



September 21, 2022

Dr. Steven Cliff
Executive Officer
California Air Resources Board
1001 I Street
Sacramento, CA 95814

RESPONSE TO PUBLIC COMMENTS FOR TIER 2 PATHWAY APPLICATION NO. B0348

Dear Dr. Cliff:

Shell Energy North America (US), L.P. (Shell Energy) is responding to the public comments posted by The Association of Irrigated Residents, Leadership Counsel for Justice & Accountability, Central Valley Defenders of Clean Water & Air, Animal Legal Defense Fund, and Food & Water Watch (the "Commenters") during the 10-day public commenting period in association with Shell Energy and AmpRenew Offtake I LLC's (Amp) joint Tier 2 Pathway Application, B0348.

The Commenters' letter was nearly identical to the letter they submitted in response to Amp's Tier 2 Pathway Application, B0250, and their concern with factory farm gas. The letter did not comment on hydrogen as a transportation fuel but focused solely on biomethane from dairy and swine manure participating in the Low Carbon Fuel Standard Program. Given their concern is focused on the biomethane production portion of pathway B0348, Shell Energy echoes Amp's comments submitted to the Executive Officer on June 27, 2022 (attachment A).

Additionally, Shell Energy and Amp have the following response to specific comments from the Commenters Letter.

Commenters Letter

"... more recent research indicates that emissions from factory farm gas production are significantly higher than currently appreciated, with especially high emissions from digestate storage.² This recent study did not consider additional emissions from digestate handling and application, which is another potentially large source of emissions resulting from this factory farm gas production that must be included in the pathway life cycle analysis.³"

Shell Energy and Amp Response

Please review Amp's response to comment No. 1 in the July 27, 2022, response letter on how Amp follows the approved modeling methodology. The CARB Tier 1 Simplified Calculator includes methane emissions from project digestate storage in Sections L4 and L5, which accounts for the emissions as part of the Pathway application. Therefore, the pathway boundaries account for digestate storage emissions. The June 2022 paper discusses the potential range of methane emissions from organic waste digestate storage, which is not specific to manure digestate, nor is specific to any factual or methodological errors in Amp or Shell's pathway. As such, Amp follows the approved CARB modeling methodology, which was reviewed and approved by CARB Staff and our third-party validation body. The public commentors issue with digestate storage factors used in the CARB Tier 1 Simplified Calculator is not a factual or methodological error for this pathway application and is outside the scope of Amp or Shell's applications.

Please note that digestate is not transported offsite. After the digester, digestate goes to the effluent pond or is used for onsite cattle deep bedding as is described in the pathway application. The Pathway conformed to the CARB approved methodology, and Amp confirms that there is no digestate handling, transport, or application associated with offsite usage. In addition, RNG is not trucked from the site, but is injected into a pipeline.

Shell Energy appreciates the opportunity to respond and takes the integrity of the LCFS program seriously. We are confident that our joint pathway application is in full compliance with the existing LCFS regulations, as adopted by CARB in accordance with California state statutes, and that no revisions are necessary. We respectfully request that CARB proceed with certifying pathway B0348.



Marcie Milner
Vice President, Regulatory Affairs

Attachment A



June 27, 2022

Mr. Richard Corey
Executive Officer
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Re: RESPONSE TO PUBLIC COMMENTS FOR TIER 2 PATHWAY APPLICATION NO. B0250

Dear Mr. Corey:

AmpRenew Offtake I LLC (Amp) is responding to the public comments posted during the 10-day public comment period in association with the Tier 2 Pathway Application, B0250, as submitted to the California Air Resources Board (CARB). Per §95488.7(d)(5)(A) of the Low Carbon Fuel Standard (LCFS) Regulation, this letter provides written response to the comments related to potential factual or methodological errors in this response letter.

A comment letter was received from the Association of Irrigated Residents, Leadership Counsel for Justice & Accountability, Animal Legal Defense Fund, and Food & Water Watch (the "Commenters"). It is Amp's position that the comments received are not related to potential factual or methodological errors and incorrectly claim adverse environmental damage results from the pathway application.

Amp has reviewed the submitted comments and does not agree that the comments meet the requirements of §95488.7(d)(5)(A). Amp's responses to the comments are provided below and Amp believes that no revisions to the pathway application are necessary or required.

AMP RESPONSE TO PUBLIC COMMENT

A public comment letter from the Commenters was received, and their main comments are presented below, followed by Amp's responses.

Comment No. 1

First, the application applies an unlawfully truncated system boundary that ignores feedstock production at the source factory farms and other emissions such as those from storage and disposal of digestate, resulting in exaggerated Carbon Intensity values.

Amp Response to Comment No. 1

Per the LCFS Regulation, Amp used CARB's 'Tier 1 Simplified CI Calculator for Biomethane from Anaerobic Digestion of Dairy and Swine Manure' (the "Simplified CI Calculator") to calculate the Carbon Intensity for the pathway application, as required by §95488.3 of the LCFS Regulation. CARB defines (in CARB Compliance Offset Protocol Livestock Projects (November 2014)) the project boundaries that are required for the well-to-wheel analysis in the Simplified CI Calculator. Amp followed, and an accredited CARB third party verification body validated Amp's use of these boundaries. The project boundaries account for emissions that would have occurred in the absence of the project and emissions that occurred due to the project.

In addition, Amp provided all documents necessary to certify a Tier 2 pathway application, including unredacted lifecycle analysis (LCA) reports, to both CARB and the accredited third-party verification body allowing CARB staff to replicate the CI calculated by Amp as required by §95488.7(a). The LCA report included descriptions of where each primary step in the fuel life cycle occurred. Per the CARB Staff Summary, "Staff has reviewed the application and has replicated, using the Tier 2 modified version of the Simplified CI Calculator, the CI values calculated by the applicant. EcoEngineers (H3-20-008) submitted a positive statement. Staff recommends this application be certified on a provisional basis after all the comments received during the 10-



day comment period are addressed satisfactorily by the applicant. The certification is subject to the operating conditions set forth in this document.”¹

The Commenters reference the Petition for Rulemaking and the Petition for Reconsideration (the “Petitions”) as separately addressed and submitted to CARB. As the Petitions do not reference potential factual or methodological errors for this pathway application, they are outside the scope of this application and review and do not warrant a response.

Comment No. 2

Second, CARB has failed to ensure that the additionality requirements of Health and Safety Code § 38562 are met. If CARB had done so, it would have concluded that the methane capture at these factory farms is patently not additional.

Amp Response to Comment No. 2

The pathway application fully meets the additionality requirements of the CARB Compliance Offset Protocol Livestock Projects (November 2014) as previously mentioned. Similarly, the application meets the LCFS Regulation §95488.9(f)(3), which allows projects that have generated CARB Compliance Offset Credits under the Cap-and-Trade Regulation to apply and receive credits under the LCFS. In addition, as noted in the LCA reports, the operators of the previous CARB Compliance Offset Projects under the Cap-and-Trade program deemed those digester projects in the beginning of 2017 as not economically viable to operate and, accordingly, they stopped use of the digesters and associated equipment and terminated the CARB Compliance Offset Projects. Therefore, all emission reductions from the digesters ceased until Amp recommissioned the digesters in 2020.

As stated above in Amp’s response to Comment No. 1, the Commenters reference the Petitions submitted to CARB, which do not reference potential factual or methodological errors for this pathway application and are outside the scope of this application and review.

Comment No. 3

Third, this application is a good example of how CARB’s flawed approach is rewarding the biggest factory farm polluters and incentivizing further expansion and herd consolidation, which does more climate harm than good.

Amp Response to Comment No. 3

Dairies manage their herds based on demand for milk and milk products, not for gas production. Dairy manure, and the associated methane, is a byproduct of the dairy farming process. The project helps the dairies reduce the environmental impact of their ongoing operations and diverts dairy methane to the California vehicle market. This results in both avoided dairy farm methane emissions and reduced transportation fuel emissions. Additionally, the LCFS program awards credits based on continued emission reduction compared to a baseline, and this is reviewed through an annual verification process to ensure that projects are continually reducing emissions. As part of the certification and validation process, Amp provided herd count numbers for multiple years to CARB and to the verification body to validate the baseline conditions and historical operations.

Comment No. 4

Finally, the inflated Carbon Intensity values CARB proposes here work an additional environmental injustice on Californians who will be exposed to higher levels of pollution from fossil transportation fuel and dirty vehicles made possible by excessive credit generation at factory farm gas projects.

Amp Response to Comment No. 4

The statement that Californians will be exposed to higher levels of pollution from fossil transportation fuels and dirty vehicles as a consequence of this pathway is inaccurate. All fuel reporting entities in the California must meet declining Carbon Intensity benchmarks over time. This results in reduced emissions of greenhouse gases (GHG) and other pollutants. As stated on CARB’s website: “The LCFS is designed to decrease the carbon intensity of California’s transportation fuel pool and provide an increasing range of low-carbon and renewable alternatives, which reduce the petroleum dependency and achieve air quality

¹ CARB Staff Summary for Application No. B0250
(https://ww2.arb.ca.gov/sites/default/files/classic/fuels/lcfs/fuelpathways/comments/tier2/b0250_summary.pdf)



benefits.”² In light of CARB’s clear statement in this matter, Amp respectfully rejects the argument that Californians will be exposed to higher pollution levels from fossil transportation fuels and vehicles due to this pathway application.

Additionally, this pathway application is focused only on the beneficial capture and use of otherwise emitted methane. Amp supplies renewable natural gas for vehicle fleets in California from this pathway, which reduces GHGs and other pollutant emissions from vehicles previously fueled by fossil natural gas or converted from diesel. CARB sets the Carbon Intensity levels, which determine deficit and credit generation per the LCFS Regulation, through the regulatory process and are outside the scope of this application. Emissions from fossil transportation fuels and purchase of credits to offset that usage are also outside the scope of this application.

CLOSING

In conclusion, Amp has submitted this Tier 2 pathway application in full compliance with existing LCFS regulations as adopted by CARB in accordance with California state statutes and regulations. Amp appreciates the opportunity to respond to the public comments for this pathway application and asserts that no changes to the pending application under CARB are required. Amp respectfully requests approval of this pathway application so that it can continue its verified, measurable, science-based GHG emissions.

Sincerely,

Cassandra Farrant

Cassandra Farrant
Head of Environmental Credit Compliance
Amp Americas

² CARB website (<https://ww2.arb.ca.gov/our-work/programs/low-carbon-fuel-standard>)