

Subject:

Comments on ARB draft Policy Statement on Voluntary Early Actions to Reduce Greenhouse Gas Emissions

From:

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Kern Oil & Refining Co. (Kern) has attended previous AB 32 public workshops and is providing the following written comments on ARB's proposed Policy Statement on Voluntary Early Actions to Reduce Greenhouse Gas Emissions.

Kern believes it is not only important to encourage early voluntary Greenhouse Gas (GHG) reductions, but it is equally important to recognize that certain sectors, such as the refinery sector, have made early actions in achieving reductions in Low Carbon Fuel Standards (LCFS) and have effectively made significant reductions in ozone precursors by having voluntarily committed to upgrading refinery processes to achieve mandated Reformulated Phase 3 Gasoline standards and Ultra Low Sulfur Diesel (ULSD standards). ARB should recognize refiners have committed millions of dollars in plant upgrades to produce cleaner burning fuels. ARB should also recognize and take into consideration the difficulties associated with "conflicting regulations."

## **Overview**

*AB 32 Chapter 4, Part 4, Section 38562(b)(4) Ensure that activities undertaken pursuant to the regulations complement, and do not interfere with, efforts to achieve and maintain federal and state ambient air quality standards and to reduce toxic air contaminant emissions.*

Mandated projects that produce reformulated or alternative cleaner fuels result in significant reductions of priority pollutants and GHG emissions from mobile sources. These emission reductions are critical to the State and Federal Ozone Attainment Plan and AB 32 objectives. Projects mandated to produce reformulated and alternative cleaner fuels should not be in conflict with the efforts to achieve GHG reductions.

In order for refiners to produce mandated reformulated fuels, such as Ultra Low Sulfur Diesel (ULSD) refiners must install additional process heaters. The additional heaters increase refinery fuel consumption which increase GHG emissions. However, the emissions reductions from the use of reformulated or alternative fuels vastly outweighs the incremental increase in fuel usage and GHG emissions at the refinery. Therefore, the refineries producing the mandated reformulated fuels or alternative fuels should not be penalized for the increased fuel usage, and facility increases in GHG emissions resulting from mandated projects to produce cleaner-burning fuels. Kern recommends that some form of early action carbon credit be provided to refineries that are mandated to implement the production of cleaner-burning, reformulated, or alternative fuels.

The following are examples of actual projects Kern has recently completed that resulted in additional fuel usage at the refinery, resulting in increase of GHG emissions, yet effectively reduced a far greater amount of GHG emissions and ozone precursors from the use of cleaner fuels and cogeneration, resulting in a significant overall net air quality benefit.

**Example 1:** As a result of federal and California state mandates all refineries were required to again reformulate diesel fuels to meet ULSD standards. In order to meet these mandates Kern was required to install process heaters and ancillary equipment to produce ULSD. This increased the refinery's fuel usage. The emissions reductions statewide from the use of ULSD produced from this project are substantial. The overall net environmental benefits of this project far surpass any incremental energy usage or GHG emissions increase at the refinery level. Any GHG emissions increases directly resulting from this type of a reformulated fuels mandate should not be counted toward the facility's GHG emissions baseline or inventory. In fact, refiners should be provided a discrete early action carbon credit for the reductions occurring from the mobile source use of the cleaner burning reformulated fuels.

**Example 2:** As a result of local air district rules affecting heaters and boilers, Kern was required to retrofit existing boilers and heaters to meet new emissions standards. Engineering analysis indicated that retrofitting with process heaters with control devices would result in a decrease in heater efficiency and would cause an increase in fuel

consumption. This project is another illustration of how “conflicting regulations” meant to control ozone precursors can also cause increases in fuel consumption and increases in GHG emissions.

**Example 3:** Due to the electrical energy shortages and disruptions in California, Kern installed a distributed generation system to supply the electrical and steam energy needs of the refinery. In doing so, fuel consumption increased at the facility due to the new natural gas fuel supply needed to operate the system. The increase in fuel consumption, however, was fully offset by the decrease in demand usage from the “Grid” including peak power stations that would otherwise be supplying power to the refinery. In addition, the refinery effectively reduced potential emissions by protecting against shutdowns and start ups due to electrical disruptions. This example illustrates how fuel consumption and GHG emissions at a facility may increase, yet the facility’s overall emissions may actually decrease due to a project that provides a more reliable source of power.

The examples cited above, demonstrate the importance of consideration for not penalizing facilities for the resultant increase in fuel usage for those mandated projects that produce overall net air quality benefits greater than the incremental facility emissions increase.

## **Recommendation**

Kern recommends ARB add a bullet on page two of the draft “Policy Statement on Voluntary Early Actions to Reduce Greenhouse Gas Emission”, as follows:

- Ensure that companies are not penalized for GHG emissions increases due to the addition or modification of equipment required to meet state or federal mandated reformulated fuel mandates; and reward those companies with credits or offsets resulting from GHG reductions achieved through the market use of the cleaner burning reformulated fuels each facility produces.

If you need additional information, please contact me a (661) 282-2646,

Regards

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