SECTION 10 LOOKING FORWARD

Port-related mobile source emissions have continued to decrease over the last several years due in part to the reduced cargo throughput (reflective of global economic conditions) as well as the implementation of the CAAP and regulatory programs. In 2013, the TEU throughput may increase from the previous year as evidenced from the TEU throughput levels in the first quarter of 2013. The 2013 EI will reflect the Port’s actual throughput level in 2013 and the net emissions benefits associated with the implementation of CAAP measures and regulatory programs. In addition, consistent with the Port’s EI development process, the latest available emission factors and methods will be incorporated into the 2013 EI.

The following is a brief description of the anticipated impacts of control programs and measures for each source category, which will result in further reduction of emissions from these port-related sources in 2013:

Ocean-Going Vessels
Continued implementation of CAAP measures, including the use of shore power for vessels at berth and the Port’s vessel speed reduction program, will result in significant emission benefits. In addition, CARB’s marine fuel regulation requiring the use of lower sulfur fuel in main and auxiliary engines and auxiliary boilers will continue. Further, the trend toward newer vessels complying with new IMO standards and incorporating emission reduction technologies is expected to continue offering additional emission benefits in 2013.

Harbor Craft
Under the CARB regulation for commercial harbor craft, in-use, newly purchased, or replacement engines in crew boats, commercial fishing vessels, ferries, excursion vessels, tug boats, pilot boats, workboats, and tow boats must meet EPA’s most stringent emission standards per a compliance schedule set by CARB for in-use engines and for new engines at the time of purchase. For harbor craft with home ports in the SoCAB, the compliance schedule for in-use engine replacements began in 2010 with the oldest model year engines (1979 and earlier) and continue in a phased-in approach.

Cargo Handling Equipment
The continued implementation of the CAAP measure and CARB’s in-use regulation for cargo handling equipment will result in emissions benefits due to the replacement of existing older equipment with newer and cleaner equipment powered by on-road engines or the cleanest engine available. The final compliance date for non-yard tractors in CARB’s CHE regulation is end of 2013 and will result in emission reductions in 2013. Additionally, introduction of electric and hybrid RTGs will be reflected in the 2013 inventory.
Locomotives
The 1998 memorandum of understanding (MOU) among the Class 1 railroads (UP and BNSF), CARB, and EPA requires the accelerated introduction of cleaner locomotives in SoCAB. Specifically, the MOU required BNSF and UP to achieve fleet-wide average NOx emission rates meeting EPA’s Tier 2 line haul emission standard for their locomotives operating in SoCAB by 2010, a goal that the railroads have met, according to documentation they provided to CARB and that CARB released through their website. Additional reductions in subsequent years will be slower now that the MOU is in force but further reductions will occur as the railroads continue to turn over their nation-wide fleets.

Heavy-Duty Vehicles
Implementation of the Clean Trucks Program has resulted in significant emission reductions due to replacement of older trucks with newer ones that meet more stringent emission standards. The final ban, which restricted pre-2007 trucks, came into effect January 1, 2012. In 2013 and future years, the Port will continue the efforts to increase the population of alternatively powered trucks serving the Port, which will reduce emissions of DPM and, depending on the fuel source or technology employed, may reduce emissions of other pollutants.