

**Comments on
Quantification of the Health and Economic Impacts of Air Pollution from Port-
related Goods Movement and Port Activities in California
(Appendix A of the Dec 1, 2005 Draft Emission Reduction Plan for Ports and
International Goods Movement)**

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1. Because mortality tends to drive the aggregate results of benefit assessments, it is especially important that valuation of this endpoint is well supported. When I take the most recent EPA value for the value of a statistical life (VSL) of \$5.5 million in 1999 dollars (from the EPA March 2005 RIA, 4-51), and adjust it for the CPI and California real per capita income changes from 1999 through 2004 (from DOF), further adjusting PCY with an income elasticity of 0.4, I end up with \$6.4 m for VSL.

CPI 1999 = 166.6
CPI 2004 = 188.9

% PCY 2000 = 6.2 Adj. 2.5
% PCY 2001 = (0.8) Adj. (0.3)
% PCY 2002 = (1.6) Adj. (0.6)
% PCY 2003 = (0.1) Adj. (nil)
% PCY 2004 = 2.7 Adj. 1.1

This diverges considerably from the draft report's value of \$8.2m in 2005, in part because of the assumption in the report that 0.8% is the appropriate annual rate of real income growth to extrapolate values forward. Looking at the past five years, this is closer to 0.5%, when also adjusted for income elasticity.

2. I cannot determine whether future values were adjusted for income elasticity as well as real income growth. Given that there was apparently no adjustment, either this should be changed or a sound explanation should be given for adopting EPA's approach on income adjustment except for the elasticity adjustment.

3. For school absences, EPA has combined several studies to estimate that the average duration is 1.6 days (EPA 2005 4-38) and is using this assumption in estimating days of absence. I cannot tell if the draft ARB report assumes each absence is one day, or something else, but the EPA approach is well supported.

4. The report acknowledges that some quantifiable effects are not quantified. Given the established basis for estimating and valuing several significant endpoints, I am not clear on why they were omitted, other than the possibility of overlap (double counting). Onset

of chronic bronchitis, in particular, should be included. Respiratory symptoms should also be included, and could be adjusted for possible overlap by netting out respiratory-related hospitalizations. Acute bronchitis could be included and similarly adjusted.