## State of California AIR RESOURCES BOARD

## SECOND ERRATA

## PROPOSED AMENDMENTS TO THE LOW CARBON FUEL STANDARD REGULATION AND TO THE REGULATION ON COMMERCIALIZATION OF ALTERNATIVE DIESEL FUELS

On August 13, 2018, the California Air Resources Board released the "Second Notice of Public Availability of Modified Text and Availability of Additional Documents and Information" for the proposed amendments to the Low Carbon Fuel Standard (LCFS) Regulation and to the Regulation on Commercialization of Alternative Diesel Fuels. The deadline for written public comment on the modified text and additional documents was initially set to August 28, 2018, but was extended to August 30, 2018.

PLEASE BE ADVISED that five simplified calculators and the CA-GREET3.0 model posted August 13, 2018 contained one or more typographical errors in excel formulas or in the text that have been corrected. The majority of these typographical errors were not present in the previous model versions posted for public comment on June 20, 2018. The corrected calculators/model are:

- 1. Tier 1 Simplified CI Calculator for Biodiesel and Renewable Diesel;
- 2. Tier 1 Simplified CI Calculator for Biomethane from Anaerobic Digestion of Wastewater Sludge;
- 3. Tier 1 Simplified CI Calculator for Biomethane from Anaerobic Digestion of Dairy and Swine Manure;
- 4. Tier 1 Simplified CI Calculator for Biomethane from Anaerobic Digestion of Organic Waste;
- 5. Tier 1 Simplified CI Calculator for Sugarcane-derived Ethanol; and
- 6. CA-GREET3.0

The typographical errors discovered and corrections are described below.

| Model/calculators<br>(for reference no.<br>see above) | Error  | Correction                      |
|---|--|---------------------------------|
| 1   | Missing default value for canola farming emissions (Canola tab: D40)   | Restored the default value      |
| 1   | Hydrogen use for renewable diesel was linked<br>to an incorrect cell which contained a static<br>value (RD-Production tab: F132) | Linked to the correct cell      |
| 1   | Pointing error for the average moisture content (UCO 1 tab: G39)   | Linked to the correct cell      |
| 2   | An errant multiplication sign in the Final CNG CI formula (RNG tab: 192)   | Deleted the multiplication sign |

| 3                    | Outdated emission factors ("EF Table" &<br>"Biogas-to-RNG" tabs)  | Updated the emission factors for<br>NG use in LNG, and tailpipe<br>emissions |
|----------------------|---|--|
| 3                    | Unused propane, and NG for LNG production emission factor tables in EF Table tab  | Deleted the propane and natural gas emission factor tables                   |
| 4                    | #REF! errors due to inadvertent deletion in EF<br>Table tab (RNG tab: H102, H103)   | Restored the deleted value   |
| 4                    | Missing loss factors for "Credit" and "Credit<br>Adjustment" in calculating CIs for CNG, LNG<br>and LCNG (RNG tab: I106, I107, I018)                          | Incorporated loss factors  |
| 4                    | Pointing errors for feedstock mass used in calculating avoided emissions in the baseline compost scenarios (FS Fate tab: C57, C59 and ULW Fate tab: C58, C60) | Linked to the correct cells  |
| 6                    | Methane leakage from the landfill RNG T&D<br>was incorrectly referenced to the pipeline<br>distance for fossil NG (RNG tab: L595)                             | Corrected reference cells using<br>RNG pipeline distance                     |
| 6                    | Cells AD121:AF126 in "EF" tab are not used  | Deleted unused cells   |
| 6                    | "Corn Oil" should be updated to "Corn/Sorghum<br>Oil" in T&D tab  | Updated the terminology  |
| 5                    | Irrelevant internal note: "per CA-GREET3.0v-<br>139.xlsm" in the "EF Table" tab   | Deleted the internal note  |
| Multiple calculators | Spelling errors   | Corrected spelling errors  |

This Second Errata, the complete Second Notice of Public Availability of Modified Text and Availability of Additional Documents and Information, and other rulemaking materials are available on CARB's website at the following address: https://www.arb.ca.gov/regact/2018/lcfs18/lcfs18.htm

The corrected models are still listed under the August 13, 2018 release of CA-GREET3.0, posted for public review here: <u>https://www.arb.ca.gov/fuels/lcfs/ca-greet/ca-greet.htm</u>

Any questions regarding these corrections should be directed to Anil Prabhu, Manager, Fuels Evaluation Section, at (916) 445-9227.

CALIFORNIA AIR RESOURCES BOARD

 $(\mathcal{V})$ Richard W. Corev

Richard W. Corey Executive Officer

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The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see CARB's website at <u>www.CARB.ca.gov</u>.