



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

SEP 23 2019

Mr. David McNiel
President
Texmark Chemicals, Inc.
900 Clinton Drive
Galena Park, Texas 77547

Dear Mr. McNiel:

You petitioned the Agency on behalf of Texmark Chemicals, Inc. and Neste US, Inc., to approve a pathway for the generation of biomass-based diesel (D-code 4) renewable identification numbers (RINs) for renewable jet fuel and renewable diesel bottoms produced from renewable diesel through a fractionation process, where the renewable diesel was originally produced at the Neste Porvoo foreign renewable fuel production facility by hydrotreating biogenic waste fats, oils and greases (“biogenic waste FOGs”) feedstock (the “Neste Porvoo Pathways”). Neste generates D-code 4 RINs, through existing pathways in Table 1 to 40 CFR 80.1426, for renewable diesel produced at their hydrotreating facility in Porvoo, Finland. Texmark proposes to purchase renewable diesel produced through the Neste Porvoo Pathways with RINs attached, retire the attached RINs, fractionate the renewable diesel at their facility in Galena Park, Texas, and generate new D-code 4 RINs for the resulting renewable jet fuel and renewable diesel bottoms (the “Texmark Galena Park Fractionation Process”). We call this entire set of steps from feedstock to fuel the “Texmark-Neste Pathway.”

Through the petition process described under 40 CFR 80.1416, Texmark and Neste submitted data to EPA to perform a lifecycle greenhouse gas analysis of the renewable jet fuel and renewable diesel bottoms produced from biogenic waste FOGs feedstock through the Texmark-Neste Pathway. This analysis involved a straightforward application of the same methodology and much of the same modeling used for the March 2010 RFS rule (75 FR 14670), and the March 2013 RFS rule (78 FR 14190). The difference between this analysis and the modeling completed for these previous assessments was the evaluation of Neste’s specific renewable diesel facility in Finland and the additional fractionation of renewable diesel to produce renewable jet fuel.

Based on our assessment, renewable jet fuel and renewable diesel bottoms produced through the Texmark-Neste Pathway qualify under the Clean Air Act (CAA) for D-code 4 RINs, assuming the fuel meets the other definitional criteria for renewable fuel (e.g., produced from renewable biomass and used to reduce or replace the quantity of fossil fuel present in transportation fuel, heating oil or jet fuel) specified in the CAA and EPA implementing regulations.

Pursuant to 40 CFR 80.1426(c)(6), “A party is prohibited from generating RINs for a volume of fuel that it produces if the fuel has been produced by a process that uses a renewable fuel as a feedstock, and the renewable fuel that is used as a feedstock was produced by another party, except that RINs may

be generated for such fuel if allowed by the EPA in response to a petition submitted pursuant to §80.1416 and the petition approval specifies a mechanism to prevent double counting of RINs.” This approval includes conditions specified in the attached pathway determination document to, among other things, prevent double counting of RINs through the Texmark-Neste Pathway.

This approval applies specifically to Texmark Chemicals, Inc. and Neste US, Inc., and to the process, materials used, fuels produced, and process energy types and amounts outlined and described in the July 2018 petition request submitted by Texmark and Neste.

The OTAQ Reg: Fuels Programs Registration and OTAQ EMTS Application will be modified to allow Texmark to register and generate biomass-based diesel or advanced biofuel RINs for jet fuel and renewable diesel bottoms produced through the Texmark-Neste Pathway.

Sincerely,

A handwritten signature in black ink, appearing to read "Sarah Dunham", with a long horizontal flourish extending to the right.

Sarah Dunham, Director
Office of Transportation and Air Quality

Enclosure

Texmark-Neste Fuel Pathway Determination under the RFS Program
Office of Transportation and Air Quality

Summary: Texmark Chemicals, Inc. and Neste US, Inc. petitioned the Agency under the Renewable Fuel Standard (RFS) program to approve a pathway that would allow Texmark to generate biomass-based diesel (D-code 4) renewable identification numbers (RINs) for renewable jet fuel (RJF) and renewable diesel bottoms (RDB) produced from renewable diesel through a fractionation process at Texmark’s facility in Galena Park, Texas. Neste generates D-code 4 RINs, through existing pathways in Table 1 to 40 CFR 80.1426, for renewable diesel produced at their hydrotreating facility in Porvoo, Finland, using biogenic waste fats, oils and greases (“biogenic waste FOGs”) as feedstocks (the “Neste Porvoo Pathways”). Texmark proposes to purchase renewable diesel produced through the Neste Porvoo Pathways with RINs attached, then retire the attached RINs, then fractionate the renewable diesel at their facility in Galena Park, Texas, and then generate new D-code 4 RINs for the resulting renewable jet fuel and renewable diesel bottoms (the “Texmark Galena Fractionation Process”). Because Texmark is using a renewable fuel as a feedstock to produce another renewable fuel, pursuant to 40 CFR 80.1426(c)(6), this determination includes a number of conditions which together serve as a mechanism to prevent RIN double counting. We refer to this entire set of steps including all of the feedstocks, processes and conditions the “Texmark-Neste Pathway.”

The Neste Porvoo Pathways utilize fuel pathways that EPA previously evaluated and approved as meeting the 50% greenhouse gas (GHG) reduction requirement for biomass-based diesel and advanced biofuel in the March 2010 RFS2 rule (75 FR 14670). The novel aspect of the Texmark-Neste Pathway is the use of renewable diesel to produce RJF and RDB through fractionation. Based on the data submitted by Texmark and Neste, and our previous modeling, we conducted a lifecycle assessment and estimated that RJF and RDB produced through the Texmark-Neste Pathway reduces lifecycle GHG emissions compared to the statutory petroleum baseline by approximately 77% when biogenic waste FOG is used as the initial feedstock. Based on the results of our lifecycle GHG assessment using conservative assumptions,¹ RJF and RDB produced through the Texmark-Neste Pathway using biogenic waste FOGs as the original feedstock qualify for biomass-based diesel or advanced biofuel RINs, provided all associated regulatory requirements are satisfied, including the conditions specified in Section IV of this determination document.

The fuel pathways for which Texmark and Neste requested our evaluation are the type of new pathways that EPA described in the preamble to the March 2010 RFS rule as capable of being evaluated by comparing the applicant’s fuel pathways to pathways that have already been analyzed.

¹ The purpose of lifecycle assessment under the RFS program is not to precisely estimate lifecycle GHG emissions associated with particular biofuels, but instead to determine whether or not the fuels satisfy specified lifecycle GHG emissions thresholds to qualify as one or more of the four types of renewable fuel specified in the statute. Where there are a range of possible outcomes and the fuel satisfies the GHG reduction requirements when “conservative” assumptions are used, then a more precise quantification of the matter is not required for purposes of a pathway determination.

This analysis involved a straightforward application of the same methodology and modeling used for the March 2010 RFS rule (75 FR 14670) and the March 2013 RFS rule (78 FR 14190). The difference between this analysis and the analyses completed for these previous assessments was the evaluation of process data from Neste's Porvoo facility, transport of the renewable diesel from Finland to Texas, and the fractionation of renewable diesel to produce RJF and RDB through the Texmark Galena Fractionation Process. In addition, since the requested pathway involves using a renewable fuel as the feedstock to produce another renewable fuel, pursuant to 40 CFR 80.1426(c)(6), our task in evaluating this petition included establishing a mechanism to prevent double counting of RINs.

This document is organized as follows:

- *Section I. Required Information and Criteria for Petition Requests:* Information on the background and purpose of the petition process, the criteria EPA uses to evaluate petitions and the information that is required to be provided under the petition process as outlined in 40 CFR 80.1416. This section applies to all petitions submitted pursuant to 40 CFR 80.1416.
- *Section II. Available Information:* Background information on Texmark and Neste, the information that they provided and how it complies with the petition requirements outlined in Section I.
- *Section III. Analysis and Discussion:* Description of the lifecycle analysis done for this determination and how it differs from the analyses done for previous assessments. This section also describes how we have applied the lifecycle results to determine the appropriate D-codes for RJF and RDB fuel produced through the Texmark-Neste Pathway.
- *Section IV. Conditions and Associated Regulatory Provisions:* Registration, reporting, and recordkeeping requirements for RJF and RDB fuel produced through the Texmark-Neste Pathway. The conditions in this section are intended to, among other things, prevent double counting of RINs through these pathways.
- *Section V. Public Participation:* Description of how this petition is an extension of the analyses done as part of prior notice and public comment rulemakings.
- *Section VI. Conclusion:* Summary of our conclusions regarding the Texmark-Neste petition.

I. Required Information and Criteria for Petition Requests

A. Background and Purpose of Petition Process

As a result of changes to the RFS program in Clean Air Act section 211(o), as amended by the Energy Independence and Security Act of 2007 (EISA), EPA adopted new regulations, published at 40 CFR Part 80, Subpart M. The RFS regulations specify the types of renewable fuels eligible to participate in the RFS program and the procedures by which renewable fuel producers and importers may generate RINs for the qualifying renewable fuels they produce through approved fuel pathways.²

² See EPA's website for information about the RFS regulations and associated rulemakings: <https://www.epa.gov/renewable-fuel-standard-program>

Pursuant to 40 CFR 80.1426(f)(1):

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 40 CFR 80.1426 lists the three critical components of a fuel pathway: (1) fuel type; (2) feedstock; and (3) production process. Each specific combination of the three components comprises a fuel pathway and is assigned a D-code. EPA may also independently approve additional generally applicable fuel pathways into Table 1 for participation in the RFS program, or a third party may petition for EPA to evaluate a new, facility-specific fuel pathway in accordance with 40 CFR 80.1416. In addition, renewable fuel producers qualified in accordance with 40 CFR 80.1403(c) and (d) for an exemption from the 20 percent GHG emissions reduction requirement of the Act for a baseline volume of fuel (“grandfathered fuel”) may generate RINs with a D-code of 6 pursuant to 40 CFR 80.1426(f)(6) for that baseline volume, assuming all other regulatory requirements are satisfied.³

The petition process under 40 CFR 80.1416 allows parties to request that EPA evaluate a potential new fuel pathway’s lifecycle GHG emissions 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, as well 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 40 CFR 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.

³ “Grandfathered fuel” refers to a baseline volume of renewable fuel produced from a facility that commenced construction before December 19, 2007, and which completed construction within 36 months without an 18-month hiatus in construction and is exempt from the minimum 20 percent GHG reduction requirement that applies to general renewable fuel. A baseline volume of ethanol from a facility that commenced construction after December 19, 2007, but prior to December 31, 2009, qualifies for the same exemption if construction is completed within 36 months without an 18-month hiatus in construction and the facility is fired with natural gas, biomass, or any combination thereof. “Baseline volume” is defined in 40 CFR 80.1401.

- Any other relevant information, including information pertaining to energy saving technologies or other process improvements.
- The petition must be signed and certified as meeting all the applicable requirements of 40 CFR 80.1416 by the responsible corporate officer of the applicant company.
- 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 additional information pursuant to 40 CFR 80.1416(b)(2). This information was not required for the Texmark-Neste petition because their proposed pathways use feedstocks, biogenic waste FOGs, that EPA has previously evaluated.

II. Available Information

A. Background on Texmark and Neste

Texmark and Neste petitioned the Agency to approve pathways that would allow Texmark to generate biomass-based diesel (D-code 4) RINs for RJF and RDB produced from renewable diesel feedstock through a fractionation process at Texmark's facility in Galena Park, Texas. A petition is required because these are not approved pathways in Table 1 to 40 CFR 80.1426. Furthermore, a petition was required before RINs could be generated, because in accordance with 40 CFR 80.1426(c)(6), these pathways use a renewable fuel as a feedstock to produce another renewable fuel.

B. Information Available Through Existing Modeling

The pathways described in the Texmark-Neste petition would produce RJF and RDB from feedstocks, biogenic waste FOGs, that EPA previously evaluated in the March 2010 RFS2 rule (75 FR 14670) (see Table 1). Therefore, no new feedstock modeling was required. Similarly, no new modeling of the emissions associated with the combustion of renewable jet fuel or renewable diesel was required because that was previously evaluated as part of prior rulemakings. Compared to previous rulemakings, this petition only required EPA to evaluate a specific hydrotreating fuel production facility, fractionation of renewable diesel into RJF and RDB, and specify a mechanism to prevent RIN double counting, pursuant to 40 CFR 80.1426(c)(6), for renewable fuel used as a feedstock to produce another renewable fuel.

In the March 2010 RFS rule, EPA analyzed and approved biomass-based diesel (D-code 4) and advanced biofuel (D-code 5) pathways for the production of renewable diesel through a hydrotreating process using biogenic waste FOGs feedstock. In the March 2013 RFS Pathways I rule (78 FR 14190), EPA conducted more detailed process modeling using data representing an industry average hydrotreating production process maximized for diesel fuel output and the same process maximized for jet fuel output, and added jet fuel to rows F and H of Table 1 to 40 CFR 80.1426. Neste's renewable diesel facility in Porvoo, Finland uses the same general type of hydrotreating process previously studied by EPA in the March 2013 RFS rule, with the difference being that Neste Porvoo uses different

amounts of process energy, produces different amount of fuel and co-products per pound of feedstock, and does not produce jet fuel co-product.

This was a straightforward analysis based on existing modeling done for previous rulemakings for the RFS program, and substituting Neste’s process data, which only altered the amounts of inputs and outputs. The analysis included evaluating the GHG emissions associated with distillation of renewable diesel to produce RDB and RJF based on process data provided by Texmark for their facility in Galena Park, Texas. It also included evaluation of the emissions associated with transporting the renewable diesel from Finland to Texas. The analysis completed for this petition utilized the same fundamental modeling approach as was used in previous rulemakings for the RFS program.

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

Row	Fuel Type	Feedstock	Production Process Requirements	D-Code
F	Biodiesel, renewable diesel, jet fuel and heating oil	Biogenic waste oils/fats/greases	One of the following: Trans-Esterification Hydrotreating (Excluding processes that co-process renewable biomass and petroleum)	4 (Biomass-based diesel)

C. Information Submitted by Texmark and Neste

Texmark and Neste supplied all the information as required in 40 CFR 80.1416 that EPA needed to analyze the lifecycle GHG emissions associated with the RJF and RDB produced through the Texmark-Neste Pathway. The information submitted included a technical justification describing the requested pathways, modeling flow charts, a detailed mass and energy balance of the processes involved with information on co-products as applicable, and other additional information as needed to complete the lifecycle GHG assessment. The process modeling flow charts, mass and energy balance data and other details about the production process were submitted under claims of confidential business information.

III. Analysis and Discussion

A. Lifecycle Analysis

Determining a fuel pathway’s compliance with the lifecycle GHG reduction thresholds specified in CAA 211(o) for different types of renewable fuel 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 CAA 211(o), the lifecycle 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 RFS program, EPA considers the following:

- Feedstock production – based on agricultural sector and other 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 related to the RJF and RBD produced through the Texmark-Neste Pathway under this petition request is consistent with the CAA's applicable requirements, including the definition of lifecycle GHG emissions and threshold evaluation requirements.

Feedstock Production/Collection and Transport – Neste generates D-code 4 RINs, through existing pathways in Table 1 to 40 CFR 80.1426, for renewable diesel produced at their hydrotreating facility in Porvoo, Finland, using biogenic waste FOGs as feedstocks. We have evaluated biogenic waste FOGs as part of previous assessments; therefore, no new feedstock production modeling was required.

According to their petition, the biogenic waste FOGs that Neste intends to use include used cooking oil (UCO), also known as yellow grease, and animal tallow. For the March 2010 RFS2 rule, EPA estimated the lifecycle GHG emissions associated with biodiesel produced from UCO feedstock, which formed the basis for the Agency's determination that biodiesel and renewable diesel produced from a variety of biogenic waste FOGs, including animal tallow, satisfy the RFS program's 50 percent GHG reduction requirement for fuel to qualify as advanced biofuel. For the March 2010 RFS2 rule, we estimated emissions of 0.04 kilograms of carbon dioxide equivalent GHG emissions per pound of UCO (kgCO_{2e} per lb) associated with collecting and transporting the UCO. We used this estimate of the upstream GHG emission associated with UCO, in our evaluation of the Texmark-Neste Pathway using biogenic waste FOG as the initial feedstock.

Feedstock Pretreatment – After the feedstocks are loaded into storage tanks they are pretreated to remove naturally occurring minerals which are known to deactivate the downstream hydrotreating catalyst. Feedstock pretreatment occurs onsite at the Neste Porvoo facility, and the energy used for pretreatment was included as part of the fuel production mass and energy balance data provided with the Texmark-Neste petition. For this analysis, the energy used and emissions associated

with feedstock pre-treatment were evaluated as part of the fuel production stage of the lifecycle, discussed below.⁴

Renewable Diesel Production – Neste’s facility in Porvoo, Finland uses a fuel production method that fits in the category of a hydrotreating process already analyzed for the March 2010 RFS2 rule and the March 2013 RFS Pathways I rule. This facility is currently registered under the RFS program to generate D-code 4 RINs for renewable diesel produced from the qualifying feedstocks listed in rows F of Table 1 to 40 CFR 80.1426. Although renewable diesel produced at this facility is already eligible for D-code 4 RINs, evaluation of this specific facility was required to determine if the requested Texmark-Neste Pathway satisfy the 50% GHG reduction requirement when additional emissions are included for feedstock transport and fractionation of the renewable diesel to RJF and RDB at Texmark’s facility.

Neste provided mass and energy balance data for renewable diesel production at their facility in Porvoo, Finland. We evaluated this process using the methods established in prior rulemakings but modified the process input-output data based on the information provided by Neste. Based on this analysis, we estimated GHG emissions associated with hydrotreating at Neste’s Porvoo facility of 6.1 kgCO₂e per million British Thermal Unit (mmBtu) of renewable diesel produced.

Renewable Diesel Transport – According to Neste, the renewable diesel is transported 6,780 nautical miles by ocean tanker from the Neste Porvoo facility to the Texmark facility in Galena Park, Texas. Using data from GREET-2018,⁵ we estimated emissions of 1.4 kgCO₂e per mmBtu of RJF or RDB associated with this shipping. As a conservative assumption, we also included the emissions associated with a backhaul from Galena Park to Porvoo.

Fractionation – Renewable diesel delivered to Texmark is fractionated, which involves boiling the renewable diesel to jet fuel range and recovering the distillate. Natural gas is used for energy to heat the distillation column and to cool the recovered distillate. Two co-product streams are recovered from this process: RJF and RDB. RDB is similar to renewable diesel, and is used in the same applications, but has higher average energy density than the renewable diesel input to the fractionation process.

Fuel Use – For this analysis we applied fuel use emissions factors developed for the March 2010 RFS final rule. For RJF and RDB we used the emissions factors for non-CO₂ GHGs for baseline

⁴ In some cases Neste conducts pre-treatment of animal tallow and used cooking oil at their Sluiskil Pretreatment facility, where the pre-treatment does not alter the feedstock but instead simply removes impurities. In these cases, the feedstock is not pretreated again at Porvoo, and the overall lifecycle GHG emissions are not significantly different for purposes of this threshold determination.

⁵ Argonne National Laboratory. (2018). “Summary of Expansions and Updates in GREET 2018. ANL-18/38. October 2018. <https://greet.es.anl.gov/files/greet-2018-summary>. The GREET-2018 is available for download at <https://greet.es.anl.gov/>.

diesel fuel.⁶ The tailpipe emissions are relatively small, and the threshold GHG reduction results are not sensitive to these assumptions.⁷

Lifecycle GHG Results – Based on our analysis described above, we estimated the lifecycle GHG emissions associated with RJF and RDB produced through the Texmark-Neste Pathway using biogenic waste FOGs as feedstocks. Table 2 shows the lifecycle GHG emissions associated with the RJF and RDB produced through these pathways. For this analysis, we have estimated the emissions associated with RJF and RDB to be the same, as they both undergo the same production and distribution steps, the emissions associated with fractionation are allocated between them based on energy content, and the tailpipe emissions for both RJF and RDB were estimated based on the same emissions factor.

To determine if these fuels satisfy the GHG reduction requirements, we compared the lifecycle GHG emissions for RJF and RDB to the statutory 2005 average diesel baseline. As shown in Table 2, RJF and RDB produced through the Texmark-Neste Pathway exceed the CAA 50% GHG reduction threshold for biomass-based diesel or advanced biofuel.

Table 2: Lifecycle GHG Emissions for RJF and RDB Produced Through the Texmark-Neste Pathway (kgCO₂e/mmBtu)⁸

Feedstock	Used Cooking Oil	2005 Diesel Baseline
Feedstock Upstream	2.7	18.0
Renewable Diesel Production	6.1	
Renewable Diesel Transport	1.4	
Fractionation	11.1	
Fuel Distribution	0.8	
Tailpipe	0.7	79.0
Net Emissions	22.8	97.0
% GHG Reduction Relative to Baseline	77%	--

⁶ Following the methodology developed for the March 2010 RFS rule, after notice, public comment and peer review, the carbon in the finished fuel derived from renewable biomass is treated as biologically derived carbon originating from the atmosphere. The uptake of this carbon from the atmosphere by the renewable biomass and the CO₂ emissions from combusting it cancel each other out. Instead of presenting both the carbon uptake and tailpipe CO₂ emissions, we leave both out of the results. Note that our analysis also accounts for all significant indirect emissions, such as from land use changes, meaning we do not simply assume that biofuels are “carbon neutral.”

⁷ Available data suggests the non-CO₂ emissions factors for renewable diesel and conventional diesel are small and not significantly different. For example, GREET-2016 uses the same methane and nitrous oxide emissions factors for conventional and renewable diesel used in heavy or medium duty trucks.

⁸ Totals may not be the sum of the rows due to rounding.

B. Application of the Criteria for Petition Approval

The Texmark-Neste petition request included a production process, feedstock and fuel products already considered as part of the March 2010 RFS rule (75 FR 14670) and the March 2013 RFS rule (78 FR 14190). Texmark and Neste provided all necessary information that was required for this type of petition request.

Based on the data submitted and information already available through analyses conducted for previous RFS rulemakings, EPA conducted a lifecycle assessment and determined that the RJF and RDB produced through the Texmark Galena Fractionation Process from renewable diesel produced through the Neste Porvoo Pathways meets the 50 percent lifecycle GHG threshold requirement specified in the CAA for biomass-based diesel and advanced biofuel.

The lifecycle GHG results presented above justify authorizing the generation of D-code 4 RINs for RJF and RDB produced through the Texmark-Neste Pathway, assuming that the fuel satisfies the other definitional criteria for renewable fuel (e.g., produced from renewable biomass, and used to reduce or replace the quantity of fossil fuel present in transportation fuel, heating oil or jet fuel) specified in the CAA and EPA implementing regulations.

IV. Conditions and Associated Regulatory Provisions

The authority for Texmark to generate RINs for RJF and RDB produced through the Texmark-Neste Pathway is expressly conditioned on Texmark satisfying all of the following conditions as detailed in this section, in addition to the other applicable requirements for renewable fuel producers set forth in the RFS regulations. The conditions in this section are enforceable under the CAA. They are established pursuant to the informal adjudication reflected in this decision document, and also pursuant to regulations cited below and 40 CFR 80.1416(b)(1)(vii), 80.1450(i), and 80.1451(b)(1)(ii)(W). In addition or in the alternative to bringing an enforcement action under the CAA, EPA may revoke this pathway approval if it determines that Texmark has failed to comply with any of the conditions specified herein.⁹

A. Mechanism to Prevent RIN-Double Counting

Pursuant to 40 CFR 80.1426(c)(6), “A party is prohibited from generating RINs for a volume of fuel that it produces if the fuel has been produced by a process that uses a renewable fuel as a feedstock, and the renewable fuel that is used as a feedstock was produced by another party, except that RINs may be generated for such fuel if allowed by the EPA in response to a petition submitted pursuant to §80.1416 and the petition approval specifies a mechanism to prevent double counting of RINs.” To prevent RIN-double counting through the Texmark-Neste Pathway, we are setting forth the following conditions associated with these pathways:

⁹ As with all pathway determinations, this approval does not convey any property rights of any sort, or any exclusive privilege.

1. All RJF and RDB produced through the Texmark Galena Fractionation Process shall be produced from renewable diesel that was produced by Neste through the Neste Porvoo Pathways and shipped to the United States in accordance with 40 CFR 80.1466. The renewable diesel shall remain segregated from other fuel in transit to Galena Park, Texas, and Texmark shall maintain documents demonstrating that the fuel remained segregated from all other fuel from the time it is offloaded in Galena Park until the time it is used as a feedstock.
2. Texmark shall purchase renewable diesel produced through the Neste Porvoo Pathways with D-code 4 RINs attached.
3. Texmark shall retire all of the RINs attached to each batch of renewable diesel produced through the Neste Porvoo Pathways that Texmark purchases before they generate new RINS for RJF and RDB produced from that batch of renewable diesel through the Texmark Galena Fractionation Process.
4. For each batch of renewable diesel produced through the Neste Porvoo Pathways used to produce RJF and RDB through the Texmark Galena Fractionation Process, the total number of new D-code 4 RINs generated by Texmark for RDB and RJF shall not exceed the number of D-code 4 RINs separated and retired from the batch of renewable diesel produced through the Neste Porvoo Pathways used to produce the batch of RJF and RDB.

B. Equivalence Values

Regardless of the equivalence value calculations specified at 40 CFR 80.1415,¹⁰ for purposes of the Texmark-Neste Pathway, all of the following products shall be assigned an equivalence value of 1.6:

1. Renewable diesel produced through the Neste Porvoo Pathways¹¹
2. RJF produced through the Texmark-Neste Pathway
3. RDB produced through the Texmark-Neste Pathway

¹⁰ Provisional data submitted by Neste and Texmark suggests that Neste Porvoo Pathway renewable diesel and the RJF produced by Texmark would have equivalence values (EV) of 1.6, but the RDB produced by Texmark would have EV of 1.7. Due to the fact that EVs are rounded to the nearest tenth, if RDB were treated with EV of 1.7, there could be situations where Texmark would generate more RINs for RJF and RDB than it retired from Neste Porvoo Pathway renewable diesel. To prevent this situation, for purposes of this petition, we are treating all of these products with EV of 1.6. We discussed this matter with Neste and Texmark and they agreed using EV of 1.6 was a reasonable solution.

¹¹ Neste has already registered for renewable diesel produced through the Neste Porvoo Pathways with an EV of 1.6.

C. Registration Requirements

As part of compliance with the registration provisions in 40 CFR Part 80, Subpart M that apply to renewable fuel producers to register for the production of renewable jet fuel and renewable diesel, as part of its registration application Texmark shall include a Compliance Monitoring Plan detailing how Texmark will accurately and reliably monitor and comply with the conditions specified in Section IV.A and IV.B of this determination document. The Compliance Monitoring Plan shall also include details on the records that Texmark will create and maintain to demonstrate compliance with these conditions.

D. Additional Conditions

Neste is currently registered to generate D-code 4 RINs with EV of 1.6 for renewable diesel (Fuel Code 41) produced at its renewable diesel production facility in Porvoo, Finland from biogenic waste FOG feedstock. Pursuant to this registration, Neste shall comply with all of the applicable registration, recordkeeping, reporting, and other requirements associated with producing D-code 4 renewable diesel from biogenic waste FOG feedstocks. To be eligible for D-code 4 RINs, Neste Porvoo pathway renewable diesel, and fuels produced through the Texmark-Neste Pathway, shall not be produced from palm oil, palm fatty-acid distillate or other palm oil derivatives. Texmark and Neste shall be liable for any violations related to RIN generation by Texmark where renewable diesel produced through the Neste Porvoo Pathways used as a feedstock had an incorrect D-code assigned, as improperly generated, or is otherwise an invalid RIN.

To be eligible for D-code 4 RINs, the RDB shall meet the RFS regulatory definition of non-ester renewable diesel and meet the ASTM 975-13a Grade no. 1-D or No. 2-D specifications.

V. Public Participation

The definition of advanced biofuel in CAA 211(o)(1) specifies that the term means renewable fuel that has “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 March 2010 RFS rule (75 FR 14670) and the March 2013 RFS rule (78 FR 14190) we took public comment on our lifecycle assessment of pathways involving the production of renewable diesel and jet fuel from biogenic waste FOGs using a hydrotreating process, including all models used and all modeling inputs and evaluative approaches.

In the March 2010 RFS rule we acknowledged that it was unlikely that our final regulations would address all possible qualifying fuel production pathways, and we took comment on allowing the generation of 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 previous assessments, whereas rulemaking would typically be conducted to respond to petitions requiring new modeling. See 75 FR 14797 (March 26, 2010).

In responding to this petition, we have largely relied on the same modeling that we conducted for the March 2010 RFS rule and the March 2013 RFS rule, and have simply adjusted the analysis to account for Texmark and Neste's process data. This includes use of the same emission factors and types of emission sources that were used in previous rules. Thus, the fundamental analyses relied on for this decision have been made available for public comment as part of previous rulemakings, consistent with the reference to notice and comment in the statutory definitions of "advanced biofuel." Our approach today is also consistent with our description of the petition process in the preamble to the March 2010 RFS Rule and our promulgation of 40 CFR 80.1416, as our work in responding to the petition was a logical extension of analyses already conducted.

VI. Conclusion

Based on our assessment, renewable jet fuel (RJF) and renewable diesel bottoms (RDB) produced through the Texmark Galena Fractionation Process from renewable diesel qualifies for D-code 4 RINs, provided the renewable diesel was produced through the Neste Porvoo Pathways, all the conditions and associated regulatory provisions specified in Section IV of this document are satisfied, and the fuel meets the other definitional criteria for renewable fuel (e.g., produced from renewable biomass, and used to reduce or replace the quantity of fossil fuel present in transportation fuel, heating oil or jet fuel) specified in the CAA and EPA implementing regulations.

This approval applies specifically to Texmark Chemicals, Inc. and Neste US, Inc., and to the process, materials used, fuels produced, and process energy types and amounts outlined and described in the petition request submitted by Texmark and Neste.¹² This approval is effective as of signature date. RINs may only be generated for RJF and RDB produced through the Texmark-Neste Pathway that is produced after the date of activation of Texmark's registration for the new pathways.¹³

The OTAQ Reg: Fuels Programs Registration and OTAQ EMTS Application will be modified to allow Texmark to register and generate RINs for jet fuel and renewable diesel produced from renewable diesel produced through the Neste Porvoo Pathways using a production process of "Texmark Galena Fractionation Process."

¹² As with all pathway determinations, this approval does not convey any property right of any sort, or any exclusive privilege.

¹³ A fuel pathway is activated under the RFS program when EPA accepts the registration application for the pathway, allowing it to be used in EMTS for RIN generation. When EPA accepts a registration application, an email is automatically sent from otaqfuels@epa.gov to the responsible corporate officer (RCO) of the company that submitted the registration application. The subject line of such an email includes the name of the company and the company request (CR) number corresponding with the registration application submission, and the body of the email says the company request "has been activated." After the Texmark-Neste Pathway has been activated, Texmark may use renewable diesel that was produced through the Neste Porvoo Pathways prior to the date of Texmark's pathway activation, to generate D-code 4 RINs for fuel produced through the Texmark-Neste Pathway.