Preliminary Draft for Public Review and Comment
January 24, 2010

Parallel Products Waste Beverage-to-Ethanol Method 2B Application

Plant Summary

USL Parallel Products of California (Parallel Products) has submitted an application for an LCFS Method 2B pathway. The pathway is for the production of ethanol from waste beverages. Parallel Products operates a plant in Rancho Cucamonga, California, in which sugars in waste beverages, soft drinks, and other waste sugar sources are fermented to ethanol. Over 90 percent of the waste beverages used in the Parallel Products facility are produced in California. The ethanol is combined with waste beer, wine and/or spirits and distilled to 190 proof. The 190 proof product is dried to 200 proof. The neat ethanol is denatured and sold to a nearby Southern California refiner for blending into motor vehicle gasoline. Parallel Products produces about 600 thousand gallons of ethanol per year. Parallel's waste beverage pathway yields no co-products.

Carbon Intensity of the Ethanol Produced

Parallel products has calculated the carbon intensity of the ethanol produced from its process to be 71.4 grams of CO2 equivalent per MJ of ethanol produced. About 89 percent of this carbon intensity value represents the emissions associated with the production of ethanol at the plant, while about 11 percent represents the emissions associated with waste beverage transportation. The Low Carbon Fuel Standard (LCFS) lookup table currently contains no pathway for a waste-beverage-to-ethanol pathway. Therefore, the Parallel Products pathway falls under the Method 2B provisions of the LCFS. As such, it is not subject to the substantiality requirements with which Method 2A applications must comply (a minimum improvement of five gCO2e/MJ, and a minimum production volume of ten million gallons per year).

Because the Parallel Products plant uses waste for a feedstock, no indirect emissions (including land use change emissions) are associated with the fuel it produces. Therefore, the total carbon intensity of the pathway is 71.4 grams of CO2 equivalent per MJ of ethanol produced. A proposed LCFS Lookup Table entry for the Parallel Products pathway is shown in Table 1.

Table 1: Proposed Lookup Table Entry for the Parallel Products Rancho Cucamonga Facility

Fuel/Feedstock	Proposed Lookup Table Pathway Description	Carbon Intensity (Including Indirect Effects)	Do Special Conditions Apply[1]
Ethanol/Waste Beverages	Waste Beverages to Ethanol	71.4	Y

[1] The special conditions to which this column refers are discussed in the "Carbon Intensity of the Ethanol Produced" section of this summary

Parallel Product's total energy and electricity use values for its Rancho Cucamonga facility will become operating conditions upon approval by the Executive Officer of the proposed carbon intensity value. Energy and electricity use shall not exceed the current values that are classified by the applicant as confidential business information.

Staff Analysis and Recommendation

Staff has reviewed the Parallel Products application and has replicated, using the CA-GREET spreadsheet, the carbon intensity value calculated by Parallel Products. Parallel Products has provided documentation of the plant's energy use and ethanol production. Staff is satisfied that the energy value in the application accurately represents the plant's energy value. Staff is satisfied that the electricity use value in the application accurately represents the plant's electricity use. Staff believes that the carbon intensity value calculated by Parallel Products is sustainable. Consequently, Staff believes that the carbon intensity value of 71.4 gCO_2e/MJ accurately represents the carbon intensity value of the Parallel Products Rancho Cucamonga plant. Therefore, Staff recommends that Parallel Products application for a Method 2B pathway be approved.