

## **Endicott Biofuels II LLC CA-GREET Model**

The applicant has conducted its analysis of direct effects on carbon intensity for this pathway using CA-GREET, v.1.8b (Dec. 2009) (See [http://www.arb.ca.gov/fuels/lcfs/ca\\_greet1.8b\\_dec09.xls](http://www.arb.ca.gov/fuels/lcfs/ca_greet1.8b_dec09.xls)). The standard inputs and parameters specified in CA-GREET remain unchanged except as noted in the input table below. The input table below specifies the spreadsheet location of the CA-GREET inputs and other parameters that were claimed as confidential business information or trade secret by the applicant, but it does not disclose the actual value of such inputs and parameters because they are claimed to be confidential business information or trade secret.

Endicott Biofuels Input data table (Locations of cells containing Confidential Business Information are shown, but the actual values of such confidential information are not disclosed):

<b>GREET Tab/Cell</b>	<b>Description</b>	<b>Default Value</b>	<b>Modified Value</b>	<b>Comment</b>
UCO BD/B11	UCO Processing (Btu/lb. of UCO)	1,073	xx	Assumes UCO from modern rendering plants plus no cooking required
UCO BD/B12	FFA transesterification (Btu/lb BD)	171	xx	This step in the Endicott process is assumed to be [redacted]
UCO BD/B13	UCO transesterification (Btu/lb. of biodiesel)	2,116	xx	UCO esterification (EBF Process) (Btu/lb. of biodiesel). EBF distillation process slightly less energy-intensive than traditional transesterification
UCO BD/C41	Glycerin co-product production lb/lb BD	0.105	xx	Based on 23.6 mm lbs/yr of glycerin production and 220.2 mm lbs/yr of BD production
UCO BD/E174	Shares of Process Fuels: Natural Gas (%) for [redacted]	90.7	xx	Based on EBF energy balance
UCO BD/E177	Shares of Process Fuels: Electricity (%) for [redacted]	9.3	xx	Based on EBF energy balance
UCO BD/F174	Shares of Process Fuels: Natural Gas (%) for Esterification	42.0	xx	Based on EBF energy balance
UCO BD/F177	Shares of Process Fuels: Electricity (%) for Esterification	2.2	xx	Based on EBF energy balance
UCO BD/F179	Shares of Process Fuels: Electricity (%) for Esterification	40.9	xx	Based on EBF energy balance
T&D/IH93	Transport of UCO to BD plant	50 miles via truck	1,500 miles via rail	Includes distance to [REDACTED]
T&D/GE 93	Transport of Biodiesel to California Bulk Terminal	1,400 mi via rail	1,600 miles via rail	From Port Arthur, Texas