

reduced to an average in-use level of 11 ppm with a maximum level of 15 ppm. The sulfur in diesel fuel used by

locomotives, CMVs, and RMVs would remain at an average in-use level of about 340 ppm. Figure II.E-3 shows the

estimated reductions from these sulfur changes. For more information on this topic, please see chapter 7 of the RIA.¹¹²

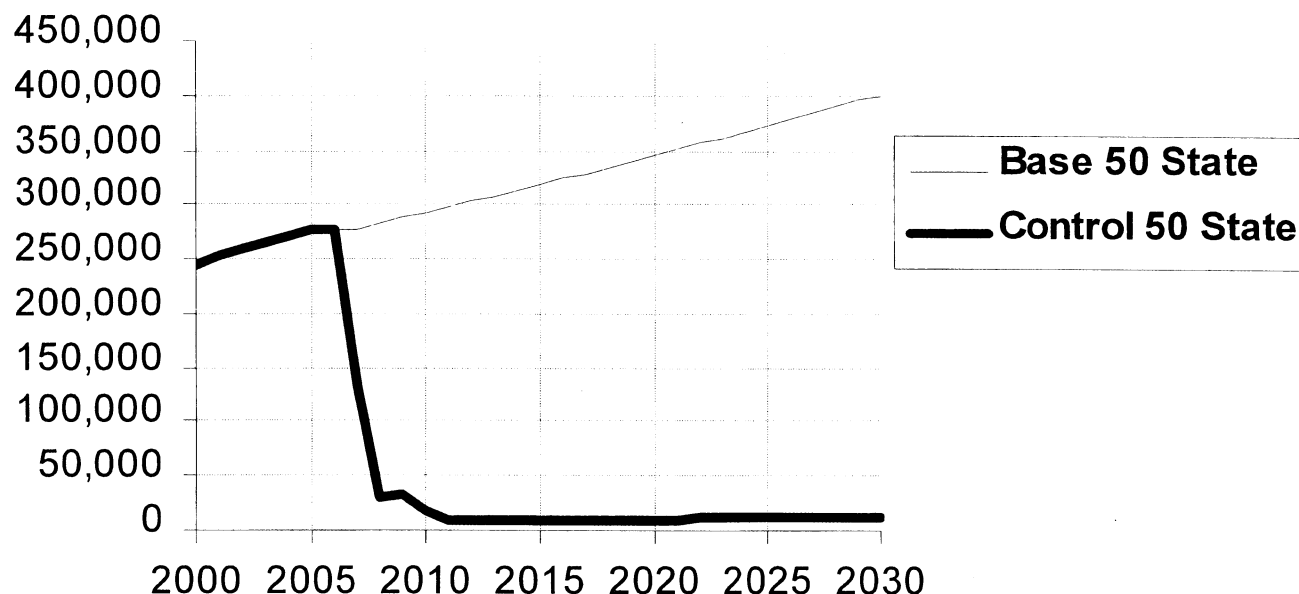


Figure II.E-3: Estimated SO₂ Reductions From Reducing Diesel Sulfur For Land-Based Nonroad Engines, CMVs, RMVs, and Locomotives (tons/year)

Table II.E-6 shows 50 state estimates of total SO₂ emissions without the proposed rule and how SO₂ emissions would be reduced by the diesel fuel sulfur reductions in 2020 and 2030.

Lowering diesel fuel sulfur to a maximum of 500 ppm (340 ppm in-use) for CMV, locomotive and land-based nonroad engines would result in a reduction of about 360,000 tons/year of SO₂ in 2030. Lowering diesel fuel sulfur

to a maximum of 500 ppm (340 ppm in-use) for CMV and locomotive engines and a maximum of 15 ppm (11 ppm in-use) for land-based nonroad engines would result in a reduction of about 390,000 tons of SO₂ in 2030.

TABLE II.E-6—ESTIMATED NATIONAL (50 STATE) EMISSIONS OF LAND-BASED NONROAD, LOCOMOTIVE, COMMERCIAL MARINE VESSEL, AND RECREATIONAL MARINE VESSEL
[SO₂ Emissions From Lowering Diesel Fuel Sulfur Levels]

Year	Total SO ₂ emissions at 2400 ppm sulfur without proposed rule [short tons]	500 ppm sulfur (340 ppm in-use) locomotives, CMVs, RMVs ^a [short tons]	500 ppm sulfur (340 in-use) land-based nonroad [short tons]	15 ppm sulfur (11 ppm in-use) land-based nonroad [short tons]
1996	229,000
2020	345,000	9,000	26,000	1,000
2030	401,000	10,000	30,000	1,000

Notes:

^aCMV = commercial marine vessels, RMV = Recreational marine vessels.

4. VOC and Air Toxics

Based on a 48 state emissions inventory, we estimate that land-based nonroad diesel engines emitted over 221 thousand tons of VOC in 1996. Between

1996 and 2030, we estimate that land-based nonroad diesel engines will contribute about 2 to 3 percent to mobile source VOC emissions. Without further controls, land-based nonroad diesel engines will emit over 97

¹¹² Under this proposal, the introduction of 340 ppm (approximate average in-use level, 500 ppm maximum) sulfur diesel fuel for all nonroad diesel

engines would take place in June of 2007. The introduction of 11 ppm sulfur diesel fuel (average

in-use, 15 ppm maximum) for land-based nonroad engines would take place in June 2010.