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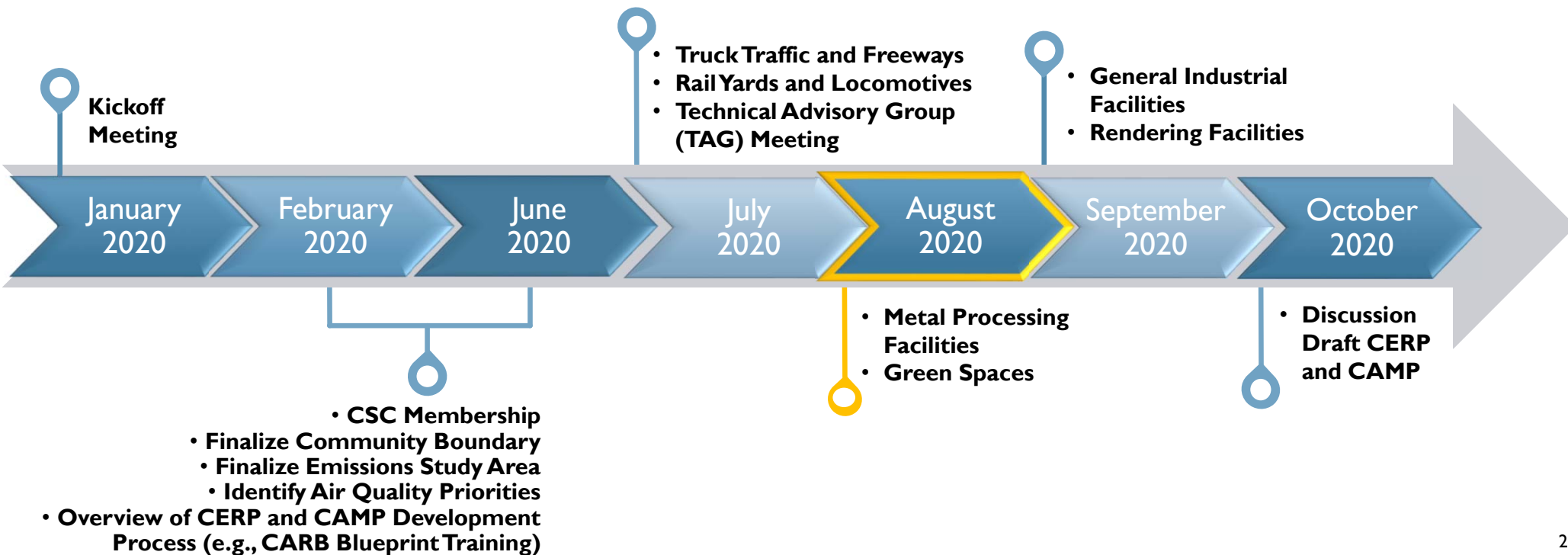
# METAL PROCESSING FACILITIES GREEN SPACES

SOUTHEAST LOS ANGELES CSC MEETING AND WORKSHOP #5  
AUGUST 27, 2020



Dianne Sanchez, Ph.D. - Air Quality Specialist

# CERP AND CAMP TIMELINE





**AIR QUALITY PRIORITY –  
METAL PROCESSING FACILITIES**



# AIR QUALITY PRIORITY OVERVIEW



- CSC members identified metal processing facilities as a top air quality priority
- Community members expressed general concerns about toxic air contaminants, odors and particulate matter emissions from metal processing facilities

# EXAMPLES OF TYPES OF FACILITIES IN SELA



- Approximately 76 metal processing facilities in the SELA emissions study area
- Examples of metal processing facilities include in SELA:
  - Metal Forging
  - Metal plating (e.g., chromium electroplating)
  - Metal Recycling
  - Other



# EXAMPLES OF METAL PROCESSING OPERATIONS



## Metal forging:

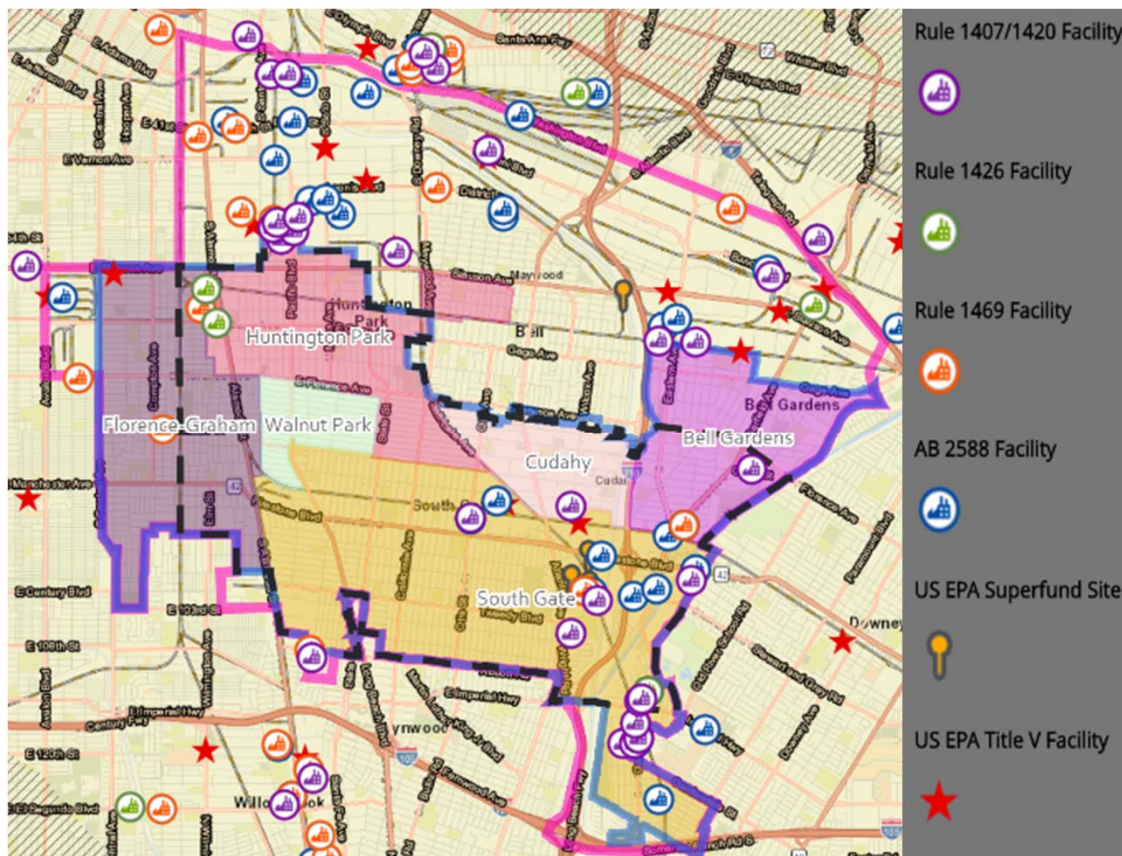
- Forms and shapes metals through hammering, pressing, or rolling by heating raw stock (e.g., billets) to its plastic deformation temperature and shaping it to a desired shape and size
- Metal grinding is often an integral part to metal forging



## Metal plating:

- Process of in which a thin layer of metal coats a surface
- Often used to improve corrosion resistance, enhance hardness, and for decorative purpose

# METAL PROCESSING FACILITIES—EMISSION SOURCES AND DATA



Metal Toxic	Pounds Per Year
Cadmium	1.57
Hexavalent Chromium	0.06
Nickel	7.98
Arsenic	4.04
Lead	58.85

Criteria Pollutant	Tons per Year
PM2.5	9.58
PM10	10.99
VOCs	3.01

- Data from 2018 base year for SELA community boundary and emission study area
- Story map available at: <https://scaqmd-online.maps.arcgis.com/apps/MapJournal/index.html?appid=9f5791575fdf4d859a6d8001aa9f8980>

# EXAMPLES OF SOUTH COAST AQMD RULES FOR METAL PROCESSING FACILITIES



## 1100 Series (Criteria Air Pollutants)

- 1107 – Metal Coating
- 1124 – Aerospace Assembly and Manufacturing Operations
- 1125 – Metal Container, Closure, and Coil Coating
- 1144 – Metalworking Fluids and Lubricants
- 1171 – Solvent Cleaning Operations

## 1400 Series (Toxics)

- 1407 – Arsenic, Cadmium, and Nickel emissions from metal melting
- 1420/1420.2 – Lead emissions from metal melting
- 1426 – Emissions from Metal Finishing (e.g., plating/anodizing)
- 1430 – Emissions of Metal Grinding at Forging Facilities
- 1469– Chromium (+6) emissions from Plating/Anodizing
- 1469.1 – Chromium (+6) emissions from Coating Operations
- 1480 – Ambient Monitoring and Sampling of Metal Toxic Air Contaminants

Rule 402 – Public Nuisance



# EXAMPLES OF EMISSIONS CONTROLS REQUIRED BY SOUTH COAST AQMD RULES



## Point Source Controls

Air pollution controls that require facilities to meet a certain emissions limits



## Housekeeping Measures

Cleaning requirements to reduce fugitive metal particulate



## Building Enclosures

Close openings to further contain fugitive metal particulate



## Other

For example, additional requirements (e.g., negative air for total enclosures) for facilities located near schools centers

# DISCUSSION



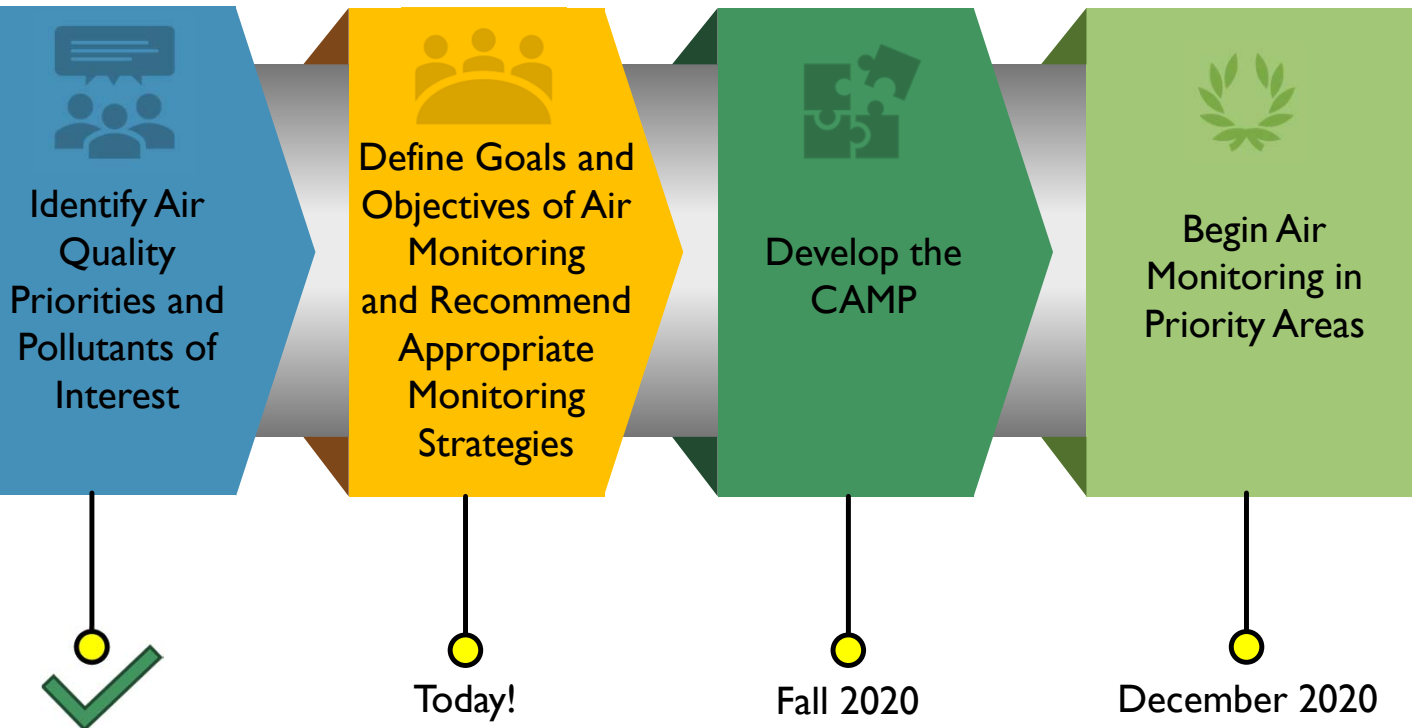
COMMENTS AND QUESTIONS?



# AIR QUALITY PRIORITY: METAL PROCESSING FACILITIES

PAYAM PAKBIN, PH.D. - PROGRAM SUPERVISOR

# WORKING WITH THE CSC TOWARDS DEVELOPING THE COMMUNITY AIR MONITORING PLAN (CAMP)



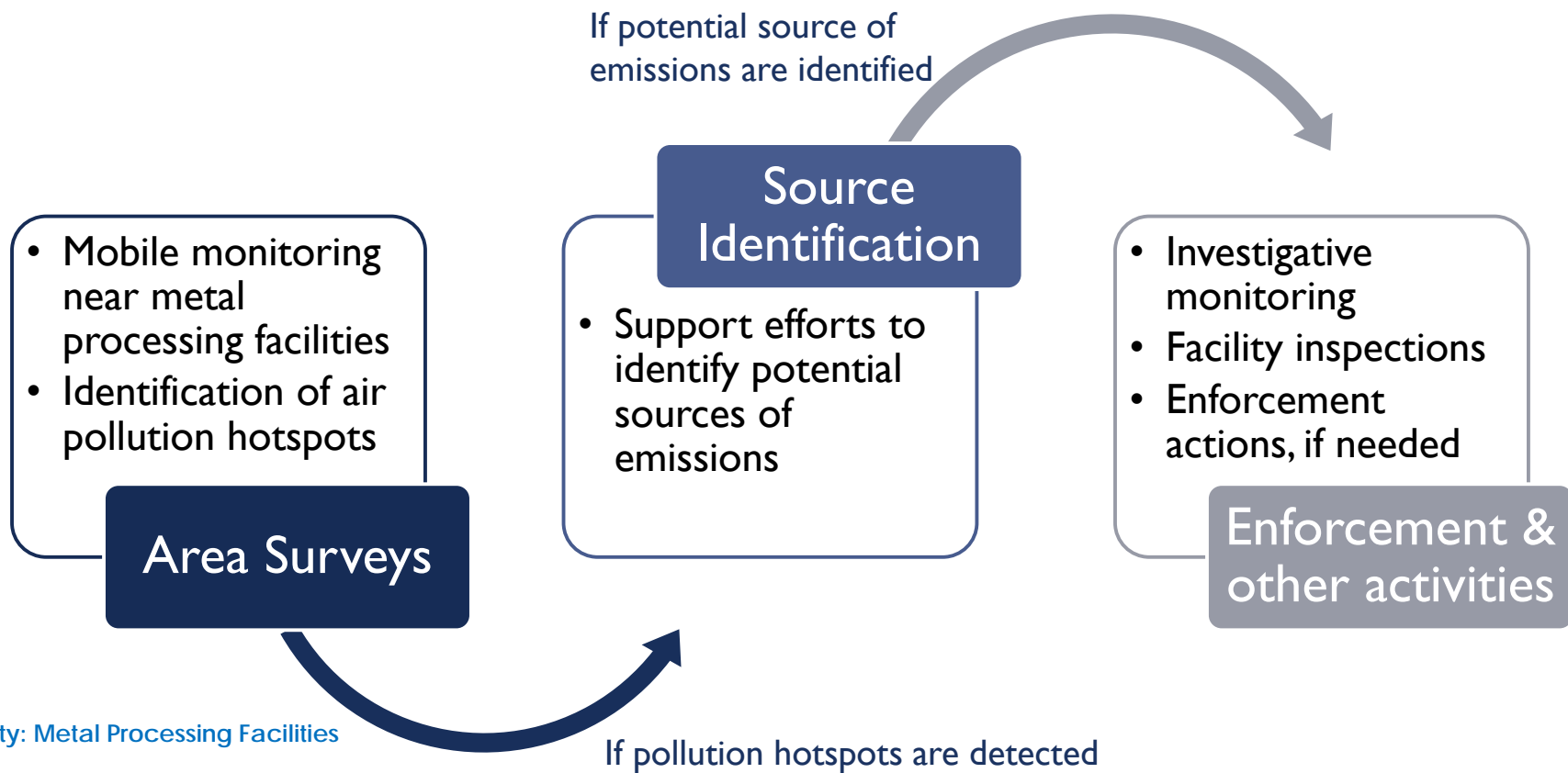
# AIR MONITORING GOALS AND OBJECTIVES

Identify sources of high toxic metal emissions

If elevated levels of toxic metals persist, perform follow up actions

Determine if enforcement actions are needed

# AIR MONITORING AND ENFORCEMENT STRATEGY



# ONGOING AIR TOXIC METALS INVESTIGATION

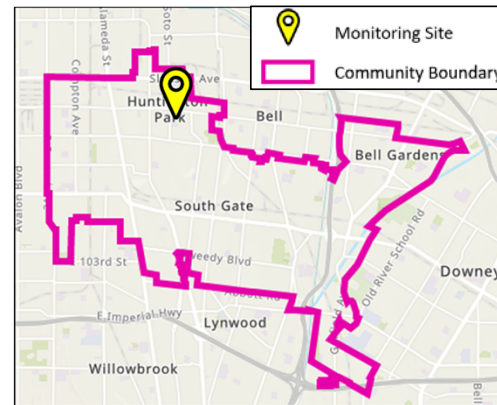
Baseline  
Monitoring

Mobile  
Measurements

Investigative  
Monitoring



Fixed air monitoring stations can provide baseline measurements and help track the progress of emission reduction strategies



Multiple Air Toxic Exposure Study measurements were conducted in Huntington Park in 2018-2019. MATESV report and data anticipated to be finalized in early 2021

# ONGOING AIR TOXIC METALS INVESTIGATION

Baseline  
Monitoring

Mobile  
Measurements

Investigative  
Monitoring



**Development of  
Multi-Metals Mobile  
Platform**

First of its kind!  
*ongoing*



# ONGOING AIR TOXIC METALS INVESTIGATION

Baseline  
Monitoring

Mobile  
Measurements

Investigative  
Monitoring



## Facility Monitoring

Time-integrated monitoring  
near target facility



## Facility Inspections and Enforcement Actions

# DISCUSSION

- Comments, Questions, Concerns?

Please contact:  
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[ppakbin@aqmd.gov](mailto:ppakbin@aqmd.gov)  
909-396-2122



# OFFICE OF COMPLIANCE & ENFORCEMENT



## METAL PROCESSING FACILITIES

**JACK CHENG**

Senior Enforcement Manager,  
Toxics and Waste Management

# COMPLIANCE ACTIVITIES



**Facility Inspections –**  
approx. 27,000 facilities &  
over 67,000 permits

**Responding to  
Notifications –**  
equipment breakdowns,  
deviations from permit  
conditions, or other  
notifications

**Complaint Response –**  
approx. 10,000 complaints  
annually

**Enforcement Actions –**  
NC, NOV, and Hearing  
Board

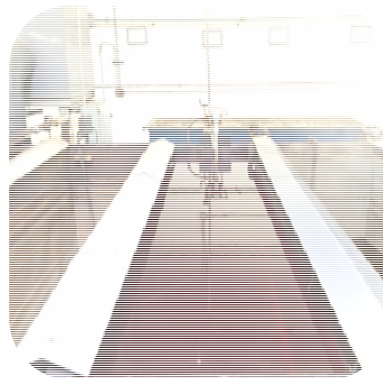
# METAL PROCESSING FACILITY TYPES



- What is considered metal processing?



Coating/Treating



Plating/Anodizing



Melting/Forging

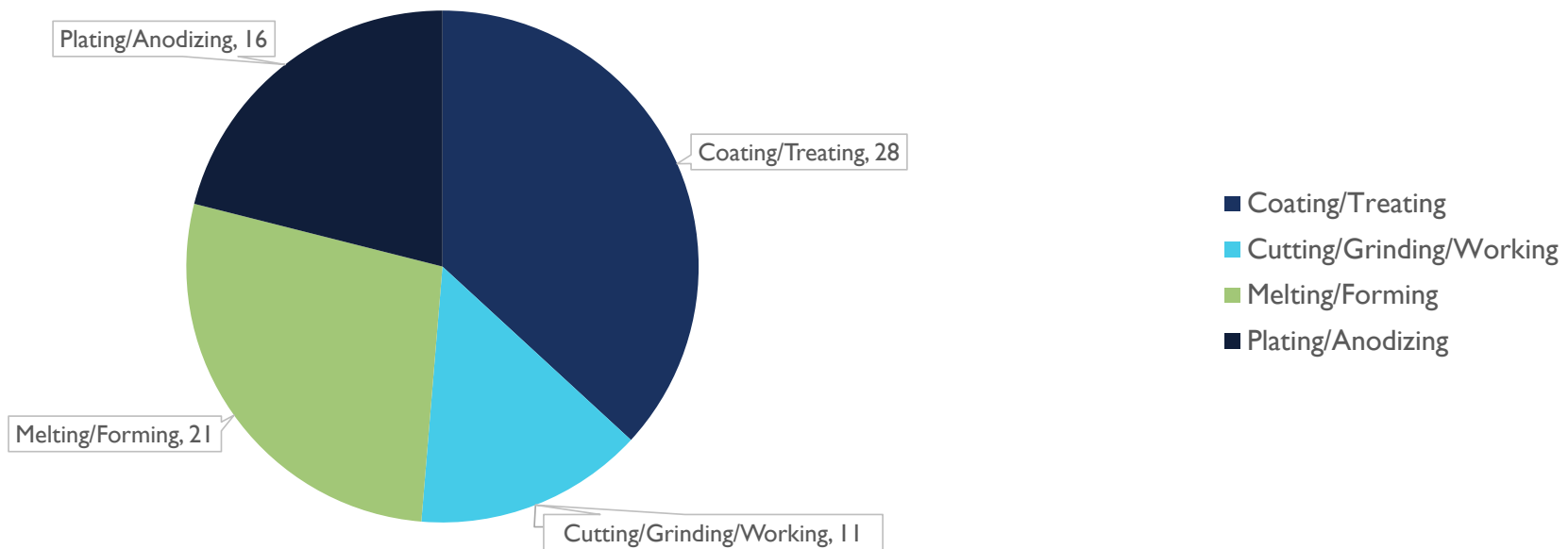


Cutting/Grinding/Working

# IN YOUR COMMUNITY



## SELA Emissions Study Area Metal Processing Facilities



# METAL FACILITY INSPECTIONS



- Process walkthrough
- Permitted/unpermitted equipment (permit conditions, relevant rules, etc.)
- Production review (throughput, production, usage, waste, invoices, etc.)
- Document review (source tests, equipment calibrations, Safety Data Sheets, etc.)
- Sampling (content identification, compliance verification, etc.)
- General observations (housekeeping, equipment condition, maintenance, etc.)

# PUBLIC COMPLAINTS



- **I-800-CUT-SMOG (I-800-288-7664) or online [www.aqmd.gov](http://www.aqmd.gov)**
- Live attendant during business hours (Monday-Friday) or to our standby system off-hours
- Common complaints for metals facilities: dust and/or odors
- Complainant information = confidential
- Complaints can be made anonymously
- ***INSPECTORS RESPOND TO ALL COMPLAINTS!***





# ENFORCEMENT ACTIONS



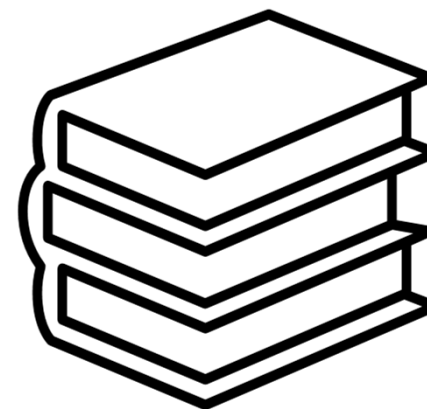
- Notice to Comply (NC) – minor violations found during an inspection or request for additional information; “fix-it ticket”
- Notice of Violation (NOV) – noncompliance with rules, permit conditions, or administrative requirements; a fine or penalty may be imposed
- Hearing Board – to address ongoing noncompliance
  - Variance
  - Order for Abatement



# REFERENCE SLIDE – EXISTING RULES



- 1100 Series (Criteria Air Pollutants)
  - 1107 – Metal Coating
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  - 1125 – Metal Container, Closure, and Coil Coating
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  - 1469.1 – Chromium (+6) emissions from Coating Operations
- Rule 402 – Public Nuisance



# REFERENCE SLIDE - RULES IN THE PIPELINE.....



- Proposed Amended Rule 1107 - Coating of Metal Parts and Products
- Proposed Amended Rule 1407 - Control of Emissions of Arsenic, Cadmium, and Nickel from Non-Chromium Metal Melting Operations
- Proposed Rule 1407.1 - Control of Toxic Air Contaminant Emissions from Chromium Alloy Melting Operations
- Proposed Amended Rule 1426 - Emissions from Metal Finishing Operations
- Proposed Rule 1435 - Control of Toxic Emissions from Metal Heat Treating Processes
- Proposed Amended Rule 1469.1 - Spraying Operations Using Coatings Containing Chromium
- Proposed Rule 1480 – Air Toxics Metals Monitoring

## METAL PROCESSING FACILITIES— INCENTIVES



- April 2020, staff requested CARB allocate ~ \$360,000 in CAPP funds for metal processing facility control or conversion projects in SELA
- Project types include:
  - Emissions control device projects (e.g., installation of HEPA filters)
  - Conversion projects (i.e., switch from Cr6+ to Cr3+ processes at chrome plating facilities)
- Projects will reduce emissions beyond existing standards

# METAL PROCESSING FACILITIES – POTENTIAL CERP POLICIES



- Identify sources of elevated levels of toxic metal emissions
- If persistent or recurring elevated levels of toxic metal emissions are detected at locations through air monitoring activities, determine the source of emissions, collection additional measurements, inspect nearby facilities, and/or request records from the facilities



- Conduct outreach to metal processing facilities and provide information on the South Coast AQMD's Small Business Assistance Program, permitting process, and applicable rules and regulations
- Provide training to facility operators on best management practices and South Coast AQMD rules that address metal processing facilities



- Pursue incentive funds to reduce emissions from metal processing facilities
  - ✓ Transition hexavalent chromium electroplating operations to trivalent chromium
  - ✓ Installing air pollution controls to reduce emissions where emission reductions exceed rule requirements



- Continue rule development or rule amendment efforts to reduce emissions from metal processing facilities and operations

# DISCUSSION



COMMENTS AND QUESTIONS?



# AIR QUALITY PRIORITY – GREEN SPACES

## GREEN SPACES— AIR QUALITY PRIORITY OVERVIEW



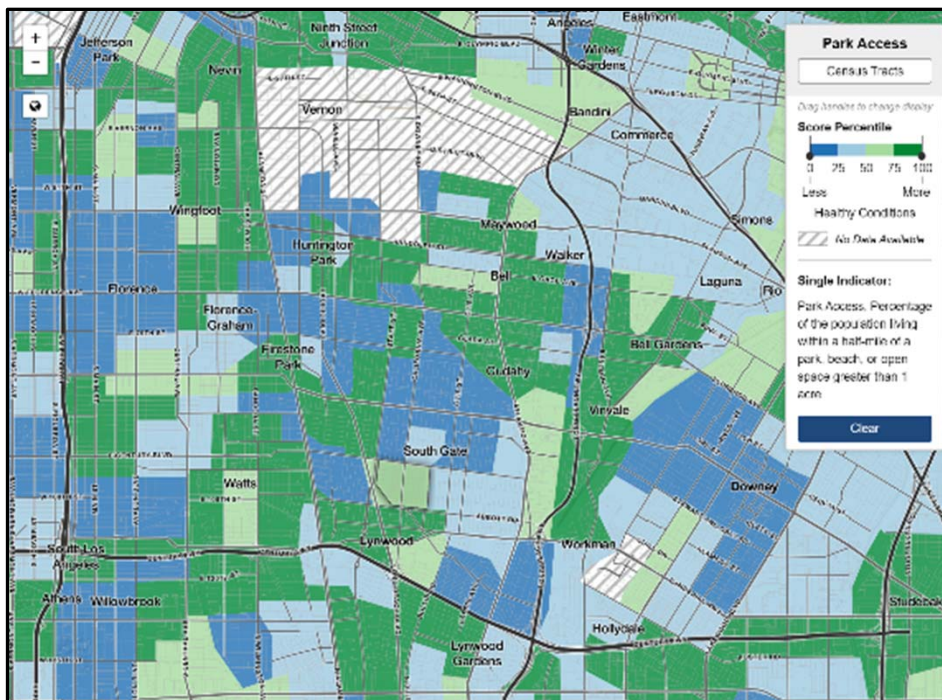
- CSC identified Green Spaces as a top air quality priority
- Community members would like to see increased green space in the SELA community through:
  - Tree planting
  - School gardens
  - Tree buffers near freeways
  - Greenways or tree canopy covers over bike trails



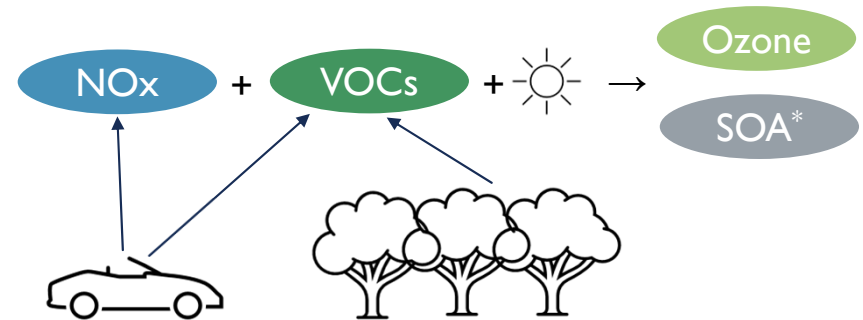
# GREEN SPACES— EMISSIONS BENEFITS FROM GREEN SPACES



## Park Access per Census Tract in SELA



- Map based on the 2010 census
- Map generated by the California Healthy Places Index: <https://map.healthyplacesindex.org/>



- Urban green spaces provide community benefits such as:
  - Air filtration
  - Removing pollution
  - Cooling temperatures
  - Providing food
- Planting low VOC emitting trees does not contribute to air pollution

\* Secondary organic aerosols (SOA) are a suspension of fine solid or liquid particles in gas produced by oxidation of a parent molecule

# GREEN SPACES— AGENCY OVERVIEW



## Land Use Agencies L.A. County and Cities

- CA state law requires that each incorporated city and county adopt a long-term general plan, which includes land use policy, or how communities use land within their boundaries
  - L.A. County**
  - General Plan Land Use Element identifies goals and policies for the distribution, general location, and extent of uses of land (e.g., green space) in unincorporated L.A. County
  - Cities**
  - Each city adopts its own general plan including land use policies related to increasing green space

## Air Districts South Coast AQMD

- Responsible for regional air quality planning, monitoring, and stationary source and facility permitting
  - Past Green Space Efforts**
  - Tree Partnership (2009)
    - Offered matching funding for qualifying tree planting projects initiated by cities and counties
    - Goal to increase the benefits trees provide in reducing criteria pollutants such as ozone, toxic air pollutants, and greenhouse gases

# GREEN SPACES— POTENTIAL GREEN SPACE PROGRAMS IN SELA



- Coastal Conservancy LA Urban Greening Project (South Gate)
- California Natural Resources Agency Urban Greening Grant Program (Walnut Park)
- LA County Green Zone Ordinance
- Nonprofits Organizations
  - From Lot to Spot
  - Tree People
  - La Neighborhood Land Trust
  - Farm LA



*Program details available in Green Spaces Green Paper Draft*

# Green Zones Program



**LA County Department of Regional Planning**

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**Green Zones Program  
Presentation to SELA AB 617/ CSC**

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**August 27, 2020**

LA COUNTY DEPARTMENT OF REGIONAL PLANNING



# Green Zones Program Background & Goal

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## County Board motion in 2015

- Develop land-use strategies to improve the public health and quality of life of residents in EJ communities.
- Address incompatible land uses in proximity to sensitive uses by changing regulatory requirements.
- Revise/add General Plan policies to support these goals.



# Green Zones Program Components / Overview

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**Environmental Justice  
Screening Method**



**Zoning Requirements**



**Stakeholder  
Engagement**



**Business Incentive Research**

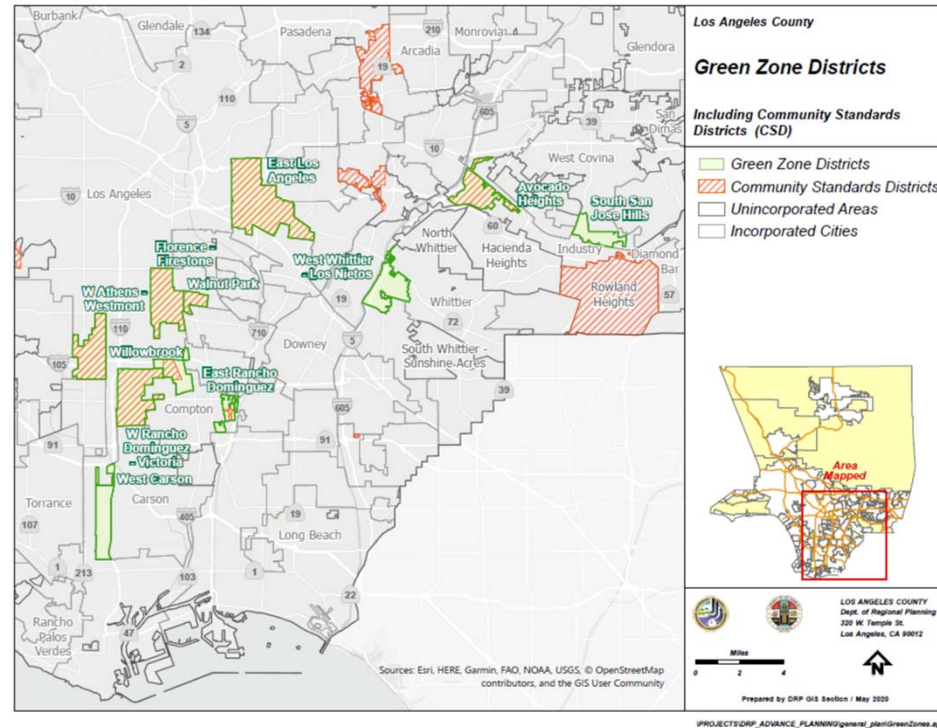


**Agency Coordination**



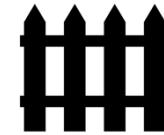
# Identification of Green Zone Districts

- Avocado Heights
- East Los Angeles
- East Rancho Dominguez
- Florence-Firestone
- South San Jose Hills
- Walnut Park
- West Athens-Westmont
- West Carson
- West Rancho Dominguez-Victoria
- West Whittier-Los Nietos
- Willowbrook



# Green Zone District Standards

- New development standards for specific industrial, recycling, or vehicle-related uses within 500 feet of existing sensitive uses on other properties.
- New development standards would require a Conditional Use Permit for specific uses.
- Nonconforming uses must comply within 3, 5 or 10 years of ordinance adoption.
  - Applications and steps to comply within 1-5 years of ordinance adoption.
  - Proactive outreach and monitoring and inter-agency coordination will be part of this program.



Fencing



Solid Wall  
Screen



Landscape  
Buffer



# Development Standards

- Landscaping buffers
- Trees for every 100 sq. ft. of landscaping
- Required maintenance and watering system



# Defining Sensitive Uses

- Create a Countywide definition of sensitive uses.
- Helps apply new Green Zone standards to industrial, recycling, and vehicle-related uses in specific communities.
- Also establishes standards for new sensitive uses when they locate adjacent to or adjoining legally, existing industrial, recycling and solid waste, or vehicle-related.
  - Designed to address new multifamily development in commercial and mixed-use zones.
  - Discourage further development of incompatible uses in industrial areas



Solid Wall  
Screen



Landscape  
Buffer



# Recycling and Waste Management Revisions

- New permitting requirements for recycling and waste management, including automobile dismantling yards, pallet yards, organic/solid waste facilities, and supermarket accessory recycling collection centers.
- Current regulations lump uses into one category: junk & salvage, which makes it difficult to regulate with appropriate permitting conditions.
- More stringent entitlement process and standards for new development subject to a CUP for future facilities. Will include minimum distance to sensitive uses.
- Identifies new organic waste and recycling uses to be in line with new state laws for waste diversion and provide an avenue for permitting with conditions.



Recycling



# Storage Enclosures for Recycling and Solid Waste

- Add additional requirements to current development requirements for solid waste and recycling storage enclosures
- Applies to new commercial and industrial development or multifamily residential development of four or more units, and to expansion of existing development by 50% or more of the existing floor area. The revisions would not apply to residential development less than 4 units.



Solid Wall  
Screen



# General Plan Amendment Revisions

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- County General Plan Amendment to ensure consistency with proposed with Title 22 changes and promote environmental justice policies.
- Propose zone change to 28 parcels in Florence-Firestone, West Rancho Dominguez, West Carson, and Wilmington and proposed land-use designation change for 15 of those parcels for consistency.



# CEQA, EIR & Health Impact Assessment

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## EIR

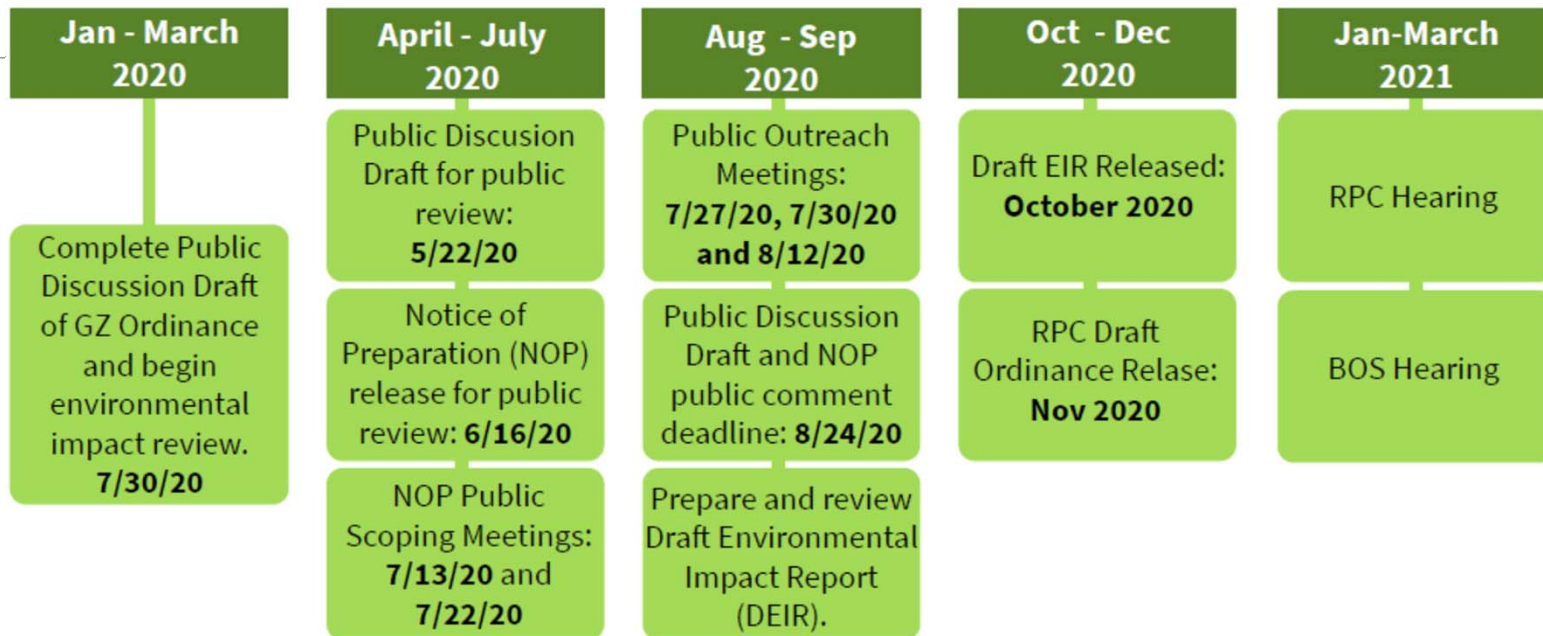
- Inform government decision makers and the public about potential significant environmental impacts of proposed projects.
- Identify ways that environmental impact(s) can be avoided or significantly reduced
- Enhance public participation in the environmental review process through scoping meetings, public notice, public review, hearings, and the judicial process.

## HIA

- Evaluate potential impacts of the program with relation to:
  - Exposure to air pollutants and toxins
  - The use of green space to buffer incompatible uses
  - Impacts on accessibility and mobility
  - economic vibrancy of the community



# Project Schedule



## Opportunities to Participate

- A. Revised Public Hearing Draft Ordinance (Fall 2020)
- B. Public Review of Draft PEIR (Fall 2020, 45 days Public Review)
- C. Regional Planning Commission (RPC) Hearing (Early 2021)
- D. Los Angeles County Board of Supervisors Hearing & Final EIR (Early 2021)



# Green Zones Program Contact

## *Contactos del programa de zonas verdes*

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Project Manager: Tahirah Farris  
Email: [tfarris@planning.lacounty.gov](mailto:tfarris@planning.lacounty.gov)

Project Website:  
<http://planning.lacounty.gov/greenzones>

Project Email:  
[GreenZones@planning.lacounty.gov](mailto:GreenZones@planning.lacounty.gov)

Social Media:  
Twitter, Facebook, Instagram: @LACDRP





# GREEN SPACES— POTENTIAL CERP POLICIES



- Identify sources and/or programs that can provide funding for green space expansion



- Agencies or entities to identify sources and/or programs that can provide funding for green space



# DISCUSSION

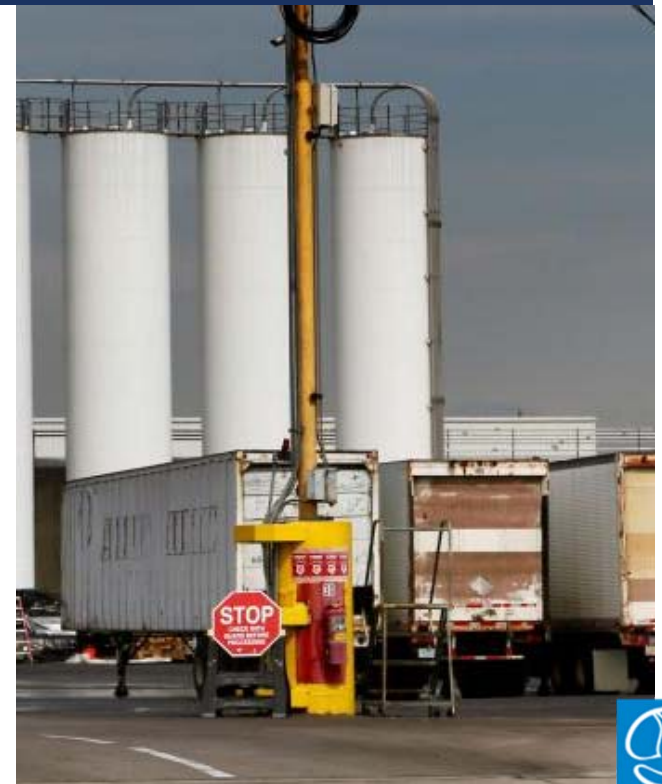


QUESTIONS AND COMMENTS?

# EXIDE CLEAN-UP EFFORTS

- Exide Technologies was a battery recycling facility in Vernon which caused lead soil contamination in SELA community
- Closure operations began in Nov 2017 and overseen by DTSC
- In the Spring of 2020, contractors conducting residential clean-up operations were issued Notices of Violation (NOVs) by South Coast AQMD due to trackout and fugitive dust concerns\*
- In June 2020, Exide Technologies was issued a NOV by South Coast AQMD for not fulfilling Rule 1420.1 Compliance Plan requirements (facility is now in compliance)\*

\*Updates and the most recent information can be found here: <http://www.aqmd.gov/home/news-events/community-investigations/exide-updates/compliance-permitting-toxics#RecentC>



## AB 617 – 2020 COMMUNITY STEERING COMMITTEE SCHEDULE (SELA)

January 9, 2020	<b>Community Kick-off Meeting</b> Salt Lake Park (Huntington Park) 6:00 – 8:30 pm	July 23, 2020	<b>Workshop and Community Steering Committee Meeting</b> Virtual Meeting 4:00 – 6:00 pm
February 6, 2020	<b>Community Steering Committee Meeting</b> Ross Hall at Veterans Park (Bell Gardens) 6:00 – 8:30 pm	August 27, 2020	<b>Workshop and Community Steering Committee Meeting</b> Virtual Meeting 4:00 – 6:00 pm
March 12, 2020 and April 9, 2020	<b>Community Steering Committee Meetings –</b> <div style="text-align: center; color: red; font-weight: bold; font-size: 1.2em;">Postponed</div>	September 17, 2020	<b>Workshop and Community Steering Committee Meeting</b> Virtual Meeting 4:00 – 6:00 pm
May 7, 2020	<b>Community Steering Committee Meeting</b> Virtual Meeting 4:00 – 6:00 pm	October 8, 2020	<b>Community Steering Committee Meeting</b> Virtual Meeting 4:00 – 6:00 pm
June 11, 2020	<b>Community Steering Committee Meeting</b> Virtual Meeting 4:00 – 6:00 pm	November 5, 2020	<b>Community Steering Committee Meeting</b> Virtual Meeting 4:00 – 6:00 pm