Board Agenda Item

TO: Air Pollution Control District Board

FROM: Douglas W. Allard, Air Pollution Control Officer

SUBJECT: Marine Shipping Emissions

RECOMMENDATION:

Receive and file a report on staff efforts to reduce emissions from marine vessels.

DISCUSSION:

Emissions from ocean-going marine vessels transiting the Santa Barbara County coast are one of the largest sources of air pollution in the region and represent the biggest threat to our efforts to maintain the federal ozone standard (Figures 1 and 2). In adopting the 2001 Clean Air Plan, your Board directed staff to take aggressive actions to reduce the air quality impacts from this source.

In response to your Board’s direction, we are attempting to influence future emission standards and to garner support for reducing emissions from existing vessels. To date we have done the following:

- Organized a group of affected California air districts to lobby EPA and other organizations to address this source of air pollution.
- Joined the Maritime Air Quality Technical Working Group established by the state Air Resources Board.
- Worked directly with USEPA Region IX headquarters to ensure that EPA rulemaking and incentive-based programs consider the impacts to Santa Barbara County and similarly situated air districts.
- Met with high-ranking EPA and Maritime Administration officials and our congressional representative to seek support in our efforts.
- Worked with the Marine Exchange in the Port of Los Angeles to gather additional data about the ships transiting along our coast and their emissions.

Board Chair Holmdahl and your staff will brief your Board on these efforts.
Emissions of NOx
Santa Barbara County

Emissions of Nitrogen Oxides*

1999

Onshore: 49.28 tons per day
Onroad motor vehicles: 25.95 tons (cars, trucks, buses)
Other mobile sources: 17.27 tons (equipment, trains, planes, boats to 3 miles out)
Stationary sources: 5.30 tons (oil & gas production, agricultural, industrial)
Area-wide sources: 0.76 tons (residential fuel consumption)

Offshore: 29.08 tons per day
Mobile sources: 28.38 tons (ships, boats)
Stationary sources: 0.70 tons (oil and gas production)

2015 (projected)

Onshore: 29.81 tons per day
Onroad motor vehicles: 9.96 tons (cars, trucks, buses)
Other mobile sources: 14.19 tons (equipment, trains, planes, boats to 3 miles out)
Stationary sources: 4.42 tons (oil & gas production, agricultural, industrial)
Area-wide sources: 1.24 tons (residential fuel consumption)

Offshore: 47.95 tons per day
Mobile sources: 47.29 tons (ships, boats)
Stationary sources: 0.66 tons (oil and gas production)

*from the final 2001 Santa Barbara County Air Pollution Control District Clean Air Plan
Breakdown of NOx Emissions
Santa Barbara County

Marine vessel emissions are projected to increase rapidly nearly negating all onshore emission reductions in the future.