The Honorable Bill Leonard
Member of the Senate
State Capitol, Room 4062
Sacramento, CA 95814

Dear Senator Leonard:

In preparation for our meeting on November 30, I thought it would be helpful to provide a written response to the questions you posed in your October 19 letter to Jananne Sharpless. These questions deal with what statutory guidance would be needed by the Air Resources Board (ARB) to implement the levy envisioned by SB 155. You also asked for comments on the overall concept. Since we still have some questions regarding how you anticipate expending the revenues collected, I would prefer to discuss the overall concept at our meeting.

What guidelines does ARB need to define dirty fuels? Your letter defines dirty motor vehicle fuels as gasoline and diesel. (Bunker oil is discussed separately below). We know the emission rates of vehicles which use these fuels, and the emission rates of cleaner fuels can be determined by testing. This information could be used as the basis for comparing the emission performance of cleaner fuels to dirty fuels. This comparison could be used to determine if a fuel would be subject to the emission levy. The process could be established by regulation.

A more complicated issue for which legislative guidance would be needed is: How much cleaner must a fuel be to be considered clean and thus avoid the levy? For example, ARCO has voluntarily introduced a cleaner gasoline for use in older cars. It is called EC-1. EC-1 is claimed to reduce emissions from these vehicles by about 20%. It also has lower toxic emissions. EC-1 is thus cleaner than current gasoline, but it is less than half as clean as alternative fuels such as natural gas or methanol (M85). The guidance needed is how much cleaner must a fuel be to avoid the levy.

Furthermore, ARB staff will propose next year that all gasoline, beginning in about 1993, have cleaner properties similar to EC-1. Thus if the sale of a cleaner fuel becomes mandatory, we would need to know whether the levy should end, continue at some lower rate, or simply continue at the old rate.

CARB-FTC 0050230
One approach which would address these issues would require ARB to define by regulation the emission rates caused by burning existing dirty fuels, and establish a mechanism by which the emission rates caused by burning cleaner fuels can be determined. We would suggest that the statutory definition of a low emission vehicle could be used as the criteria to exempt a fuel from the levy (HSC 39037.05), however, we would suggest adding to 39037.05 a requirement that the toxic emissions must also be reduced by half in order to qualify as a low emission vehicle. We also suggest that a fuel which achieves 50% or more of the emission reductions required to be exempt from the levy have its levy reduced by one half. This will encourage companies to voluntarily introduce cleaner forms of gasoline and diesel.

The costs of administering the program should be reimbursable from the revenues collected.

What guidance does ARB need to determine the amount of the levy? Your letter states the levy would be limited to the average cost of newly imposed stationary and mobile source emission reduction requirements expressed in dollars per ton. We routinely establish the cost of newly adopted motor vehicle emission control requirements, and the districts do the same for stationary sources. Thus the limit of the levy could be established.

An example may help illustrate how the upper limit of the levy could be calculated. The most recent motor vehicle emission standard adopted by ARB cost $2400/ton of hydrocarbons reduced. In 1987, there were 950 tons per day of reactive hydrocarbons emitted statewide from on-road mobile sources. If we assume about 1 billion gallons of motor vehicle fuels are sold monthly, the maximum levy would be 6.8 cents per gallon. If the levy was set at the maximum, $800 million would be raised annually.

Does extending the system to include stationary sources of combustion add or detract from the concept? Your letter mentions bunker oil as a dirty fuel, but distillate and diesel fuel might also be considered dirty fuels. These three fuels account for about 4 percent of all NOx emissions. NOx emissions from motor vehicles are about 15 times larger. Because combustion emissions from fuel oil combustion are relatively small in comparison to motor vehicle emissions, it may be advisable to limit the levy program to motor vehicle fuels, at least in the beginning.

I look forward to meeting with you today.

Sincerely,

Tom Cackette  
Deputy Executive Officer

cc: Jananne Sharpless