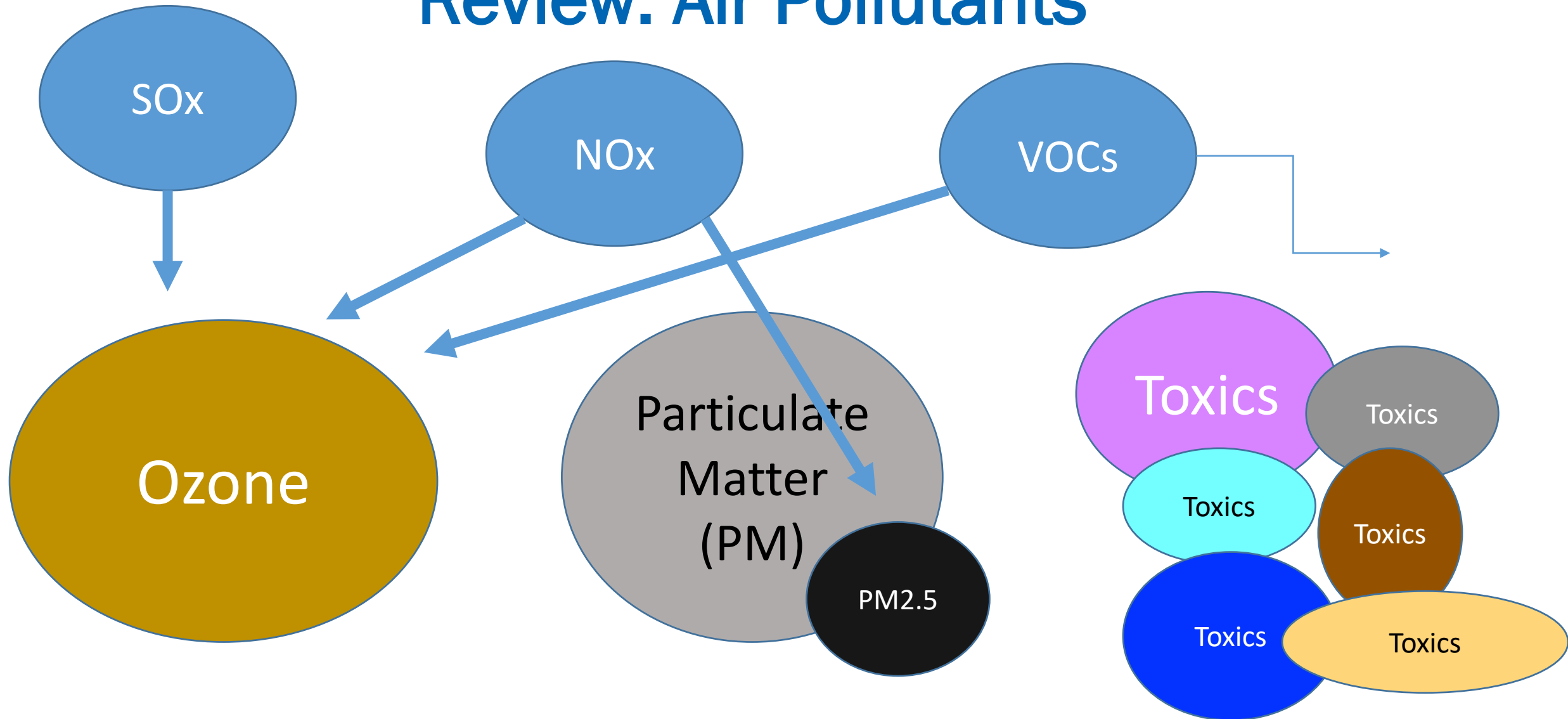
Benzene, Toluene, Ethylbenzene, Xylene (BTEX), type of VOC, primarily from oil refining & petroleum products

Review: Air Pollutants

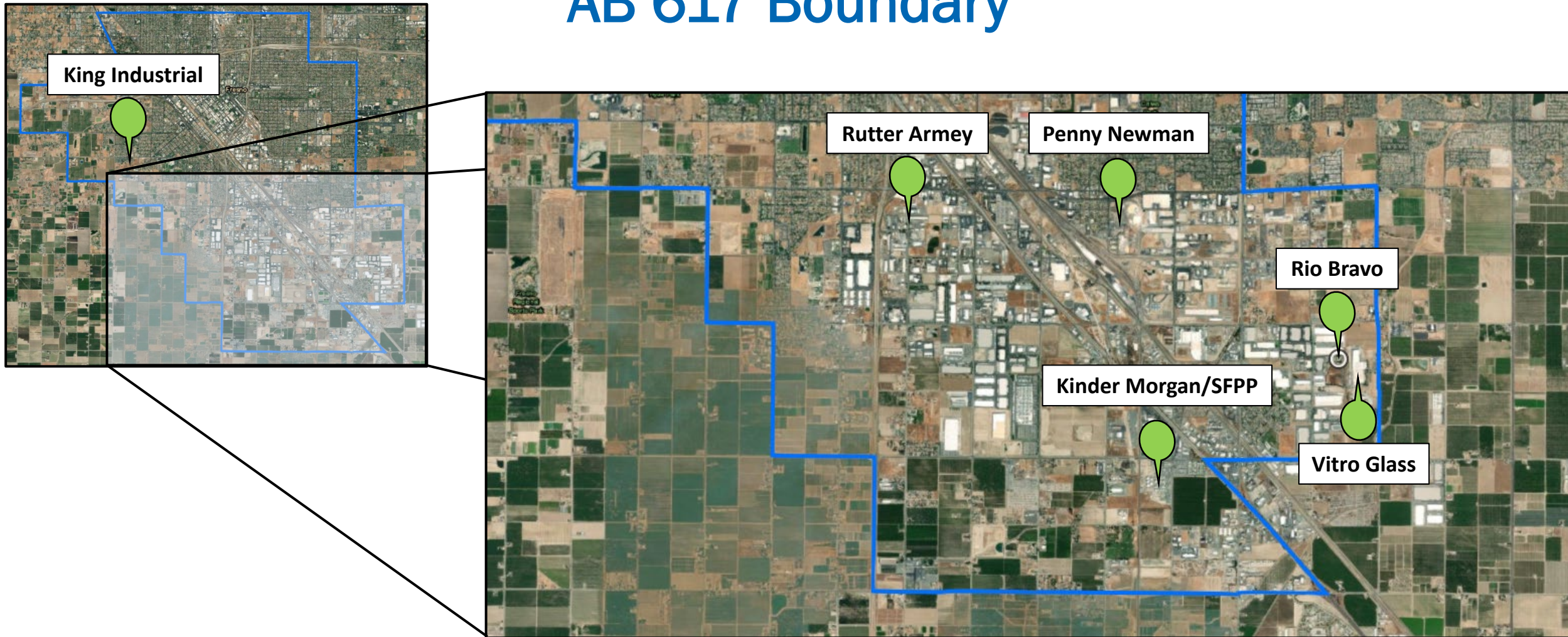
Air pollution can either be directly emitted into the air, *or* combine with other elements and form in the atmosphere



Review: Air Pollutants



Map of Stationary Sources of Community Concern within AB 617 Boundary

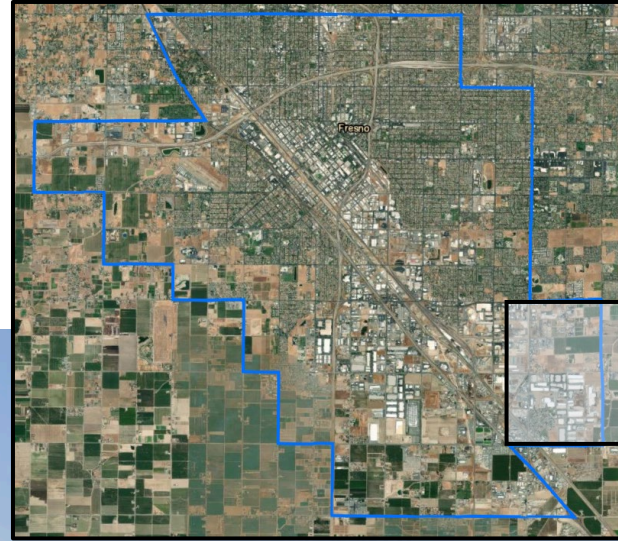


Is there a source not listed you'd like to discuss?

Vitro Architectural Glass

Emissions Inventory for Year 2020

Pollutant	Tons Per Year
NOx	162.42
VOC	6.49
PM10	9.27



Near the Southwest
corner of Peach and North

Flat glass manufacturing plant: Used in windows,
windshields, etc.

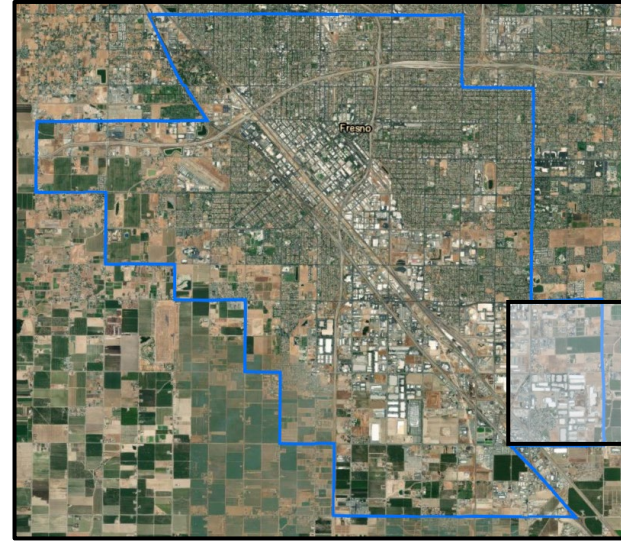
Vitro Architectural Glass (cont'd)

- **CERP Commitment:** Measure IS.8 – Evaluation of Rules (including for glass melting furnaces) for additional emissions reduction benefits
- **Action:** Amended Rule 4354 (Glass Melting Furnaces) December 2021
 - Rule requirements began in 1994, amended 6 times, NOx emissions already reduced by over 75%
 - December 2021 amendment lowered limits for NOx, PM, and SOx, resulting in further reductions of remaining emissions by 43% NOx, 49% PM, 4% SOx
 - Emissions from Vitro Glass will be reduced through these amendments
 - Public meetings and workshops noticed to CSC throughout 2021
- **Per CERP measure IS.4, a six-month inspection frequency is currently in effect due to an emissions violation documented in March 2018**
- **Questions/Discussion**

Rio Bravo Facility

Emissions Inventory for Year 2020

Pollutant	Tons Per Year
NOx	101.02
VOC	0.61
PM10	1.03



Near the Southeast
corner of Willow and North

Biomass facility: As opposed to open burning, operation burns woody waste in controlled process to generate electricity

Rio Bravo Facility (cont'd)

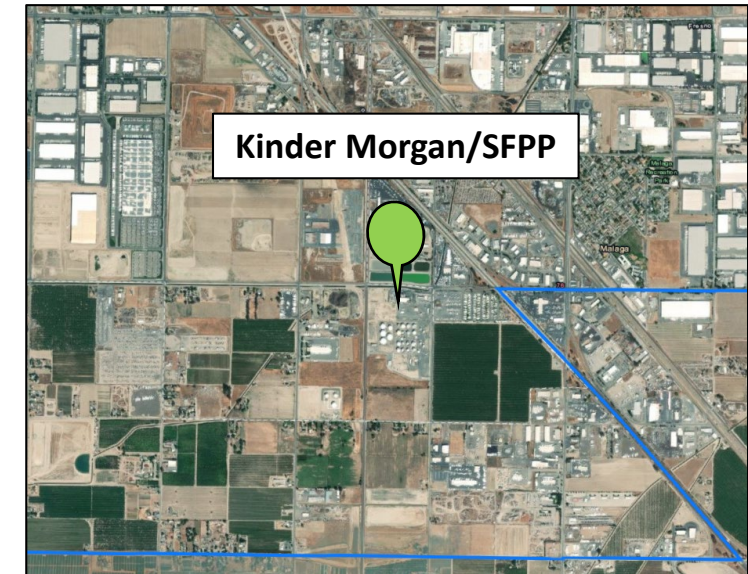
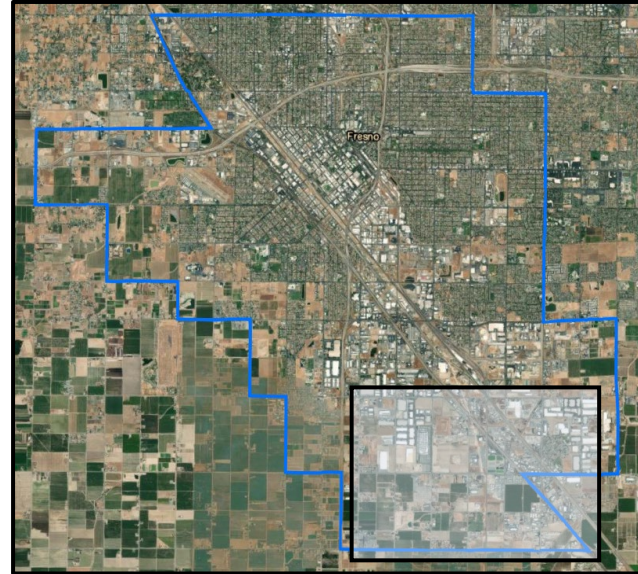
- **CERP Commitment:** Measure IS.8 – Evaluation of Rules (including for biomass facilities) for additional emissions reduction benefits
- **Action:** Amended Rule 4352 (Solid Fuel Fired Boilers, Steam Generators, Process Heaters) December 2021
 - Rule requirements began in 1994, amended 3 times, NOx emissions already reduced by approximately 75%
 - December 2021 amendment lowered NOx limits, established PM and SOx limits, resulting in further reductions of 15% NOx, 28% PM, 52% SOx
 - Emissions from Rio Bravo will be reduced through these amendments
 - Public meetings and workshops noticed to CSC throughout 2021
- **An annual inspection frequency is currently in effect.** If any emissions violations are documented during CERP implementation, a six-month inspection frequency would be triggered per CERP measure IS.4
- **Questions/Discussion**

Kinder Morgan/SFPP Facility

Emissions Inventory for Year 2020

Pollutant	Tons Per Year
NOx	14.17
VOC	61.7
PM10	0.62

Near the Southeast corner of Cedar and Central



Petroleum products storage and transportation



Kinder Morgan/SFPP Facility

- **CERP Commitment:** Measure IS.7— Evaluation of BARCT Requirements
- **Action:** Through AB 617 BARCT evaluation, number of VOC leak detection and repair rules are going through potential amendment process
 - Rule evaluation will include Rules 4401, 4409, 4455, 4623, and 4624
 - For SFPP, Rules 4623 and 4624 apply
 - Public workshop noticed to CSC, held on October 7, 2021
 - Additional workshop planned for early 2022 (CSC will be notified when it is scheduled)
- **Per CERP measure IS.4, a six-month inspection frequency is currently in effect due to an emissions violation documented in June 2020**
- **Questions/Discussion**

Penny Newman

Near the Southeast
corner of Cedar and Jensen

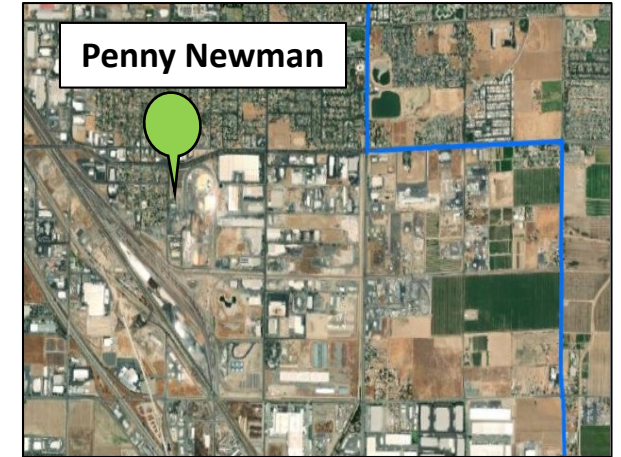
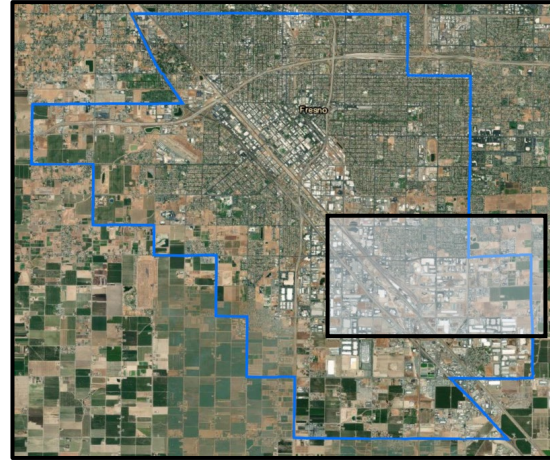


Grain product storage
and transportation



Penny Newman

Emissions Inventory for Year 2020	
Pollutant	Tons Per Year
NOx	0.29
VOC	0.23
PM10	12.32



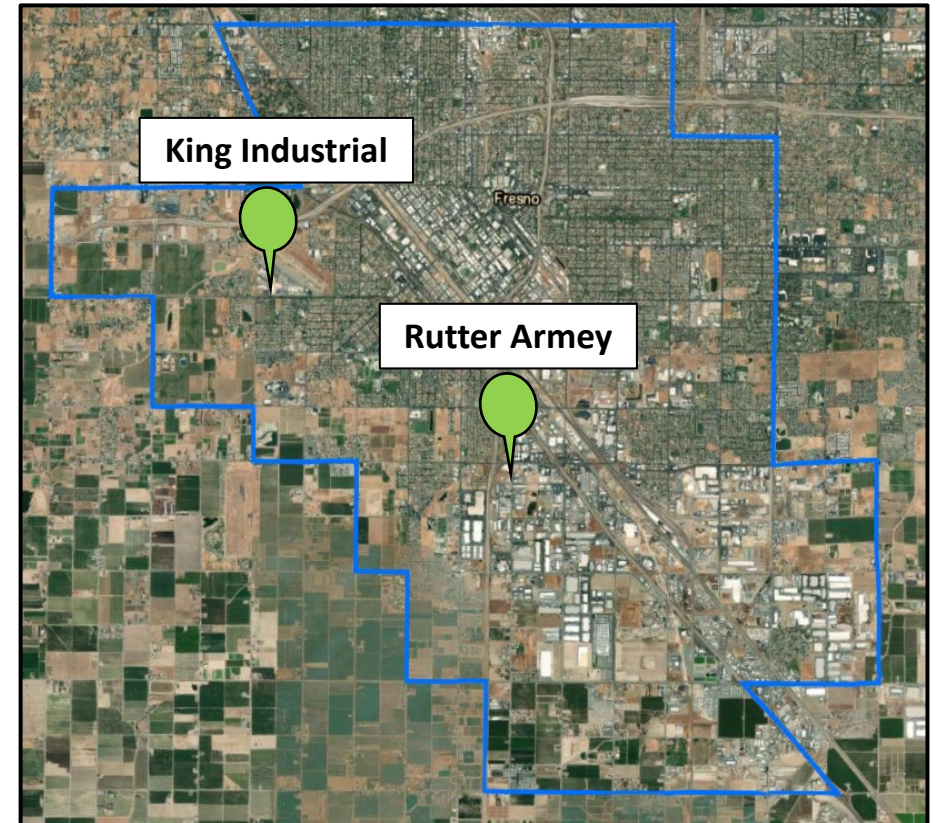
- **CERP Commitment:** Measure HD.10 Incentives for Railcar Movers/Switcher Locomotives
- **Action:** Working with Penny Newman to assess replacement of older railcar mover with newer, cleaner vehicle
- **Per CERP measure IS.4,** a six-month inspection frequency is currently in effect due to an emissions violation documented in January 2020
- **Questions/Discussion**

Chrome Plating Operations

- 2 hard chrome plating facilities within the AB 617 community
- **Subject to State and Local requirements**
 - ATCM 17 California Code of Regulation 93102 – *Airborne Toxic Control Measure for Chromium Plating and Chromic Acid Anodizing*
 - CARB in process of amending rule, public technical working group scheduled Jan 20, 2022
 - District Rule 7011 – *Chrome Plating and Chromic Acid Anodizing Facilities*
 - District Rule 2201 - *New and Modified Source Review Rule*
- **CERP Commitment:** Measure IS.1 —provide incentives to the operations to convert to the use of trivalent chromium or installing advanced control technologies
- **Action:** Working with local facilities to continue to assess current control technologies, discuss upcoming regulations, and explore feasibility of installing advanced controls

Chrome Plating in South Central Fresno

- **King Industrial Hard Chrome**
 - Hard chrome plating facility
 - Utilizes a Merlin Tank Cover and Exhaust System which provides more than 99% control
- **Rutter Armey**
 - Hard chrome plating facility
 - Utilizes a three-stage control system which provides more than 99% control



Air Monitoring at King Industrial Hard Chrome



- **March 31, 2021:** District collected samples at two locations nearby the chrome plating operation
 - Sent to third party lab to analyze for presence of Hexavalent Chromium
- **No Hexavalent Chromium** present in the samples collected
 - Lowest value the lab can detect is $0.00004 \mu\text{g}/\text{m}^3$
 - Chronic Reference Exposure Level for Hexavalent Chromium $0.2 \mu\text{g}/\text{m}^3$

Air Monitoring at Rutter Armey



- **May 13, 2021:** District collected samples at two locations nearby the chrome plating operation
 - Sent to third party lab to analyze for presence of Hexavalent Chromium
- **No Hexavalent Chromium** present in the samples collected
 - Lowest value the lab can detect is $0.00004 \mu\text{g}/\text{m}^3$
 - Chronic Reference Exposure Level for Hexavalent Chromium $0.2 \mu\text{g}/\text{m}^3$

Other Stationary Source CERP Commitments

- **IS.9**-Expedited facility risk assessment under Air Toxics Hot Spot Information and Assessment Act (AB 2588)
 - The District is currently implementing a plan designed to expedite the assessment of the health risk associated with each of the facilities located in South Central Fresno
 - Progress updated monthly on CERP measure tracker
- Reduce emissions as a result of warehouses in boundary
 - Measures to replace HD diesel trucks, replace locomotive switchers, install charging stations, reduce idling through enforcement actions, study potential new truck routes, install vegetative barriers, and keep the community engaged through a land use subcommittee