UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUN 10 2011

OFFICE OF
AIR AND RADIATION

Mr. Brian Appel, President
Changing World Technologies, Inc.
460 Hempstead Avenue
West Hempstead, New York 11552

Dear Mr. Appel:

You requested a determination of whether Changing World Technology's (CWT) proprietary renewable diesel fuel products, when made with natural gas and electricity as process energy sources and waste oils/fats/greases and/or the non-cellulosic portions of separated food wastes as feedstocks, would qualify as biomass-based diesel under the Renewable Fuel Standard Program (RFS2).

Through the petition process described under 40 CFR 80.1416, CWT submitted data to the Environmental Protection Agency necessary to perform a lifecycle greenhouse gas analysis of the CWT renewable fuel pathway. In conducting our detailed assessment, my staff largely relied on the modeling done for biodiesel produced from waste oils, fats, and greases for the RFS2 final rule, adjusting the analysis to account for CWT's unique production process. The enclosed document "Changing World Technologies Request for Fuel Pathway Determination under the RFS2" describes the data submitted by CWT, the analysis conducted by the EPA, and our determination of the lifecycle greenhouse gas emissions associated with the fuel production pathway described in CWT's petition.

Based on our assessment, the proposed CWT renewable diesel pathway qualifies for Biomass-Based Diesel (D-Code 4) RINs under the RFS2. The pathway has been determined to qualify based on an analysis of waste oils/fats/greases and/or the non-cellulosic portions of separated food waste as feedstocks. Although CWT's thermal depolymerization process is capable of producing renewable diesel from feedstocks other than waste material, our analysis relied on data submitted by CWT, which pertained to waste feedstocks. Therefore, we are not able to evaluate and make a determination for feedstocks other than waste oils, fats, and greases and non-cellulosic portions of separated food wastes at this time.

This approval applies specifically to Changing World Technologies, Inc., and to the process, materials used, fuel produced, and process energy sources as specified in the petition request submitted by CWT. The OTAQ Reg: Fuels Programs Registration and OTAQEMTS: OTAQ EMTS Application will be modified to allow CWT to register and generate D-Code 4 RINs for the production of renewable diesel from the above feedstocks using a production process identified in EMTS as "CWT Process."

If you have additional questions about this or related issues, please contact Robert Larson of my staff at 734-214-4277.

Sincerely,

Margo Tsirigotis Oge, Director
Office of Transportation and Air Quality

Enclosure

Changing World Technologies Request for Fuel Pathway Determination under the RFS2
Office of Transportation and Air Quality
May 31, 2011

Summary: Changing World Technologies (CWT) petitioned the Agency for authority to generate biomass based diesel RINs (D-code 4) under the RFS2 program for the production of a non-ester renewable diesel fuel using electricity and natural gas for process energy and, for feedstock, biogenic waste oils/fats/greases and/or the non-cellulosic portions of separated food wastes (the proposed "CWT renewable diesel pathway.")

Through the petition process described under 40 CFR 80.1416, CWT submitted data to EPA to perform a lifecycle greenhouse gas emissions analysis of the CWT renewable diesel pathway. This involved a straightforward application of the same methodology, and much of the same modeling, used for the RFS2 final rule (75 FR 14670, March 26, 2010). The minor difference between this analysis and the analyses completed for the RFS2 final rule is the evaluation of a new fuel production process. CWT utilizes a thermal depolymerization production process that is unlike those used in pathways modeled as part of the final RFS2 rulemaking. As outlined in the preamble to the final RFS2 rule, this is the type of pathway that EPA envisioned would be evaluated by comparing the petitioner's fuel pathway to pathway(s) that had already been analyzed. EPA's evaluation of the CWT renewable diesel pathway did not require significant new analysis. EPA performed its assessment based on the modeling done for biodiesel produced from waste oils, fats, and greases ("waste grease biodiesel") performed as part of the RFS2 rulemaking.[1] Similar to what was modeled for waste grease biodiesel, the CWT renewable diesel pathway uses waste feedstocks such as animal and food processing wastes, which have no land use impact and therefore no GHG emissions associated with agricultural production or land-use change. CWT's thermal depolymerization process is capable of producing renewable diesel from feedstocks other than waste material. However, because CWT is focusing on waste materials, they did not submit process data pertaining to non-waste feedstocks and therefore this analysis and determination pertains only to waste oils, fats, and greases and non-cellulosic portions of separated food wastes. Compared to the waste grease biodiesel process, the CWT renewable diesel process had smaller GHG impacts related to the fuel production process. Based on the data submitted and the existing waste grease biodiesel modeling, EPA conducted a lifecycle assessment and determined that the CWT renewable diesel pathway meets the 50% lifecycle GHG threshold requirement defined in the Clean Air Act for biomass-based diesel and advanced biofuels. The CWT renewable diesel pathway results in an 89% reduction in GHG emissions compared to the diesel fuel baseline. Based on our assessment, the CWT renewable diesel pathway qualifies for generating RINs for Biomass-Based Diesel and Advanced Biofuel (D-codes 4 & 5, respectively).

[1] CWT produces a "non-ester renewable diesel", rather than "biodiesel," as defined in 40 CFR 80.1401. However, the biodiesel pathway analyzed for the RFS2 final rulemaking is the closest modeled pathway to the CWT process, and was therefore used to evaluate the CWT process where appropriate.

This document is organized as follows:

- *Section I. Required Information and Criteria for Petition Requests*: This section contains information on the background and purpose of the petition process, the criteria EPA uses to evaluate the petitions and the information that is required to be provided under the petition process as outlined in 40 CFR 80.1416. This section is not specific to CWT's request and applies to all petitions submitted pursuant to 40 CFR 80.1416. .
- *Section II. Available Information*: This section contains background information on CWT and describes the information that CWT provided and how it complies with the petition requirements outlined in Section I.
- *Section III. Analysis and Discussion*: This section describes the lifecycle analysis done for the CWT renewable diesel pathway and identifies how it differs from the analysis done in the RFS2 rule for biodiesel made from waste grease feedstocks. This section also describes how we have applied the lifecycle results to determine the categories of D-Codes for which the CWT renewable diesel pathway qualifies.
- *Section IV. Public Participation*: This section describes how this petition is an extension of the analysis done as part of the RFS2 final rulemaking.
- *Section V. Conclusion*: This section summarizes our conclusions regarding CWT's petition, including the D-codes CWT may use in generating RINs for fuel produced using the CWT renewable diesel pathway.

I. Required Information and Criteria for Petition Requests

A. Background and Purpose of Petition Process

As part of changes to the Renewable Fuel Standard program (RFS2), EPA adopted new regulations that specify the types of renewable fuels eligible to participate in the RFS2 program and the procedures by which renewable fuel producers and importers can generate Renewable Identification Numbers (RINs) for the qualifying renewable fuels they produce through approved fuel pathways. See 75 FR.14670 (March 26, 2010); 75 FR 26026 (May 10, 2010); 75 FR 37733 (June 30, 2010); 75 FR 59622 (September 28, 2010); 75 FR 76790 (December 9, 2010); 75 FR 79964 (December 21, 2010).

Pursuant to § 80.1426(f) (1) of the RFS2 regulations:

Applicable pathways. D codes shall be used in RINs generated by producers or importers of renewable fuel according to the pathways listed in Table 1 to this section, subparagraph 6 of this section, or as approved by the Administrator.

Table 1 to § 80.1426(f) of the RFS2 regulations lists three critical components of a fuel pathway: (1) fuel type, (2) feedstock, and (3) production process. Each specific combination of the three components, or fuel pathway, is assigned a D code. EPA may also independently approve additional fuel pathways not currently listed in Table 1 for participation in the RFS2 program, or a third party may petition for EPA to evaluate a new fuel pathway in accordance with § 80.1416. In

addition, producers of facilities identified in 40 CFR 1403(c) and (d) that are exempt from the 20% GHG emissions reduction requirement of the Act may generate RINs with a D code of 6 pursuant to 80.1426(f)(6).

The petition process under § 80.1416 allows parties to request that EPA evaluate a new fuel pathway's lifecycle GHG reduction and provide a determination of the D code for which the new pathway may be eligible.

B. Required Information in Petitions

As specified in 40 CFR 80.1416(b)(1), petitions must include all of the following information, and should also include as appropriate supporting documents such as independent studies, engineering estimates, industry survey data, and reports or other documents supporting any claims:

- The information specified under § 80.76 (Registration of refiners, importers or oxygenate blenders).
- A technical justification that includes a description of the renewable fuel, feedstock(s), and production process. The justification must include process modeling flow charts.
- A mass balance for the pathway, including feedstocks, fuels produced, co-products, and waste materials production.
- Information on co-products, including their expected use and market value.
- An energy balance for the pathway, including a list of any energy and process heat inputs and outputs used in the pathway, including such sources produced off site or by another entity.
- Any other relevant information, including information pertaining to energy saving technologies or other process improvements.
- Other additional information as requested by the Administrator to complete the lifecycle greenhouse gas assessment of the new fuel pathway.

In addition to the requirements stated above, parties who use a feedstock not previously evaluated by EPA must also include the following, and should also include as appropriate supporting information such as state, county, or regional crop data, commodity reports, independent studies, industry or farm survey data, and reports or other documents supporting any claims:

- Type of feedstock and description of how it meets the definition of renewable biomass.
- Market value of the feedstock.
- List of other uses for the feedstock.
- List of chemical inputs needed to produce the renewable biomass source of the feedstock and prepare the renewable biomass for processing into feedstock.

- Energy needed to obtain the feedstock and deliver it to the facility. If applicable, identify energy needed to plant and harvest the source of the feedstock and modify the source to create the feedstock.
- Current and projected yields of the feedstock that will be used to produce the fuels.
- Other additional information as requested by the Administrator to complete the lifecycle greenhouse gas assessment of the new fuel pathway.

II. Available Information

A. Background on CWT

CWT requested authorization to generate D-code 4 RINs (Biomass-based diesel) for the CWT renewable diesel pathway. CWT already has authority to generate D-code 5 RINs (Advanced) under the RFS2 program for the production of a non-ester renewable diesel fuel from the non-cellulosic portions of separated food wastes using "any" process. A petition is required because the CWT renewable diesel pathway is not included as an approved process under the Biomass-Based Diesel (D-code 4) categories in Table 1 to § 80.1426(f) of the RFS2 regulations. The Table includes renewable diesel made from soybean oil; oil from annual cover crops; algal oil; and biogenic waste oils/fats/greases, but only if the production process is trans-esterification or hydrotreating (excluding processes that coprocess renewable biomass and petroleum). The CWT fuel production process is not considered either trans-esterification or hydrotreating. CWT uses a proprietary thermal depolymerization process that subjects animal and food waste to heat and pressure in the presence of water, producing a renewable diesel.[2]

B. Information Available through Existing Modeling

In terms of CWT's petition to generate Biomass-Based Diesel RINs for the production of renewable diesel from biogenic waste oils/fats/greases and/or the non-cellulosic portions of separated food wastes, there is one relevant existing pathways excerpted from Table 1 to 80.1426, as shown below:

Table 1: Excerpts of Existing Fuel Pathways from 40 CFR 80.1426

Fuel Type	Feedstock	Production Process Requirements	D-Code

[2] In accordance with CWT's registration under 40 CFR Part 79, their fuel additive ("TDP Renewable Diesel Additive") may only be blended up to 5 percent by volume with diesel fuel used for on-road transportation fuel purposes.

Biodiesel, and renewable diesel	Soy bean oil; Oil from annual cover crops; Algal oil; Biogenic waste oils/fats/greases; Non-food grade corn oil	One of the following: Trans-Esterification Hydrotreating *Excluding processes that co-process renewable biomass and petroleum*	4 (Biomass-Based Diesel)

A fuel pathway under RFS2 is defined by three components: (1) fuel type, (2) feedstock, and (3) production process. For the CWT renewable diesel pathway addressed in CWT's petition, CWT would use feedstock and produce a fuel that has already been analyzed as part of the RFS2 final rule and included in Table 1 to § 80.1426(f) of the RFS2 regulations. Therefore no new feedstock modeling was required as that was already done as part of the RFS2 final rule. Similarly, EPA has already evaluated the end use tailpipe emissions impact of using renewable diesel as a transportation fuel. This petition only requires EPA to evaluate a new fuel production process.

The same analytical approach that was used to evaluate the lifecycle GHG emissions of the existing pathway noted above was used to analyze the CWT renewable diesel pathway. The only difference is that the fuel production process step was adjusted to reflect the CWT process. Included below is a description of the modeling approach used, highlighting the changes that were made from the analysis used in the RFS2 final rule to analyze the CWT petition request.

The preamble to the RFS2 final rule describes the modeling approach used to estimate lifecycle GHG emissions from waste grease biodiesel. The preamble describes the models and data used as well as the input and output streams from those models to calculate the emissions for each of the lifecycle stages. To modify the waste grease biodiesel analysis to reflect the CWT renewable diesel pathway, the biggest change required was replacing the biodiesel production process data with the CWT process data. This resulted in the following changes to the modeling (described in more detail in the following sections):

- Amount of energy used by the fuel production process and associated emissions from fuel production and use changed to reflect CWT's data provided in their energy balance
- Amount and type of fuel product produced changed to reflect CWT's yield and type of fuel produced
- Elimination of co-product produced in the fuel production process (CWT's process produces variable amounts of fertilizer co-product based on the chemical composition of the feedstock, so we did not apply a co-product credit to represent a conservative scenario)

This was a straightforward analysis based on existing modeling done for the RFS2 final rule and substituting CWT's proprietary process data, which for the most part only altered the amounts of inputs and outputs and not the fundamental modeling approach.

C. Information Submitted by CWT

CWT has supplied all the required information on their production process for EPA to analyze their product and make a determination. Information submitted includes fuel and facility registration information, a technical justification that has a description of the fuel, feedstocks used, their proprietary production process, a detailed mass and energy balance of the process with information on co-products as applicable, and other additional information as needed to complete the lifecycle greenhouse gas assessment.

III. Analysis and Discussion

A. Lifecycle Analysis

Determining a fuel pathway's compliance with the Clean Air Act's lifecycle GHG reduction thresholds requires a comprehensive evaluation of the renewable fuel, as compared to the gasoline or diesel that it replaces, on the basis of its lifecycle GHG emissions. As mandated by the Clean Air Act, the GHG emissions assessments must evaluate the aggregate quantity of GHG emissions (including direct emissions and significant indirect emissions such as significant emissions from land use changes) related to the full lifecycle, including all stages of fuel and feedstock production, distribution, and use by the ultimate consumer.

In examining the full lifecycle GHG impacts of renewable fuels for the RFS2 program, EPA considers the following:

- Feedstock production – based on agricultural sector models that include direct and indirect impacts of feedstock production.
- Fuel production – including process energy requirements, impacts of any raw materials used in the process, and benefits from co-products produced.
- Fuel and feedstock distribution – including impacts of transporting feedstock from production to use, and transport of the final fuel to the consumer.
- Use of the fuel – including combustion emissions from use of the fuel in a vehicle.

EPA's evaluation of the lifecycle GHG emissions of the CWT renewable diesel pathway under this petition request was consistent with the Clean Air Act's applicable requirements, including the definition of lifecycle greenhouse gas emissions and threshold evaluation requirements. It was based on information that CWT submitted on its production process under a claim of Confidential Business Information (CBI) via a mail submission dated January 28, 2011.

CWT's mass and energy balance was provided in terms of hourly production. CWT's thermal depolymerization process is capable of producing renewable diesel from feedstocks other than waste material. However, because CWT is focusing on waste materials, they did not submit process data pertaining to non-waste feedstocks and therefore we are not able to evaluate and make a determination

for feedstocks other than waste oils, fats, and greases and non-cellulosic portions of separated food wastes at this time. CWT's fuel lifecycle GHG emissions were determined as follows:

Feedstock production – CWT's fuel is produced from waste oils/fats/greases and/or the non-cellulosic portions of separated food wastes. These feedstocks already appear in Table 1 to § 80.1426(f) of the RFS2 regulations and have already been evaluated as part of the RFS2 final rule lifecycle GHG determinations. Therefore no new renewable feedstock production modeling was required.

The RFS2 analysis assumed that waste material has no agricultural or land use change GHG emissions associated with its production. We do not believe CWT's alternative process for using waste oils, fats, and greases, as well as other non-cellulosic portions of separated food waste, conflicts with this assumption. Therefore, no GHG emissions were attributed to feedstock production for the CWT renewable diesel pathway.

Fuel production – CWT's fuel production method is different than the two approved production processes (trans-esterification and hydrotreating) already analyzed for the RFS2 final rule. CWT's proprietary process begins with crushing and homogenizing the feedstock into a water-based slurry that then undergoes a depolymerization process where it is exposed to heat and pressure. Depending on the feedstock used, concentrated inorganics (primarily calcium and phosphorus from bone material) are removed and can be sold as a fertilizer. The blended, depolymerized feedstock then undergoes further hydrolysis under heat and pressure to convert the molecules into smaller compounds resulting in non-polar carboxylic oils, which form the basis of the renewable diesel, nitrogen-rich water that can be concentrated into a nitrogen fertilizer product, and mineral particles. The components are then separated for further processing, treatment, and finished product storage.

To analyze the GHG impacts of CWT's process, EPA utilized the same approach that was used to determine the impacts of processes considered as part of the RFS2 final rule. The main difference is that CWT uses different amounts of electricity and natural gas. As mentioned, the CWT process can utilize a range of waste feedstocks (e.g. waste greases, animal offal, and other food processing wastes). Depending on the chemical composition of the feedstocks, the CWT process produces varying amounts of concentrated inorganics high in phosphate and nitrogen-rich organic material that can be sold as fertilizer. We took a conservative approach in this analysis and applied no credits for co-products with the rationale that co-products generated would reduce the GHG impact further. Therefore, the GHG emissions for the fuel production component of CWT's fuel lifecycle determination were based on the type and amount of energy used and associated emissions per mmBtu of fuel produced. CWT does not use any additional raw materials in their fuel production process.

CWT submitted mass and energy balance data to EPA under a CBI claim that quantified electricity and natural gas (in BTUs) inputs, as well as gallons of fuel produced. The emissions from the use of this energy were calculated by multiplying the amount of energy by emission factors for fuel production and combustion, based on the same method and factors used in the RFS2 final rulemaking. The emission factors for the different fuel types are from GREET and were based on assumed carbon contents of the different process fuels. The emissions from producing electricity in the United States were also taken from GREET and represent average U.S. grid electricity production emissions.

Individual process input and output energy flows within the plant were not needed for this analysis. Instead, a total input and output from the entire plant was used.

CWT's process uses substantially less natural gas for process energy compared to EPA's analysis of waste grease biodiesel and therefore results in considerably lower onsite combustion emissions and lower upstream emissions attributed to natural gas. CWT's process uses more electricity compared to EPA's analysis of waste grease biodiesel, which results in slightly greater upstream emissions. When both natural gas and electricity use are considered, CWT's process uses overall less energy than the waste grease biodiesel process analyzed as part of RFS2, which results in a net reduction in GHG emissions as compared to that process. As discussed, fertilizer produced through CWT's process could further reduce lifecycle GHG emissions by displacing fossil fuel-derived fertilizer, but these volumes vary and therefore we conservatively assumed no co-product credits. Therefore, CWT's process does not include GHG emission reductions for co-product production whereas the waste grease biodiesel received a co-product credit for glycerin. Overall, accounting for these differences, the CWT process results in lower fuel production GHG emission impacts compared to the waste grease biodiesel process as shown in Table 3.

Table 3: Comparison of Fuel Production GHG Emissions for CWT Renewable Diesel and Waste Grease Biodiesel

Lifecycle Stage (soybean crushing and fuel production)	**Waste Grease Biodiesel (g CO_2-eq./mmBtu)**	**CWT Renewable Diesel (g CO_2-eq./mmBtu)**
On-Site Emissions	10,558	2,368
Upstream (natural gas, catalyst and electricity production)	4,684	4,911
Co-Product Credit	-5,645	0
Total Fuel Production Emissions:	**9,598**	**7,278**

Note: Numbers are rounded.

Fuel and feedstock distribution – CWT's feedstock and fuel type were already considered as part of the RFS2 final rule. Therefore, the existing feedstock and fuel distribution lifecycle GHG impacts for waste oils/fats/greases and renewable diesel fuel were applied to our analysis of the CWT pathway.

Use of the fuel – CWT's process produces a fuel that was analyzed as part of the RFS2 final rule. Thus, the fuel transportation and combustion emissions calculated as part of the RFS2 final rule for renewable diesel were applied to our analysis of the CWT pathway.

CWT's fuel was then compared to baseline petroleum diesel, using the same value for baseline diesel as in the RFS2 final rule analysis. The results of the analysis indicate that the CWT renewable diesel pathway using waste oils/fats/greases and/or non-cellulosic portions of separated food wastes

would result in a GHG emissions reduction of 89% compared to the diesel fuel it would replace, as discussed further in the following section.

B. Application of the Criteria for Petition Approval

CWT's petition request involved a fuel pathway with a new production process, using feedstocks and producing a fuel product already considered as part of the RFS2 final rule. CWT provided all the information necessary for EPA to evaluate this type of petition request.

Based on the data submitted and information already available through analyses conducted for the RFS2 final rule, EPA conducted a lifecycle assessment and determined that the CWT renewable diesel pathway would meet the 50% lifecycle GHG threshold requirement specified in the Clean Air Act for biomass-based diesel and advanced biofuels. Without the uncertainty concerns due to land use impacts, there was no need to apply an uncertainty range for this pathway, which is consistent with the methodology used for waste grease biodiesel in the RFS2 analysis. The CWT renewable diesel pathway results in an 89% reduction in GHG emissions compared to the 2005 petroleum diesel fuel baseline. These results justify authorizing the generation of biomass-based diesel and advanced biofuel RINs for fuel produced by the CWT renewable diesel pathway, assuming that the fuel meets the other definitional criteria for renewable fuel (e.g., produced from renewable biomass, and used to reduce or replace petroleum-based transportation fuel, heating oil or jet fuel) specified in EISA.

Table 4 below breaks down by stage the lifecycle GHG emissions for the waste grease biodiesel fuel pathway done as part of the RFS2 final rule, the CWT renewable diesel pathway, and the 2005 diesel baseline. This table demonstrates the contribution of each stage in the fuel pathway and its relative significance in terms of GHG emissions.

Table 4: Lifecycle GHG Emissions for CWT's Renewable Diesel Pathway, 2022 (kg CO_2-eq./mmBtu)

Fuel Type	Waste grease biodiesel	CWT	2005 Diesel Baseline
Net Domestic Agriculture (w/o land use change)	0	0	
Net International Agriculture (w/o land use change)	0	0	
Domestic Land Use Change	0	0	
International Land Use Change, Mean *(Low/High)*	0	0	
Fuel Production	10	7	18
Fuel and Feedstock Transport	3	3	*
Tailpipe Emissions	1	1	79
Total Emissions	**14**	**11**	**97**

*Emissions included in fuel production stage.

IV. Public Participation

The definitions of biomass-based diesel and advanced biofuel in CAA 211(o)(1) specify that the terms mean renewable fuel that have "lifecycle greenhouse gas emissions, as determined by the Administrator, after notice and opportunity for comment, that are at least 50 percent less than the baseline lifecycle greenhouse gas emissions…." As part of the RFS2 rulemaking process, we took public comment on our lifecycle assessment of waste grease biodiesel, including all models used and all modeling inputs and evaluative approaches. We also acknowledged that it was unlikely that our final regulations would address all possible qualifying fuel production pathways, and we took comment on allowing parties to generate RINs using a temporary D code in certain circumstances while EPA was evaluating such new pathways and updating its regulations. After considering comments, we finalized the current petition process, where we allow for EPA approval of certain petitions without going through additional rulemaking if we can do so as a reasonably straightforward extension of the assessments conducted as part of the RFS2 rule, whereas rulemaking would be conducted to respond to petitions requiring significant new modeling. See 58 FR 14797 (March 26, 2010).

In responding to this petition, we have largely relied on the same waste grease biodiesel modeling that we conducted for the RFS2 final rule, and have simply adjusted the analysis to account for CWT's proprietary production process. This includes use of the same emission factors and types of emission sources that were used in the RFS2 final rule analysis. Thus, the fundamental analyses relied on for this decision have been made available for public comment as part of the RFS2 final rule, consistent with the reference to notice and comment in the statutory definitions of "advanced biofuel" and "biomass based diesel." Our approach today is also consistent with our description of the petition process in the preamble to the final RFS2 rule, as our work in responding to the petition was a logical extension of analyses already conducted.

V. Conclusion

Based on our assessment, renewable fuel produced from waste oils, fats, and greases and/or non-cellulosic portions of separated food wastes using the CWT renewable diesel pathway qualifies for Biomass-Based Diesel (D-code 4) RINs under the RFS2 program. The pathway has been determined to qualify based on an analysis of waste oils, fats, and greases and/or non-cellulosic portions of separated food wastes and therefore this determination only applies to these feedstocks. As previously stated, the CWT renewable diesel pathway also qualifies for Advanced Biofuel (D-code 5) RINs as already determined under the RFS2 final rule.

This approval applies specifically to CWT, Inc. and to the process, feedstocks, materials used, renewable fuel produced, and process energy sources as outlined and provided in the petition request submitted by CWT. EPA will extend a similar approval to other petitioners utilizing the same fuel pathway as CWT upon verification that the pathway is indeed the same.

The OTAQ Reg: Fuels Programs Registration and OTAQEMTS: OTAQ EMTS Application will be modified to allow CWT to register and generate RINs for the production of renewable diesel from the above feedstocks using a production process of “CWT Process.”