

2016 AIR QUALITY REPORT CARD



COMPARED TO 2005

SAN PEDRO BAY STANDARDS

The San Pedro Bay Standards establish the long-term emissions-reduction and health risk-reduction goals for the ports of Los Angeles and Long Beach.

- Emission Reduction Standard for DPM, NO_x, and SO_x have target years of 2014 and 2023 to support state ambient air quality goals.
- Health Risk Reduction Standard has a target year of 2020 to align with California Air Resources Board's Goods Movement Emission Reduction Plan.



Clean Air Action Plan (CAAP) Goals (% reduction compared to 2005)	2014	2023
DPM	72%	77%
NO _x	22%	59%
SO _x	93%	93%
Health Risk Reduction Standard	2020	85%
<i>(% reduction in residential cancer risk compared to 2005)</i>		

OVERALL EMISSIONS REDUCTIONS CY 2005-2016

Pollutant	CY 2005-2016	
	%	tons
DPM	87%	765
PM _{2.5}	85%	699
PM ₁₀	86%	818
NO _x	57%	9,183
SO _x	98%	4,869



EMISSIONS PER 10,000 TEU HANDLED REDUCTIONS

Pollutant	CY 2005-2016	
	%	tons
DPM	89%	1.05
PM _{2.5}	88%	0.96
PM ₁₀	88%	1.12
NO _x	63%	13.72
SO _x	98%	6.53



OCEAN-GOING VESSEL EMISSIONS REDUCTIONS

Pollutant	CY 2005-2016	
	%	tons
DPM	90%	419
PM _{2.5}	87%	373
PM ₁₀	89%	474
NO _x	40%	2,095
SO _x	98%	4,718



HEAVY-DUTY VEHICLE/CLEAN TRUCK EMISSIONS REDUCTIONS



Pollutant	CY 2005-2016	
	%	tons
DPM	97%	241
PM _{2.5}	97%	230
PM ₁₀	97%	240
NO _x	71%	4,450
SO _x	90%	41

HARBOR CRAFT EMISSIONS REDUCTIONS

Pollutant	CY 2005-2016	
	%	tons
DPM	52%	29
PM _{2.5}	52%	26
PM ₁₀	52%	29
NO _x	43%	568
SO _x	89%	6



RAIL EMISSIONS REDUCTIONS



Pollutant	CY 2005-2016	
	%	tons
DPM	50%	28
PM _{2.5}	49%	26
PM _{x10}	50%	28
NO _x	54%	932
SO _x	99%	97

CARGO HANDLING EQUIPMENT EMISSIONS REDUCTION

Pollutant	CY 2005-2016	
	%	tons
DPM	91%	48
PM _{2.5}	88%	43
PM ₁₀	88%	47
NO _x	72%	1,139
SO _x	82%	8



CO2 EQUIVALENT EMISSIONS BY SOURCE TYPE



Source Type	CY 2005-2016	
	%	tons
Ocean-Going Vessels	28%	80,559
Harbor Craft	-2%	-1,423
Cargo Handling Equipment	-19%	-25,038
Rail	18%	14,814
Heavy-Duty Vehicles	17%	80,849
TOTAL	15%	149,761

PRIMARY POLLUTANTS DEFINED:
 DPM = Diesel Particulate Matter
 NO_x = Oxides of Nitrogen

SO_x = Oxides of Sulfur
 PM_{2.5} = Particulate Matter less than 2.5 microns in diameter
 PM₁₀ = Particulate Matter less than 10 microns in diameter

CO₂ = Carbon Dioxide
 (A Green House Gas contributor)