

**PRELIMINARY DRAFT SUBMITTED FOR PUBLIC COMMENT
December 14, 2010**

Green Plains Central City Corn Ethanol LCFS Pathway 2A Application

Plant Summary

The Green Plains Central City (Green Plains) corn ethanol plant is located in Central City, Nebraska. Green Plains has submitted an LCFS Method 2A application for the Central City plant. The Central City plant began operation on May 6, 2004, with a capacity of 48 million gallons per year (MGY) of denatured ethanol. In November 2006, the capacity of the facility was expanded to 100 MGY. The plant is a dry mill, ICM-designed, natural gas-fired plant producing modified distillers grains with solubles (MDGS) with an average moisture content of about 50 to 55 percent.

Carbon Intensity of Ethanol Produced

The carbon intensity of the Green Plains plant, as calculated by Green Plains, is 84.29 gCO₂e/MJ of ethanol produced. The reference carbon intensity from the LCFS Lookup Table is 98.4 gCO₂e/MJ for gas-fired plants producing dry distillers' grains with solubles. This reference value also applies to plants producing MDGS. Because the proposed CI is five or more gCO₂e/MJ below the reference pathway CI, the proposed pathway meets the LCFS substantiality requirement.

The Green Plains plant achieves a lower carbon intensity value relative to the reference pathway through two principal means. First, the plant incorporates modern plant design developed by ICM that results in less energy use in the plant. Energy use at the Central City plant is below the 36,000 BTU per gallon energy use value that forms the basis of the carbon intensity for the reference dry DGS pathway. Second, electricity use at the Central City plant is below the 1.08 kw-hr per gallon that is assumed for the reference pathway.¹

Staff Analysis and Recommendation

The staff has reviewed the Green Plains application and has replicated, using the CA-GREET spreadsheet, the carbon intensity value calculated by Green Plains. Green Plains has provided documentation of the plant's energy use and ethanol production. The staff is satisfied that the energy value in the application accurately represents the plant's energy value. The staff is satisfied that the electricity use value in the application accurately represents the plant's electricity value. The staff believes that the carbon intensity value calculated by Green Plains is sustainable. Consequently, the staff believes that the carbon intensity value of 84.29 gCO₂e/MJ accurately represents the carbon intensity value of the Green Plains plant. Therefore, the staff recommends that Green Plains' application for a Method 2A corn ethanol pathway be approved.

¹ Actual plant energy use values are classified as confidential business information and not reported herein.