

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

July 12, 2021

OFFICE OF AIR AND RADIATION

Ms. Janna Nigten General Counsel Koole Terminals Sluispolderweg 67 1505 HJ Zaandam Netherlands

Dear Ms. Nigten:

You petitioned the Agency on behalf of Koole Tankstorage Botlek B.V. (Koole) and Neste Oyj (Neste) 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 Pathway"). 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. Koole proposes to purchase renewable diesel produced through the Neste Porvoo Pathway with RINs attached, retire the attached RINs, fractionate the renewable diesel at the Koole facility in Rotterdam, Netherlands, and generate new D-code 4 RINs for the resulting renewable jet fuel and renewable diesel bottoms (the "Koole Rotterdam Fractionation Process"). We call this entire set of steps from the biogenic waste FOG feedstock to the renewable jet fuel and diesel bottoms the "Koole-Neste Pathway."

Through the petition process described under 40 CFR 80.1416, Koole 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 Koole-Neste Pathway. This analysis involved a straightforward application of the same methodology and much of the same modeling used for the March 2010 RFS2 rule (75 FR 14670), and the March 2013 Pathways I rule (78 FR 14190). The primary differences between this analysis and the modeling completed for these previous assessments are the evaluation of Neste's 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 Koole-Neste Pathway qualify under the Clean Air Act (CAA) for D-code 4 RINs, assuming the fuel

meets the other definitional and RIN generation criteria for renewable fuel specified in the CAA and its 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 Koole-Neste Pathway.

This approval applies specifically to Koole Tankstorage Botlek B.V. and Neste Oyj, and to the processes, materials used, fuels produced, and process energy types and amounts outlined and described in the May 2020 petition request submitted by Koole and Neste.

EPA approved a similar pathway for Texmark Chemicals, Inc. and Neste in September 2019 (the "Texmark-Neste Pathway").<sup>1</sup> The primary difference between the Koole-Neste Pathway and the Texmark-Neste Pathway is that Koole is a foreign producer and Texmark is located in Texas. Thus, additional conditions are specified in the attached determination to ensure the Clean Air Act and regulatory requirements are satisfied for imported renewable fuels.

EPA's electronic registration and transaction systems will be modified to allow Koole to register and generate biomass-based diesel or advanced biofuel RINs for jet fuel and renewable diesel bottoms produced through the Koole-Neste Pathway.

Sincerely,

Sarah W Dunham

Sarah Dunham, Director Office of Transportation and Air Quality

Enclosure

<sup>&</sup>lt;sup>1</sup> https://www.epa.gov/renewable-fuel-standard-program/texmark-neste-approval

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

Summary: Koole Tankstorage Botlek B.V. (Koole) and Neste Oyj (Neste) petitioned the agency under the Renewable Fuel Standard (RFS) program to approve a pathway that would allow Koole 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 Koole's facility in Rotterdam, Netherlands. Under the Koole-Neste Pathway EPA is approving here, Neste would generate D-code 4 RINs, through existing pathways in Table 1 to 40 CFR 80.1426, for renewable diesel produced at its hydrotreating facility in Porvoo, Finland, using biogenic waste fats, oils and greases ("biogenic waste FOGs") as feedstocks (the "Neste Porvoo Pathway"). The renewable diesel produced through the Neste Porvoo Pathway that is designated for shipping to Koole is renewable diesel for reprocessing by Koole ("RDRK"). Koole would then purchase RDRK with RINs attached, retire the attached RINs, fractionate the RDRK at its facility in Rotterdam, and then generate new D-code 4 RINs for the resulting renewable jet fuel and renewable diesel bottoms (the "Koole Rotterdam Fractionation Process"). Because Koole 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, including requiring Neste to generate RINs for its RDRK, 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 as the "Koole-Neste Pathway."

The Neste Porvoo Pathway utilizes 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 Koole-Neste Pathway is the use of renewable diesel to produce RJF and RDB through fractionation. EPA approved a similar pathway for Texmark Chemicals, Inc. and Neste in September 2019 (the "Texmark-Neste Pathway"). The primary difference between the Koole-Neste Pathway and the Texmark-Neste Pathway is that Koole is a foreign producer and Texmark is located in Texas. Thus, additional conditions for the Koole-Neste Pathway are specified below to ensure Clean Air Act and regulatory requirements are satisfied for imported renewable fuels.

Based on the data submitted by Koole and Neste, and our previous modeling, we conducted a lifecycle assessment and estimated that RJF and RDB produced through the Koole-Neste Pathway reduce lifecycle GHG emissions compared to the statutory petroleum baseline by approximately 84% when biogenic waste FOG is used as the initial feedstock. Based on the results of our lifecycle GHG assessment using conservative assumptions,<sup>2</sup> RJF and RDB produced through the Koole-Neste

<sup>&</sup>lt;sup>2</sup> 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 (75 FR 14785).

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 this pathway determination document.

The fuel pathways for which Koole and Neste requested our evaluation are the type of new pathways that EPA described in the preamble to the March 2010 RFS2 rule as capable of being evaluated by comparing the applicant's fuel pathways to pathways that have already been analyzed. Our analysis of the Koole-Neste Pathway involved a straightforward application of the same methodology and modeling used for the March 2010 RFS2 rule (75 FR 14670) and the March 2013 Pathways I 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 Netherlands, and the fractionation of renewable diesel to produce RJF and RDB through the Koole Rotterdam 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 Koole 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 Koole-Neste Pathway.
- *Section IV. Conditions and Associated Regulatory Provisions:* Registration, reporting, and recordkeeping requirements for RJF and RDB fuel produced through the Koole-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.

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.

• Section VI. Conclusion: Summary of our conclusions regarding the Koole-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 (RFS regulations). 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.<sup>3</sup>

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.<sup>4</sup>

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.

<sup>&</sup>lt;sup>3</sup> See EPA's website for information about the RFS regulations and associated rulemakings: <u>https://www.epa.gov/renewable-fuel-standard-program</u>

<sup>&</sup>lt;sup>4</sup> "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.

# B. Required Information in Petitions

As specified in 40 CFR 80.1416, 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 1090.805 (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.

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. 40 CFR 80.1416(c)(2).

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 Koole-Neste petition because the proposed pathways use feedstocks, biogenic waste FOGs, that EPA has previously evaluated.

# II. Available Information

# A. Background on Koole and Neste

Koole and Neste petitioned the agency to approve pathways that would allow Koole to generate biomass-based diesel (D-code 4) RINs for RJF and RDB produced from renewable diesel feedstock through a fractionation process at Koole's facility in Rotterdam, Netherlands. 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 Koole-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, transporting the RDRK and RJF/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 RFS2 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 Pathways I 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 Koole for its Rotterdam facility. It also included evaluation of the emissions associated with transporting the renewable diesel from Finland to Rotterdam and then Rotterdam to the United States. The analysis completed for this petition utilized the same fundamental modeling approach as was used in previous rulemakings for the RFS program.

Row	Fuel Type	Feedstock	Production Process	D-Code
			Requirements	
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	4 (Biomass- based diesel)
			and petroleum)	

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

# C. Information Submitted by Koole and Neste

Koole 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 Koole-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 RDB produced through the Koole-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 the 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<sub>2</sub>e 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 Koole-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 Koole-Neste petition. For this analysis, the energy used and emissions associated with feedstock pre-treatment were evaluated as part of the renewable diesel production stage of the lifecycle, discussed below.<sup>5</sup>

**Renewable Diesel Production** – Neste's Porvoo facility 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 row 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 fuel production at this specific facility was required to determine if the requested Koole-Neste Pathway satisfies the 50% GHG reduction requirement when additional emissions are included for feedstock and fuel transport and fractionation of the renewable diesel to RJF and RDB at Koole's Rotterdam facility.

Neste provided mass and energy balance data for renewable diesel production at its Porvoo facility. 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

<sup>&</sup>lt;sup>5</sup> In some cases, Neste conducts pre-treatment of animal tallow and used cooking oil at their Sluiskil (the Netherlands) 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.

estimated GHG emissions associated with hydrotreating at Neste's Porvoo facility of 9.2 kgCO<sub>2</sub>e per million British Thermal Unit (mmBtu) of renewable diesel produced.

**Renewable Diesel Transport**– According to Neste, the renewable diesel is transported approximately 1,300 nautical miles by ocean tanker from the Neste Porvoo facility to Koole's Rotterdam facility. Using data from GREET-2020,<sup>6</sup> we estimated emissions of 0.3 kgCO<sub>2</sub>e per mmBtu of RJF or RDB associated with this shipping. As a conservative assumption, we also included the emissions associated with a backhaul from Rotterdam to Porvoo.

**Fractionation** – Renewable diesel delivered to Koole is fractionated, which involves boiling the renewable diesel to jet fuel range and recovering the distillate. Natural gas is used for energy to pre-heat the renewable diesel and in the column reboiler. 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 Distribution** – We estimated emissions associated with transporting RJF and RDB from Rotterdam to California (approximately 8,000 miles) and then distributing the fuel to end users in the United States. We assume transport to California as a conservative assumption and because there is strong demand there for RJF and RDB, making it a likely destination for the imported fuel. We used data from GREET-2020 to estimate emissions from ocean tanker transport, including a return trip. For fuel distribution in the United States we applied the estimates for renewable diesel and jet from the March 2013 RFS Pathways I rule.

**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-CO<sub>2</sub> GHGs for baseline diesel fuel.<sup>7</sup> The tailpipe emissions are relatively small, and the threshold GHG reduction results are not sensitive to these assumptions.<sup>8</sup>

Lifecycle GHG Results – Based on our analysis described above, we estimated the lifecycle GHG emissions associated RJF and RDB produced through the Koole-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

<sup>&</sup>lt;sup>6</sup> Argonne National Laboratory (2020). "GREET Factsheet 2020." https://greet.es.anl.gov/publication-greet\_factsheet\_2020 <sup>7</sup> Following the methodology developed for the March 2010 RFS2 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. In the context of a full lifecycle analysis, the uptake of this carbon from the atmosphere by the renewable biomass and the CO<sub>2</sub> emissions from combusting it cancel each other out. Therefore, instead of presenting both the carbon uptake and tailpipe CO<sub>2</sub>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." <sup>8</sup> Available data suggests the non- CO<sub>2</sub> emissions factors for renewable diesel and conventional diesel are small and not significantly different. For example, GREET uses the same methane and nitrous oxide emissions factors for conventional and renewable diesel used in heavy or medium duty trucks.

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 Koole-Neste Pathway exceed the CAA 50% GHG reduction threshold for biomass-based diesel or advanced biofuel.

	Koole-Neste Pathway	2005 Diesel Baseline
Feedstock	Used Cooking Oil	Crude Oil
Feedstock Upstream	2.7	
Renewable Diesel Production	9.2	
Renewable Diesel Transport	0.3	18.0
Fractionation	0.7	
Fuel Distribution	1.7	
Tailpipe	0.7	79.0
Net Emissions	15.2	97.0
% GHG Reduction Relative to Baseline	84%	

Table 2: Lifecycle GHG Emissions for RJF and RDB Produced Through the Koole-Neste
Pathway (kgCO <sub>2</sub> e/mmBtu) <sup>9</sup>

# **B.** Application of the Criteria for Petition Approval

The Koole-Neste petition request included a production process, feedstock, and fuel products already considered as part of the March 2010 RFS2 rule (75 FR 14670) and the March 2013 Pathways I rule (78 FR 14190). Koole 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 Koole Rotterdam Fractionation Process from RDRK produced through the Neste Porvoo Pathway, *i.e.*, through the Koole-Neste Pathway, 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 Koole-Neste Pathway, provided the fuel satisfies the other

<sup>&</sup>lt;sup>9</sup> Totals may not be the sum of the rows due to rounding.

definitional and RIN generation criteria for renewable fuel specified in the CAA and EPA implementing regulations and the conditions specified in this pathway determination document.

#### **IV. Conditions and Associated Regulatory Provisions**

The authority for Koole to generate RINs for RJF and RDB produced through the Koole-Neste Pathway is expressly conditioned on Koole satisfying all of the following conditions as detailed in this section and the attached designation, shipping and other conditions, in addition to the other applicable requirements for renewable fuel producers set forth in the RFS regulations (40 CFR part 80, Subpart M). The conditions in this section and the attached designation, shipping and other conditions 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), 80.1426(a)(1)(iii), 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 Koole or Neste has failed to comply with any of the conditions specified herein.<sup>10</sup>

#### 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."

The RFS program is designed to increase the consumption of renewable fuel in the United States.<sup>11</sup> The RFS regulations at 40 CFR 80.1426(b)(1) state that, "a RIN must be generated by a renewable fuel producer or importer for a batch of renewable fuel...if it is produced or imported for use as transportation fuel, heating oil, or jet fuel in the 48 contiguous states or Hawaii." Renewable diesel produced by Neste Porvoo and sold to a facility outside of the United States would not be eligible to generate RINs under the RFS regulations because the renewable diesel is not produced or imported for use as a transportation fuel in the United States. However, pursuant to 40 CFR 80.1416(c)(6), for fuel produced through the Neste-Koole Pathway to be eligible for RINs, EPA must specify a mechanism to prevent double counting of RINs for fuel produced through this pathway. The most robust way to accomplish this is to require Neste to generate RINs for the RDRK produced, which are then reported and tracked in the EPA Moderated Transaction System (EMTS). Koole must then retire those RINs in EMTS and generate new RINs for the volumes of RJF and RDB it produces

<sup>&</sup>lt;sup>10</sup> As with all pathway determinations, this approval does not convey any property rights of any sort, or any exclusive privilege.

<sup>&</sup>lt;sup>11</sup> See, e.g., 42 U.S.C. 7545(o)(2)(A)(i) ("the Administrator shall promulgate regulations to ensure that gasoline sold or introduced into commerce in the United States (except in noncontiguous States or territories), on an annual average basis, contains the applicable volume of renewable fuel . . .").

from the RDRK, which will also be reported and tracked. In this way, EPA can verify that only one set of RINs is ultimately generated under the entire Koole-Neste Pathway. Thus, although Neste could not otherwise generate RINs for the renewable diesel it is sending to Koole, we are requiring it in this particular situation to prevent RIN double counting and provide greater assurance that the statutory requirements in CAA Section 211(o) are satisfied (e.g., feedstocks qualify as renewable biomass).

To prevent RIN-double counting through the Koole-Neste Pathway, we are setting forth the following conditions associated with these pathways:

- Neste shall generate D-code 4 RINs for RDRK produced through the Neste Porvoo Pathway, provided all of the applicable statutory requirements in CAA Section 211(o) and conditions in this document are satisfied. All RDRK produced through the Neste Porvoo Pathway shall be shipped to Koole Rotterdam for processing through the Koole Rotterdam Fractionation Process.
- 2. All RJF and RDB produced through the Koole Rotterdam Fractionation Process shall be produced from RDRK that was produced by Neste through the Neste Porvoo Pathway and shall be shipped to the United States in accordance with the designation, shipping and other requirements attached to this determination. The attached designation, shipping and other requirements are based on 40 CFR 80.1466, plus modifications as necessary to ensure proper tracking and a clear chain of custody of the renewable fuel. These requirements include the condition that the RDRK shall remain segregated from other fuel in transit to Koole Rotterdam, plus associated documentation, engineering reviews, inspections, bonds and liabilities.
- 3. Koole shall purchase RDRK produced through the Neste Porvoo Pathway with D-code 4 RINs attached. For each batch of RDRK sold to Koole, Koole shall obtain records from Neste Porvoo documenting the original source or sources of the used cooking oil and animal tallow feedstocks used to produce that batch of RDRK through the Neste Porvoo Pathway. Under the applicable requirement at 40 CFR 80.1454(j)(1)(ii), Neste Porvoo must maintain records that demonstrate the location(s) of any establishments from which the waste stream consisting solely of used cooking oil and animal tallow was collected. In cases where the used cooking oil and/or animal tallow was sourced from an aggregator, the records shall demonstrate the physical address that the aggregator obtained the wastes used as feedstocks from, not only the physical or company address of the aggregator. This condition #3 is required for renewable fuel producers that use biogenic waste oils/fats/greases such as used cooking oil and animal tallow (among other feedstocks) under the RFS regulations at 40 CFR 80.1454(j), and it is reiterated here for additional clarity and to note that both Neste Porvoo and Koole must maintain the required records. Neste Porvoo and Koole, as renewable fuel producers, remain subject to the requirements at paragraph 40 CFR 80.1454(j) so long as these requirements remain effective. If these requirements are amended, removed, vacated, or otherwise revised at some point in the future, Neste Porvoo and Koole will be required to comply with the newly revised requirements. If the regulations at 40 CFR 80.1454(j) are vacated or removed such that the

recordkeeping requirements described in this condition #3 are no longer effective as a general matter, these requirements will also no longer apply to Neste Porvoo and Koole.

- 4. Koole shall retire all of the RINs attached to each batch of RDRK that Koole purchases before they generate new RINs for RJF and RDB produced from that batch of RDRK through Koole Rotterdam Fractionation Process.
- 5. For each batch of RDRK used to produce RJF and RDB through the Koole Rotterdam Fractionation Process, the total number of new D-code 4 RINs generated by Koole for RDB and RJF shall not exceed the number of D-code 4 RINs separated and retired from the batch of RDRK used to produce the batch of RJF and RDB.

#### **B.** Equivalence Values

Regardless of the equivalence value calculations specified at 40 CFR 80.1415,<sup>12</sup> for purposes of the Koole-Neste Pathway, all of the following products shall be assigned an equivalence value of 1.6:

- 1. Renewable diesel produced through the Neste Porvoo Pathway, also referred to as RDRK;<sup>13</sup>
- 2. RJF produced through the Koole-Neste Pathway; and
- 3. RDB produced through the Koole-Neste Pathway.

# C. Registration Requirements

As part of compliance with the registration provisions in 40 CFR Part 80, Subpart M that apply to renewable fuel producers that register for the production of renewable jet fuel and renewable diesel, as part of its registration application Koole shall include a Compliance Monitoring Plan detailing how Koole 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 Koole will create and maintain to demonstrate compliance with these conditions.

# **D.** Additional Conditions

Neste is currently registered to generate D-code 4 RINs with an EV of 1.6 for renewable diesel (Fuel Code 41) produced at its renewable diesel production facility in Porvoo, Finland from biogenic

<sup>&</sup>lt;sup>12</sup> Provisional data submitted by Neste and Koole suggests that Neste Porvoo Pathway renewable diesel and the RJF produced by Koole would have equivalence values (EV) of 1.6, but the RDB produced by Koole 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 Koole 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 Koole and they agreed using EV of 1.6 was a reasonable solution.

<sup>&</sup>lt;sup>13</sup> Neste has already registered for renewable diesel produced through the Neste Porvoo Pathway with an EV of 1.6.

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, RDRK, and fuels produced through the Koole-Neste Pathway, shall not be produced from palm oil, palm fatty-acid distillate or other palm oil derivatives. Koole and Neste shall be liable for any violations related to RIN generation by Koole where RDRK used as a feedstock had an incorrect D-code assigned, was improperly generated, or is otherwise an invalid RIN.

To be eligible for D-code 4 RINs, the RDB produced through the Koole-Neste Pathway 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 RFS2 rule (75 FR 14670) and the March 2013 Pathways I 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 RFS2 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 instead 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 logical and 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 RFS2 rule and the March 2013 Pathways I rule and have adjusted the analysis to account for Koole 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 RFS2 rule and our promulgation of 40 CFR 80.1416, as our work in responding to the petition was a logical and reasonable extension of analyses already conducted.

#### VI. Conclusion

Based on our assessment, renewable jet fuel (RJF) and renewable diesel bottoms (RDB) produced through the Koole Rotterdam Fractionation Process from renewable diesel qualifies for Dcode 4 RINs, provided the renewable diesel was produced through the Neste Porvoo Pathway, all the conditions and associated regulatory provisions specified in Section IV of this document are satisfied, and the fuel meets the other definitional and RIN generation criteria for renewable fuel specified in the CAA and its implementing regulations.

This approval applies specifically to Koole Tankstorage Botlek B.V. and Neste Oyj, and to the process, materials used, fuels produced, and process energy types and amounts outlined and described in the petition request submitted by Koole and Neste.<sup>14</sup> This approval is effective as of signature date. RINs may only be generated for RJF and RDB produced through the Koole-Neste Pathway that are produced after the date of activation of Koole's registration for the new pathways.<sup>15</sup>

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

<sup>&</sup>lt;sup>14</sup> As with all pathway determinations, this approval does not convey any property right of any sort, or any exclusive

privilege. <sup>15</sup> 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 Koole-Neste Pathway has been activated, Koole may use renewable diesel that was produced through the Neste Porvoo Pathway prior to the date of Koole's pathway activation, to generate D-code 4 RINs for fuel produced through the Koole-Neste Pathway.

#### Designation, Shipping, Certification, Transfer and Other Requirements Associated with the Koole-Neste Pathway

(a) *Applicability*. The authority for Koole to generate RINs for RJF and RDB produced through the Koole-Neste Pathway is expressly conditioned on Koole and Neste satisfying all of the following conditions related to designation, shipping, certification, transfer, and other requirements (the "Koole-Neste Pathway Requirements"). In addition, or in the alternative to bringing an enforcement action under the CAA, EPA may revoke this pathway approval if it determines that Koole or Neste has failed to comply with any of the conditions specified herein.

(b) *General requirements*. The Koole-Neste pathway is conditioned on Koole and Neste meeting all requirements that apply to foreign renewable fuel producers under 40 CFR Part 80, Subpart M, except that 1) the conditions specified below in this document supersede certain requirements in section 40 CFR 80.1466 of the RFS regulations, and 2) EPA is allowing Neste to generate RINs for "Renewable Diesel to be Reprocessed by Koole" ("RDRK") that will not be sold for use in the United States until it is further processed by Koole.<sup>16</sup> These Koole-Neste Pathway Requirements do not relieve Koole or Neste from complying with the requirements of 40 CFR Part 80, Subpart M except as specified in this document.

(c) *Designation, RIN-generating foreign producer certification, and product transfer documents.* (1) Neste must designate each batch of renewable diesel produced through the Neste Porvoo Pathway for sale to Koole as RDRK at the time the RDRK is produced.

(2) On each occasion when RDRK is transferred for transport to a vessel or loaded onto a vessel or other transportation mode for transport to Koole's Rotterdam facility, Neste shall prepare a certification for each batch of RDRK; the certification shall include the report of the independent third party under paragraph (d) of these Koole-Neste Pathway Requirements, and all the following additional information:

(i) The Neste Porvoo facility's name and EPA registration number.

(ii) The identification of the renewable fuel as RDRK.

(iii) The identification of the renewable fuel by type, D code, and number of RINs generated.

(iv) The volume of RDRK, standardized per §80.1426(f)(8)(B)(iii), being transported, in gallons.

<sup>&</sup>lt;sup>16</sup> The conditions specified below were drafted with 40 CFR 80.1466 as the starting point and then modifications were made to fit the particular characteristics of the Koole-Neste pathway. In some cases, this led to gaps in the paragraph numbering. We decided to keep the numbering with gaps to facilitate comparison with 40 CFR 80.1466.

(3) Neste shall not transfer title of any RDRK to any person other than Koole. On each occasion when any person transfers custody of any RDRK prior to its being delivered to Koole's Rotterdam facility, it must include all the following information as part of the product transfer document information:

(i) Designation of the renewable fuel as RDRK.

(ii) The certification required under paragraph (c)(2) of these Koole-Neste Pathway Requirements.

(d) *Load port independent testing and producer identification.* (1) On each occasion that RDRK is loaded onto a vessel for transport to Koole's Rotterdam facility, Neste shall have an independent third party do all the following:

(i) Inspect the vessel prior to loading and determine the volume of any tank bottoms.

(ii) Determine the volume of RDRK, standardized per \$80.1426(f)(8)(B)(iii), loaded onto the vessel (exclusive of any tank bottoms before loading) and meeting the specification ASTM D975-20a (\$1090.95(c)(3)).

(iii) Obtain the EPA-assigned registration number of the Neste Porvoo facility.

(iv) Determine the name and country of registration of the vessel used to transport the RDRK to Koole's Rotterdam facility.

(v) Determine the date and time the vessel departs the port serving the Neste Porvoo facility.

(vi) Review original documents that reflect movement and storage of the RDRK from the Neste Porvoo facility to the load port, and from this review determine all the following:

(A) Ensure that the RDRK was produced at the Neste Porvoo facility.

(B) That the RDRK remained segregated from all other fuel.

(2) The independent third party shall submit a report to the following:

(i) The Neste Porvoo facility, containing the information required under paragraph (d)(1) of these Koole-Neste Pathway Requirements, to accompany the product transfer documents for the vessel.

(ii) The Administrator, containing the information required under paragraph (d)(1) of these Koole-Neste Pathway Requirements, within thirty days following the date of the independent third party's inspection. This report shall include a description of the method used to ensure the RDRK was produced at the Neste Porvoo facility, assurance that the RDRK remained segregated as specified in paragraph (j)(1) of these Koole-Neste Pathway Requirements, and a

description of the RDRK's movement and storage between production at the Neste Porvoo facility and vessel loading.

(3) The independent third party must:

(i) Be approved in advance by EPA, based on a demonstration of ability to perform the procedures required in this paragraph (d);

(ii) Be independent under the criteria specified in §1090.55(a); and

(iii) Sign a commitment that contains the provisions specified in paragraph (f) of these Koole-Neste Pathway Requirements with regard to activities, facilities and documents relevant to compliance with the requirements of this paragraph (d).

(e) Comparison of load port and port of entry testing. (1)(i) Neste and Koole shall compare the results from the load port testing under paragraph (d) of these Koole-Neste Pathway Requirements, with the Koole port of entry testing as reported under paragraph (k) of these Koole-Neste Pathway Requirements, for the volume of renewable fuel, standardized per §80.1426(f)(8)(B)(iii),

(2)(i) If the temperature-corrected volumes, after accounting for tank bottoms, determined at the port of entry and at the load port differ by more than one percent, the number of RINs associated with the renewable fuel shall be calculated based on the lesser of the two volumes in paragraph (e)(1)(i) of these Koole-Neste Pathway Requirements.

(ii) Where the Koole port of entry volume is the lesser of the two volumes in paragraph (e)(1)(i) of these Koole-Neste Pathway Requirements, Neste shall calculate the difference between the number of RINs originally assigned to the fuel and the number of RINs calculated under 80.1426 for the volume of renewable fuel as measured at the Koole port of entry, and acquire and retire that amount of RINs in accordance with paragraph (k)(3) of these Koole-Neste Pathway Requirements.

(f) *Foreign producer commitments*. Koole and Neste shall commit to and comply with the following provisions as a condition to being registered as a foreign renewable fuel producer under 40 C.F.R. Part 80, Subpart M:

(1) Any EPA inspector or auditor must be given full, complete, and immediate access to conduct inspections and audits of the Koole Rotterdam and Neste Porvoo facilities.

(i) Inspections and audits may be either announced in advance by EPA, or unannounced.

(ii) Access will be provided to any location where:

(A) Renewable fuel, including RDRK, is produced;

(B) Documents related to renewable fuel producer operations are kept; and

(C) Renewable fuel, including RDRK, is stored or transported between the Neste Porvoo facility, the Koole Rotterdam facility, and the United States, including storage tanks, vessels and pipelines.

(iii) EPA inspectors and auditors may be EPA employees or contractors to EPA.

(iv) Any documents requested that are related to matters covered by inspections and audits must be provided to an EPA inspector or auditor on request.

(v) Inspections and audits may include review and copying of any documents related to the following:

(A) The volume of renewable fuel, including RDRK.

(B) The proper classification of renewable fuel as being RDRK.

(C) Transfers of title or custody to RDRK.

(D) Work performed and reports prepared by independent third parties and by independent auditors under the requirements of these Koole-Neste Pathway Requirements, including work papers.

(vi) Inspections and audits by EPA may include interviewing employees.

(vii) Any employee of the Koole Rotterdam and Neste Porvoo facilities must be made available for interview by the EPA inspector or auditor, on request, within a reasonable time period.

(viii) English language translations of any documents must be provided to an EPA inspector or auditor, on request, within 10 working days.

(ix) English language interpreters must be provided to accompany EPA inspectors and auditors, on request.

(2) An agent for service of process located in the District of Columbia shall be named, and service on this agent constitutes service on Koole or Neste or any employee of Koole or Neste for any action by EPA or otherwise by the United States related to the requirements of 40 CFR Part 80, Subpart M.

(3) The forum for any civil or criminal enforcement action related to the provisions of these Koole-Neste Pathway Requirements for violations of the Clean Air Act or regulations promulgated thereunder shall be governed by the Clean Air Act, including the EPA administrative forum where allowed under the Clean Air Act.

(4) United States substantive and procedural laws shall apply to any civil or criminal enforcement action against Koole or Neste or any employee of Koole or Neste related to the provisions of this section.

(5) Applying to be an approved foreign renewable fuel producer under 40 CFR Part 80, Subpart M, or producing or exporting renewable fuel under such approval, and all other actions to comply with the requirements of 40 CFR Part 80, Subpart M relating to such approval constitute actions or activities covered by and within the meaning of the provisions of 28 USC 1605(a)(2), but solely with respect to actions instituted against Koole or Neste, their agents and employees in any court or other tribunal in the United States for conduct that violates the requirements applicable to the foreign renewable fuel producer under 40 CFR Part 80, Subpart M, including conduct that violates the False Statements Accountability Act of 1996 (18 USC 1001) and section 113(c)(2) of the Clean Air Act (42 USC 7413).

(6) Koole or Neste, or their agents or employees, will not seek to detain or to impose civil or criminal remedies against EPA inspectors or auditors for actions performed within the scope of EPA employment or contract related to the provisions of this section.

(7) The commitment required by this paragraph shall be signed by the owner or president of Koole or Neste (as applicable).

(8) In any case where RDRK produced at the Neste Porvoo facility is stored or transported by another company between the production facility and the vessel that transports the RDRK to the Koole Rotterdam facility, Neste shall obtain from each such other company a commitment that meets the requirements specified in paragraphs (f)(1) through (7) of these Koole-Neste Pathway Requirements, and these commitments shall be included in Neste's application to be an approved foreign renewable fuel producer of RDRK under 40 CFR Part 80, Subpart M.

(g) *Sovereign immunity*. By submitting an application to be an approved foreign renewable fuel producer under 40 CFR Part 80, Subpart M, or by producing and exporting RDRK to the Koole Rotterdam facility under such approval, Neste, and its agents and employees, without exception, become subject to the full operation of the administrative and judicial enforcement powers and provisions of the United States without limitation based on sovereign immunity, with respect to actions instituted against Neste, its agents, and employees in any court or other tribunal in the United States for conduct that violates the requirements applicable to the Neste under 40 CFR Part 80, Subpart M, including conduct that violates the False Statements Accountability Act of 1996 (18 USC 1001) and section 113(c)(2) of the Clean Air Act (42 USC 7413).

(h) *Bond posting*. Neste shall meet the following requirements as a condition to approval as a RINgenerating foreign producer of RDRK under 40 CFR Part 80, Subpart M:

(1) Neste shall post a bond of the amount calculated using the following equation Bond = G \* \$0.01

#### Where

Bond = amount of the bond in U.S. dollars.

G = the greater of: the largest volume of RDRK produced by Neste and exported to the Koole Rotterdam facility, in gallons, during a single calendar year among the five preceding calendar years, or the largest volume of RDRK that Neste expects to export to the Koole Rotterdam facility during any calendar year identified in the Production Outlook Report required by 40 CFR 80.1449. If the volume of RDRK exported to the Koole Rotterdam facility increases above the largest volume identified in the Production Outlook Report during any calendar year, Neste shall increase the bond to cover the shortfall within 90 days.

(2) Bonds shall be posted by any of the following methods:

(i) Paying the amount of the bond to the Treasurer of the United States.

(ii) Obtaining a bond in the proper amount from a third party surety agent that is payable to satisfy United States administrative or judicial judgments against the foreign producer, provided EPA agrees in advance as to the third party and the nature of the surety agreement.

(3) Bonds posted under this paragraph (h) shall:

(i) Be used to satisfy any judicial judgment that results from an administrative or judicial enforcement action for conduct in violation of this 40 C.F.R. Part 80, Subpart M, including where such conduct violates the False Statements Accountability Act of 1996 (18 USC 1001) and section 113(c)(2) of the Clean Air Act (42 USC 7413);

(ii) Be provided by a corporate surety that is listed in the United States Department of Treasury Circular 570 "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds"; and

(iii) Include a commitment that the bond will remain in effect for at least five years following the end of latest annual reporting period that Neste produces RDRK pursuant to the requirements of the Koole-Neste Pathway and 40 CFR Part 80, Subpart M.

(4) On any occasion a Neste bond is used to satisfy any judgment, Neste shall increase the bond to cover the amount used within 90 days of the date the bond is used.

(i) *English language reports*. Any document submitted to EPA by Koole or Neste shall be in English, or shall include an English language translation.

(j) *Prohibitions*. (1) No person may combine RDRK with any other fuel or feedstock, until the importer has met all the requirements of paragraph (k) of these Koole-Neste Pathway Requirements.

(2) No foreign renewable fuel producer or other person may cause another person to commit an action prohibited in paragraph (j)(1) of these Koole-Neste Pathway Requirements, or that otherwise violates the requirements of these Koole-Neste Pathway Requirements or 40 C.F.R. Part 80, Subpart M.

(3) Neste and Koole may not generate RINs for the same volume of renewable fuel unless the RINs attached to the RDRK are retired first. The conditions specified in Section IV of the enclosed determination document specify conditions to prevent RIN-double counting.

(4) Neste is prohibited from generating RINs for RDRK in excess of the number for which the bond requirements of this section have been satisfied.

(k) *Requirements for Koole*. In addition to the applicable requirements specified above and the applicable requirements of 40 CFR Part 80, Subpart M, Koole shall meet all the following requirements:

(2) For each renewable fuel batch classified as RDRK delivered to Koole's Rotterdam facility, Koole shall have an independent third party do all the following:

(i) Determine the volume of RDRK, standardized per §80.1426(f)(8)(B)(iii), in the vessel.

(ii) Use Neste's certification to confirm that the fuel was RDRK produced by Neste.

(iii) Determine the name and country of registration of the vessel used to transport the RDRK to Koole's Rotterdam facility.

(iv) Determine the date and time the vessel arrives at the Koole Rotterdam facility.

(4) Koole shall submit reports within 30 days following the date any vessel transporting RDRK arrives at its facility to all the following:

(i) The Administrator, containing the information determined under paragraph (k)(2) of these Koole-Neste Pathway Requirements.

(ii) The RIN-generating foreign producer, Neste, containing the information determined under paragraph (k)(2)(i) of these Koole-Neste Pathway Requirements, and including identification of

the port at which the product was offloaded, and any RINs retired under paragraph (e)(2) of this section.

#### (l) Not applicable.

(m) *Additional attest requirements for Neste Oyj as a producer of RDRK*. The following additional procedures shall be carried out by Neste as part of the attest engagement required for renewable fuel producers under 40 CFR Part 80, Subpart M.

(1) Obtain listings of all tenders of RDRK. Agree the total volume of tenders from the listings to the volumes determined by the third party under paragraph (d) of these Koole-Neste Pathway Requirements.

(2) For each tender under paragraph (m)(1) of these Koole-Neste Pathway Requirements, where the renewable fuel is loaded onto a marine vessel, report as a finding the name and country of registration of each vessel, and the volumes of RDRK loaded onto each vessel.

(3) Select a sample from the list of vessels identified in paragraph (m)(2) of these Koole-Neste Pathway Requirements used to transport RDRK, in accordance with the guidelines in 40 CFR 1090.1805, and for each vessel selected perform all the following:

(i) Obtain the report of the independent third party, under paragraph (d) of this section, and of Koole under paragraph (k) of these Koole-Neste Pathway Requirements.

(A) Agree the information in these reports with regard to vessel identification and renewable fuel volume.

(B) Identify, and report as a finding, each occasion the load port and Koole Rotterdam facility port of entry volume results differ by more than the amount allowed in paragraph (e) of these Koole-Neste Pathway Requirements, and determine whether Neste retired the appropriate amount of RINs as required under paragraph (e)(2) of these Koole-Neste Pathway Requirements, and submitted the applicable reports under 40 CFR 80.1451 in accordance with paragraph (k)(4) of these Koole-Neste Pathway Requirements.

(ii) Obtain the documents used by the independent third party to determine transportation and storage of the RDRK from the Neste facility to the load port, under paragraph (d) of these Koole-Neste Pathway Requirements. Obtain tank activity records for any storage tank where the RDRK is stored, and activity records for any mode of transportation used to transport the RDRK prior to being loaded onto the vessel. Use these records to determine whether the RDRK was produced at the Neste Porvoo facility that is the subject of the attest engagement, and whether the RDRK was mixed with any other fuel.

(4) Select a sample from the list of vessels identified in paragraph (m)(2) of these Koole-Neste Pathway Requirements used to transport RDRK, in accordance with the guidelines in 40 CFR 1090.1805, and for each vessel selected perform the following:

(i) Obtain a commercial document of general circulation that lists vessel arrivals and departures, and that includes the port and date of departure of the vessel, and the port of entry and date of arrival of the vessel.

(ii) Agree the vessel's departure and arrival locations and dates from the independent third party and United States importer reports to the information contained in the commercial document.

(5) Obtain a separate listing of the tenders under this paragraph (m)(5) where the RDRK is loaded onto a marine vessel. Select a sample from this listing in accordance with the guidelines in 40 CFR 1090.1805, and obtain a commercial document of general circulation that lists vessel arrivals and departures, and that includes the port and date of departure and the ports and dates where the renewable fuel was offloaded for the selected vessels. Determine and report as a finding the country where the renewable fuel was offloaded for each vessel selected.

(6) In order to complete the requirements of this paragraph (m) an auditor shall:

(i) Be independent of Neste and Koole;

(ii) Be licensed as a Certified Public Accountant in the United States and a citizen of the United States, or be approved in advance by EPA based on a demonstration of ability to perform the procedures required in 40 CFR 1090.1800, 80.1464, and this paragraph (m); and

(iii) Sign a commitment that contains the provisions specified in paragraph (f) of this section with regard to activities and documents relevant to compliance with the requirements of 40 CFR 1090.1800, 80.1464, and this paragraph (m).

(n) *Withdrawal or suspension of foreign renewable fuel producer approval.* EPA may withdraw or suspend Koole and Neste's approval where any of the following occur:

(1) A foreign renewable fuel producer fails to meet any requirement of these Koole-Neste Pathway Requirements.

(2) A foreign government fails to allow EPA inspections or audits as provided in paragraph (f)(1) of these Koole-Neste Pathway Requirements.

(3) A foreign renewable fuel producer asserts a claim of, or a right to claim, sovereign immunity in an action to enforce the requirements in this subpart.

(4) A foreign renewable fuel producer fails to pay a civil or criminal penalty that is not satisfied using the foreign renewable fuel producer bond specified in paragraph (h) of these Koole-Neste Pathway Requirements.

(o) *Additional requirements for applications, reports, and certificates.* Any application for approval as a foreign renewable fuel producer, any report, certification, or other submission required under this section shall be:

(1) Submitted in accordance with procedures specified by the Administrator, including use of any forms that may be specified by the Administrator.

(2) Signed by the president or owner of the foreign renewable fuel producer company, or by that person's immediate designee, and shall contain the following declarations:

(i) "I hereby certify:

(A) That I have actual authority to sign on behalf of and to bind [NAME OF FOREIGN RENEWABLE FUEL PRODUCER] with regard to all statements contained herein;

(B) That I am aware that the information contained herein is being Certified, or submitted to the United States Environmental Protection Agency, under the requirements of 40 CFR part 80, Subpart M and the Koole-Neste Pathway Requirements, and that the information is material for determining compliance under these regulations; and

(C) That I have read and understand the information being Certified or submitted, and this information is true, complete and correct to the best of my knowledge and belief after I have taken reasonable and appropriate steps to verify the accuracy thereof."

(ii) "I affirm that I have read and understand the provisions of 40 CFR part 80, Subpart M, including 40 CFR 80.1465, and the Koole-Neste Pathway Requirements apply to [NAME OF FOREIGN RENEWABLE FUEL PRODUCER]. Pursuant to Clean Air Act section 113(c) and 18 USC 1001, the penalty for furnishing false, incomplete or misleading information in this certification or submission is a fine of up to \$10,000 U.S., and/or imprisonment for up to five years."