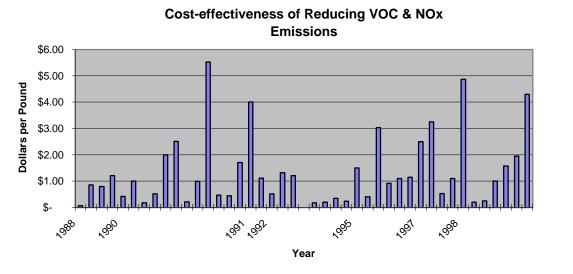
## VOC and NOx Regulations

			Cost-	1	
		e	ffectiveness	Cost-	
Year	Regulation		average	effectiveness	Tons/Dav
1988	Motor Vehicle Recall	\$			3
1989	Antiperspirants and deodorants	\$			4
	OBD II	\$	0.79		118
	Exhaust emission	\$			70
1990	Exhaust emission form light-, medium and light heavy duty engines	\$			4.4
	Consumer products	\$			3
	Evaporative emission at 105	\$			114
	Evaporative emission at 75	\$	0.51		35
	Phase I reformulated gasoline	\$			80
	Low-emission vehicles and clean fuels	\$			185
	1994 standards four 4-stroke engines	\$			29
	1994 standards for 2 stroke engines less than 50 cc	\$			29
	1999 standards for 4-stroke engines	\$			29
	1999 standards for 2-stroke engines	\$			29
	Smoke emissions from heavy-duty diesel engines	\$			22
	Consumer products	\$			45
1991	Reformulated gasoline (phase II)	\$			220
	OBD II	\$			
1992	Phase II consumer products	\$			8
	Engines converted to non-gasoline fuels	\$			30 lbs./ca
	Exhaust emissions	\$			6
1994	Small refiner volume provisions		I/A		-3
	Evaporative emissions for heavy-duty diesel engines and vehicles	\$			4
	Off-highway recreation vehicles	\$			30
	Golf carts	\$			9
	Vehicles with engines less than 25 horsepower	\$			1
1995	Accelerated introduction of medium-duty ultra-low emission vehicles	\$			4
	On-Board refueling vapor recovery	\$			
	Aerosol coating (paint) products	\$			3 to 18
1996	Low-emission vehicle - TLEV ROG	\$			
	Low-emission vehicle - LEV ROG	\$			
	Low-emission vehicle - ULEV ROG	\$			
1997	Hair spray VOC	\$			-14
	Consumer products		\$3.25	\$0-6.3	15.3
	New certification tests to control emitions from aggressive driving & A/C usage		\$0.52	\$0.44 -0.60	133
	Heavy-duty vehicle inspection		\$1.09	\$1.05 - 1.12	22 - 24
1998	Small off-road engine HC + NOx	\$	4.87		23.8
	Heavy-duty vehicle NOx+NMHC	\$	0.20		98
	Off-road large spark-ignition engines HC+NOx	\$			60
	LEV II and CAP 2000 ROG+NOx	\$		\$0.5 - \$1.39	57
	Aerosol coating, antiperspirants, deodorants, & consumer products VOC	\$		\$1.00 - \$3.00	5.4
	Marine engine HC+NOx	\$			110
	On-road motorcycles HC+NOx	\$			1.3



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