

Edward Carr
Marine Policy Seminar – Abstract
11/5/12

Emission Control Areas and the Panama Canal

Sulphur Oxides (SO_x) are released by the burning of petroleum-based fuels. SO_x are believed to exacerbate pulmonary difficulties in high-risk populations such as the elderly, children, and asthmatics. The International Maritime Organization (IMO) has recognised the need for greater shipping emissions controls and, under MARPOL VI, has mandated emissions reductions on the high seas and specified a number of Emission Control Areas (ECAs). The EPA notes that by imposing an ECA around North America, 5,500 to 14,000 premature deaths from respiratory disease could be prevented in 2020. Vessels can control sulphur emissions by either “scrubbing” the SO_x from their stack emissions, or switching to low sulphur fuels.

Panama experiences a large volume of freight vessels due to the Panama Canal. The canal’s lock system is currently being upgraded to allow larger vessels with to pass through the canal. Preliminary data indicate that a significant proportion of Panama’s sulphur and particulate emissions come from ocean-going vessels. Future research will investigate how emissions might change when the canal expansion is complete and if a theoretical ECA were put in place.