

San Diego County Air Pollution Control District (District)



San Diego County
**Air Pollution
Control District**

BAE Systems - San Diego Ship Repair Public Meeting

March 9, 2022

Meeting Agenda



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SDAPCD

Purpose of this meeting

Air Toxics and the “Hot Spots” Program

Facility operation, emissions, and health risk for 2017 emissions

Next Steps (Risk Reduction Plan)

Public Comment

Receive public comments

Answer questions

SDAPCD staff and BAE Systems staff

California Air Toxics “Hot Spots” Program (Assembly Bill 2588)



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Program Goal

- Protects the public’s right to know about toxic air contaminant emissions and how these emissions can potentially impact public health; and,
- Requires health risk reductions for facilities with elevated health risks

Toxic Air Contaminants

- Chemicals emitted into the atmosphere that may cause adverse health effects

Adverse Health Effect

- Range from minor eye or throat irritation, shortness of breath, or headaches, to cancer, birth defects, or damage to organs

California Air Toxics “Hot Spots” Program



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**Quantify Toxic
Air Contaminant
Emissions**

**Identify Facilities
that may Present
Public Health
Concerns**

**Request Health
Risk
Assessments –
Review and
Approve**

**Implement
Public
Notification and
Risk Reduction
Requirements**

Air Toxics “Hot Spots” Program Health Risks



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Cancer Risk

Calculates the probability that a person would contract cancer if exposed to emissions for 30 years

Health Hazard Index

Calculated for acute exposure (or short-term health impacts) and chronic exposure (or long-term health impacts)

Index < 1 → no adverse health effects

Index ≥ 1 → potential for adverse health effects

Cancer Burden

Estimates of the number of people that can contract cancer within a community that is exposed to the emission levels

Public Notification and Risk Reduction Thresholds



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Health Risk	Public Notification Threshold	Risk Reduction Threshold
Cancer Risk	10 in one million	10 in one million (100 in one million for emissions prior to CY 2018)
Acute Noncancer Health Hazard Index	1.0	1.0
Chronic Noncancer Health Hazard Index	1.0	1.0
Cancer Burden	1.0	1.0



BAE Systems

- Ship repair facility



BAE Systems Equipment



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- Abrasive blasting



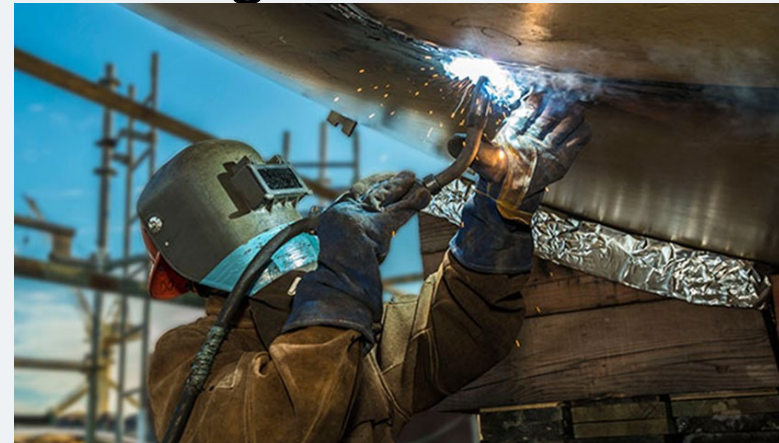
- Diesel Engines



- Coating operations



- Welding



Elevated Health Risks BAE Systems 2017 Emissions



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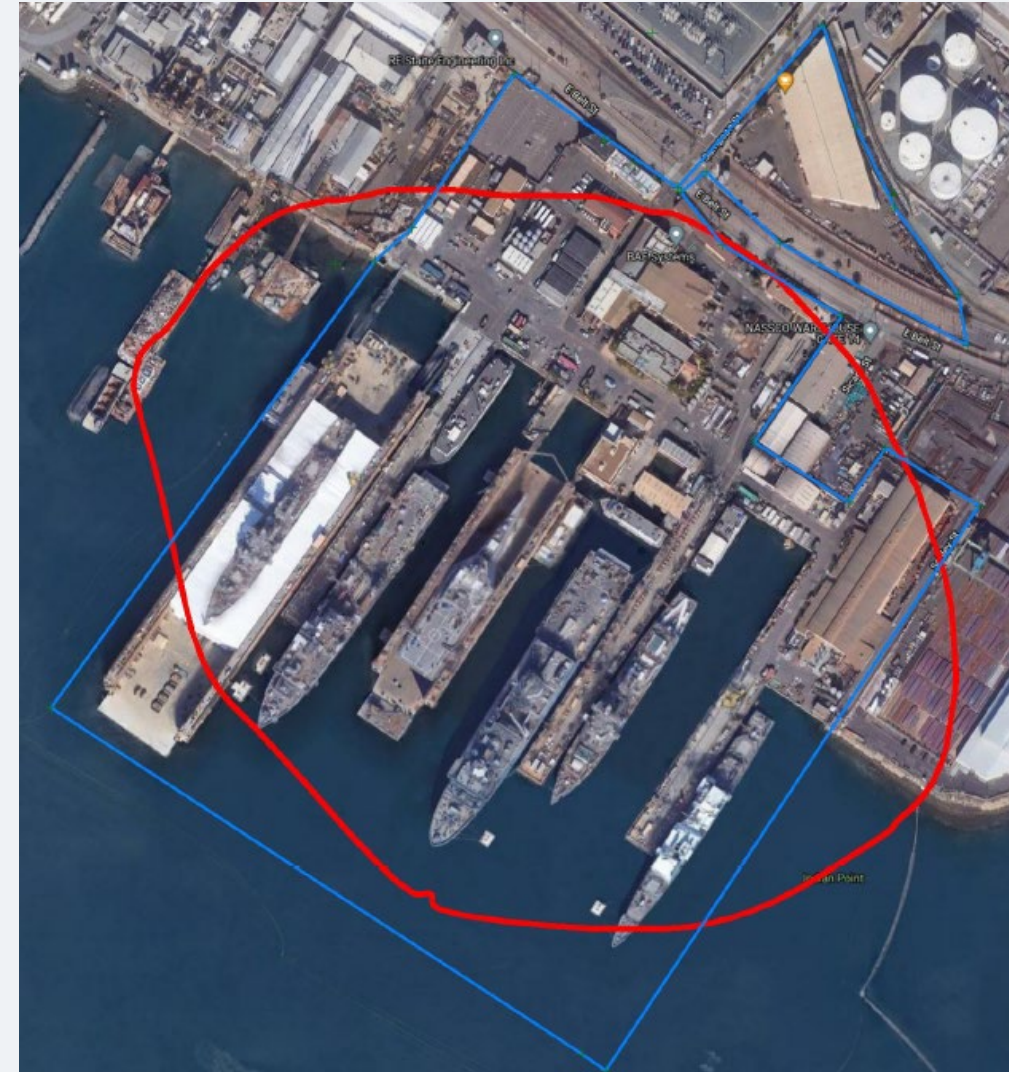
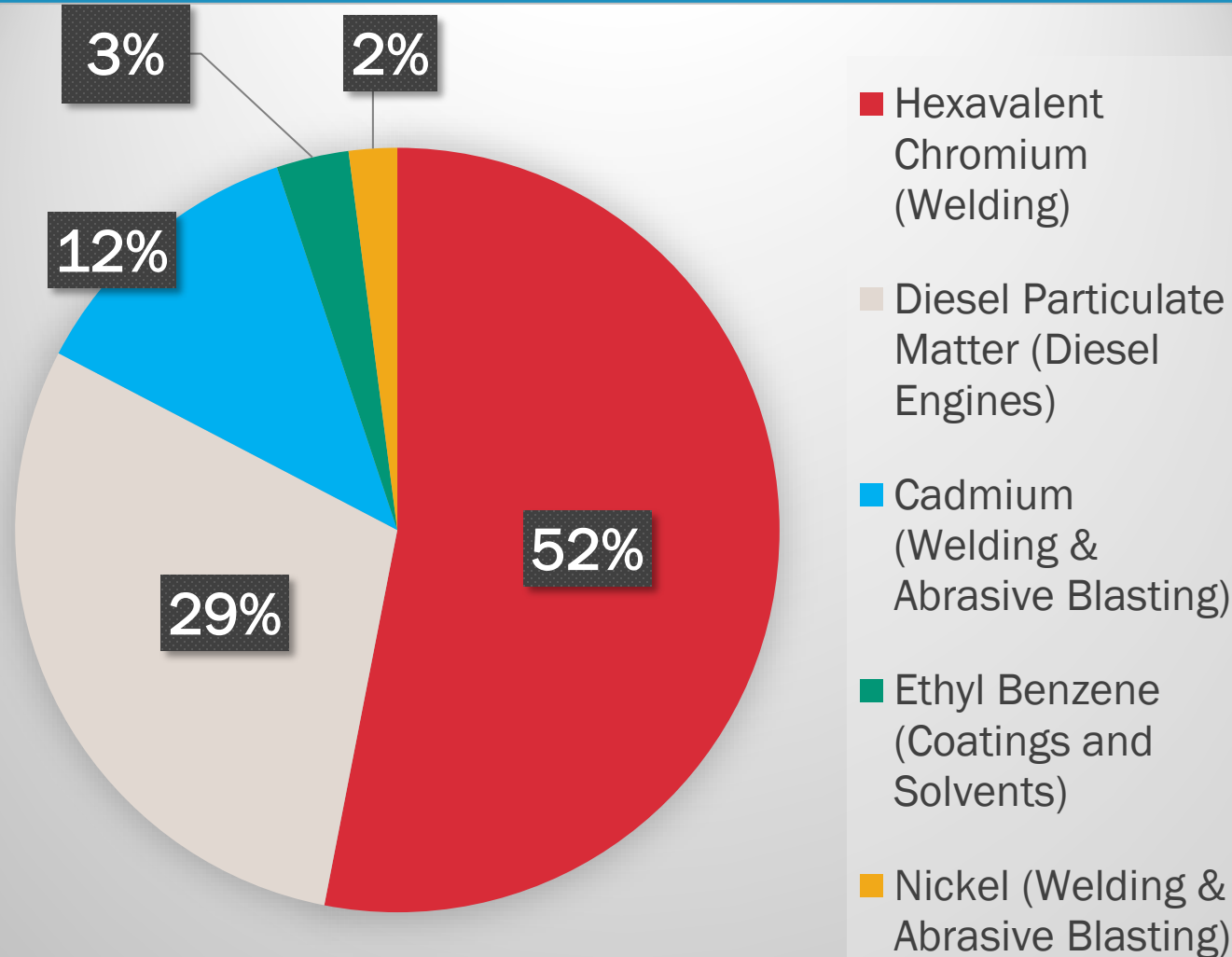
Health Risk	HRA Results	Risk Notification Thresholds	Risk Reduction Thresholds
Maximum Worker Cancer Risk	14.2 in one million	10 in one million	100 in one million
Maximum Worker Acute Health Hazard Index	2.44	1.0	1.0

Emission Contributions

Worker Cancer Risk of 14.2 in one million



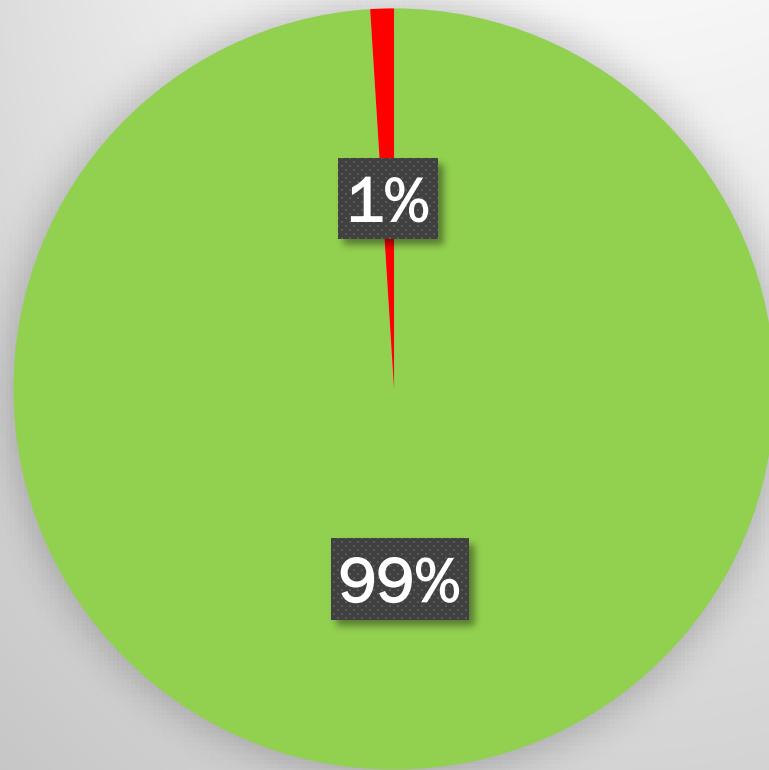
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Emission Contributions Worker Acute Non-Cancer Health Hazard Index of 2.44

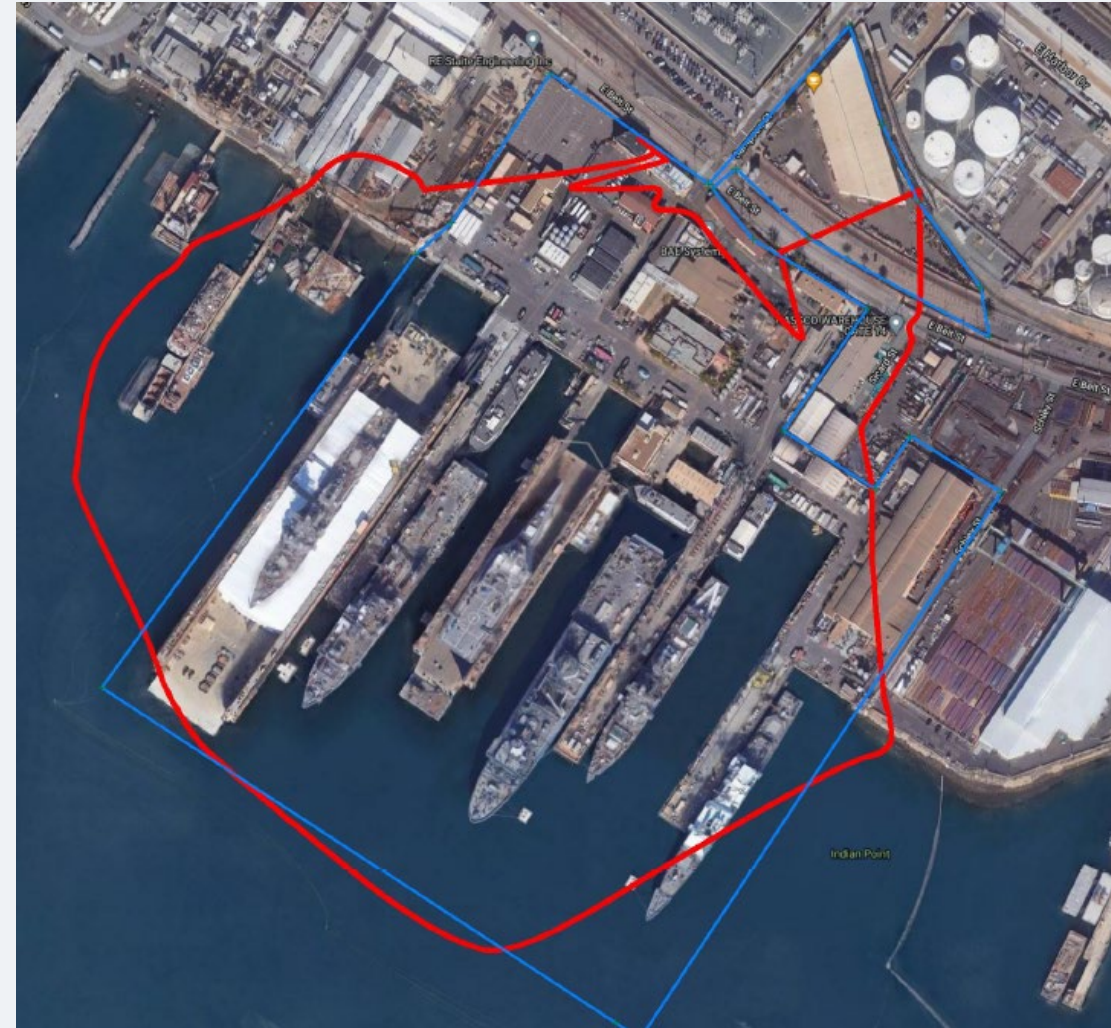


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■ Nickel
(Welding &
Abrasive
Blasting)

■ Benzene
(Diesel
Engines)



AB2588 Toxic Hot Spots Emission Reduction Efforts

- **Implementation of electronic tracking for daily use of welding consumables**
 - Allows for improved accuracy
 - Tracks daily unused welding consumables
 - Provides greater precision for actual use of weld rods and flux-core spools
- **Dry Dock Electrification** – Pride of San Diego
- **Renewable Diesel used in all equipment** portable & stationary devices
 - 30-60% emission reduction made from renewable resources
- **Tier 4 or Electric Air Compressors** are used for ship repair activities



Additional Diesel Particulate Reduction Initiatives

2015-2021 Goals Accomplished

- 2 – Fully Electric Semi Trucks – tested for ship repair use
- 22k Electric Forklift purchased to replace 18k Diesel Forklift
- Developed incentive-based vanpool program

2022-2024 Goals

- Purchase ZEV Semi (newest 579)
- ZEV Forklift fleet – currently propane
- Fleet vehicles – replace 20% with ZEV over next 5 years
- Roof top solar installation to accommodate EV charging needs
- Expand vanpool program





Next Steps

