

Status Report San Pedro Bay CAAP and Proposed Backstop Rules

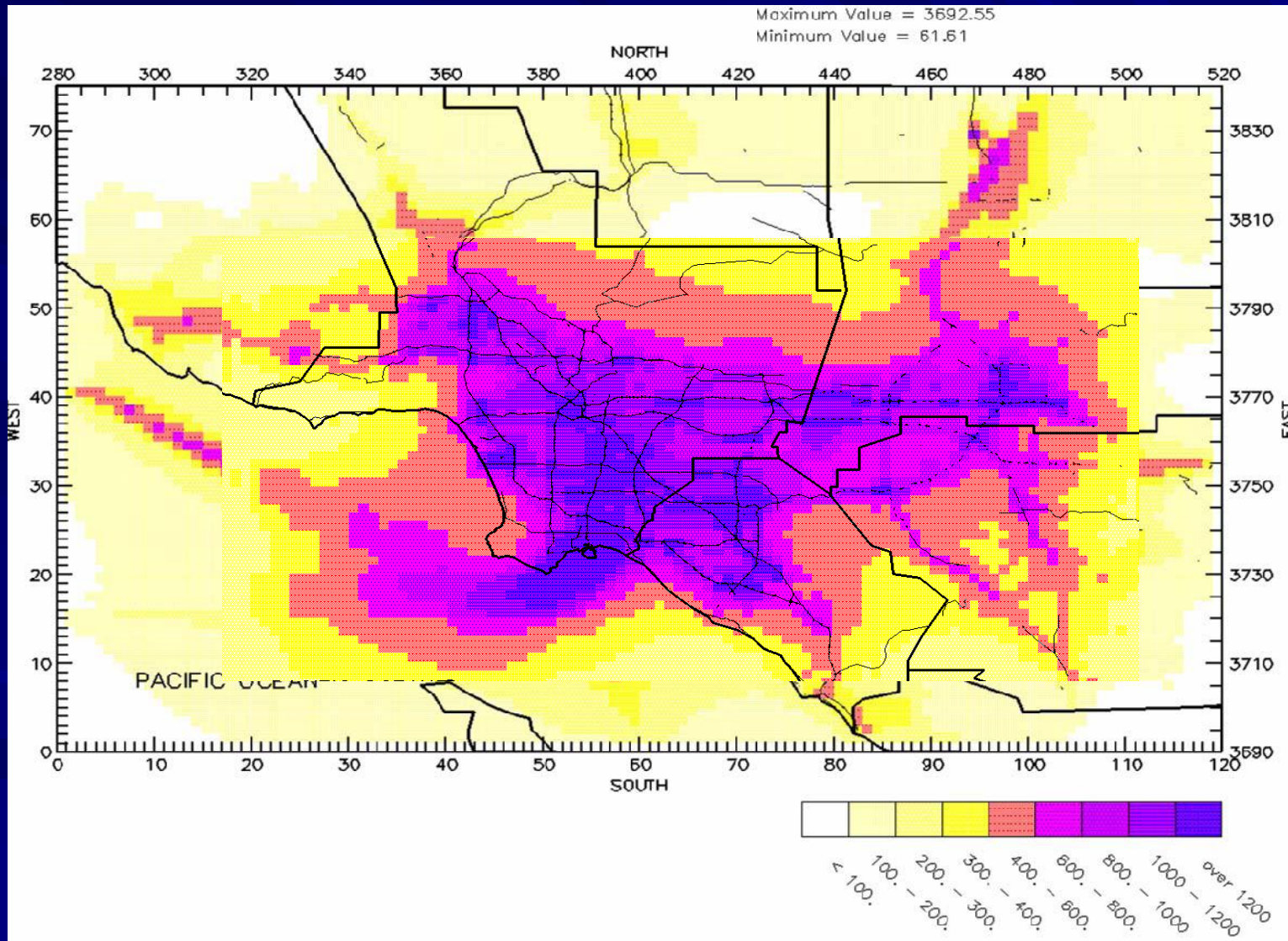


March 5, 2010

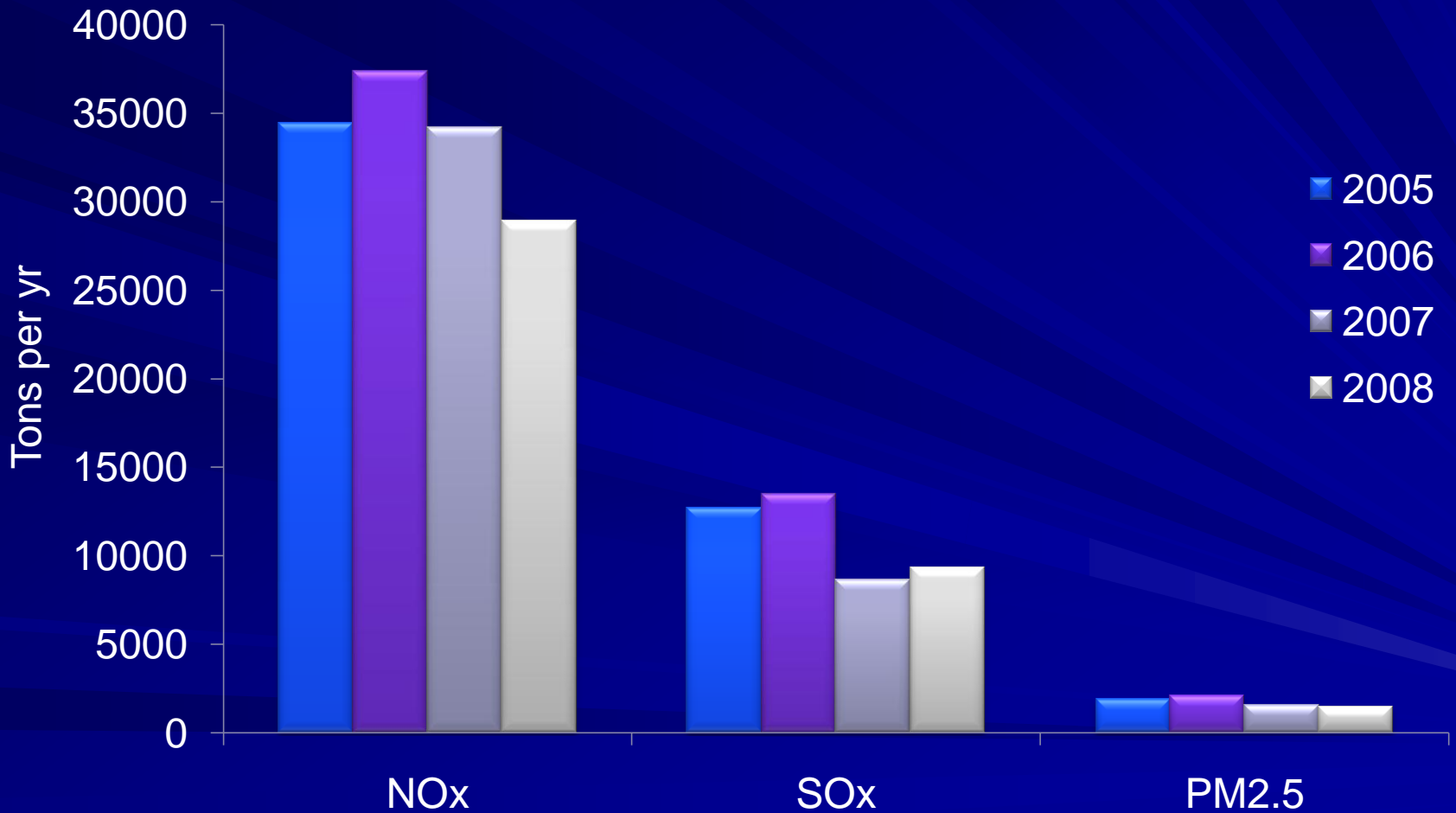
Background

- Port activities major emission source
 - Criteria pollutants
 - Health Risk
- CAAP and AQMP establish future reductions from port-related sources
- Emission reductions needed from ports to achieve air quality standards and health risk reductions

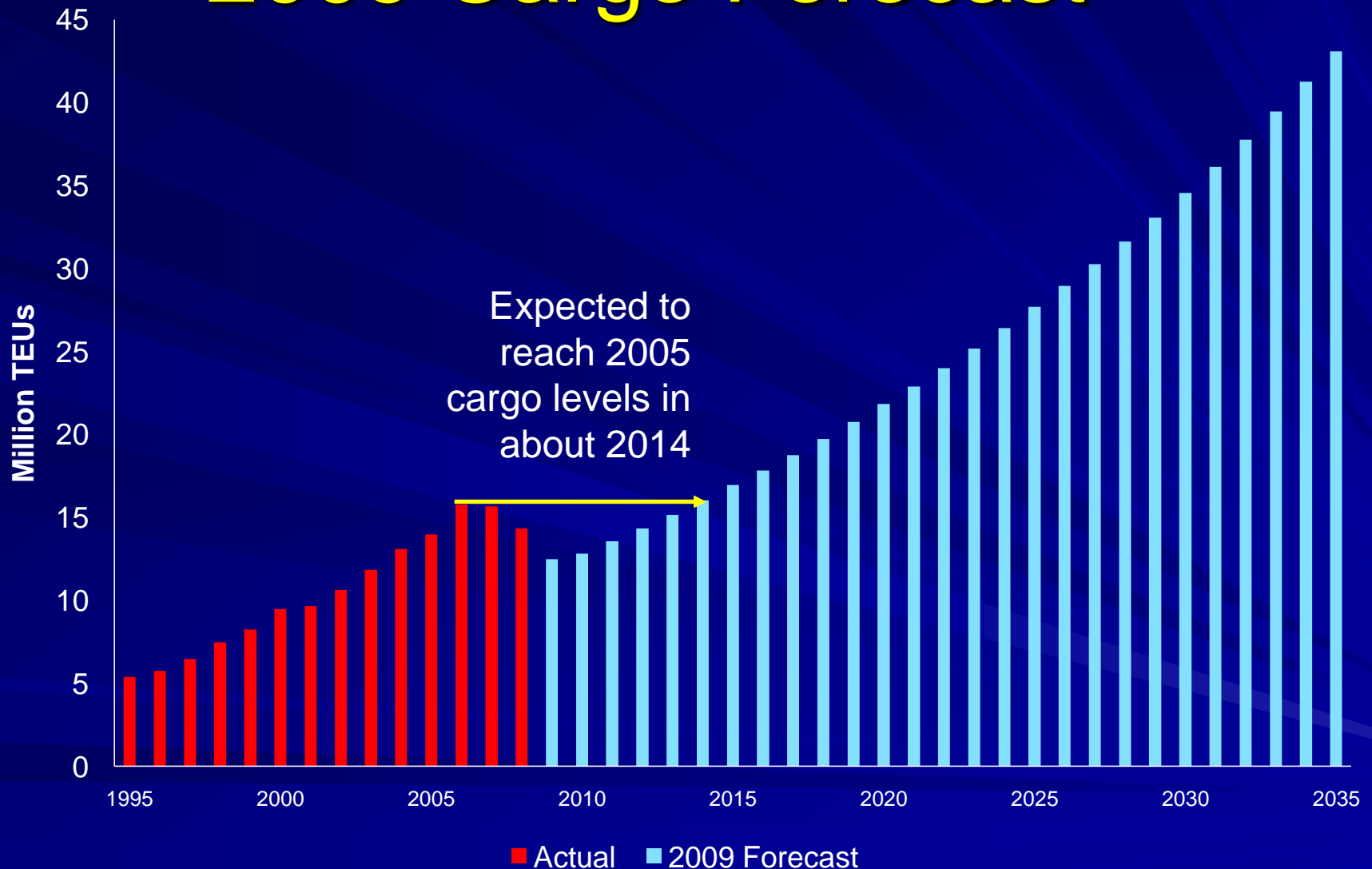
Comparison Between MATES II and III



Emissions Trend



2009 Cargo Forecast*

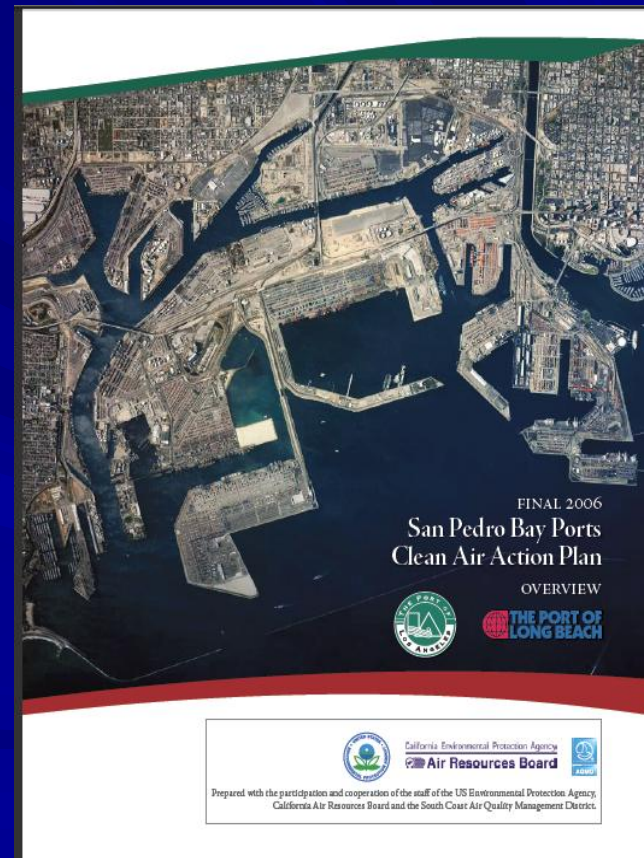


Source: POLA

San Pedro Bay

Voluntary Clean Air Action Plan

- Commitment to reduce emissions from port-related sources
- San Pedro Bay Standards
 - Health Risk
 - Criteria Pollutants
- Project-specific
- Source specific performance



CAAP Process

- Jointly Adopted by Ports of Los Angeles and Long Beach
- Collaborative effort between ports and regulatory agencies
- Adopted November 2006
- 5 Year Plan



CAAP Achievements to Date



- Clean truck program
- Low sulfur fuel for ocean going vessels
- Vessel speed reduction
- Clean cargo handling equipment
- Annual emissions inventory reporting

CAAP Status Update

- Ports working with agencies
 - Developing San Pedro Bay Standards
 - New/revised measures
- Consensus reached on many issues
- Several issues remain – discussions ongoing

Backstop Rules

- Two Rules
- Proposed Rule 4010
 - Emissions inventory
 - Health Risk Assessment
- Proposed Rule 4020
 - Targets
 - Criteria Pollutant
 - Health Risk Targets
 - Triggers
 - Backstops

(PR4010 March 2, 2010)

PROPOSED RULE 4010 EMISSIONS INVENTORY AND HEALTH RISK ASSESSMENT SUBMITTAL REQUIREMENTS FOR THE PORT OF LOS ANGELES AND PORT OF LONG BEACH

- (a) Purpose
This rule specifies requirements for the Ports of Los Angeles and Long Beach to submit emissions forecasts, emissions inventories, and a health risk assessment from port-related sources operating at, and traveling to and from, the ports.
- (b) Applicability
This rule applies to the Port of Los Angeles and the Port of Long Beach, acting through their respective Boards of Harbor Commissioners. The ports may elect to comply separately or jointly with provisions of this rule regarding emission targets and emission forecasts. The ports shall comply jointly with the health risk assessment provisions.
- (c) Definitions
- (1) BASELINE HEALTH RISK means the cancer risk to communities

(PR4020 February 24, 2010)

PROPOSED RULE 4020 BACKSTOP REQUIREMENTS FOR EMISSION REDUCTIONS AND HEALTH RISKS AT THE SAN PEDRO BAY PORTS

- (a) Purpose
The purpose of this rule is to establish backstop requirements in the event that forecasted emissions or health risk reductions from port-related sources do not meet emission or risk reduction targets.
- (b) Applicability
This rule applies to the Port of Los Angeles and the Port of Long Beach, acting through their respective Boards of Harbor Commissioners. The ports may elect to comply separately or jointly with provisions of this rule regarding emission targets and emission forecasts. The ports shall comply jointly with health risk reduction targets.
- (c) Definitions
- (1) BASELINE HEALTH RISK means the cancer risk to communities surrounding the ports due to exposure to emissions of diesel particulate matter (DPM) caused by port-related sources in 2005 within each 2 kilometer by 2 kilometer receptor grid cell adjacent to port owned properties established for the San Pedro Bay port-wide health risk assessment (Port HRA).
- (2) BASELINE EMISSIONS of NO_x, SO_x, PM_{2.5}, or DPM means port-wide emissions of NO_x, SO_x, PM_{2.5} or DPM, as applicable, from all port-related sources, as calculated in the 2005 annual emissions inventory developed by the Port of Los Angeles and the Port of Long Beach. For the purpose of this rule, the 2005 annual emissions inventory of port-related sources shall mean as approved by the Executive Officer.
- (3) CONTROL STRATEGY means a strategy that can reduce NO_x, SO_x, and/or PM_{2.5} emissions and can include incentive or disincentive programs.
- (4) DIESEL PARTICULATE MATTER (DPM) means the particles found in the exhaust of diesel-fueled port-related sources.
- (5) EMISSIONS FORECAST means a forecast of future-year emissions of NO_x, SO_x, PM_{2.5} or DPM from all port-related sources, submitted pursuant to Rule 4010 subdivision (e).

Purpose of Backstop Rules



- Safety net
- Ensures Basin achieves:
 - 2015 Annual PM_{2.5} Standard
 - 2024 8-hour Ozone Standard
- Ensures localized reductions in DPM exposure



Applicability

- Port of Los Angeles
- Port of Long Beach
- Port-related equipment
 - Ships
 - Locomotives
 - Cargo Handling Equipment
 - Trucks
 - Harbor Craft

Proposed Rule 4010 Approach

**Baseline
Emissions
or HRA**

**Emissions
or HRA
Forecast**

**Emissions
Reporting**



Forecasting Requirements*

2015 PM2.5 Standard

In 2012, submit 2014 forecast for NOx, SOx, and PM2.5

2024 Ozone Standard

In 2020, submit 2023 forecast for NOx, SOx, and PM2.5

2012

2014

2017

2020

2023

2020 Risk Standard

In 2012, submit 2014 forecast for DPM

2020 Risk Standard

In 2017, submit 2020 forecast health risk for DPM

* Forecasts can be revised any time before forecasted date

Proposed Rule 4020 Approach

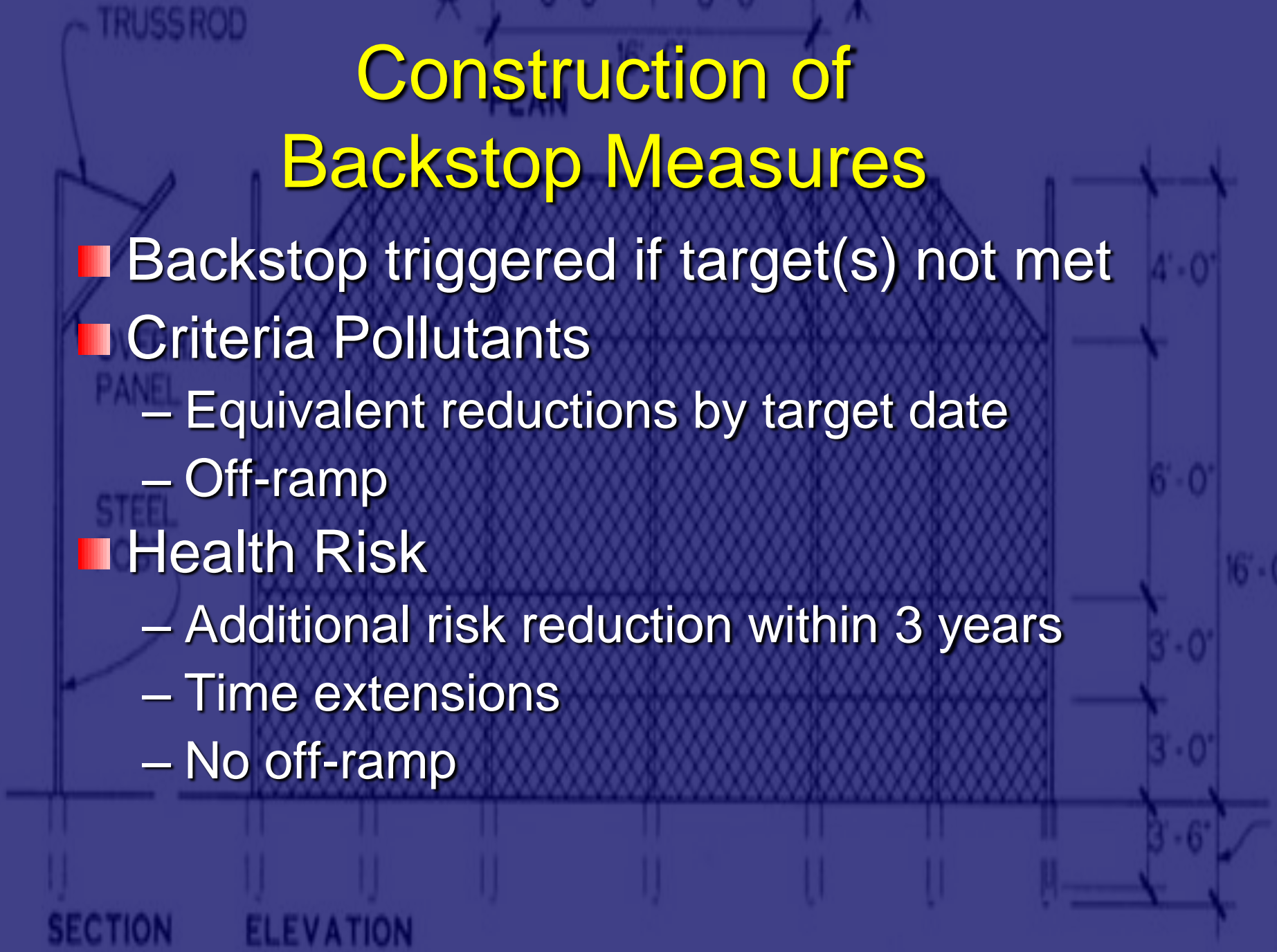
- Establishes targets
- Trigger for backstop based on targets
- Establishes backstop measures
- Provides off-ramps for criteria pollutants
- Provides time extensions for health risk

Backstop Targets

- Criteria Pollutant Reduction Targets
 - 2014: NO_x, SO_x, and PM_{2.5} Targets TBD
 - 2023: NO_x Target TBD
- Health Risk Reduction Targets
 - 2014: 73% for DPM emissions
 - 2020: 85% for DPM risk within each 2 X 2 kilometer grid adjacent to port owned properties

Construction of Backstop Measures

- Backstop triggered if target(s) not met
- Criteria Pollutants
 - Equivalent reductions by target date
 - Off-ramp
- Health Risk
 - Additional risk reduction within 3 years
 - Time extensions
 - No off-ramp



Off-Ramp and Extensions for Backstop Measures

CRITERIA
POLLUTANT
OFF RAMP

- REDUCTIONS NOT NEEDED FOR AQMP
- COST EFFECTIVENESS
- NO LEGAL MECHANISM

EXIT



ONLY

HEALTH
RISK TIME
EXTENSION

2 YEAR EXTENSION

- TECHNOLOGY LIMITATIONS
- NO LEGAL MECHANISM

NO EXIT

Schedule

- Public workshop April 2010
- Adoption late 2010

