1/4/12

Mr. Don Hittner
Operations Manager
Indeck Olean Energy Center
140 Moore Ave.
Olean, NY 14760

Re: Petition for Approval of an Alternative Test Method to Determine the Sulfur Content of Ultra-Low Sulfur Diesel Fuel Oil, for Unit 1 at the Indeck Olean Energy Center (Facility ID (ORISPL) 54076)

Dear Mr. Hittner:

The United States Environmental Protection Agency (EPA) has reviewed the July 14, 2011 petition submitted under 40 CFR 75.66(c) by Indeck-Olean Limited Partnership (Indeck), in which Indeck requested permission to use an alternative method to determine the sulfur content of ultra-low sulfur diesel fuel at Unit 1 at the Indeck Olean Energy Center. EPA approves the petition, as discussed below.

Background

Indeck owns and operates the Indeck Olean Energy Center, which is located in Cattaraugus County, NY. Indeck Unit 1 is a combined-cycle turbine with a maximum rated heat input capacity of 789 MMBtu/hr. Unit 1 combusts natural gas as its primary fuel and ultra-low sulfur diesel (ULSD) oil as a backup fuel. According to Indeck, the unit is subject to the Acid Rain Program, the Clean Air Interstate Rule (CAIR) NO_x and SO_2 Trading Programs, and the Transport Rule (TR) NO_x and SO_2 Trading Programs. Therefore, Indeck is required to continuously monitor and report SO_2, NO_x, and CO_2 emissions and heat input for Unit 1 in accordance with 40 CFR Part 75. To meet the Part 75 monitoring requirements for SO_2 emissions and heat input, Indeck uses the excepted methodology in Appendix D of Part 75.

For an affected unit that burns fuel oil, section 2.2 of Appendix D requires periodic fuel sampling and analysis to determine the total sulfur content of the fuel. The acceptable methods for total sulfur determination are listed in section 2.2.5 of Appendix D. Of the methods listed, only one (ASTM D5453-06) is sensitive enough to measure total sulfur at the levels found in ULSD (i.e., $\leq$ 15 ppm, which is equivalent to 0.0015% S by weight). However, the laboratory that analyzes Indeck's fuel oil samples is not set up to perform ASTM D5453-06; rather, the laboratory uses ASTM D7039-07, "Standard Test Method for Sulfur in Gasoline and Diesel Fuel by Monochromatic Wavelength Dispersive X-Ray Fluorescence Spectrometry", to determine the total sulfur content of ULSD samples.

In view of these considerations, Indeck submitted a petition to EPA on July 14, 2011,

requesting permission to use ASTM D7039-07 to determine the total sulfur content of its ULSD. According to Indeck, an EPA-sponsored round-robin test program was conducted in which ASTM D7039-04 was used[1] to analyze ultra-low sulfur liquid standards with traceability to the National Institute of Standards and Technology (NIST). The results of that study showed that the method is accurate and has no statistically-observable bias. In addition, ASTM D7039 has been approved as an analytical method for determining the total sulfur content of ultra-low sulfur diesel fuel under 40 CFR 80.584 and 80.585.

EPA's Determination

Based on a review of Indeck's July 14, 2011 petition and the attached portion of ASTM D7039-07, EPA finds ASTM D7039-07 to be an appropriate method for determining the total sulfur content of ultra-low sulfur liquid fuels. The method is capable of accurately determining total sulfur levels as low as 2 ppm (0.0002% S by weight). Therefore, the Agency approves Indeck's request to use ASTM D7039-07 to determine the sulfur content of the ULSD combusted in Unit 1 at the Indeck Olean Energy Center.

EPA's determination relies on the accuracy and completeness of Indeck's July 14, 2011 petition and is appealable under Part 78. If you have any questions regarding this determination, please contact Matthew Boze at (202) 343-9211. Thank you for your continued cooperation.

Sincerely,

/s/
Sam Napolitano, Director
Clean Air Markets Division

cc: Esther Nelson, EPA Region II
Randall Orr, NYSDEC
Matthew Boze, CAMD

[1] Note that an earlier version of the method (i.e., ASTM D7039-04) was used in the study.