
Clean Vehicles + Clean Fuel = Cleaner Air



- EPA's Tier 2 Vehicle and Gasoline Sulfur program, which was finalized in December 1999, is now taking effect.
- This historic new program will result in cars, SUVs, pickups, and vans that are 77-95 percent cleaner than today's cars and trucks.
- At the same time, the program will result in cleaner-burning gasoline that contains 90 percent less sulfur.
- For the first time:
 - ▶ All passenger cars and light trucks will be covered by the same emission standards.
 - ▶ Vehicles and fuels are being treated as a system, so that the cleaner vehicles will have the low-sulfur gasoline that they need to run their cleanest.
 - ▶ The emission standards will apply to all vehicles, regardless of the type of fuel they operate on (e.g. gasoline, diesel, or alternative fuels).
- The Tier 2 program is the result of a groundbreaking cooperative effort among EPA, the auto industry, the oil industry, states, environmental and public health groups, and others.
- Industry has stepped up to the challenge of meeting the very stringent standards.
 - ▶ The auto industry will significantly exceed the required number of very clean vehicles sold for Model Year 2004 (estimated to be 35 percent, rather than the required 25 percent).
 - ▶ Oil refiners have been making large investments, and several refiners are already introducing cleaner gasoline earlier than required.
- The changes to vehicles and gasoline will be essentially transparent to consumers:
 - ▶ The performance and product selection of vehicles and fuels will not change.
 - ▶ The very large benefits of this program will cost about \$70-250 per vehicle and less than 2 cents per gallon of gasoline.
- For these costs, EPA expects significant air quality and health improvements:
 - ▶ Even with the continuing increases in vehicle population and in the number of miles driven, the nation's air quality is expected to improve.
 - ▶ Less pollution from cars means fewer cases of respiratory disease and costs associated therefrom (lost work productivity, medical expenses, etc.)
- A simplified version of the Tier 2 NO_x standards and phase-in schedules, including the emission standard bin structures, are below.

Phase-In Schedules for NO_x Standards and Fuels
(does NOT include a number of exceptions and options)

Phase-in schedule for 0.07 g/mi NO_x average (all vehicles not complying with Tier 2 must comply with interim standards through the phase-in period)		
Year	Cars & Light Trucks	Heavier Trucks
2004	25%	
2005	50%	
2006	75%	
2007	100%	
2008	100%	50%
2009	100%	100%

Phase-in schedule for sulfur reductions in gasoline			
Year	Refinery Caps	Corporate Average	Refinery Average
2004	300 ppm	120 ppm	N/A
2005	300 ppm	90 ppm	30 ppm
2006	80 ppm	90 ppm	30 ppm

Tier 2 Bins - NO_x standards	
Bin 1	0.00
Bin 2	0.02
Bin 3	0.03
Bin 4	0.04
Bin 5	0.07 (average standard)
Bin 6	0.10
Bin 7	0.15
Bin 8	0.20
Bin 9 (expires in 2006)	0.30
Bin 10 (expires in 2006)	0.60
Bin 11 (expires in 2006)	0.90