



# Fact Sheet

South Coast Air Quality Management District

## Marine Vessel Emission Reduction Act S 1499 (Boxer & Feinstein) & HR 2548 (Solis)

### Background

Air pollution from goods movement activities is a significant and growing concern for Southern California residents. Studies confirm that exposure to harmful air pollutants, including toxic diesel emissions, increases mortality and hospital, physician and emergency room visits, as well as exacerbate respiratory illnesses including asthma. Over 70 percent of the airborne cancer risk in Southern California is directly attributed to diesel-fueled engines in the basin.

The aggregated smog-forming and toxic diesel emissions from the ships, trains, trucks, and equipment at the ports of Long Beach and Los Angeles represent the largest single fixed source of air pollution in the Los Angeles Basin. Collectively, sources at the ports are responsible for more than 100 tons per day (tpd) of smog-forming and particulate-forming nitrogen oxides – more than the daily emissions from all 6 million-plus cars in the region. Emissions from local ports operations also contribute approximately 50 percent of the regional diesel particulate matter (DPM) emissions, which has been classified by the California Air Resources Board as a carcinogen. Without adequate actions to reduce emission from good movement activities, this problem is only expected to worsen since the cargo throughput in Los Angeles Basin ports is projected to increase by up to 300 percent over the next 10 to 20 years.

### Problem

Large ships, particularly foreign-flagged vessels, are the largest unregulated source of pollutants in Southern California. Marine vessels burn fuel with extremely high sulfur content - averaging approximately 27,000 parts per million (ppm). (By contrast, most equipment in the United States is required, or will be required, to burn fuel with no more than 15 ppm sulfur.) The high sulfur content of marine fuels causes ships to emit over 50 percent of the sulfur oxides (SOx) pollution in Southern California - one of the major components of soot and smog. If this region is to attain the federal PM2.5 standard by 2014, marine vessel SOx emissions must be reduced by over 90%.

### Solution

The Marine Vessel Emissions Reduction Act requires ships to use cleaner-burning, lower-sulfur fuels that reduce health-threatening soot and smog-producing emissions when the ships are in or near U.S. ports. The bill also will impose tougher emissions standards for marine engines.

#### MARINE VESSEL EMISSIONS REDUCTION ACT OF 2007 SUMMARY:

- EPA is to limit the sulfur content of fuel used by domestic and foreign-flagged marine vessels when they enter or leave U.S. ports beginning December 31, 2010.
- EPA must set the limit at no more than 1,000 parts per million unless EPA determines that such a level is not technically feasible by December 31, 2010.
- EPA may set an interim standard as high as 2,000 parts per million, but must lower the standard to 1,000 parts per million by the earliest date that level is achievable.
- The Administrator may provide for an alternative compliance mechanism if a vessel employs a control technology that reduces SOx emissions to at least the same degree as the reduction that would be achieved by compliance with the applicable fuel sulfur content limitation.
- EPA is to set standards for new and in-use engines in domestic and foreign-flagged oceangoing vessels that enter or leave U.S. ports. The standards are to require the maximum degree of emission reduction for NOx, PM, hydrocarbons and carbon monoxide achievable by no later than January 1, 2012.