Information on CARBOB Commingling Issues

A letter dated February 2, 2009, was received by the California Air Resources Board staff. The letter asked questions about CARBOB commingling issues. The Enforcement Division responded to the letter and the response is provided here for others to benefit. (Note: CARB highlighted each question in yellow. Each CARB response is highlighted in gray.)

Letter dated February 2, 2009.

Re. Request for Clarification Regarding CARBOB Commingling Issues

Dear Mr. Simeroth:

In a previous conference call to discuss a number of implementation issues relating to the amended CaRFG3 regulations. One of the issues discussed was CARBOB commingling issues for "CARBOB's that are not identically specified". The CARBOB commingling issues involve downstream tanks as opposed to production tanks (where the CARBOB is certified) and retail tanks (where finished compliant CARB gasoline can be commingled with other compliant CARB gasoline).

On our call, there was some discussion of terms such as: "narrow-range" certified CARBOB; "discrete-level" certified CARBOB; "single-value" certified CARBOB; and "broad-range" certified CARBOB.

For the purpose of this discussion, we would like to define these terms as follows:

1) "narrow-range", "discrete-level", "single-value" certified CARBOBs are designated for oxygen content that is within 0.4 weight percent oxygen (for example 1.8 to 2.2 weight percent oxygen, 2.5 to 2.9 weight percent oxygen, etc.) and will be called "discrete" CARBOBs;

2) "broad-range" certified CARBOBs are designated for oxygen content that is greater than 0.4 weight percent oxygen (for example 2.0 to 2.7 weight percent oxygen, 2.0 to 3.5 weight percent oxygen, etc.) and will be called "range" certified CARBOBs.

Our understanding is that it is not permissible to commingle a range-certified CARBOB with a discrete-level certified CARBOB <u>unless</u> the range of the range-certified CARBOB includes the discrete level and the receiving tank becomes a CARBOB that can only be blended at the discrete level. Other allowable options in this situation would be to either:

CARB comment: The regulation states that "CARBOB may be blended with other CARBOB for which . . . the same amount (or range of amounts) of oxygen, was specified by the producer or importer at the time the CARBOB was supplied from the production or import facility." In other words, all CARBOB placed into a specific downstream tank must be identically specified for oxygen. NO, you cannot commingle 2 CARBOBs into a downstream tank where one CARBOB

is a range and the second CARBOB is a discrete level that is within the range of the first CARBOB.

1) re-certify the downstream tank for a different oxygen level(s); or

CARB comment: Yes, a company may re-certify a downstream tank to match the oxygen specification of the CARBOB it expects to receive. Remember, the company that operates that terminal must notify CARB that it is treating that downstream tank as though it were a production tank. CARB has established procedures that a company should use to notify CARB of this type of treatment. It is called "tank designation notification".

2) dual certify the tank ahead of time and prior to shipment.

CARB comment: No, a downstream tank cannot be dual certified.

Dual Certification -- What is it? and Where in the distribution system does the concept apply?

Currently, KinderMorgan (KM) only allows a CARBOB having a formulation of 1.8 to 2.2 w% oxygen with a blending rate of 5.7 v% ethanol into its pipeline system. However, some producers want to produce a CARBOB that can be shipped in the KM pipeline as well as in its own proprietary pipeline to its own proprietary terminal for blending (for example) up to 7.7 v% ethanol. CARB Enforcement Division staff and these producers developed a procedure so that a producer can certify its CARBOB to satisfy this need while complying with the notification requirements of the CARBOB regulation. In this example, the producer first certifies it's CARBOB for an oxygen range of 1.8 to 2.7 w% oxygen with a blending range of 5.7 to 7.7 v% ethanol. Next, the producer certifies the same CARBOB for an oxygen range of 1.8 to 2.2 w% oxygen with a blending rate of 5.7 v% ethanol. The first certification demonstrates that the CARBOB complies with the producer's proprietary pipeline specifications and satisfies the CARB notification requirements regarding the supply of CARBOB from its production facility into its proprietary system. The second certification demonstrates that the CARBOB complies with KM pipeline specifications and satisfies the CARB notification requirements regarding the supply of CARBOB from its production facility into the KM pipeline system. The producer sends both CARBOB formulations to CARB using an electronic form created by CARB for this purpose. The term "dual certification" was given to this procedure. Dual certification can only be conducted at a production or import facility (not at, for example, a downstream storage tank at a bulk terminal).

So, how is this information used?

1. When this producer supplies CARBOB to the KM pipeline, the producer informs KM that the CARBOB formulation is 1.8 to 2.2 w% oxygen with a blending rate of 5.7 v% ethanol. KM may only commingle that CARBOB with other CARBOB that is identically specified at its terminals. KM must oxygenate this CARBOB at 5.7 v% ethanol.

2. When that same producer supplies the same (dual certified) CARBOB to its proprietary pipeline going to its proprietary terminal, the producer informs its proprietary pipeline and terminal that the CARBOB is certified for an oxygen range of 1.8 to 2.7 w% oxygen with a blending range of 5.7 to a 7.7 v% ethanol. Its proprietary terminal may only commingle that CARBOB with other CARBOB that is identically specified at its terminal. The proprietary terminal may oxygenate this CARBOB at any point between 5.7 to 7.7 v% ethanol.

It is also our understanding dual certification can mean the following:

1) certifying a batch of CARBOB at two discrete levels;

2) certifying a batch of CARBOB at a discrete level and a range level; or

3) certifying a batch of CARBOB at different range levels.

<u>CARB comment</u>: YES, the items listed above are examples dual certification, but dual certification can only be done at the production or import facility.

We also understand CARB has developed a new compliance tool (spreadsheet) to accommodate notifications for dual-certified CARBOB batches. Please provide us with an update on the status of this tool and whether it has been finalized and is available via the website.

CARB comment: YES, CARB has developed a new reporting tool to accommodate dual certification. CARB has distributed it only to those companies that have discussed the concept of dual certification with CARB and fully understand that dual certification only applies to CARBOB at the production or import facility. CARB will distribute the reporting tool to additional companies after we discuss the concept of dual certification with them.

It is also our understanding compliant mid-grade finished gasoline produced from premium and regular CARBOBs that are not identically specified may be produced if the different CARBOBs are combined along with ethanol at the manifold/truck. This situation may be a transitional step or may be an ongoing operation.

Enforcement Division comment: The Enforcement Division is of the opinion that mixing of premium and regular CARBOB formulations to produce mid-grade finished gasoline is permissible only in the manifold at a truck loading rack or in a cargo tank truck.

There is an open question regarding whether or not there is a protocol provision that would allow commingling premium and regular CARBOBs that are not identically specified in a terminal tank (as opposed to a delivery truck) to produce a "mid-grade CARBOB" for subsequent ethanol blending.

<u>CARB comment</u>: Section 2266.5(f)(2)(C) provides for protocols for "Other Situations." Each specific situation will be evaluated upon application for a protocol.

Finally, we understand non-identically specified CARBOBs can be commingled provided the commingling is the result of the unavoidable mixing of deminimus volumes of CARBOBs associated with normal tank farm and pipeline operations.

<u>Enforcement Division comment:</u> The Enforcement Division is of the opinion that the incidental mixing exclusively at the interface of 2 CARBOBs in a pipe is permissible. However, the specific facts of each situation must be addressed separately.

We are requesting that CARB staff respond with your understanding of the items outlined above.

We would also like feedback from CARB on when you expect to incorporate the amendments into the entire CARB gasoline regulation so we can work with an integrated document.

CARB comment: We are currently preparing in integrated document and hope to have it available on the web by about April 20, 2009.