


# AIR QUALITY REPORT CARD 2005 - 2011

## PRIMARY POLLUTANTS DEFINED

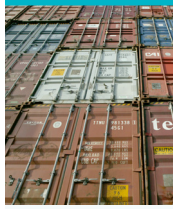
DPM = Diesel Particulate Matter  
 NOx = Oxides of Nitrogen  
 SOx = Oxides of Sulfur  
 PM<sub>2.5</sub> = Particulate Matter less than 2.5 microns in diameter  
 PM<sub>10</sub> = Particulate Matter less than 10 microns in diameter  
 CO<sub>2</sub> = Carbon Dioxide (A Green House Gas contributor)

## OVERALL EMISSIONS REDUCTIONS CY 2005-2011




Pollutant	CY 2005 - 2011	
	%	tons
DPM	71%	634
PM <sub>2.5</sub>	69%	580
PM <sub>10</sub>	71%	693
NOx	51%	8,392
SOx	76%	4,038

## EMISSIONS PER 10,000 TEU HANDLED




Pollutant	CY 2005 - 2011	
	%	tons
DPM	73%	0.86
PM <sub>2.5</sub>	71%	0.80
PM <sub>10</sub>	73%	0.95
NOx	54%	11.84
SOx	77%	5.5

## OCEAN-GOING VESSEL EMISSIONS REDUCTIONS



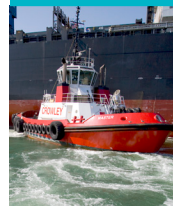
Pollutant	CY 2005 - 2011	
	%	tons
DPM	69%	333
PM <sub>2.5</sub>	67%	304
PM <sub>10</sub>	69%	395
NOx	30%	1,608
SOx	75%	3,895

## HEAVY-DUTY VEHICLE/CLEAN TRUCK EMISSIONS REDUCTIONS




Pollutant	CY 2005 - 2011	
	%	tons
DPM	91%	223
PM <sub>2.5</sub>	91%	204
PM <sub>10</sub>	91%	222
NOx	78%	4,948
SOx	91%	38

## HARBOR CRAFT EMISSIONS REDUCTIONS




Pollutant	CY 2005 - 2011	
	%	tons
DPM	36%	20
PM <sub>2.5</sub>	36%	18
PM <sub>10</sub>	36%	20
NOx	33%	441
SOx	92%	6

## RAIL EMISSIONS REDUCTIONS



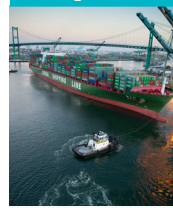
Pollutant	CY 2005 - 2011	
	%	tons
DPM	46%	27
PM <sub>2.5</sub>	48%	26
PM <sub>10</sub>	46%	27
NOx	39%	660
SOx	94%	92

## CARGO-HANDLING EQUIPMENT EMISSIONS REDUCTIONS



Pollutant	CY 2005 - 2011	
	%	tons
DPM	56%	30
PM <sub>2.5</sub>	54%	27
PM <sub>10</sub>	54%	29
NOx	47%	735
SOx	83%	7


## CO<sub>2</sub> EQUIVALENT REDUCTIONS BY SOURCE TYPE



Source Type	CY 2005 - 2011	
	%	metric tons
Ocean-Going Vessels	23%	69,917
Harbor Craft	9%	5,298
Cargo Handling Equipment*	- 8%	- 10,457
Rail	16%	12,867
Heavy-Duty Vehicles	26%	121,498
<b>TOTAL</b>		<b>199,123</b>

\* All percentages reflect a reduction in emissions except cargo handling equipment.

## 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, NOx, and SOx 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 CARB's Goods Movement Emission Reduction Plan.

Clean Air Action Plan (CAAP) Goals (% reduction compared to 2005)	2014	2023
DPM	72%	77%
NOx	22%	59%
SOx	93%	93%

Health Risk Reduction Standard (% reduction in residential cancer risk compared to 2005)	2020	85%
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