ENVIRONMENT CONSIDERATIONS
IN TERMINAL DEVELOPMENT AND OPERATIONS

HEATHER TOMLEY
ACTING MANAGING DIRECTOR
PLANNING AND ENVIRONMENTAL AFFAIRS

AMERICAN ASSOCIATION OF PORT AUTHORITIES
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GREEN PORT POLICY

SUSTAINABILITY

SOIL

WATER

COMMUNITY ENGAGEMENT

SEDIMENTS

AIR

WILDLIFE
DEVELOPMENT PROJECT SEQUENCE

- Project Initiated
- HDP & Plans (Up to 35% Design) Submitted
- NOI/NOP Issued
- CEQA/NEPA Initial Review
- Prepare Document
- Start Permit Process
- ROD Signed
- Permits Issued
- Board Approval of CEQA Document
- Complete Final Bid Plans & Specs & Advertise
- Award Contract
- Start Construction
- May 2011
- Operations Begin, Ongoing Mitigation Monitoring
- Construction Permit Closure
- Complete Construction
SUSTAINABILITY

IMPLEMENT SUSTAINABLE PRACTICES IN DESIGN, DEVELOPMENT AND OPERATIONS
CLIMATE CHANGE
PLAN FOR ADAPTATION AND RESILIENCE
SOILS
RETURN LAND TO PRODUCTIVE USE
WATER & SEDIMENT

IMPROVE WATER QUALITY; BENEFICIALLY REUSE SEDIMENTS
WATER RESOURCES ACTION PLAN

PREVENT PORT OPERATIONS FROM DEGRADING WATER & SEDIMENTS

SUPPORT BENEFICIAL USES OF WATER & SEDIMENTS BY ADDRESSING IMPACTS OF OPERATIONS – PAST, PRESENT AND FUTURE
STORMWATER PROGRAM
INDUSTRIAL, CONSTRUCTION, MUNICIPAL & ENFORCEMENT
TOTAL MAXIMUM DAILY LOAD
REMOVE LEGACY CONTAMINATES FROM FISH TISSUES

Benthic invertebrates

Dissolved and particle-sorbed PCBs

Benthic invertebrates

Shiner Perch

White Croaker

California Halibut

PCBs sorbed to sediments

Water column invertebrates

PCBs sorbed to sediments
SEDIMENT QUALITY OBJECTIVES
REDUCE CHEMICAL CONCENTRATION, TOXICITY, BENTHIC IMPAIRMENT

% SAMPLES PASSING SQO - DIRECT EFFECTS

- 1998
- 2003
- 2008
- 2013
LANDFILL

ACCOMMODATE DREDGE MATERIALS, REGIONAL SEDIMENTS
LOW-IMPACT DEVELOPMENT

ANAHEIM STREET
WILDLIFE
INCREASE DIVERSITY, POPULATION OF SPECIES
AIR QUALITY

DECREASE EMISSIONS FROM PORT OPERATIONS
SOURCES OF EMISSIONS
VESSELS, HARBOR CRAFT, TRUCKS, CARGO-HANDLING EQUIPMENT, LOCOMOTIVES
88% Diesel Particulate Matter
56% Nitrogen Oxides
97% Sulfur Oxides
18% Greenhouse Gases

*2017 EMISSIONS INVENTORY COMPARED TO 2005 LEVELS

Up 12% TEUs
GREEN FLAG PROGRAM

VOLUNTARY VESSEL SPEED REDUCTION
LOW-SULFUR FUELS

INCENTIVES FOR VESSEL OPERATORS
GREEN SHIP AWARDS

INCENTIVES FOR LOW-EMISSION VESSELS
AT-BERTH POWER

ALTERNATIVE TECHNOLOGIES
CLEAN TRUCKS
TRANSITION TO CLEANEST TECHNOLOGIES
Greenhouse Gases Goal by 2030

Reduce 40%

Greenhouse Gases Goal by 2050

Reduce 80%
2030
CARGO-HANDLING EQUIPMENT
ZERO EMISSIONS
2035
ALL PORT TRUCKS
ZERO EMISSIONS
LONG BEACH CONTAINER TERMINAL
STATE-OF-THE-ART, GREEDEST
ELECTRIFIED OPERATIONS

MOST ADVANCED TECNOLOGIES
‘GOAL ZERO’ CHALLENGES

EMERGING TECHNOLOGIES; TOUGH DUTY CYCLES; LIMITED INFRASTRUCTURE; HIGH COSTS
‘GOAL ZERO’ STRENGTHS

ESTABLISHED GOALS; MORE INCENTIVE DOLLARS; INCREASING INTEREST; PARTNERSHIPS
TECHNOLOGY ADVANCEMENT

ACCELEBRATE VERIFICATION AND AVAILABILITY
ENERGY RESILIENCY

RELIABILITY, COST-COMPETITIVE AND GREEN
GE TRANSPORTATION
Delivering cloud-based cargo data insights
COMMUNITY PARTNER

INVOLVE, INFORM AND ENGAGE
COMMUNITY GRANTS

MITIGATING NEGATIVE IMPACTS ON THE COMMUNITY
THANK YOU

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