

# AB 617 SOUTH LOS ANGELES COMMUNITY STEERING COMMITTEE

December 2, 2021



# Language Justice Announcement

## During the Event

### SLOW DOWN

Facilitators, presenters, trainers, participants... anyone speaking during the event, **speak at a moderate pace**. Take a breath after each sentence, **take a pause** after switching speakers and asking questions. Slowing down supports **EVERYONE**, not just interpreters.



### SPEAK-UP

Speak loud and clear! Ideally, **using headphones with a mic**. Interpreters need to be able to hear the speaker over the sound of their own voice when doing simultaneous interpretation.

### SAY YOUR NAME EACH TIME YOU SPEAK

Folks listening to the interpretation might only hear the interpreters voice, so they will not notice when a new person is speaking.



### ONE PERSON AT A TIME

Interpreters can only interpret for **one person at a time**, and they don't want to be put in the position of having to decide which voice to privilege over another.

### LANGUAGE IS NOT A BARRIER

To the contrary, when we have multiple languages in a space, **we have multiple cosmovisions**, and multiple ways of understanding the world. We have the opportunity to expand and deepen our perspective, our imaginations, the possible strategies, tactics, and visions for what is possible.



# Today's Agenda

**PART 1: Oil and Gas / Mobile Sources Recap / Next Steps**

**PART 2: Defining Air Quality Priorities Auto Body Shops / Metal Facilities**

**PART 3: BACT / BARCT / Alternatives: Auto Body Shops / Metal Facilities**

**PART 4: Diving into Solutions for Auto Body Shops / Metal Facilities**

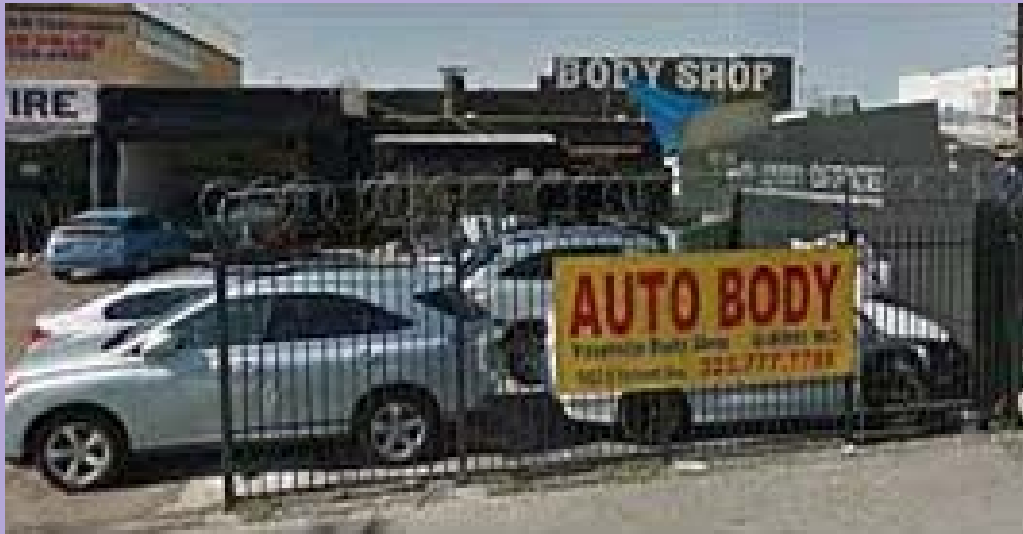
**PART 5: Defining Next Steps**

**PART 6: Public Comments**

# PART 1: Oil and Gas / Mobile Sources Recap / Next Steps



# PART 2: Defining Air Quality Priorities Auto Body Shops / Metal Facilities



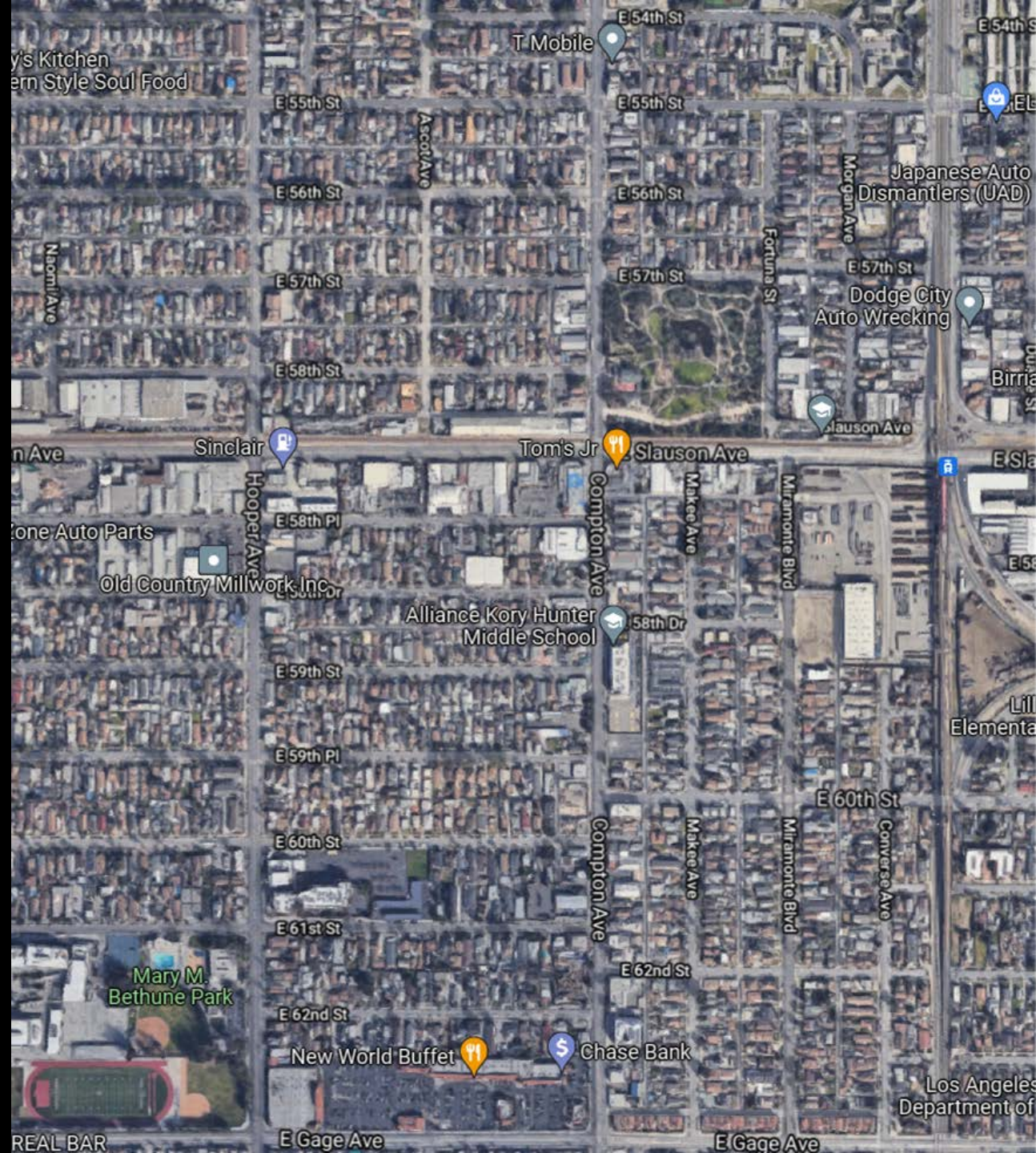


**METAL  
MANUFACTURING  
CASE STUDY**





# California Metal X Lead-Free Metal Brass Alloys For Water Supply Systems



## CONTEXT & BACKGROUND:



For the purpose of this case study, we focused on a specific metal manufacturing facility—California Metal X. CMX is a metals processing facility that supplies metal alloys to potable water systems.

CMX operations and equipment are continuously modified to reduce pollution burden.



## THE PROBLEM



Copper-based brass alloys have long been used for potable water supply components due to the durability and corrosion resistance of copper.

In the United States, the 1974 Safe Drinking Water Act (SDWA) was enacted to ensure safe drinking water in every community by setting maximum concentration limits for chemicals that adversely impact water quality, including copper and lead.

## POLLUTION BURDEN & HEALTH IMPACTS:



Lead is:

- Considered an extremely toxic element with no known safety threshold.
- A potent developmental toxic and increased evidence has shown that health impacts can arise even at very low concentrations impacting cognitive ability, particularly in children.
- Lead-bearing brass alloys in water supply systems have contributed to increased exposure to lead

## REGRETTABLE SUBSTITUTIONS:



- In 2011, the SDWA dictated a phase out of leaded brass potable water supply components.
- This law enabled metal industries to switch to bismuth brass alloys which was recommended as a safer alternative. However, bismuth when extracted contains toxic lead.
- By enforcing this law, California proliferated a switch to a regrettable substitution—bismuth brass—without considering the impacts of bismuth’s extraction, production, and disposal which enable the continued lead-contamination in water and air pollution burden in frontline communities.



## BEST PRACTICES & CONTROL TECHNOLOGIES:



- CMX implementation of best practices and control technologies has created positive environmental health benefits and reduced air pollution.
- Some of the best practices include using a water filtration system to prevent toxic metals from entering the environment and using wet sweeping to wash metal particulates into the filtration system to minimize air emissions.

## NON-TOXIC SUSTAINABLE ALTERNATIVES:



- Silicon brass is a less toxic, more sustainable, leadfree substitute to lead-bearing and bismuth-bearing brass alloys for potable water supply applications.
- Reducing lead concentration of silicon brass to the lowest achievable level of 0.02% would further reduce adverse impacts.

## JUST TRANSITION & CLEAN PRODUCTION:



By switching to a clean production approach, safer alternative silicon brass, and best available control technologies, metal facilities can reduce frontline community's exposure to lead in water and air pollution impacts related to manufacturing brass alloys



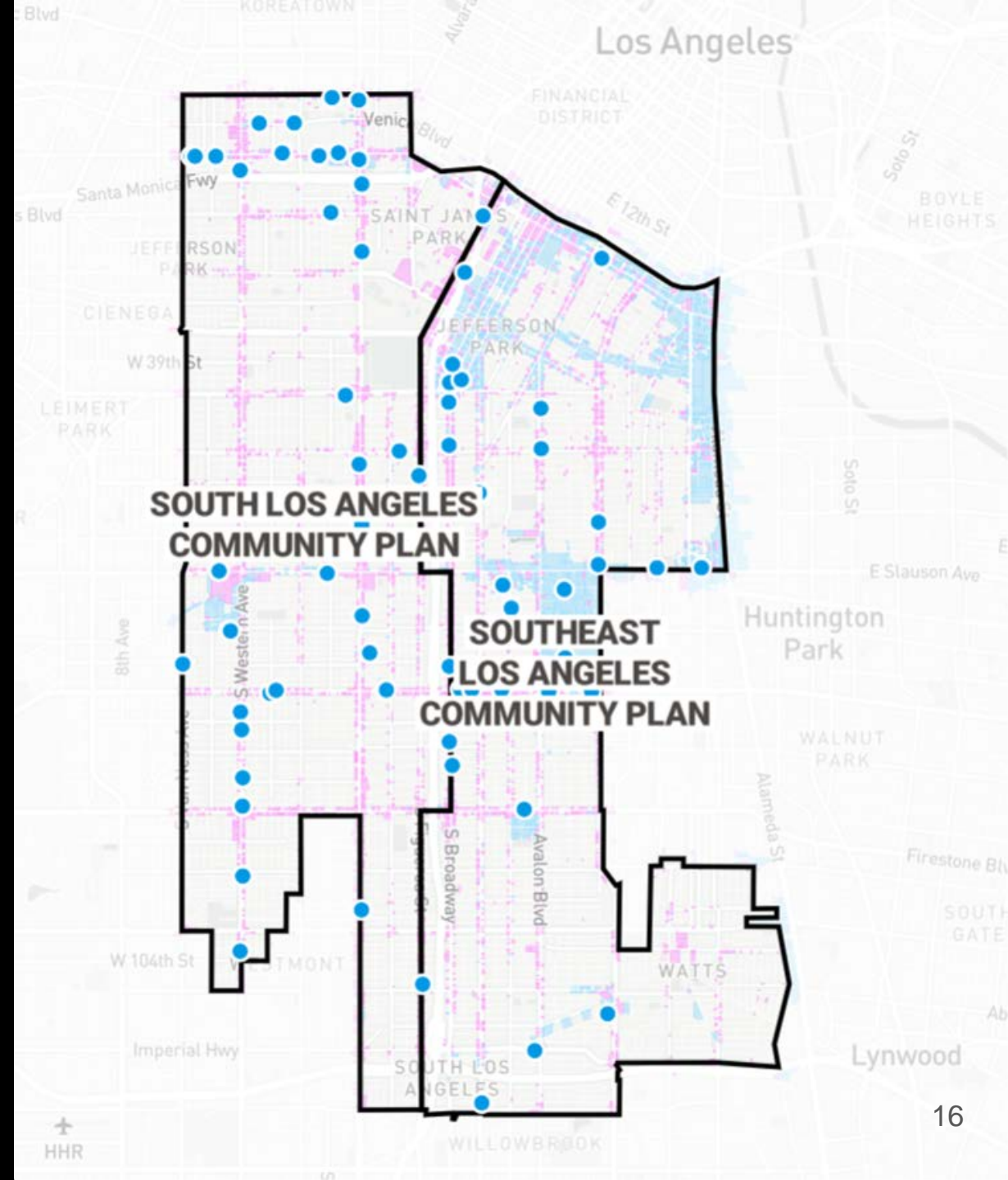
# AUTO BODY SHOPS CASE STUDY



## THE PROBLEM:

There are approximately more than 55 auto body shops located in South Central Los Angeles.

In addition, there are countless auto body shops located in South LA that are missing or misclassified by regulatory agencies which leads to inaccurate data on air pollution emissions and its impacts on public health.



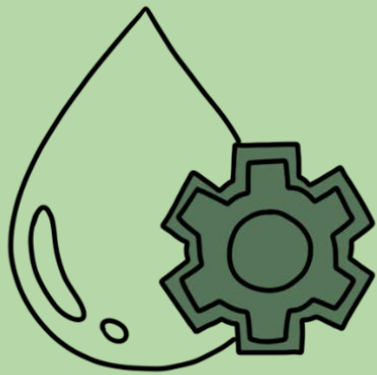
## POLLUTION BURDEN & HEALTH IMPACTS:



- The paints or coatings used at auto body shops may cause odors and emit air pollutants, including volatile organic compounds (VOCs) or toxic air contaminants, such as metals.
- Other operations can result in emissions of fine dust from metal compounds (e.g., chromium and nickel).
- These pollutants can contribute to health problems including a number of respiratory effects and are the leading cause of occupational asthma.



# BEST PRACTICES & CONTROL TECHNOLOGIES:



**TABLE 4: TOP 6 EPA BEST PRACTICES FOR AUTO BODY SHOPS**

| Category   | Benefits   |
|--|--|
| <b>Requirements:</b>   |  |
| Ventilated spray booths with filters that are at least 98% efficient                     | <ul style="list-style-type: none"> <li>Removes paint overspray from the air</li> <li>Less contact with hazardous coating materials</li> </ul>                |
| Prohibit clean spray guns by spraying solvent through the gun, creating an atomized mist | <ul style="list-style-type: none"> <li>Minimizes contact with hazardous solvents</li> <li>Minimizes emissions of hazardous chemicals into the air</li> </ul> |
| <b>Best Practices:</b>   |  |
| Use low VOC or water-based cleaners, primers, and base coats                             | <ul style="list-style-type: none"> <li>Reduces or eliminates VOC emissions</li> </ul>  |
| Keep all containers shut when not in use   | <ul style="list-style-type: none"> <li>Reduces emissions and occupational exposure</li> </ul>  |
| Make Material Safety Data Sheets available to shop workers                               | <ul style="list-style-type: none"> <li>Increases worker awareness of toxicity of chemicals leading to greater care in chemical use</li> </ul>                |

# Defining Air Quality Priorities for Auto Body Shops / Metal Facilities

## Jamboard Activity Steps:

1. Walking through the community
2. The facility itself
3. What else we need to account for



# PART 3: BACT/BARCT/Alternatives: Auto Body Shops/Metal Facilities



**Michael Morris,  
Planning and Rules Manager**



**Pippin Mader,  
Staff Air Pollution Specialist**



# Auto Body and Metal Processing Requirements

# Background – Autobody Requirements

- At last CSC meeting, discussed U.S. EPA best practices for autobody shops
- South Coast AQMD rules go beyond U.S. EPA's best practices for autobody shops
- Two primary rules that regulate autobody spraying operations
  - Rule 1151 – Motor Vehicle and Mobile Equipment Non-Assembly Line Coating Operations
  - Rule 1171 – Solvent Cleaning Operations
- Operators conducting autobody spraying operations must meet requirements in South Coast AQMD rules

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| Make Material Safety Data Sheets available to shop workers                               | <ul style="list-style-type: none"> <li>■ Increases worker awareness of toxicity of chemicals leading to greater care in chemical use</li> </ul>                  |



# Requirements for Autobody Spraying Operations

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Limits VOC Content of Coatings and Solvents



Rules limit the VOC content limits for coatings and solvents and reflect Reasonably Available Control Technology

Prohibits Materials with Toxic Air Contaminants

| Hazardous components | CAS No.    | EMFSA      | Concentration | Classification   |
|----------------------|------------|------------|---------------|--|
| Isocyanate           | 27085-20-4 | 0.1 - 10 % |               | H350 - Carcinogenic  |
| Isocyanate           | 27085-20-4 | 0.1 - 10 % |               | H350 - Carcinogenic, H360 - Reproductive toxicity, H410 - Very toxic to aquatic life |

Rules prohibit use of coatings and solvents with specific toxic air contaminants

Requires Methods to Maximize Transfer Efficiency



Rules specify minimum transfer efficiency to reduce overspray and waste

Requires Use of Spray Enclosure



Permitted spray enclosure required if >1 gallon per day sprayed

# Requirements for Autobody Spraying Operations (Continued)

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Implement Best Management Practices



Keep solvents and solvent-laden waste in closed containers

Require Filters to Reduce Particulate



Filters limit particulate emissions and reduce overspray

Monitor Control Equipment Operating Properly



Manometer to ensure that spray booth operating properly

Prohibit solvent atomization



Solvent cleaning conducted in equipment that is closed during cleaning



# South Coast AQMD Metal Processing Rules

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## Metal Melting Rules

- Rule 1407
- Rule 1407.1
- Rule 1420
- Rule 1420.1
- Rule 1420.2



## Metal Heating Rules

- Proposed Rule 1435



## Metal Processing Rules

- Rule 1426
- Rule 1430
- Rule 1469
- Rule 1469.1
- Proposed Rule 1426.1
- Proposed Rule 1445



## Monitoring and Sampling

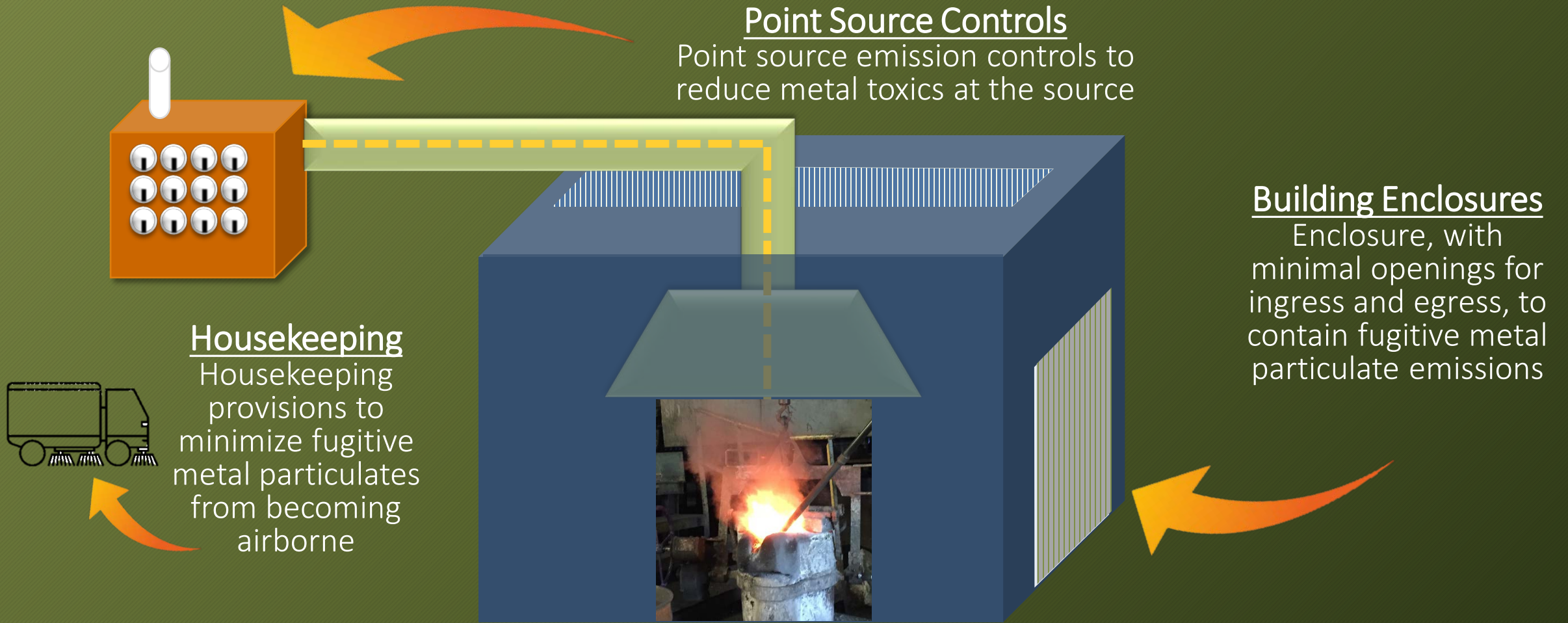
- Rule 1480





# General Approach: Metal Processing

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## Point Source Controls

Point source emission controls to reduce metal toxics at the source

## Building Enclosures

Enclosure, with minimal openings for ingress and egress, to contain fugitive metal particulate emissions

## Housekeeping

Housekeeping provisions to minimize fugitive metal particulates from becoming airborne

# Point Source Controls

- Vent exhaust to air pollution control equipment to capture and control toxic metal particulates
- Air pollution equipment includes:
  - Baghouse
  - Scrubber
  - Electrostatic precipitator
  - High efficiency particulate air (HEPA) filter
  - Ultra-low particulate air (ULPA) filter





# Building Enclosures

- Conduct metal processing in buildings that are completely enclosed or minimize cross-draft conditions
- Building improvements include:
  - Automated doors
  - Overlapping plastic strip curtains
  - Vestibules
  - Barrier
  - Airlock system





# Housekeeping

- Enhanced measures to collect potential fugitive metal dust and prevent re-entrainment from foot traffic, vehicular traffic, wind, etc.
- Housekeeping measures include:
  - Routine cleaning of areas near melting operations
  - Prohibit dry sweeping and use of compressed air
  - Additional periodic cleaning of area where dust may accumulate
  - Requirements for material storage and transport material



# Permitting for New Auto Body and Metal Processing Equipment

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- Operators must have a South Coast AQMD Permit for equipment that emits air contaminants
- Permits are issued only if the following rules and regulations are met:
  - Regulation XIII – New Source Review requirements
  - Rule 1401 – New Source Review of Toxic Air Contaminants
  - Equipment can meet the requirements in existing rules and regulations
- Regulation XIII and Rule 1401 ensures new, modified, or relocated equipment with an emission increase meets:
  - State of the art pollution controls are installed – referred to as Best Available Control Technology
  - Permits have emission limits to ensure health risks are below health risk thresholds in Rule 1401



# CARB Technology Clearinghouse – Modules and Tools

## BACT Module



**BACT Guidelines**

**BACT Determinations**

**BACT References (Out-of-State)**

## Rules Module



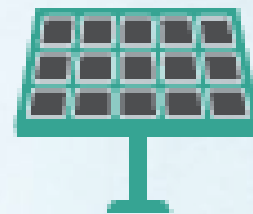
**District Rules (Current)**

**District Rules (Historical)**

**CARB Rules (ATCMs)**

**CARB Rules (Other)**

## Next Gen Module



**Residential Backup Power**

**Commercial Backup Power**

**Appliances**

## Support



**Non-Attainment Tool**

**Training Videos**

**Supporting Webpages**

**Stationary Source Q&A**

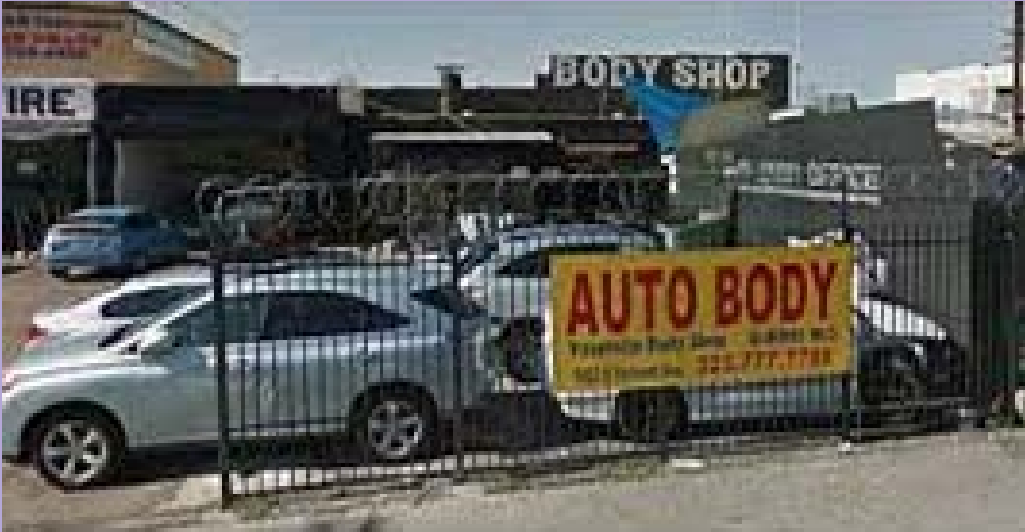


Live Tool



Under Construction

# PART 4: Diving into Solutions for Auto Body Shops / Metal Facilities



## World Cafe Groups Activity Instructions

### Understanding

Air pollution solutions effectiveness in terms of individual and community protection

### Ground Truthing

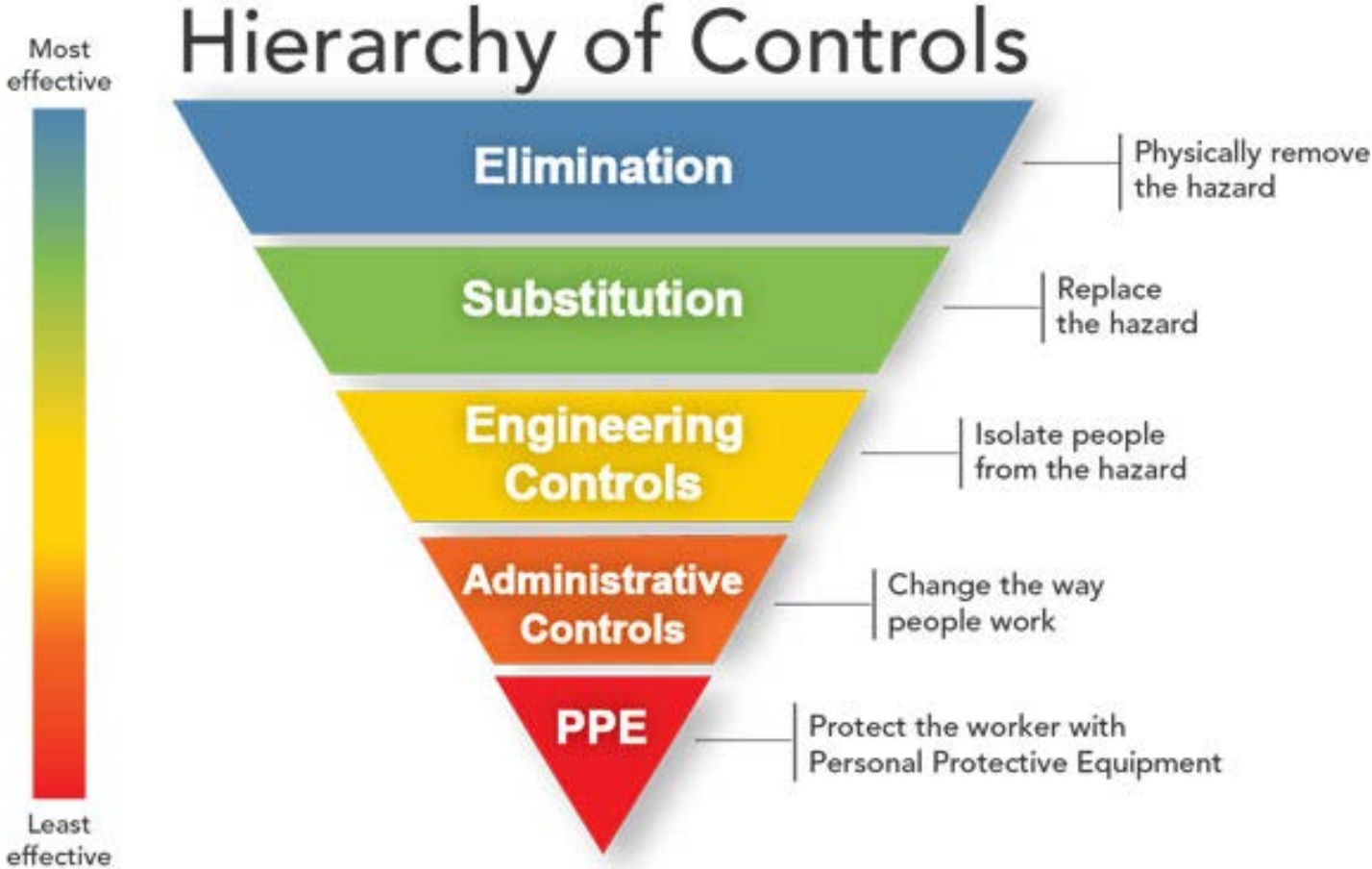
Solutions and actions to reduce air pollution and identify gaps and other potential needed solutions

### Discussing

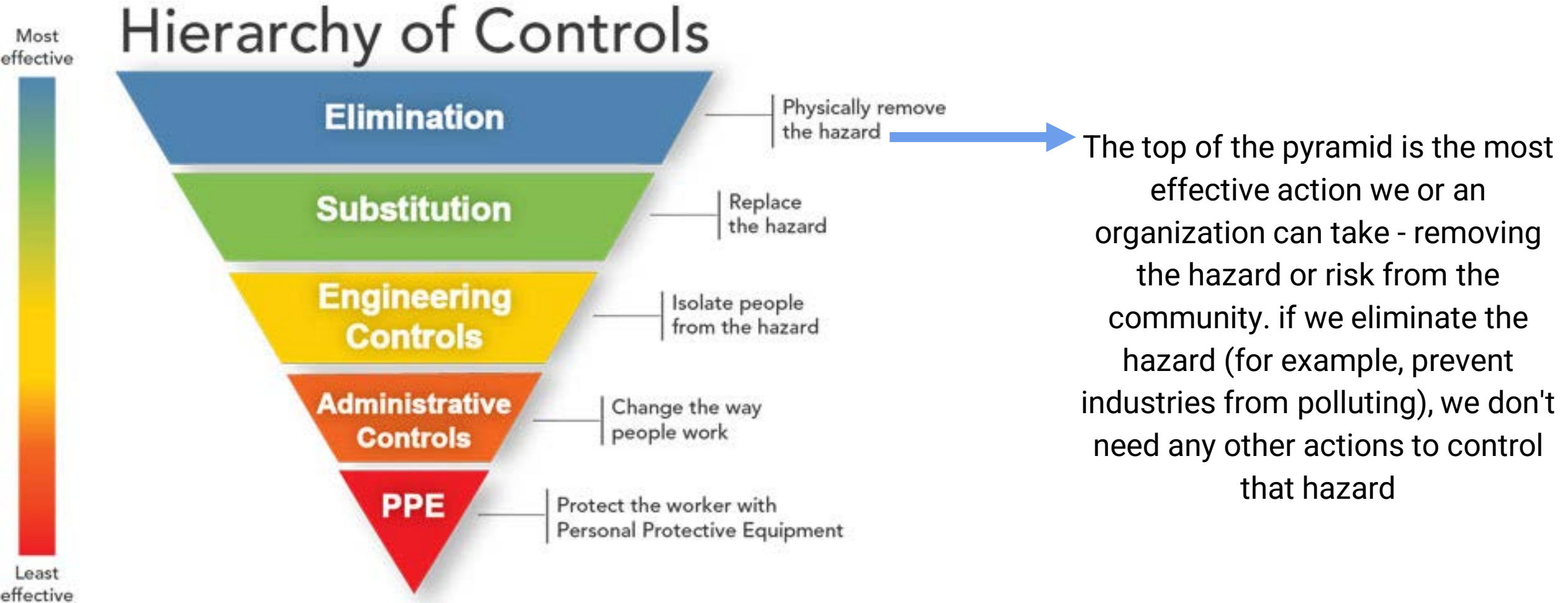
And envision other potential solutions and how we can go above and beyond

## Understanding

Air pollution solutions effectiveness in terms of individual and community protection

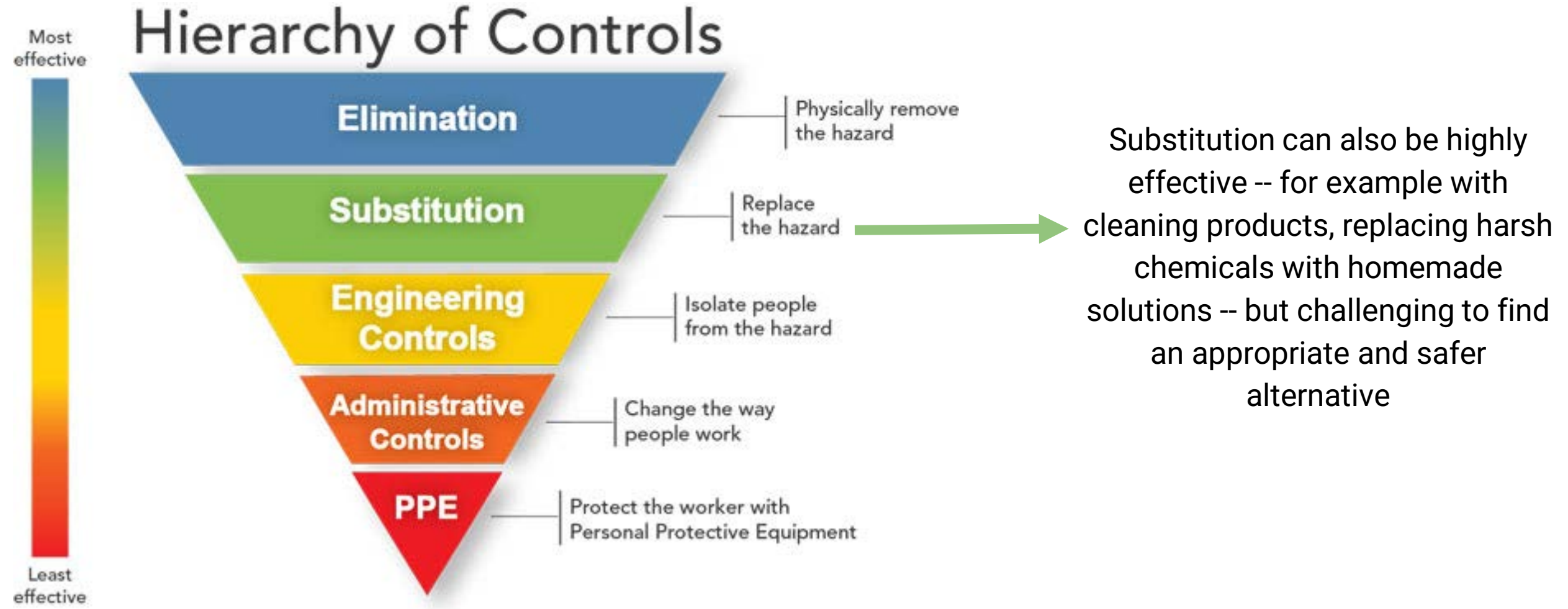


# Hierarchy of Controls: Elimination

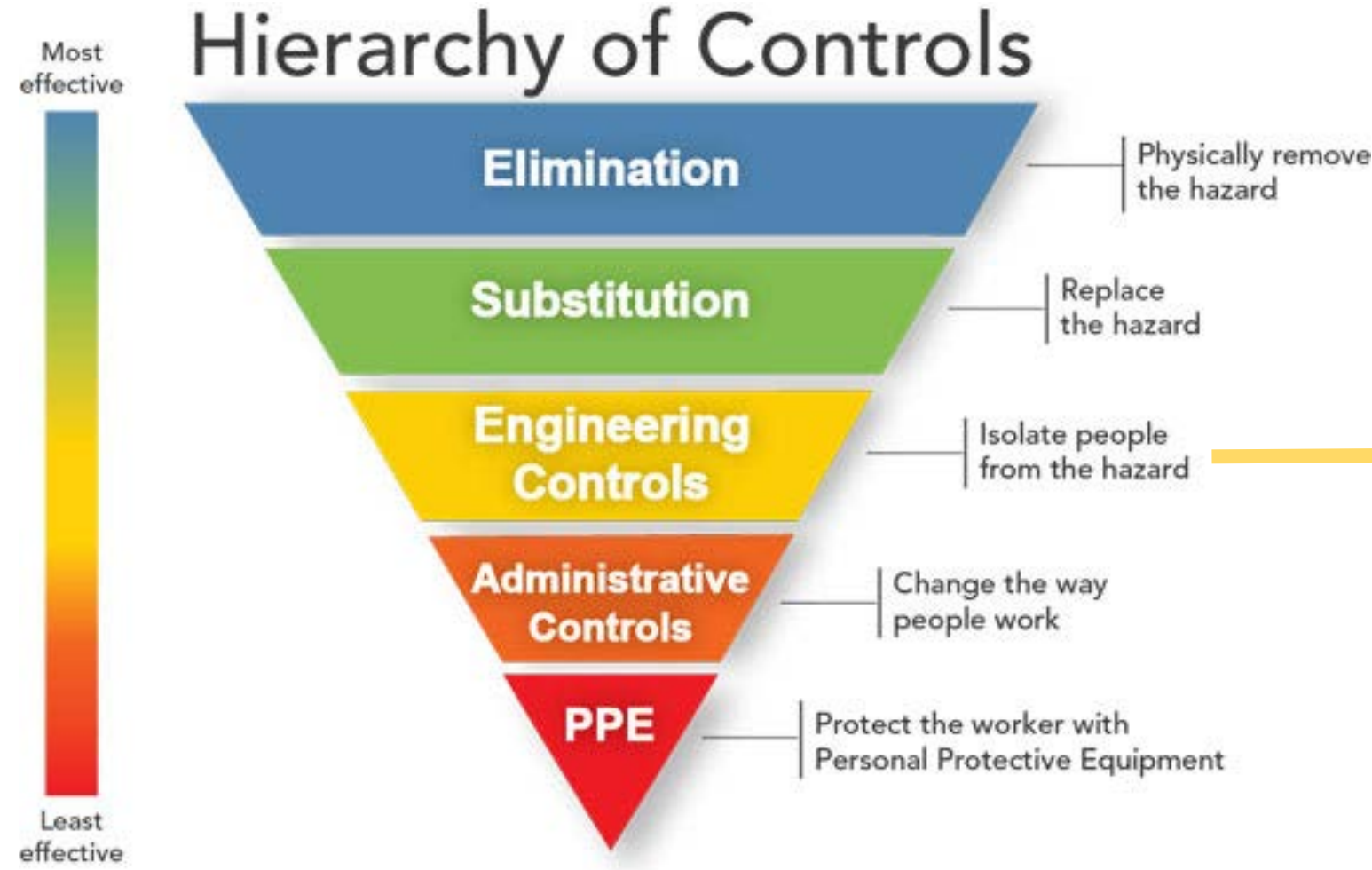




# Hierarchy of Controls: Substitution



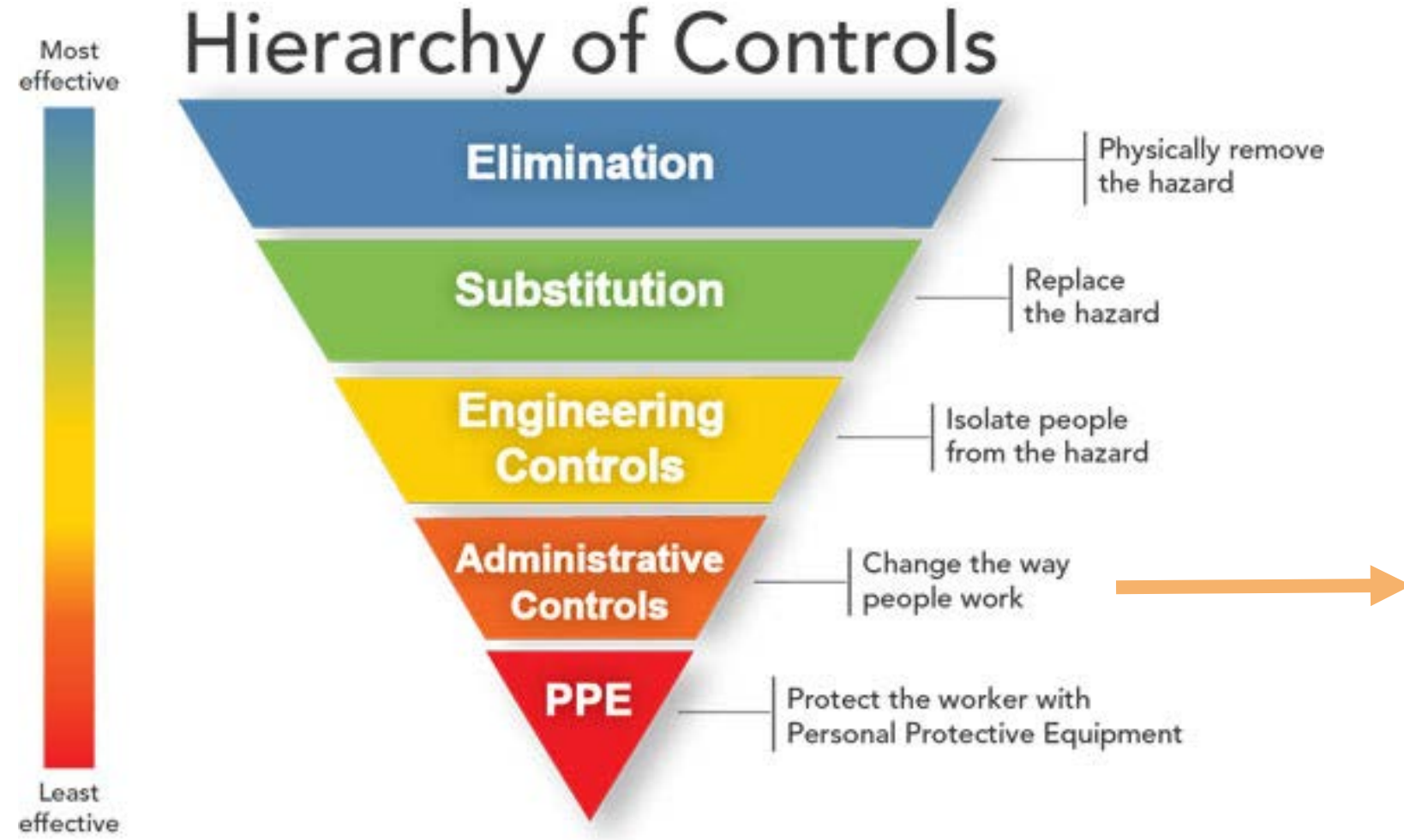
# Hierarchy of Controls: Engineering Controls



As we go down the pyramid, the actions are less effective at controlling the hazard and preventing harm

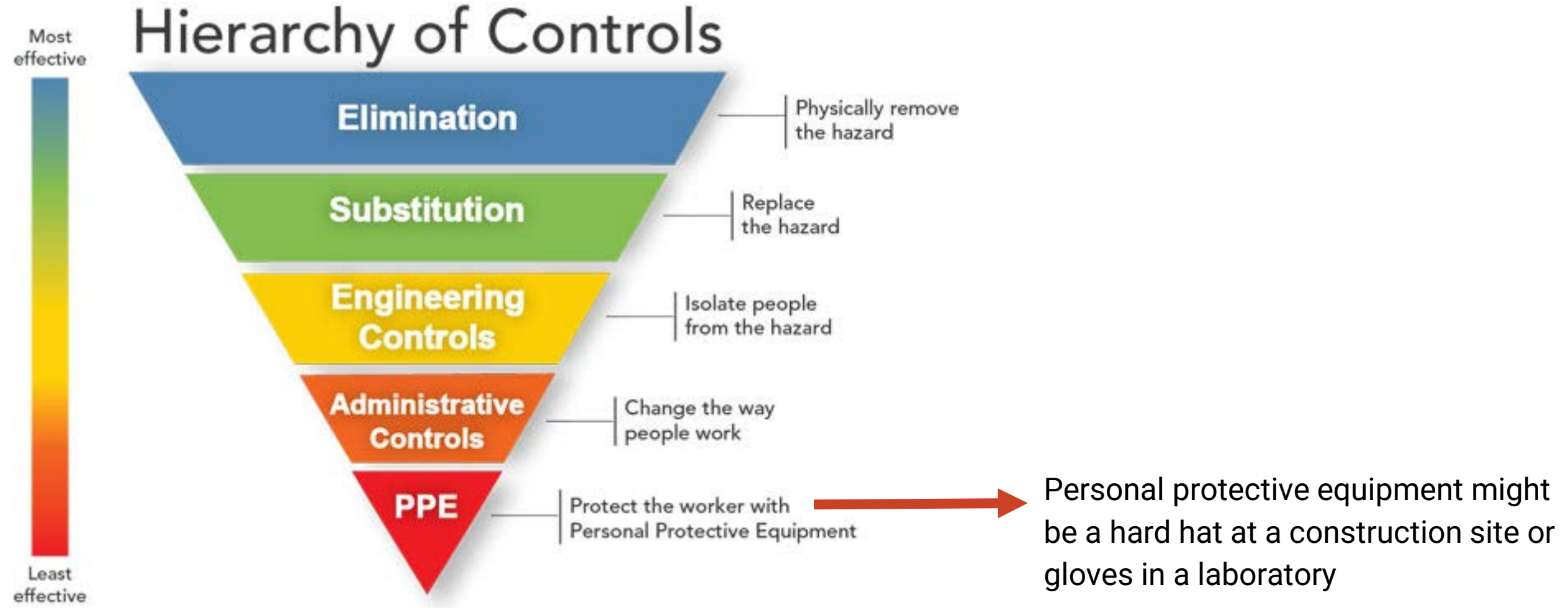
engineering controls are usually mechanical solutions to prevent the hazard or toxin from reaching people - in a workplace, this might be a physical barrier to keep chemicals away from workers. In a community setting, it could be a fence around a construction site or land use restrictions.

# Hierarchy of Controls: Administrative Controls



The controls at the bottom of our pyramid are both the least effective actions and also put the most burden on the individual instead of the organization

# Hierarchy of Controls: Protective Personal Equipment



# World Cafe Groups Activity Instructions

## Ground Truthing

Solutions and actions to reduce air pollution and identify gaps and other potential needed solutions

## Discussing

And envision other potential solutions and how we can go above and beyond

1. Where do you think “this CERP action/ solution” falls within the hierarchy of controls? Does it get at protecting individuals or does it move us toward elimination of air pollution coming from this source?
  - a. If it falls within substitution or elimination (most effective)
2. Do you think “this CERP action/solution” could be strengthened to make it more effective? If so How?
  - a. If it falls within the protecting the individual (least effective)
  - b. If it doesn’t get us to elimination of air pollution from this source, does it help us regulate it while we move toward a green alternative solution? (e.g. renewable energy)
3. What are other actions do you think need to be taken to reduce emissions in this industry?



# World Cafe Groups: Jamboard Activity

English Group: Mrs Linda

Groundtruthing Solutions for Auto Body Shops

## CERP ACTIONS

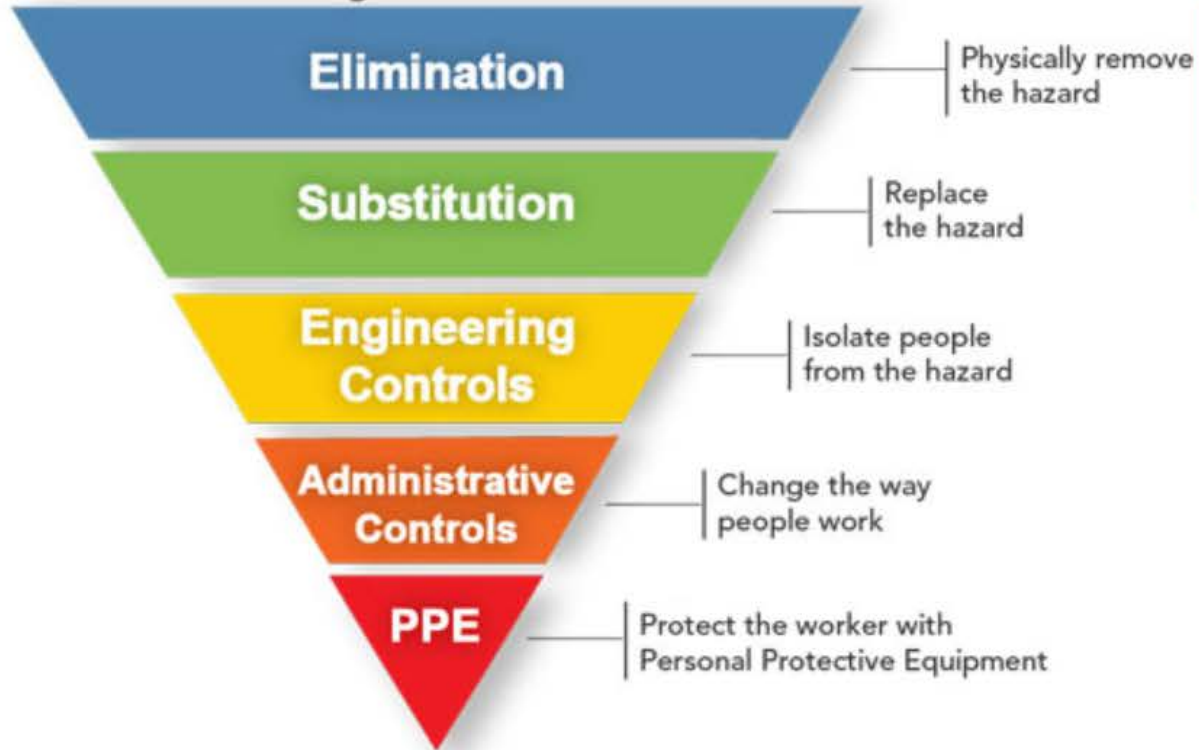
Action 1: Conduct targeted outreach to auto body shop owners and operators in the community

Action 2: Provide public outreach on South Coast AQMD's complaint system

Action 3: Provide the CSC quarterly or biannual updates on enforcement or outreach activities



## Hierarchy of Controls



SLA CSC SOLUTION

SLA CSC Solution

Where do you think "this CERP action/ solution" falls within the hierarchy of controls? Does it get at protecting individuals or does it move us toward elimination of air pollution coming from this source?  
Do you think "this CERP action/solution" could be strengthened to make it more effective? If so How?  
What are other actions do you think need to be taken to reduce emissions in this industry?

# PART 5: Defining Next Steps



**Kathryn Higgins,  
Acting Director of Community Air  
Programs - AB 617**

# CSC MEETING TIMELINE

August 5, 2021

- CSC Mtg.
- Finalized AQ Priorities

October 19, 2021

- Canceled for program pause

September 2, 2021

- CSC Mtg.
- CERP & CAMP Development Overview

November 16, 2021

- CSC Mtg.
- Metals and Auto Body Shops
- Draft CERP Actions

September 14, 2021

- Subcommittee Mtg.
- Mobile Sources

December 2, 2021

- CSC Mtg.
- Metals and Auto Body Shops Continued

June 3, 2022

- Governing Board meeting for CERP consideration

September 30, 2021

- Subcommittee Mtg.
- Oil and Gas

January 13, 2021\*

- CSC Mtg.
- Oil and Gas Continued

October 7, 2021

- CSC Mtg.
- Emissions Inventory
- General Industrial

February 3, 2021\*

- CSC Mtg.
- Mobile Sources Continued

\* Tentative topic schedule