Staff Summary
Method 2B Application
Platinum Green Chemicals Sdn. Bhd.
Used Cooking Oil to Biodiesel Pathway
(Pathway Code: BIOD031)

Deemed Complete Date: June 19, 2015
Posted for Comment Date: August 7, 2015
Certified Date: August 18, 2015

Pathway Summary

Platinum Green Chemicals Sdn. Bhd (Platinum Green) produces mixed-feedstock biodiesel (BD) at its Negeri Sembilan, Malaysia plant. The company has applied for a Low Carbon Fuel Standard (LCFS) Method 2B pathway for the fuel produced from used cooking oil (cooking required). The plant uses a standard Fatty Acid Methyl Esters (FAME) transesterification process to produce biodiesel and has a production capacity of 60 million gallons per year.

The biodiesel is transported by pipeline and trucks from the biodiesel plant to the Malaysian port, and then transported by ocean tanker to California.

Platinum Green left most of the default input parameters unchanged in its CA-GREET analysis. Only the BD production energy consumption, the electrical generation energy mix, and the transportation distance parameters were changed.

Carbon Intensity of the Fuel Produced

The LCFS lookup table currently contains no pathway covering BD produced in Malaysia from used cooking oil. Therefore, the Platinum Green pathway falls under the Method 2B provisions of the LCFS. Because Platinum Green's application was submitted under the Method 2B process, it is not subject to the substantiality requirements with which Method 2A applications must comply (a minimum improvement of five gCO_2e/MJ, and a minimum production volume of ten million gallons per year).

The proposed Platinum Green pathway CI is shown in the following table.

Proposed Lookup Table Entry

Fuel	Pathway Identifier	Pathway Description	Carbon Intensity in gCO_2e/MJ		
			Direct Emissions	Land Use or other Indirect Effects	Total
Biodiesel	BIOD031	2B Application*: Malaysian used cooking oil where "cooking" is required; Biodiesel Produced in Malaysia	26.85	0	26.85

*Specific Conditions Apply

Operating Conditions

Operations at the plant will be subject to the following conditions designed to ensure that the CI of the of the BD produced at the Platinum Green plant will remain at or below the value appearing in the table above for all volumes of BD sold in California:

1) Except for periods of abnormal operations, such as planned maintenance or unpredictable, unavoidable, and uncontrollable *force majeure* events, the total thermal and electrical energy use values specified in the Platinum Green application shall not be exceeded.
2) All gallons produced under all certified LCFS Method 2 pathways shall inherit the same CI increment from the consumption of process energy at the plant. The applicants may not allocate process energy CIs so as to reduce the total life cycle CI of some subset of the gallons produced (e.g., those being shipped to California) and increase the CI of the remaining gallons. An example of such a reallocation would be associating California-bound gallons with the consumption of biogas and non-California-bound gallons with the consumption of natural gas.

Staff Analysis and Recommendation

Staff has reviewed Platinum Green's Method 2B application, and finds the following:

- Staff has replicated, using the CA-GREET spreadsheet, the carbon intensity values calculated by the applicant; and
- Staff has concluded that the plant's actual energy consumption is not likely to exceed the energy consumption levels specified in Platinum Green's Method 2B application.

On the basis of these findings, staff recommends that Platinum Green's application for a Method 2B pathway be approved.