
June 2022 Denial of Petitions for RFS Small Refinery Exemptions: Appendices

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United States Environmental Protection Agency

Appendix B – Comment Summary and Response

This appendix summarizes the comments received and responds to the unique arguments made therein that were not already addressed in the SRE Denial.¹ Similar to the SRE petitions and supporting documentation considered and addressed in the Proposed Denial, many of the comments submitted in response to the Proposed Denial raised the same or very similar arguments, allowing us to group and respond to the arguments once.²

In sum, EPA received numerous substantive comments. The parties represented in the commenters included refineries, biofuel producers, and their respective trade organizations. Many elected officials, including representatives at the local, state, and federal level, commented on the interests their constituents have in the SRE provision and RFS program. Many of the petitioning small refineries submitted their comments under claims of confidentiality and included refinery-specific data for DOE and EPA to evaluate. To the extent small refineries raised the general arguments in favor of EPA granting their exemptions, EPA has responded to those in the SRE Denial and this Appendix B.³ EPA has responded to confidential data and information by providing confidential, refinery-specific appendices to the submitting refineries. In all instances, the findings of the SRE Denial apply to all 69 SRE petition denials, regardless of whether the refinery's comments are further addressed in an individual appendix.

¹ “June 2022 Denial of Petitions for RFS Small Refinery Exemptions,” EPA-420-R-22-011, June 2022.

² Since some comments received were specific to the 2018 SRE petitions that were remanded to the Agency by the D.C. Circuit and are not relevant to this final action, and to the extent we already responded to those comments in the April 2022 SRE Denial, we are not necessarily addressing all comments in this response.

³ Throughout this Appendix B, references to Sections I, II, III, IV, V, and VI refer to the corresponding sections in the SRE Denial, while references to Sections B.I, II, III, and IV refer to the corresponding sections in this Appendix B.

I. Procedural Comments and Legal Authority

1. EPA provided an insufficient opportunity for comment on the Proposed Denial.

Comment:

EPA stacked multiple comment periods for RFS-related actions raising numerous economic and legal issues and posing serious potential consequences for small refineries' compliance into the same short period. Small refineries did not have sufficient time to prepare adequate comments to the Proposed Denial due to several comment periods for RFS actions open at the same time.

Response:

EPA's action denying SRE petitions is not a rulemaking, but rather is an adjudication of the SRE petitions before the Agency and, as such, EPA is not required to provide public notice and an opportunity for public comment before taking this action. However, EPA chose to provide the opportunity for public comment to ensure that the Agency had all relevant information available to it, and that all stakeholders had an opportunity to provide information for EPA's consideration in making a final decision on the SRE petitions. Further, EPA disagrees that the public comment period was insufficient because other RFS actions were available for public comment at the same time. First, small refineries have been on notice regarding the holdings in the *RFA* opinion since January 20, 2020. Second, EPA notified the refineries on August 17, 2021, that EPA was strongly considering applying the holdings from the *RFA* opinion that remained after the Supreme Court's decision in *HollyFrontier* to pending SRE petitions before the Agency. Though the Proposed Denial was not issued until December 7, 2021, and not published in the *Federal Register* until December 14, 2021, small refineries have had access to the *RFA* opinion since January 20, 2020, and had actual notice and the opportunity to provide information as early as August 2021. The fact that other EPA actions in which the same small refineries may have an interest were also available for public comment is not relevant to the adequacy of the refineries' opportunity to comment on *this* action. Moreover, it would be impossible for EPA to ensure that only one action at a time is open for public comment to avoid stakeholders having to address more than one proposed action at a time. Further discussion of our reasoning for maintaining the comment period deadline is available in a January 25, 2022, response letter to a coalition of small refineries, available in the docket for this action.

Comment:

EPA's contention that small refineries were on notice regarding the substance or importance of the Proposed Denial from actions and events leading up to it is nonsensical.

Response:

EPA clearly informed affected refineries by email on August 17, 2021, that the Agency intended to evaluate SRE petitions following its evaluation of the *RFA* holdings.⁴ Therefore, refineries

⁴ A copy of this email is available in the docket for this action.

had actual notice of the factors and analysis that would likely be applied to the pending SRE petitions, and that EPA would consider relevant information they submitted. Specifically, EPA stated:

You are receiving this email . . . because EPA has at least one pending small refinery exemption petition from your small refinery. EPA has received additional information from certain small refinery exemption petitioners relating to their ability to recoup their RFS compliance costs in response to the U.S. Court of Appeals for the Tenth Circuit’s January 2020 holding in *Renewable Fuels Association v. EPA* that disproportionate economic hardship must be caused by the RFS. In the interest of equity, EPA wants to be sure that you are aware that EPA is evaluating what this holding means and that you, too have the opportunity to submit additional information to support your small refinery exemption petition(s). EPA will consider all the information you provide in support of your petition when making its decision.

There is no basis to claim that this notice was inadequate simply because it occurred in advance of the Proposed Denial; in fact, EPA’s email provided additional, earlier notice, effectively extending the time period for providing information to the Agency. In this email, EPA explained that it was evaluating RIN cost passthrough in the context of the SRE provision due to the *RFA* holding on DEH causation. There was no need for EPA to take a definitive position on whether it intended to apply the *RFA* holdings—and in fact that was one of the issues on which EPA expressly requested input—so refineries would be able to comment on the question of whether the Agency should do so. Therefore, between August 2021 and February 2022, small refineries had roughly five months’ notice and opportunity to comment on EPA’s proposed reliance on these factors.

Comment:

The comment period was less than 60 days.

Response:

First, a 60-day comment period is not required for adjudications upon which EPA chooses to request comment, and in fact no opportunity for notice and comment is required at all. In addition, the Proposed Denial was published on EPA’s website on December 7, 2021. The comment period was extended shortly thereafter to February 7, 2022. Thus, the total time from public availability to the close of the comment period was 62 days.

Comment:

The time constraints EPA claims prevent it from extending the comment period deadline are results of the Agency’s own doing.

Response:

As explained above, EPA provided a reasonable opportunity for public comment and explained in its January 25, 2022, letter to a coalition of small refineries its reasons for not extending the comment period. There have been several reasons for EPA to act on the SRE petitions when it did so. EPA took the first action to deny SRE petitions pursuant to an order from the Court of Appeals for the D.C. Circuit to issue new decisions on 36 remanded 2018 SRE petitions by April 7, 2022, which it did. EPA is taking this second action to provide certainty to SRE petitioners and other RFS program participants by deciding 69 pending SRE petitions reasonably soon after the April action. It is also important that today's action be issued concurrently with the Agency's final action to issue the 2020–2022 RFS Annual Rule, since this action is relevant to that final rule.

2. EPA’s Proposed Denial violated the due process rights of the petitioning small refineries.

Comment:

Small refineries have a property interest in their RFS exemptions that the government cannot take away without due process.

Response:

Small refineries have no property interest in continued exemptions under the RFS program. As an initial matter, the Supreme Court has held that “[t]o have a property interest in a benefit, a person clearly must have more than an abstract need or desire for it. He must have more than a unilateral expectation of it. He must, instead, have a legitimate claim of entitlement to it.” *Board of Regents v. Roth*, 408 U.S. 564, 576 (1972). EPA has consistently maintained that small refineries have no entitlement to an exemption in a given year. There is a presumption of compliance under the RFS program from which a small refinery may be exempted only if it can make a demonstration of DEH caused by the cost of compliance with the RFS program. There is not, and has never been, a guarantee or promise that a small refinery exempted in one year will be exempted in the following year. To the contrary, EPA’s practice has routinely been to evaluate SRE petitions based on the circumstances within the petition year. Meaning that, even in recent years, EPA has denied small refineries’ SRE petitions in one year after having granted an exemption for the same refinery for a prior year, based on the different facts. The small refinery exemption is further distinguishable from other government benefits recognized by the Supreme Court as being protected by the Fourteenth Amendment’s due process clause in its purpose. The Court explains that “[i]t is a purpose of the ancient institution of property to protect those claims upon which people rely in their daily lives, reliance that must not be arbitrarily undermined.” *Roth*, 408 U.S. at 576. Exemption from otherwise mandatory environmental standards is not an “ancient institution of property,” nor is it analogous to “claims upon which people rely in their daily lives.” EPA does not recognize perpetual exemption as a valid compliance strategy upon which a business can rely in making strategic decisions. Moreover, and as explained elsewhere herein, EPA provided ample notice and process—more than was required under the CAA—and did not violate small refineries’ due process rights.

Comment:

EPA violated small refineries’ due process rights because the Agency failed to provide adequate notice of its intention to deny the pending SRE petitions. Commenters also claim that they reasonably expected that EPA would grant their SRE petitions since refineries had consistently received exemptions in the past; and that the public notice-and-comment process does not cure the lack of notice, as the refineries would have had more time to prepare their SRE petitions than they did to prepare their comments.

Response:

As noted above, EPA disagrees with commenters that there is a recognized property interest in receiving an exemption from the RFS program. In addition, EPA provided adequate notice of its action and, therefore, even if the refineries did have such a property interest, they were not deprived of due process. First, as explained above, EPA provided ample notice and opportunity for the refineries and other stakeholders to comment on its Proposed Denial. Second, and as discussed elsewhere in this Appendix, commenters also have no basis to claim they reasonably relied on EPA's past actions on other SRE petitions to assume their petitions would be granted, and EPA disagrees that any such expectation was reasonable. As noted above, EPA has always evaluated each SRE petition based on information relevant to that petition, and in some cases has provided relief in one year and denied it in the next.

Finally, the commenters claim that, since the Agency claims the statute is ambiguous, EPA was, therefore, not compelled to revise its interpretation. The basis for EPA's decision to follow the holdings of *RFA* is explained in Section III and depends on the Agency's evaluation of the statutory text as well as the purpose of the RFS program and of the SRE provision. The fact that the commenters disagree with EPA's interpretation does not mean that the Agency failed to provide adequate notice of its action. In fact, commenters had sufficient time and opportunity to explain in their comments their disagreement with EPA's conclusions, as described in responses in Section B.I.1.

Moreover, as noted above, small refineries lack a property interest in obtaining an exemption from the RFS program. And, even if they had such an interest, they would have to show that they "sustained prejudice as a result of the allegedly insufficient notice." *Long v. Board of Governors of the Federal Reserve System*, 117 F.3d 1145, 1158 (10th Cir. 1997). EPA provided small refineries adequate notice regarding the Agency's specific intent to deny their pending SRE petitions and solicited comment on the aspects the Agency considers to be the most important matters of both fact and law. In addition to this comment period, in August 2021, EPA explicitly requested additional information from small refineries regarding RIN cost passthrough and the holdings of the *RFA* opinion. On August 25, 2021, EPA filed a motion for voluntary remand without vacatur in the D.C. Circuit cases so that EPA could evaluate the impacts of the *RFA* and *HollyFrontier* decisions on its SRE policy and the decisions made on those SRE petitions.⁵ In total, small refineries had over five months of notice of what factors EPA believed would be important in deciding the pending SRE petitions. Small refineries have used that time to provide comprehensive comments—in meetings and written comments—on the legal and policy issues raised by the Proposed Denial.

Furthermore, small refineries could have supplemented their SRE petitions at any time during their pendency at the Agency, and some did submit additional information multiple times over that period. EPA's use of the notice-and-comment process merely provided small refineries another opportunity to provide information supporting their SRE petitions and for other RFS stakeholders to also provide feedback on EPA's implementation of the SRE provision. EPA also disagrees with the commenters' attempt to equate the time to prepare an SRE petition with the

⁵ See e.g., EPA's Motion for Voluntary Remand Without Vacatur, Doc. No. 1911606, August 25, 2021, *Sinclair Wyo. Refining Co. v. EPA*, No. 19-1196 (consol. with 19-1197) (D.C. Cir.).

time needed for a sufficient opportunity to comment. The SRE petitions EPA is acting on had already been prepared and submitted to the Agency for review when EPA notified refineries in August 2021, and when EPA issued its Proposed Denial. EPA provided the comment period to ensure that the Agency had before it all relevant information, including any additional information petitioners wanted EPA to consider before taking its final action.

3. EPA's Proposed Denial is a veiled retroactive rulemaking with inadequate process that violates the Administrative Procedure Act.

Comment:

EPA's Proposed Denial is an action that is generally applicable to all small refineries, characteristic of a legislative rulemaking and not individual adjudications or an interpretive rule, and otherwise meets the definition of a rule in the Administrative Procedure Act ("APA").

The Proposed Denial proposes to retroactively apply two new interpretations of the SRE statute: (1) The eligibility provision, and (2) The "disparate economic hardship" provision. If finalized, the Proposed Denial's eligibility and DEH interpretations would cause either a *de facto* regulatory repeal or an amendment of 40 CFR 80.1441 and have devastating economic consequences on small refineries.

The statutory interpretations EPA proposed are rules, and the process EPA used in adopting these statutory interpretations (i.e., publishing a notice and request for comment in the Federal Register) resembles the rulemaking process. Accordingly, this rule cannot be applied retroactively absent a clear statement of Congress to the contrary, and there is no such authorization in the CAA. Even if the CAA did authorize retroactive rulemaking of this kind, the APA prohibits retroactive rulemaking (see *Treasure State Res. Indus. Ass'n v. EPA*, 805 F.3d 300, 305 n.1 (D.C. Cir. 2015), defining "rule" as a statement of "future effect").

Response:

It is well-settled that "the choice between rulemaking and adjudication lies in the first instance within the agency's discretion." *NLRB v. Bell Aerospace Co.*, 416 U.S. 267, 294 (1974); see also *SEC v. Chenery Corp.*, 332 U.S. 194, 203 (1947). It is also well-settled that an agency "is not precluded from announcing new principles" in an adjudication, see *Cassell v. FCC*, 154 F.3d 478, 486 (citing to *NLRB*), and may also address legal issues for the first time. *Conference Group v. FCC*, 720 F.3d 957, 965 (2013). Here, EPA is conducting a single adjudication of 69 SRE petitions in reliance on EPA's revised interpretations of the statutory SRE provisions, as applied to the facts and circumstances of each SRE petition. The SRE Denial is an adjudication limited to the SRE petitions expressly identified in Section I and Appendix A, redacted under claims of confidentiality. We are only adjudicating the SRE petitions from small refineries articulated in this action, not every small refinery participating in the RFS program currently and in the future (as a rulemaking would necessarily do). If we receive additional SRE petitions in the future, we will grant or deny them in a subsequent adjudicative action. Furthermore, it is recognized that agency adjudications may necessarily include statements of policy, and that such statements do not transform the adjudications into rulemakings. *NLRB v. Bell Aerospace*, 416 U.S. at 294 (upholding the Board's discretion to forgo rulemaking because "the adjudicative procedures in this case may also produce the relevant information necessary to mature and fair consideration of the issues").

Additionally, EPA has not asserted or cited to any of its rulemaking authorities under CAA sections 206, 211, or 301 to support this action, and this action is clearly not a rulemaking under

CAA section 307(d) as it is not a promulgation or revision of a regulation under CAA section 211. EPA has relied solely on its authority to adjudicate SRE petitions under CAA section 211(o)(9)(B).

Even if EPA were taking action through a rulemaking, this would not be a retroactive rule. A retroactive rule “takes away or impairs vested rights acquired under existing law, or creates a new obligation, imposes a new duty, or attaches a new disability in respect to transactions or considerations already past.” *I.N.S. v. St. Cyr*, 533 U.S. 289, 321 (2001). The SRE Denial does not take away or impair small refineries’ vested rights, as they have no entitlement to exemptions from the RFS standards. Additionally, the SRE Denial imposes no new obligations, duties, or disabilities on small refineries. It merely denies their requests to be excused from compliance with their existing RFS obligations.

EPA’s previous actions on two 2016 SRE petitions and one 2017 SRE petition were remanded to the Agency with orders to issue new decisions on the SRE petitions at issue. EPA’s new decisions on these remanded SRE petitions are necessary to respond to the courts’ directions to address those petitions and are not retroactive. Rather, they are new actions on past SRE petitions that were sent back to the Agency by reviewing courts.

The commenters claiming EPA’s SRE decisions constitute a “regulatory repeal,” or “amendment of the regulations” are incorrect. The SRE Denial does not make any changes to the RFS regulations--they remain intact and unchanged. In fact, the SRE Denial is consistent with the regulations at 40 CFR 80.1441. See 40 CFR 80.1441(e)(2). Those regulations do not speak to how EPA will interpret the statute or evaluate eligibility to petition or DEH, but simply explain the process for small refineries to apply for an exemption. Thus, this action is not a “regulatory repeal” or “amendment.” Rather, it is an adjudicatory action to decide SRE petitions, based on EPA’s interpretation of the relevant statutory provision.

4. If EPA’s Proposed Denial is not an improper, retroactive rulemaking, then it is an unlawful retroactive adjudication causing “manifest injustice.”⁶

Comment:

EPA’s denial of the SRE petitions is a retroactive adjudication, and reconsidering those petitions is especially inappropriate and inequitable. Where an agency imposes a retroactive adjudication, courts consider “(1) whether the particular case is one of first impression, (2) whether the new rule represents an abrupt departure from well-established practice or merely attempts to fill a void in an unsettled area of law, (3) the extent to which the party against whom the new rule is applied relied on the former rule, (4) the degree of the burden which a retroactive order imposes on a party, and (5) the statutory interest in applying a new rule despite the reliance of a party on the old standard.” *Retail, Wholesale & Department Store Union v. NLRB*, 466 F.2d 380, 390 (D.C. Cir. 1972) (describing factors that can result in a manifestly unjust retroactive adjudication). Even if EPA’s new interpretation is permissible, and regardless of whether it is an adjudication or a rulemaking, retroactive application is impermissible.

Commenters also claim that retroactive application of the new legal rule is unlawful, if a party has conformed its conduct to a prior legal regime, as small refineries have done: at the time small refineries were owed decisions (90 days after submitting their SRE petitions), EPA’s approach to SRE petition evaluation included reliance on the 2011 DOE Study, and small refineries had formulated their petitions accordingly. As such, the Proposed Denial violated small refineries’ settled expectations regarding EPA’s SRE petition evaluation process since disproving RIN cost passthrough was not an eligibility requirement at the time small refineries submitted their petitions.

EPA is attaching new legal consequences to actions small refineries completed before proposal of the changed interpretation, and small refineries reasonably relied on the prior decisions to grant their SRE petitions and EPA’s retroactive revocation results in DEH to small refineries. Reconsidering the already granted petitions is especially inappropriate and inequitable.

Response:

As explained elsewhere, “the choice between rulemaking and adjudication lies in the first instance within the agency’s discretion.” (*NLRB*, 416 U.S. 267, 194 (1974)). Here, EPA is acting on SRE petitions through an adjudication, not a rulemaking, and courts do not disfavor retroactive adjudication but review their validity based on fairness and equity to the affected party. *Cassel v. FCC*, 154 F.3d 478, 486 (D.C. Cir. 1998). EPA does not believe that the decisions issued in the SRE Denial are retroactive; however, even if they are, the final action is not an impermissible retroactive adjudication as it only clarifies existing law, *Aliceville Hydro Associates v. F.E.R.C.*, 800 F.2d 1147, 1152 (D.C. Cir. 1986), and does not result in an unfair or inequitable outcome.

⁶ *Retail, Wholesale & Department Store Union v. NLRB*, 466 F.2d 380, 390 (D.C. Cir. 1972) (describing the considerations that must be weighed when evaluating whether a retroactive adjudication results in manifest injustice).

As an initial matter, agency adjudications are generally accepted to be retroactive, though the retroactivity of adjudications is not limitless. *Bowen v. Georgetown University Hosp*, 488 U.S. 204, 221(1988), *see also AT&T v. F.C.C.*, 454 F.3d 329, 332 (D.C. Cir. 2006). The assertion that EPA's Proposed Denial and final action constitute a "substitution of new law for old law that was reasonably clear," *Aliceville*, 800 F.2d at 1152), fails to acknowledge the many changes in SRE petition adjudication that have taken place over the years. These represent different approaches EPA has taken to DEH evaluation, as the Agency's views and the case law have evolved. As explained in Section II.D, none of these approaches can be called "old law that was reasonably clear." *Id.* And even if they were, EPA's change in approach is more accurately characterized as a clarification of existing law (i.e., a clarification of what constitutes DEH within the context of the SRE provisions), or a correction of practice "rectify[ing] legal mistakes identified by a federal court." *Verizon Telephone Companies v. FCC*, 269 F.3d 1098, 1111 (D.C. Cir. 2001). Accordingly, the SRE Denial is not an impermissible retroactive adjudication.

For the SRE petitions pending again before the Agency on remand, EPA is responding to the courts' orders remanding EPA's prior actions and requiring the Agency to issue new decisions on the petitions at issue. Therefore, EPA has an obligation to act in response to the courts' decisions. EPA is applying the reasoning of the *RFA* opinion, which was issued on January 20, 2020. EPA is obligated to take into consideration changes in the law that occur while it is considering the petitions before it, and doing so is proper; the petitions are again before the agency. *Verizon Telephone Companies*, 269 F.3d at 1110-11. Indeed, "the Administrative Procedure Act generally contemplates that when an agency proceeds by adjudication, it will apply its ruling to the case at hand." *Clark-Cowlitz Joint Operating Agency v. F.E.R.C.*, 826 F.2d 1074, 1082 (D.C. Cir. 1987).

EPA further disagrees that its action is an impermissible retroactive adjudication based on the *Retail Wholesale* factors. Those factors "boil down ... to a question of concerns grounded in notions of equity and fairness[,]" *Clark-Cowlitz* at 1082, n.6, and consideration of the factors demonstrates that EPA's action is not counter to such notions. Here, EPA is applying its new statutory interpretation via adjudication, which is permissible, and is necessarily applying that interpretation to the SRE petitions it has before it. EPA's change in position is not an "abrupt departure" from well-established practice. EPA has taken different approaches to SRE petitions over the years, as described in Section II.D, and in some cases has granted a refinery's petition in one year but denied it in the next. Also, EPA has twice extended the 2019 compliance deadline for small refineries, mitigating any adverse impacts or burdens EPA's change in interpretation might impose. Lastly, EPA is applying an interpretation that it believes is consistent with the intent of Congress in adopting the RFS program and in authorizing exemptions for small refineries.

EPA also disagrees that its action is disrupting small refineries' settled expectations and attaching new legal consequences to decisions the refineries made before the Proposed Denial. As noted above, to the extent small refineries relied on past actions, that reliance was not reasonable in light of the facts and circumstances.

Moreover, the legal consequences of EPA's actions are the same regardless of when the denial is issued (i.e., small refineries remain obligated under the RFS program). Nor are small refineries

prejudiced by having demonstrated compliance while their SRE petitions are still pending, which was a business decision they chose to make. Furthermore, EPA solicited, and small refineries submitted, comments in response to the Proposed Denial, providing small refineries an opportunity to modify and amend the SRE petitions they submitted prior to the Proposed Denial in order to address EPA's changed SRE policy.

EPA itself provided small refineries with sufficient notice regarding its possible change in interpretation. EPA proposed to revise its prior interpretation approach to evaluating SRE petitions on December 7, 2021. However, small refineries should have been aware of the Agency's consideration of a different interpretation even before the Proposed Denial. EPA explained in February 2021 that it intended to support the interpretation taken by the Tenth Circuit in *RFA* before the Supreme Court. After the *HollyFrontier* opinion was issued, EPA solicited information from small refineries directly relevant to the remaining holdings of *RFA*, and even highlighted those holdings in its request. Through that request, subsequent requests, and the Proposed Denial, EPA provided small refineries with the opportunity to supplement their pending SRE petitions to address the change in EPA's approach, and, in fact, small refineries did exactly that.

Even if EPA had not provided small refineries with notice and opportunity to supplement their SRE petitions according to the *RFA* holdings, the SRE Denial would not likely "trigger[] retroactivity concerns." *Pine Tree Medical Assocs. v. Secretary of Health and Human Servs.*, 127 F.3d 118, 121-22 (1st Cir. 1997). In *Pine Tree*, the First Circuit stated that, "[t]here is an obvious difference between rejecting an application because it fails to meet a new regulation governing the proper format or preparation of applications that was promulgated after that application was filed, and rejecting an application because the substantive standards for granting the application on the merits have changed in the period between filing and review." *Id.* The court explains that the petitioner "place[d] undue significance on the act of filing an application with an administrative agency," and that "the mere filing of an application is not the kind of completed transaction in which a party could fairly expect stability of the relevant laws as of the transaction date." *Id.*

Comment:

EPA's retroactive revocation results in DEH on small refineries.

Response:

As stated above, the legal and policy decisions EPA here adopts are not retroactive. EPA's previous actions on the remanded SRE petitions were challenged, and the courts remanded the actions back to the Agency to issue new decisions. These new decisions do not constitute a retroactive rulemaking or retroactive adjudications, and are instead made to replace the challenged actions. Further, small refineries do not experience DEH from compliance with the RFS program, as explained in the SRE Denial.

Comment:

The Proposed Denial abandons the practice of relying on the 2011 DOE Study and scoring matrix, which EPA has applied for over ten years. EPA justifies this change by wrongly relying on DOE's superseded 2009 study. Reliance on the 2009 DOE Study is particularly inappropriate because EPA in its 2020–2022 RFS Annual Rule Proposal indicated that the RIN market is illiquid, and reliance on the 2009 DOE Study cannot replace the consultation requirement in the statute.

Response:

EPA's choice to modify its approach to SRE petition evaluation by moving away from reliance on the DOE scoring matrix is an appropriate policy decision given the lack of relevant information provided in the scoring matrix under the *RFA* causation framework, as explained in Sections IV.C and D.

The language quoted by the commenter from the 2020–2022 RFS Annual Rule Proposal regarding the liquidity of the RIN market was mischaracterized by the commenter as describing the *current* state of the RIN market. Rather, the language described a *hypothetical* situation that could occur if EPA had proposed a different action. Additionally, EPA has satisfied the statutory requirement to consult with DOE as described in Sections IV.C and B.1.5.

5. EPA failed to follow the statutory process for deciding SRE petitions.

Comment:

EPA has failed to consult with the DOE and consider the 2011 DOE Study, as required by the CAA. Commenters also assert that DOE's findings in the 2011 DOE Study have largely proven correct over time.

Response:

As described in Section IV.C, EPA did consult with DOE through meetings, phone calls, and written communications. EPA also considered both the 2009 and 2011 DOE Studies and "other economic factors," and the Agency's consideration is explained in the SRE Denial. EPA is not bound by any statutory language to a specific form or format for its consultation with DOE, nor does the statute dictate how EPA should consider the studies or other economic factors. EPA's consultation and consideration of the 2011 DOE study are consistent with the statutory requirement. While not legally required, EPA has added a memorandum to the docket for this action describing the EPA-DOE consultation process. Regarding the assertion that the 2011 DOE Study has been proven correct over time, as explained in Section IV.C, while DOE was correct in anticipating the RIN prices could rise in the future, DOE's supposition that this would advantage fuel blenders has proven not to be true. Furthermore, the 2011 DOE Study did not anticipate the degree to which those compliance costs would be passed through to refineries in higher prices for the products they sell.

Comment:

Had EPA issued timely decisions, likely resulting in exemptions for many small refineries under EPA's prior approach, small refineries would have had the opportunity to purchase RINs at lower prices than today.

Response:

As explained in the SRE Denial, EPA is acting on the petitions consistent with the holdings of the *RFA* decision. While that decision was issued in January 2020, its threshold holding regarding small refineries' eligibility for an extension of their exemptions was reviewed by the Supreme Court and reversed in *HollyFrontier* in July 2021. Had the Court upheld that particular holding, EPA would not have needed to have consider the other holdings in *RFA*. Therefore, it was reasonable for EPA to wait until resolution of that case by the Court before acting on petitions, in case refineries were no longer eligible. Finally, small refineries are aware that receiving an exemption in one year does not guarantee an exemption in the following year, as each year's SRE petition is reviewed separately. Under the statute, compliance with the RFS program is the default, and small refineries should plan to comply with their annual obligations until such time as they petition for and receive an exemption. Moreover, EPA does not agree that the results of the business decisions small refineries make regarding the timing of their RIN purchases is a cause of DEH, as explained in Section IV.D.

Comment:

Where an interagency consultation is required, evidence of such consultation must go beyond a mere generalized statement that consultation occurred.

Response:

As noted above, the form of consultation is not specified in the statute. Since the Proposed Denial, EPA has updated Section IV.C to explain the consultation process the Agency used with DOE. While not legally required, EPA has added a memorandum to the docket for this action describing the EPA-DOE consultation process.

6. EPA's Proposed Denial is arbitrary and capricious.

Comment:

EPA is changing its interpretation to effectuate a particular policy outcome, not to correct a legal error.

Response:

EPA is changing its interpretation to align it with the Tenth Circuit's surviving *RFA* holdings, which clarified the meaning of DEH by indicating it must be caused by compliance with the RFS program and highlighted a failure of EPA in ignoring its finding on RIN cost passthrough when adjudicating SRE petitions, and which EPA believes is the best interpretation of the statutory SRE provisions. See Sections II.D and IV.D for more explanation regarding how EPA is changing its approach in response to the *RFA* opinion. Additionally, EPA is also basing this change in approach on the Agency's findings regarding the RIN market and RIN cost passthrough, consistent with the Tenth Circuit in *RFA*, as described in Section IV.D.2.d.

Comment:

EPA's Proposed Denial ignores information relevant to assessing whether RFS compliance would impose DEH on an individual small refinery, as opposed to making a single decision for numerous SRE petitions. A single decision for all SRE petitions cannot adequately consider the facts of individual SRE petitions as the CAA requires.

Response:

As an initial matter, this commenter did not specifically identify what information EPA is allegedly ignoring in its analysis of whether RFS compliance imposes DEH on an individual small refinery. Without knowing what specific information this commenter is referencing, EPA cannot respond to this assertion. Regardless, by publishing notice of and requesting comment on the Proposed Denial, EPA's process was designed to gather all information that small refineries and other stakeholders considered relevant to deciding SRE petitions. Accordingly, in support of the SRE Denial, EPA considered and addressed all the substantive information—including the individual petitions and supplemental information from small refineries—provided by interested parties to the Agency during the public comment period that those parties considered relevant to assessing whether RFS compliance imposes DEH on small refineries. After conducting this review, EPA finds that the petitioning small refineries have not demonstrated that they face disproportionate RFS compliance costs and, therefore, have not demonstrated DEH warranting exemption. If this commenter is also asserting there exists other allegedly relevant information that was not considered, but that information was not provided to the Agency, EPA obviously could not have considered that information in its analysis unless it was provided to the Agency.

EPA notes that, if a small refinery had provided data and evidence of other economic factors upon which EPA could determine, after consultation with DOE, that the particular small refinery had demonstrated that it faced DEH consistent with the criteria described in the SRE Denial and

contrary to the facts regarding other small refineries, EPA would have issued an exemption to that small refinery. However, no individual small refinery has made such a showing in the SRE petitions EPA reviewed in taking this action. As described in more detail in Sections IV.C and D, EPA has evaluated each individual SRE petition, as well as provided all SRE petitions and related supplemental materials to DOE as part of the agencies' consultation. Contrary to the commenters' assertion, the SRE Denial is based on EPA's consultation with DOE on the facts of individual petition elements, including: the costs of RFS compliance per the memorandum to the docket regarding DOE-EPA consultation; consideration of individual small refineries' data and comments as evidenced by EPA's detailed confidential, refinery-specific appendices; and EPA's response to comments herein and in Section IV.D. Nothing in the SRE Denial contradicts the fact that, if a refinery demonstrates that it experiences unique DEH in the future, EPA would issue an SRE to that small refinery.

Comment:

EPA's failure to consider the scoring matrix prepared by DOE contravenes the CAA and belies EPA's claim to have consulted with DOE. The scores provided by DOE when it applies the scoring matrix to an SRE petition demonstrate without question whether a small refinery merits an exemption. Moreover, EPA's unsupported assertion that RIN costs are always passed through to consumers by all refineries, regardless of market location and situation, ignores the findings in the 2011 DOE Study on which EPA has based its evaluation of SRE petitions for over a decade.

Response:

As an initial matter, the CAA does not require EPA to use the DOE scoring matrices in its evaluation of SRE petitions. As the commenter itself acknowledges, the CAA only requires that EPA, in consultation with DOE, consider the 2011 DOE Study and other economic factors.⁷ As described more fully in Section IV.C, EPA expressly considered the 2011 DOE Study and, importantly, its finding that “[d]isproportionate economic hardship *must* encompass two broad components: a high cost of [RFS] compliance relative to the industry average, and an effect sufficient to cause *a significant impairment* of the refinery operations.” (emphasis added). EPA has concluded, consistent with the findings of the 2011 DOE Study and the Tenth Circuit's *RFA* decision, that DEH can only occur when the disproportionate impact comes from a high cost of RFS compliance relative to other refineries. EPA chose not to use the 2011 DOE scoring matrices because those matrices were designed to differentiate between refineries that would bear a higher cost of RFS compliance due to an inability to blend biofuels when compared to refineries that could blend fuels. DOE designed the matrices in this way projecting that “*If* certain small refineries must purchase RINs that are far more expensive than those that may be generated through blending, this will lead to disproportionate economic hardship for those effected entities.” (emphasis added). EPA has, with the benefit of time, experience implementing the RFS program, and based on the substantial data, contracts, and academic literature provided to the Agency in the SRE petitions and comments on the SRE Denial, concluded that RFS compliance costs are the same whether RINs are acquired through blending or by purchasing RINs.⁸ With no difference in compliance costs whether a refinery buys RINs or blends

⁷ CAA section 211(o)(9)(B)(ii).

⁸ See Section IV.D.2.

renewable fuel to acquire RINs, the evaluation rubric that DOE created to identify small refineries with limited ability to blend biofuels (i.e., the DOE scoring matrix) has no applicability to the analysis that EPA is making in this decision.

Comment:

EPA's narrow interpretation of "other economic factors" to allow the Agency to rely exclusively on a flawed finding of RIN cost passthrough to deny all pending SRE petitions misapplies the Tenth Circuit's holdings.

Response:

As an initial matter, the commenter misreads EPA's explanation of the *RFA* opinion in the Proposed Denial, and misreads the *RFA* opinion itself, in an attempt to erroneously assert that EPA can still grant an exemption to a small refinery for hardship caused by something *other than* its compliance with the RFS program. EPA strongly disagrees with that assertion. The commenter also asserts EPA is narrowly and erroneously construing the use of "other economic factors" to *only* consider RIN cost passthrough so that EPA may deny the SRE petitions. EPA also strongly disagrees with that assertion. In Section IV.D, EPA explains how it is following the statutory provisions in CAA section 211(o)(9), as interpreted by the *RFA* opinion, which requires the hardship to be *caused by* compliance with the RFS program. In making that evaluation, and as further explained in Section IV.D, EPA considers whatever "other economic factors"—which includes its consideration of the economic principles described as the RIN discount and RIN cost passthrough—that inform whether a small refinery has demonstrated its hardship is *caused by* its RFS compliance.

Moreover, EPA's findings regarding RIN cost passthrough are not flawed but are based on EPA's analysis of the available information as described throughout the SRE Denial. Where commenters have presented studies refuting EPA's findings, we have responded to those comments in Section B.III and in confidential, refinery-specific appendices. This action harmonizes EPA's findings regarding RIN cost passthrough with the circumstances described in the SRE petitions and the holdings of the *RFA* opinion. In relying on EPA's findings regarding RIN cost passthrough, EPA is also relying on all the data supporting RIN cost passthrough, and the findings represent months of careful consideration of the information described throughout this decision and its supporting materials.

Comment:

EPA's interpretation also contravenes the statute because it fails to read "disproportionate" in context. Small refineries seeking an SRE must demonstrate "disproportionate economic hardship." But EPA proposes to sever "disproportionate" from that phrase, asserting that small refineries must demonstrate that their "*RFS compliance costs* are disproportionate compared to other refineries' RFS compliance costs." EPA also tries to smuggle in a non-statutory severity requirement, insisting that any disproportionality must be "of sufficient magnitude to warrant the exemption." That is not what the statute says. If RFS compliance—on its own or in conjunction

with “other economic factors”—causes a small refinery to suffer any greater hardship relative to large refineries, it has suffered DEH, and EPA must grant an exemption.

Response:

Again, as noted in the previous response, this commenter is attempting to read the statute and the *RFA* opinion to allow it to obtain an exemption for reasons *other than* hardship *caused by* its RFS compliance. EPA strongly disagrees with that assertion. As explained in Section III, EPA, DOE, and the Tenth Circuit all share the same understanding of the definition of “DEH” (i.e., that DEH must be caused by RFS compliance and that a small refinery’s RFS compliance costs must be higher relative to other refineries). Furthermore, if a small refinery’s RFS compliance costs are higher relative to other refineries, then that higher compliance cost must be significant enough to constitute “economic hardship,” since slightly higher costs may not rise to that level. Because each obligated party’s RFS obligation is determined as a percentage of that party’s gasoline and diesel fuel production, the RFS obligations are, by definition, proportionate across all obligated parties. Furthermore, in Sections IV.D.2.a and IV.D.3.f, EPA explains how RFS compliance costs are the same for all obligated parties regardless of a party’s chosen compliance approach (blending or purchasing RINs). This happens because the market prices for transportation fuel increase to reflect the cost of the RIN, and this increased fuel price allows obligated parties to recover their RIN costs through the market price of the fuels they produce. Because the market behaves this way for all parties subject to the RFS program, there is no disproportionate cost to any party, including small refineries.

Comment:

EPA is basing its Proposed Denial on improper political considerations and the Agency’s desired outcome, not the facts of small refineries’ petitions by considering the input of biofuels groups and others vehemently opposed to any form of relief for small refineries. These outside parties have no understanding of the CBI provided by small refineries in support of their SRE petitions.

Response:

EPA based the Proposed Denial and the SRE Denial on the extensive information and analysis presented in those documents and summarized herein and in the supporting materials provided by the petitioning small refineries before EPA issued the Proposed Denial and by small refineries and other interested parties during the public comment period. EPA chose to provide public notice and broadly request comment on its Proposed Denial from all interested parties to ensure full consideration of all relevant factors. EPA’s decisions on SRE petitions have an impact on all parties participating in the RFS program. As such, EPA believed all parties could provide meaningful input on all aspects of the Proposed Denial, including EPA’s understanding of its observations in the RIN market. Accordingly, EPA believes the input of all parties was appropriately considered in the SRE Denial. While EPA acknowledges that other parties are not able to review, consider, and comment on any materials small refineries claim as CBI, EPA itself carefully considered that information in the SRE Denial, and applied the statutory criteria after consideration of all relevant comments.

Comment:

EPA's Proposed Denial is arbitrary and capricious because it was developed using an unlawful and opaque process. First, EPA's decision to take public comment on a single decision to deny multiple SRE petitions submitted by numerous small refineries creates serious procedural concerns. Congress intended SRE petitions to be adjudicated *and decided* on a case-by-case basis, *see* 42 U.S.C. § 7545(o)(9)(B). In fact—with one exception that is the 2018 SRE decision—this is how EPA has always conducted the SRE decision-making process. To do otherwise conflicts with the U.S. Court of Appeals for the Fourth Circuit's decision in *Ergon-West Virginia, Inc.* (admonishing EPA that, when assessing the impact of RFS compliance costs on an individual small refinery, EPA must do more than cite to conclusions about “the refining industry *as a whole*.” *Ergon-W. Va. V. EPA*, 896 F.3d 600, 613 (4th Cir. 2018) (emphasis added).

Second, under the judicial review provisions of the CAA, any refinery whose petition is denied is entitled to judicial review in the applicable regional circuit. 42 U.S.C. § 7607(b)(1) (petitions for review of certain enumerated petitions must be filed in the D.C. Circuit while other enumerated actions and “*any other final action* of the Administrator under this chapter... which is locally or regionally applicable may be filed only in the United States Court of Appeals for the appropriate circuit” except for a subset of additional cases that must be filed in the D.C. Circuit because EPA's otherwise local action “is based on a determination of nationwide scope or effect” that the Administrator publishes). The process EPA is now using will force dozens of refineries to challenge the Proposed Denial as a group—without any meaningful opportunity to explain to the D.C. Circuit why EPA has wrongly denied relief to a given refinery based on information in its individual exemption petition. If finalized, the Proposed Denial will essentially insulate EPA from judicial review. When procedural errors such as these are “so serious and related to matters of such central relevance” to EPA's final action “that there is a substantial likelihood that the [decision] would have been significantly changed if such errors had not been made,” 42 U.S.C. § 7607(d)(8), a court must reverse. *Id.* § 7607(d)(9)(D); *see also* 5 U.S.C. § 706(2)(D).

But EPA's procedural failings do not end there. In addition to forcing small refineries into a public, rulemaking process for what is intended to be a confidential adjudication, EPA has based many of its conclusions on data and information that it has declined to make public. Although the commenter appreciates that there may be CBI in many small refineries' submissions, *see, e.g.*, Proposed Denial at 53, EPA cannot use that as a convenient excuse to obscure the data upon which it relies. Doing so robs small refineries and other stakeholders of a meaningful opportunity to comment on and refute the Proposed Denial and will likewise also deny them meaningful judicial review. To name just one example, EPA states that it found no evidence to support the lack of passthrough or higher RIN acquisition costs for some small refineries and that this is “consistent across all the markets it observed.” Proposed Denial at 27. Tellingly, EPA does not say which (or even how many) markets it observed or the type of evidence it sought but could not find, leaving the commenter with no ability assess this claim or explain why the commenter's market may be different.

Response:

First, in reaching this decision, EPA's process was not "unlawful and opaque." As has been stated above, "the choice between rulemaking and adjudication lies in the first instance within the agency's discretion." (*NLRB*, 416 U.S. 267, 294 (1974)), and here EPA chose to decide these SRE petitions through an adjudication addressing 69 pending SRE petitions. EPA also chose to employ a public notice-and-comment process to ensure it adjudicated the SRE petitions after considering all relevant information through a transparent process. In comparison, under the prior approach, EPA only provided the basis for its decisions to the small refineries themselves in confidential decision documents, a practice for which EPA has been criticized for its opacity. Through this public process, EPA has received information from all interested parties and considered the refinery-specific information submitted. After careful review of the information submitted in the SRE petitions, petition supplements, and comments on the Proposed Denial, EPA determined small refineries had not demonstrated DEH because EPA found the cost of RFS compliance is the same for all obligated parties, including small refineries, as described in Section IV.D.2.

Second, EPA disagrees with the commenter's assertion that the D.C. Circuit would provide an inadequate venue in which small refineries could seek judicial review of the SRE Denial. The venue for judicial review of EPA's actions under the CAA is determined by the statute.⁹ Further, there is no reason to believe small refineries would not have a "meaningful opportunity to explain ... why EPA has wrongly denied relief to a given refinery based on information in its individual exemption petition," in the D.C. Circuit as in any other circuit court. Indeed, the commenter fails to explain how the D.C. Circuit would not provide adequate review of this action.

Importantly, the lack of access to the information that EPA is evaluating in no way diminishes a small refinery's ability to "explain why the commenter's market may be different." The market EPA has described is one where the market price of a refinery's products reflects the cost of RFS compliance (i.e., RIN cost passthrough). Any small refinery wishing to refute that finding for its local market would do so by providing evidence to the Agency and, if challenging a decision, a court that the market in which it operates does not behave in this manner. As explained extensively in EPA's evaluation of economic studies provided by small refineries in Sections IV.D.2 and B.III, a number of small refineries have attempted to provide such explanations and EPA has evaluated them. All of this information is part of the administrative record for this action that the D.C. Circuit would consider in its review of the SRE Denial. The court has rules and procedures in place to safeguard the claims of CBI while it considers, as does EPA, all the information presented in making its decision. Thus, neither the venue of the litigation nor claims of CBI for certain information will in any way impede the parties in obtaining a fair and impartial consideration of its arguments during judicial review of the SRE Denial.

Lastly, the commenter here provides conflicting assertions, where it first admonishes EPA for an "unlawful and opaque" process, then states that EPA's decisions must be "confidential adjudication[s]." Thus, the comment both complains of the opacity of EPA's current action while simultaneously stating that EPA's decisions ought to be *less* transparent (the whole decision

⁹ See CAA section 307(b)(1).

withheld as confidential). Moreover, EPA cannot disclose information that has been submitted to the Agency under a claim of confidentiality until such time as EPA's Office of General Counsel makes a final determination that the information is not entitled to confidential treatment.¹⁰ Until such a determination is made, EPA must preserve the information submitted under claims of confidentiality. To the furthest extent possible, EPA has utilized publicly available information and aggregated or summarized the confidential information received so that it could be presented in the Proposed Denial and the SRE Denial.

Comment:

EPA cannot simultaneously claim that the Tenth Circuit's opinion in *RFA* compelled its change in interpretation and that the language of the CAA is ambiguous and in need of clarifying interpretation.

Response:

As explained in Section III, the CAA does not define "disproportionate economic hardship." Several courts have identified this phrase as an ambiguous term that EPA interprets in administering the SRE provisions.¹¹ Prior to the *RFA* decision, EPA had been interpreting and applying that phrase to allow a small refinery to demonstrate DEH for reasons other than its RFS compliance. The Tenth Circuit in *RFA*, however, rejected that interpretation and instead directed that "disproportionate economic hardship" must be caused by compliance with the RFS program.¹² Accordingly, EPA is adopting the Tenth Circuit's holdings and applying them in the SRE Denial because the Agency believes this is the correct interpretation of the statutory text given the purpose of the RFS program and of the exemption.

¹⁰ See 40 CFR 2.204.

¹¹ See e.g., *Hermes Consolidated, LLC v. EPA*, 787 F.3d 568, 574-75 (D.C. Cir. 2015); *Sinclair Wyoming Refining Co. v. EPA*, 887 F.3d 986, 996 (10th Cir. 2017) ("The statutory text at issue allows a range of linguistic possibilities in defining "disproportionate economic hardship.").

¹² *RFA*, 948 F.3d at 1254 ("Granting extensions of exemptions based at least in part on hardships not caused by RFS compliance was outside the scope of the EPA's statutory authority.").

7. EPA’s statutory interpretation and approach to SRE evaluation is contrary to congressional intent.

Comment:

EPA’s strict interpretation of DEH causation in the Proposed Denial disregards, and is contrary to, Congress’s plainly expressed intent that the DOE survey factors can and do show when a small refinery is experiencing DEH, as demonstrated in appropriations reports over the years to both DOE and EPA instructing the agencies on how to implement the SRE provisions.

Response:

The commenter appears to suggest that Congress intended for DOE and EPA to grant relief whether or not DEH exists. Following the *RFA* decision, it is clear that in the absence of DEH, caused by the cost of RFS compliance, EPA has no authority to grant hardship relief. Yet, the commenter suggests such a conclusion is surplusage and, therefore, EPA must grant relief regardless of whether DEH does or does not exist. Were that the intent of Congress, Congress would not have put any condition on issuing SREs, would not have directed EPA and DOE to do the requisite evaluations, and would not have deemed the exemption “temporary,” but rather would have simply exempted small refineries from the RFS program.

As described in Section II.D, Congressional appropriation committees for DOE and EPA have offered direction through report language that DOE should apply the scoring matrix in a particular way, and EPA should grant some form of relief based upon DOE’s scoring and provide an explanation for why EPA chose not to do so. This language has not remained consistent year-to-year, in some cases recommending for relief only when both parts of the DOE scoring matrix recommend for relief and in other years when one or the other portion of the matrix does. Neither EPA nor DOE’s current FY2022 appropriations bills or associated report language contain information directing the agencies regarding these decisions. Furthermore, to the degree it is appropriate for EPA to consider such earlier report language, the SRE Denial fully explains the basis for EPA’s decision and why it is appropriate under the CAA.

Congress has never opined on EPA’s findings regarding RIN cost passthrough, nor, as discussed in Sections II.D and IV.C, did DOE’s 2011 Study make any determination on the veracity of RIN cost passthrough. EPA has, throughout the Proposed Denial and the SRE Denial, provided independent studies and its own data analysis supporting an overall finding of RIN cost passthrough. Nevertheless, in denying the SRE petitions, it is not necessary for EPA to conclusively demonstrate that RIN costs are always passed through in every market and under all circumstances. Rather, small refineries requesting relief must demonstrate that they experience DEH as a result of compliance with the RFS program. EPA invited petitioning small refineries to submit information demonstrating that they experienced DEH due to the RFS program. EPA has evaluated all refinery-specific information it has received to determine whether this information provided evidence of DEH. As detailed throughout the SRE Denial and our response to comments, we found that no small refinery demonstrated that it experienced DEH due to the RFS program.

Moreover, CAA section 211(o)(9)(B) does not include specific factors that Congress plainly expected EPA to consider. As Section IV.C explains, the statute is largely silent on the approach EPA applies to evaluating SRE petitions. And as some supporting comments have pointed out, Congress as a whole did not provide instruction to DOE to revisit the 2009 DOE Study. Rather, it was one committee in the Senate that rejected and called for a reevaluation of the 2009 DOE Study. One Senate committee does not represent the whole of Congress. Indeed, the text of the CAA was not amended to instruct DOE to perform an additional analysis and the House of Representatives' conference report acknowledged the non-binding nature of the Senate committee's statement: "[t]he conferees ... expect the Department to undertake the [Senate committee's] requested economic review." H. R. Rep. No. 111-278, at 126 (2009). Thus, the instructions to DOE and EPA in the various congressional reports do not represent "congressional intent" regarding the SRE provisions and do not obligate EPA to act in any particular way, given such language does not modify the statutory provisions.

8. EPA’s statutory interpretation renders the SRE provisions in the CAA surplusage.

Comment:

EPA reads the requirement that it consider “other economic factors” out of the SRE statute, focusing only on the RIN cost passthrough theory.

Response:

Under the statute, EPA must evaluate an SRE petition to determine whether a small refinery has demonstrated it experienced DEH caused by compliance with its RFS obligations. The statute directs EPA, in consultation with DOE, to consider the findings of the 2011 DOE study and “other economic factors” when making that evaluation. The statute does not require EPA to consider any particular number or types of economic factors, nor does it require EPA to consider other circumstances that might affect a small refinery’s financial wellbeing once EPA has determined that a small refinery has not experienced DEH from compliance with its RFS obligations. As explained in Section IV.D, the RIN cost passthrough analysis and all the economic data that go into it are part of EPA’s consideration of relevant “other economic factors” in its evaluation of the pending SRE petitions, not a single economic factor as the commenter asserts. Additionally, in the responses to the studies submitted by small refineries in Section B.III, and again in the response to the technical comments EPA received in Section B.IV, EPA further considers “other economic factors” in its evaluation. Taken altogether, EPA considers all the information small refineries and other interested parties have submitted in determining that small refineries do not experience DEH caused by RFS compliance given all refineries are able to recover their costs in the market. The commenter has not provided information regarding another economic factor that EPA has not considered that clearly demonstrates that a small refinery experiences DEH caused by its RFS compliance costs. Rather, the commenter would have EPA consider factors unrelated to RFS compliance, and, as explained in Sections III and IV, this is not what permissible under the statute.

Comment:

EPA’s new interpretation would effectively end SRE relief under the RFS program, in direct contradiction with the Supreme Court’s foundational assumption in *HollyFrontier* that CAA section 211(o)(9) does not include a sunset provision, and would render meaningless the Supreme Court’s recent opinion in *HollyFrontier*. EPA’s new interpretation is contrary to the Supreme Court’s opinion in *HollyFrontier*, which instructed that the SRE provisions in the CAA must be read “fairly, not narrowly.”

Response:

In *HollyFrontier*, the Supreme Court held that the “key phrase at issue before [it]—‘A small refinery may at any time petition the Administrator for an extension of the exemption under paragraph (A) for the reason of disproportionate economic hardship’—simply does not contain the continuity requirement the court of appeals supposed. Instead, more naturally, it means exactly what it says: A small refinery may apply for a hardship extension ‘at any time.’”

HollyFrontier at 2181. The SRE Denial does nothing to prevent small refineries from submitting petitions “at any time” in the future. Moreover, small refineries are aware of the analysis and statutory interpretation EPA will apply to their SRE petitions in the future. For these reasons, the SRE Denial does not render meaningless the Supreme Court’s opinion in *HollyFrontier*. EPA is not “sunsetting” the exemption provision—refineries may submit exemption petitions in the future along with their demonstrations of DEH, which EPA will evaluate and act on.

First, the question at issue in *HollyFrontier* is not the same question before EPA in this action, and the decision here in no way impacts the holding in *HollyFrontier*. This action decides the SRE petitions before the Agency according to the information EPA has reviewed. As the Tenth Circuit said in *RFA*, simply because a small refinery may petition for an exemption does not require EPA to grant the exemption. While EPA is concluding that the information it has considered, including information submitted by petitioning refineries, does not demonstrate DEH caused by RFS compliance, it is important to state that the SRE Denial does not prejudge future SRE petitions or eliminate the possibility of new, different data becoming available in the future that could support a different conclusion. EPA does not in the SRE Denial judge SRE petitions that do not yet exist, in the context of future circumstances that do not yet exist; it only decides the SRE petitions that are currently before us.

9. EPA’s statutory interpretation adds a strict “proximate cause” requirement to the CAA.

Comment:

The CAA does not require that DEH be caused by, and only by, compliance with the RFS program. EPA’s new causation interpretation also contravenes the text of the statute and evinces a misunderstanding of the RFS program. EPA asserts that the CAA requires that DEH be caused by, and only by, RFS compliance, “meaning that a small refinery may not simply experience a year of poor economic performance or struggle with disadvantageous operational or market constraints to merit an SRE.” But protecting struggling small refineries is precisely what Congress intended. As EPA has always agreed (until now), Congress “did not constrain the scope of EPA’s [DEH] determination or use language requiring that RFS compliance be the sole cause of hardship.” And as the D.C. Circuit has held, Congress required more than a bare consideration of compliance costs, “Congress required EPA to consult with DOE and to consider the findings of the 2011 Study *and other economic factors*.” It is only *after* doing all three—consulting with DOE, considering the 2011 Study, and considering other economic factors—that the statute grants EPA “substantial discretion to decide how to evaluate hardship petitions.” The Proposed Denial improperly eschews the 2011 DOE Study and fails to address the statutorily required “other economic factors” beyond the cost of compliance.

Response:

As explained in Section IV.D.1 and in responses to other comments herein, the language of the CAA requires that DEH be caused by compliance with the RFS program. It was the Tenth Circuit in *RFA* that clarified the extent to which EPA may consider DEH to be caused by factors *outside* the RFS program, and it determined that such considerations were improper.¹³ Accordingly, this is the analysis EPA must apply within the Tenth Circuit and in which the Agency is now applying nationwide. Moreover, as explained in the SRE Denial and in responses to other comments herein, EPA followed the statutory directive as it evaluated these petitions and considered “other economic factors” when making its final decision.

¹³ *RFA*, 948 F.3d at 1254 (“Granting extensions of exemptions based at least in part on hardships not caused by RFS compliance was outside the scope of the EPA’s statutory authority.”).

10. The *RFA* opinion lacks any legal force and is not an authority upon which EPA may rely.

Comment:

The Tenth Circuit vacated the *RFA* opinion in its entirety after the Supreme Court opined in *HollyFrontier*, therefore the Tenth Circuit's opinion lacks legal force and cannot be the basis of this action.

Response:

EPA disagrees with this assessment of the validity of the holdings within the *RFA* opinion. On August 19, 2021, EPA filed a motion for clarification regarding the legal effect of the court's July 29, 2021, mandate, stating:

EPA wishes to clarify its understanding that the challenged agency orders are remanded back to EPA without vacatur for further proceedings in accordance with this Court's January 24, 2020, opinion, as modified by the Supreme Court. Specifically, EPA wishes to clarify that, pursuant to the mandate: (1) the alternative holdings in the Court's January 24, 2020, opinion not addressed by the Supreme Court remain in effect; and (2) the orders at issue are remanded to EPA without vacatur. . . . If the Court concludes that its prior orders and mandate do not require further clarification, EPA will proceed in accordance with its current understanding as reflected in this motion."

EPA's Motion for Clarification of the Court's July 29, 2021, Mandate at 2, *RFA*, 948 F.3d 1206 (10th Cir. August 19, 2021). On August 26, 2021, the court denied EPA's motion. Order, *id.* (10th Cir. August 26, 2021). Accordingly, EPA considers *RFA* to have legal force and is proceeding with this understanding, as explained to the court.

Comment:

Even if the Tenth Circuit did not vacate the *RFA* decision in full, the opinion is only binding within the Tenth Circuit.

Response:

While the Tenth Circuit's *RFA* holding is only binding precedent within that court's jurisdiction, EPA has determined that the *RFA* decision provides the best reading of the statutory provisions of CAA section 211(o)(9) and is accordingly taking this action for 69 pending SRE petitions. This is appropriate because EPA has "substantial discretion" for purposes of implementing these SRE provisions.¹⁴ The alternative—to apply *RFA* only to small refineries within the Tenth Circuit—would create disparate treatment of those small refineries, which EPA finds would be

¹⁴ *Hermes*, 787 F.3d at 575 ("EPA retains substantial discretion to decide how to evaluate hardship petitions.").

unworkable and unfair given the national scope of the RFS program and EPA's determination of what is the best interpretation of the Act.

11. The CAA requires individual hardship decisions and analysis, not the generalized approach EPA has taken with the Proposed Denial.

Comment:

EPA's Proposed Denial is unlawful because it applies an improper "one-size-fits-all" analysis and is not based on an evaluation of the refinery-specific facts raised in each SRE petition.

Response:

As explained in Sections III and IV.D.3 and in responses to other comments herein, EPA considered the refinery-specific facts in each SRE petition in taking its final action. EPA provided all of the SRE petitions and supplemental materials to DOE and consulted with DOE on those submissions. Furthermore, EPA evaluated the design and mechanisms of the RFS program to assess how small refineries might be impacted, evaluated the fuel and RIN market data at-large to assess whether actual field data supported the conclusions from that analysis, and then also evaluated all of the refinery-specific information individual companies provided to assess whether there was something unique to their circumstances that was not captured by the broader analysis. This included evaluation of the confidential information provided, as discussed in the confidential, refinery-specific appendices to this action.

Comment:

The CAA requires individual adjudications of each SRE petition. Individual adjudications preserve small refineries' access to the Federal Court of Appeal for the Circuit in which they are located. EPA's single decision for all SRE petitioners forces small refineries into the D.C. Circuit, insulating EPA's action from judicial review.

Response:

The SRE Denial is not the first instance in which EPA has issued a single decision document adjudicating multiple SRE petitions.¹⁵ Furthermore, EPA has considered the arguments made by the individual small refineries, many of which were repeated across SRE petitions from other small refineries. In the SRE Denial, EPA also addresses refinery-specific data in a way that preserves small refineries' claims of confidentiality. Accordingly, though EPA is deciding multiple SRE petitions in the SRE Denial, it has considered and evaluated each petition individually. The comment regarding judicial review of EPA's SRE decisions is addressed in Section B.I.6.

Comment:

The failure to conduct a case-by-case analysis constitutes a procedural error that warrants invalidation of the action under CAA section 307(d)(8).

¹⁵ 2018 Decision (August 9, 2019).

Response:

As explained in the Proposed Denial and again in the SRE Denial, this action is not a rulemaking subject to the various statutory and other provisions applicable to a rulemaking; as such, neither the procedural requirements of CAA section 307(d) (none of which require a case-by-case analysis even if applicable) nor the procedural standard of review in CAA section 307(d)(8) apply. Instead, it is an adjudication of 69 pending SRE petitions. As such, EPA has considered and responded to the arguments (many of them identical) made by the individual small refineries. EPA has also considered the facts each small refinery submitted purporting to refute or disprove EPA's analysis of the RIN program and market effects, including RIN cost passthrough and RIN discount. EPA has addressed the refinery-specific data in a general way to preserve small refineries' claims of confidentiality. EPA has also issued separate individual responses in confidential, refinery-specific appendices to certain small refineries that raised unique arguments to which the Agency could not respond without disclosing confidential information.

Comment:

The Fourth and Tenth Circuits both held that EPA must specifically consider and address each small refinery's argument that RIN costs are not passed through. Thus, EPA's Proposed Denial is directly contrary to Fourth Circuit case law and the *RFA* opinion.

Response:

EPA's final action does consider and address each small refinery's allegation that its RIN costs cannot be passed through. Small refineries began providing detailed comments to EPA to support their claims of DEH immediately following the Supreme Court's decision in *HollyFrontier* (in which case they were considered by EPA in developing the Proposed Denial) and many took the opportunity to submit the same or augmented arguments as comments on the Proposed Denial. EPA addresses and responds to these arguments in Sections IV.D.2 and 3, and throughout this Appendix in response to specific comments. Section B.III specifically focuses on specific studies and data submitted by many small refineries in response to the Proposed Denial.

12. The Proposed Denial does not comply with Executive Order 12898.

Comment:

EPA fails to “identify or address” the fact that small refinery closures (or even reductions in capacity) caused by the Proposed Denial could have an adverse environmental impact on environmental justice communities because small refineries have a smaller environmental footprint and less impact on their surrounding communities than large integrated refineries.

Response:

The commenters provided no analysis to support their assertion that small refineries have less impact on their surrounding communities than large integrated refineries. Regardless, any small refinery closures that occur subsequent to this action are not caused by compliance with the RFS program, as explained in Section IV.D. Furthermore, any adverse environmental impact on environmental justice communities from these hypothetical small refinery closures is purely speculative and outside the scope of this action.

13. The Proposed Denial is contrary to case law on the SRE provisions and RFS program.

Comment:

EPA's Proposed Denial conflicts with other Tenth Circuit case law in *Sinclair*, which instructed EPA to apply a holistic analysis to each small refinery petition, not single factor analysis based on whether DOE evaluated a small refinery to be financially viable going forward. Here, as then, EPA is relying on a single factor, the flawed assumption that small refineries can passthrough their RIN costs.

Response:

EPA disagrees. EPA's interpretation is consistent with the *Sinclair* precedent by applying a "holistic" analysis to the pending SRE petitions by considering RIN market observations that EPA had previously ignored. This analysis accounts for the RFS program's effects on fuel and RIN pricing for obligated parties and is therefore far from a "single factor" analysis. EPA has broadly considered all relevant factors of DEH, including the specific arguments raised by small refineries and the economic studies they provided in their comments to the Proposed Denial. As described in Section IV.D, EPA has considered and analyzed many factors in reaching the decision to deny the 69 SRE petitions; this process is the opposite of applying a "single-factor" assumption to make these decisions.

Comment:

In all prior instances of judicial review over SRE decisions, the courts have never overturned the framework of the 2011 DOE survey and scoring matrix. This created a reliance interest on the part of small refineries on this evaluation approach being maintained.

Response:

As explained in Section B.I.4, EPA disagrees that small refineries had any basis to rely on a particular past Agency action, given the uncertainty in the case law and EPA statements regarding RIN cost passthrough.

II. EPA’s Interpretation on SRE Eligibility is Arbitrary, Capricious, and Otherwise Contrary to Law

Comment:

The requirement that a small refinery must have received the original statutory exemption early in the RFS program to petition for an extension of the exemption is contrary to the language of the CAA. Alternatively, such a requirement is not supported by anything in the CAA. In addition, EPA’s proposed eligibility requirement is contrary to the *HollyFrontier* opinion.

Response:

EPA disagrees with the commenter’s claim that the statute permits a refinery that is not a small refinery at the time of the original exemption to later become one, either through reducing its throughput or being newly constructed, and then to receive an “extension” of that original exemption. The commenter’s interpretation is inconsistent with the text of the statute and is not supported by *HollyFrontier*. On its face, the interpretation that a refinery must have received the original statutory exemption under CAA 211(o)(9)(A) is consistent with the CAA, which describes the extension of that exemption in section 211(o)(9)(B)(i) as an “extension of the exemption under paragraph (A).” Contrary to the commenter’s assertion, the *HollyFrontier* court did not expressly address this question, and in fact, focused on a small refinery’s exemption having “lapsed,” which means it would have existed at some time in the past.¹⁶ Therefore, the Tenth Circuit and Supreme Court opinions are consistent with EPA’s interpretation that, under the CAA, a small refinery that held the original blanket exemption is eligible to receive an extension of that exemption, regardless of whether or not a small refinery’s exemption history following its receipt of the original exemption is continuous. For this reason, EPA announced in the Proposed Denial that the Agency was considering returning to its original view of eligibility, and that is the position taken in Sections IV.A.3 and 4.

Comment:

EPA’s interpretation regarding eligibility violates small refineries’ due process rights.

Response:

Every time EPA has adjudicated an SRE petition, it has done so by applying its then-current interpretation of a small refinery’s eligibility for an exemption under CAA section 211(o)(9). In this case, EPA provided notice to small refineries of its intention to apply its prior interpretation of small refinery eligibility in the Proposed Denial (i.e., requiring refineries to have obtained the original blanket exemption) and provided over 60 days of notice and invited public comment.

Additionally, EPA communicated directly with the two refineries that it concluded were ineligible to petition on these grounds. Accordingly, these refineries had actual notice of EPA’s intent to find them ineligible and had the opportunity to comment on that finding. The refineries

¹⁶ *HollyFrontier*, 141 S.Ct. at 2178 (referring to a “resumption after some interrupting lapse”).

submitted comments, which have been included and addressed here. EPA has responded to other comments on the subject of due process in Section B.I.2.

III. Studies Relied on by Small Refineries to Refute RIN Cost Passthrough

1. Dr. Fitzgerald, Texas Tech Study and LSU Study

Comment:

EPA's Proposed Denial relies on a single academic study (Knittel et al., 2017). EPA has ignored other studies (including Lade & Bushnell, 2019; Li and Stock, 2019; Burkhardt 2019; Pouliot et al., 2017) that provide strong evidence for imperfect passthrough.

Response:

EPA has not based its RIN passthrough conclusion on a single study, as the commenter alleges. Rather, EPA has based this conclusion on an abundance of evidence, including economic theory and empirical studies. The basis for our conclusion is discussed at length in the SRE Denial.

Regarding the studies mentioned by the commenter,¹⁷ we do not believe that these studies provide evidence for imperfect RIN cost passthrough at terminals where obligated parties sell fuel. Two of the studies (Lade & Bushnell, 2019 and Li and Stock, 2019) focus on "RIN subsidy pass through" (what in the SRE Denial, EPA calls the RIN "discount") to E85 at *retail stations*. EPA does not hold that the RIN discount fully passes through in the prices offered to consumers at retail stations marketing E85 as EPA previously acknowledged.¹⁸ To summarize briefly, EPA previously found that retail stations selling E85 are rarely in direct competition with other stations selling E85 and that retail stations likely seek to recover the cost of installing the E85 pumps by marking up the price of E85. Importantly for EPA's analysis here, obligated parties primarily realize the impacts of RIN cost passthrough and the RIN discount when they sell fuel at *wholesale terminals*. Unlike retail stations, most wholesale terminals have a significant number of position holders all selling fuel in competition with each other from the same terminals. In that highly competitive setting with posted product prices, the RIN discount is far more likely to pass through in the prices wholesale fuel sellers receive. Lade in particular notes that "our finding that pass-through is high in contested markets implies that RIN pass-through at wholesale terminals is also high in these markets." (emphasis added)

Because the RIN is separated when the fuel is blended and sold as E85 at the wholesale terminal, it is the wholesale RIN discount that determines the cost for blenders to acquire RINs. The fact that individual retail stations may markup the discounted E85 wholesale price at retail has no impact on the cost to obligated parties to acquire RINs as the RIN has been separated and its

¹⁷ Gabriel E. Lade & James Bushnell, "Fuel Subsidy Pass-Through and Market Structure: Evidence from the Renewable Fuel Standard", 6 JAERE 563 (March 22, 2019), available at <https://doi.org/10.7910/DVN/AX4LOY>; Jing Li & James H. Stock, "Cost pass-through to higher ethanol blends at the pump: Evidence from Minnesota gas station data," 93 J. Env. Econ. & Mgmt 1 (2019) available at <https://doi.org/10.1016/j.jeem.2018.08.003>; Jesse Burkhardt, "The impact of the Renewable Fuel Standard on US Oil refineries," 130 Energy Policy 429 (2019) available at <https://doi.org/10.1016/j.enpol.2019.03.058>; Sebastien Pouliot, Aaron Smith, & James H. Stock, "RIN Pass-Through at Gasoline Terminals," February 22, 2017, available at <https://scholar.harvard.edu/stock/publications/rin-pass-through-gasoline-terminals>.

¹⁸ "Denial of Petitions for Rulemaking to Change the RFS Point of Obligation," EPA-420-R-17-008 at 50-51, November 2017.

value (discount) realized prior to the sale of the fuel at the retail stations. Hence, these two studies do not contradict EPA's conclusion that parties that acquire RINs by blending renewable fuel must discount the renewable fuel by the value of the RIN.

EPA finds the 2019 Burkhardt paper cited in the comments to be largely consistent and supportive of the conclusions EPA has reached in this action. Notably, the study finds that the "RIN tax obligation were fully passed through to wholesale gasoline and diesel prices on average", "that rack level pass-through is generally complete with the largest exception being firms on the East Coast", and that "full pass-through of RIN costs to nationwide output prices on average, and *no statistical difference between pass-through rates for large and small refineries*. These two findings suggest that *exempt refineries that do not bear the burden of the RFS tax obligation, but enjoy increased output prices, may incur substantial benefits from the policy.*"¹⁹ (emphasis added).

The commenters presumably cite the 2019 Burkhardt paper because of its conclusion that RIN prices may not pass through in firms operating on the East Coast. The Burkhardt paper itself (citing Pouliot et al., 2017) suggests the reason for the result on the East Coast:

First, Florida is not on the petroleum pipeline network and second, Atlanta requires a specific blend of low-sulfur gasoline. These unique properties could lead to more volatility in the price of blended gasoline, which would lead to lower pass-through rates. Consistent with the second explanation, I do not find statistically significantly lower pass-through rates in the ULSD and jet fuel markets in PADD 1.

These explanations from Burkhardt are important for several reasons. First, small refineries consistently argue that it is diesel fuel in particular where they are unable to pass through the cost of RVO compliance. Here Burkhardt finds that not only are those costs passed through in diesel fuel prices on average nationally, but also when evaluated across different geographic regions and company sizes (i.e., small refineries versus large refineries). Second, to the degree that the East Coast analysis is skewed due to the unusual market conditions in Florida and Atlanta, those are two markets primarily served by large refineries (the Colonial Pipeline in the case of Atlanta and fuel tankers serviced from the major Gulf Coast refineries in the case of Florida). Any inability to pass through the RVO compliance costs into those markets is unlikely to negatively impact small refineries. That said, we believe it is more likely that the unusual East Coast market conditions simply result in more scatter in the data, making it harder to differentiate the impact of the D6 RIN in particular in those markets during the time period analyzed in the Burkhardt paper.

The Burkhardt paper analyzed data in the years from 2012–2014 when the total renewable volume percentage standards ranged from 9.19% to 9.74%. When evaluating E10 prices in particular during this time period the degree of RIN cost and RIN discount pass through is particularly hard to measure because the two factors nearly fully offset each other in the price of

¹⁹ Burkhardt, Jesse "The impact of the Renewable Fuel Standard on US oil refineries", Energy Policy Volume 130, July 2019, Pages 429-437

E10. As described in Section IV.D, EPA expects the price of E10 to be largely determined by the following equations:

$$\text{E10 Price} = \text{Gasoline Blendstock Price} * 90\% + (\text{Ethanol Price} - \text{D6 RIN Price}) * 10\%$$

$$\text{Gasoline Blendstock Price} = \text{Gasoline Price with no RFS Obligation} + \text{RIN Costs}$$

$$\text{RIN Costs} = \text{RVO\%} * \text{Weighted RIN Prices (D6, D4, D3)}$$

Combining the two equations then we can see that the E10 Price would be expected to change with RIN prices in the following way.

$$\begin{aligned} \text{Change in E10 Price} &= 0.9 * 9.74\% * (\text{Weighted RIN Price}) - 0.1 * \text{D6 RIN Price} \\ &= 0.0873 * (\text{Weighted RIN Price}) - 0.1 * \text{D6 RIN Price} \end{aligned}$$

Because the weighted RIN price reflects not only the D6 RIN but also the more expensive D4 and D3 RINs, the weighted RIN price is slightly higher than the D6 RIN price such that, in net, the increase in the gasoline blendstock price due to the 9.74% RVO (the RIN cost passthrough) is almost exactly offset by the 10% RIN discount from the D6 RIN. In net then, there is almost zero change in E10 prices when evaluated during this time period. With a near-zero change in E10 prices with changing RIN prices, it is exceptionally difficult to estimate the impact, especially in a market with more volatile pricing due to the Florida and Atlanta markets.

Finally, EPA has considered the Pouliot et al. 2017 study that found incomplete RIN passthrough in PADD 1 and PADD 5. In reviewing this study EPA identified several concerns with the methodology. First, the study does not appear to account for changes in blending margins over time. Instead, it appears to attribute any change in the posted price of blended fuels to changes in the rate of RIN passthrough. Second, and perhaps more importantly, the study does not use renewable fuel prices actually available at the terminals studied. Instead, the study uses ethanol prices at the nearest location where spot prices are posted. This is a problem, as the cost of transporting ethanol even relatively short distances by truck can be significant. To explore the issues raised in the Pouliot et al. 2017 study further, EPA attempted to use the methods in this paper, but to add estimated transportation costs for ethanol (and biodiesel) from the markets with posted prices to the terminals being studied. EPA contracted with Stillwater Associates to perform this analysis.²⁰ Stillwater ultimately concluded that such an analysis was not feasible for a variety of reasons, including the unavailability of and inconsistency with the source data, concerns over extreme price postings and the reliability of the posted prices, and timing differences between when prices for petroleum and renewable fuels are posted at a major hub and when these fuels are available at a local market.²¹ EPA has therefore concluded that the Pouliot et al. 2017 study provides insufficient evidence to disprove our conclusions on RIN passthrough.

²⁰ Economic Analysis of Fuel Blending, prepared for the Environmental Protection Agency by Stillwater Associates LLC, February 9, 2022, pp. 6-7.

²¹ *Id.*

Comment:

An important issue in these data is the treatment of weekend fuel sales. Knittel et al. (2017) excludes weekends, and RIN price quotes are not available for weekends and major holidays. Refining and fuel supply is a 24/7/365 industry, which is borne out in the data, with about 28 percent of all transactions logged on Saturday and Sunday.

This has serious implications for the assumption of ratable compliance asserted strongly by EPA. Dr. Fitzgerald performed three, layered sets of results using the 2019–2021 data. As a control, he initially excluded weekend fuel sales and analyzed weekday-only sales in the three fuel spreads across the entire data set, which is the same “methodology used by Knittel et al. (2017) for an earlier period and endorsed by EPA.”

Dr. Fitzgerald then analyzed “each of [the] three fuel spreads using the data that include weekends. The results indicate that there is less evidence of pass-through when weekend transactions are included. Notably, the results . . . suggest that the degree of pass-through in the gasoline market is significantly different” from the results when weekends were excluded. This “draws into question the relevance of ratable compliance assumptions because trading arrangements for RINs are substantially less liquid on weekends, and waiting until the next weekday may expose obligated parties to price risk inherent to compliance. EPA expressly ignores such a pathway as being ‘caused by RFS.’”

Response:

To estimate the rate of RIN cost passthrough in the prices of fuels sold over the weekend, Dr. Fitzgerald created surrogate RIN prices for Saturdays and Sundays using “a linear interpolation of missing RIN prices” explaining further that “the difference between Friday and Monday quotes is split between Saturday and Sunday for a regular weekend.” EPA understands this to mean that if Monday’s RIN price was three cents higher than Friday’s then Saturday’s RIN price would be estimated to be one cent higher and Sunday’s two cents higher such that Monday’s increase occurred evenly over this three-day period. Similarly, if Monday’s price was three cents lower, then Saturday’s price would be estimated at one cent lower and Sunday’s price at two cents lower.

Not surprisingly, Dr. Fitzgerald’s analysis showed no significant correlation between the estimated “increase” or “decrease” in RIN prices on Saturday or Sunday because no such RIN prices exist. Market participants on Saturday or Sunday do not know if RIN prices will rise or fall on Monday when compared to Friday and so cannot react to what hasn’t yet occurred. The commenter and Dr. Fitzgerald both suggest that this is an issue given EPA’s expectation that refineries will acquire RINs ratably through the year consistent with their production and sale of refined products. We do not see the lack of pricing information for RINs on Saturday or Sunday as fundamentally problematic for refineries wishing to acquire RINs ratably with their fuel production and sales. Such refineries can buy a volume of RINs at Friday’s RIN price but at a volume that reflects Friday, Saturday, and Sunday’s sales volumes as Friday’s RIN price information is the information that the market has when it finds the appropriate fuel pricing on Saturday and Sunday. A similar strategy can be applied to holidays.

Comment:

EPA's first claim is that the RFS compliance costs are the same for all obligated parties, and thus no party bears RFS compliance costs that are disproportionate relative to others' costs. We conclude that this claim is implausible. One economic rationale behind a tradable permit program, such as RFS, is to achieve the lowest possible compliance cost market-wide. The economic logic for tradable permit programs is based on the assumption that the costs for each firm to comply with a regulation differ across firms. Economic theory suggests that this least-cost outcome will occur at the point at which the marginal compliance cost of each firm is equal to the tradable credit price (i.e., Renewable Identification Numbers, or RIN price in this context). However, equalizing marginal compliance costs across firms does not imply that the average compliance cost per unit of output is the same for all individual firms.

Response:

The primary reason that the LSU study cites in making the claim that compliance costs are not the same for all obligated parties is the difference in the cost of production of gasoline and diesel fuel between refineries, due to differences in geography, fuel quality regulations, crude oil costs, refinery configuration, etc. EPA recognizes that there are significant differences among refineries, and that these differences affect the cost of production of the petroleum fuels they produce. However, this does not refute EPA's claims that all obligated parties have the same cost of RFS compliance. RINs, which obligated parties need to demonstrate compliance, are generated by renewable fuel producers. RINs are generally separated from renewable fuel by blenders when renewable fuel is blended with petroleum fuel. Because fuel blenders (whether they are obligated parties or not) are the source of RINs, the important factor to consider when evaluating the likelihood that all obligated parties have the same compliance costs is whether the cost structure for fuel blenders is similar across the industry. Unlike refiners, fuel blender's cost structure varies very little across the country. The process and cost for blending fuels, whether at a terminal or refinery rack, is a fairly uniform process.

Further, the cost of obtaining a RIN is not simply the cost of blending renewable fuel with petroleum fuel, but also the discount the blender must offer on the blended fuel to remain competitive. Because RIN prices are uniform across the nation, and further because fuel blending is a competitive market, fuel blenders must discount their fuel blends by the entire value of the RIN to remain competitive.²² Thus, the cost of acquiring RINs for blenders, whether or not they are obligated parties, is the same for all parties even though the cost of petroleum fuels and renewable fuels varies across the U.S. If the cost of acquiring RINs is the same for all parties it follows that the cost of acquiring RINs will be the same for all *obligated* parties. In this case the purpose of a tradable credit program is not necessarily to allow parties with lower blending costs to blend excess renewable fuels and provide credits to parties with higher blending costs, rather it is to allow parties already in the business of blending renewable fuels to continue in that business rather than forcing all refiners to become renewable fuel blenders to meet their RFS obligations.

²² Independently of the RFS program, blenders also charge a blending fee to recover other costs (e.g., capital costs and operational expenses) and to provide a return on their investments.

Comment:

Finally, even if there is 100% pass-through of all RIN prices to final product prices, consumers will respond to the increased price by decreasing the quantity demanded for fuels. This reduction in demand will negatively impact the refining sector. Both the effect of equilibrium price and quantity of fuels sold should be considered when assessing the effects of the policy.

Throughout the Proposed Denial EPA focuses exclusively on the impact of RIN costs and other costs of compliance associated with the RFS Program (such as building biofuel blending infrastructure). This narrow view arbitrarily overlooks other serious consequences of the RFS Program. In particular, regardless of whether there is complete RIN cost passthrough, small refineries bear the burden of decreased demand for their products because of the RFS Program. Every gallon of biofuel mandated by the RFS on an annual basis is a gallon of gasoline or diesel that refineries are no longer able to produce. This decrease in product volume is not distributed equally across refineries. Rather, the highest cost producers see the greatest demand loss, and small refineries are very often the highest cost producers in their markets. Additionally, even if the demand reductions were spread evenly across refineries, small refineries generally have higher fixed costs per gallon and lost volumes can therefore be more impactful on their margins. EPA does not acknowledge either of these realities in the Proposed Denial.

Response:

As the commenters describe, microeconomic theory states that an increase in prices should lead to a reduction in demand. Further as one commenter more directly notes, the RFS program itself by displacing demand for petroleum-based fuels with renewable fuels further reduces the demand for the gasoline and diesel fuel that refineries produce. The commenters both argue then that this reduced demand for petroleum-based fuels is itself a form of hardship that EPA should consider in determining if DEH exists for any particular small refinery.

EPA agrees that microeconomic theory should be reflected in this market and that a reduction in demand should be expected both due to the marginally higher cost of renewable fuels and further due to the direct substitution of renewable fuels for petroleum fuels under the RFS program mandates. However, we do not believe these generalized market outcomes are the kinds of direct, individual-refinery impacts that Congress intended the SRE provisions to address, and they do not disproportionately impact small refineries. First, the very purpose of the RFS program is to displace petroleum fuel with renewable fuel through the RFS mandates set by Congress. EPA thinks it is unlikely that Congress would then intend to waive the very mandate it set simply because that mandate was having its intended effect. Instead, we believe the SRE provisions are intended to address the circumstances where the individual refinery cost of compliance is the source of the “disproportionate economic hardship,” since the statutory exemption provision refers to DEH “due to compliance” with the RFS program. That cost of compliance is the cost to acquire the RINs necessary to demonstrate that a refinery has met its RVOs. As detailed extensively in the SRE Denial, those costs are the same for all refineries and are passed through to consumers in the prices of gasoline and diesel fuel.

2. Small Refinery Coalition

Comment:

The data upon which EPA rely are from the 2013 through 2016 time period, before the blend wall was reached, RVOs exceeded 10.5%, and RIN prices rose to historic highs. Entirely missing from EPA's analysis are data from the 2017 through 2021 time period. It is arbitrary, capricious, and methodologically unsound for EPA to rely on pre-2017 data to purportedly determine that all RIN costs were fully passed through by all parties (including small refineries) during the years of 2019 and 2020.

Response:

There are several factual errors associated with this comment. First, the E10 blendwall was reached in 2013, which is when D6 RIN prices rose. Second, this comment fails to acknowledge the EPA analysis provided in Section IV.D.2.d, which provides a RIN market analysis using more recent data than was available in 2015. Finally, this comment presumes that the structure and operation of the RFS program is somehow different from one year to the next or as a function of the RIN prices. Since there have been no meaningful changes to the structure of the RFS program (or its RIN system) since 2010, there is no reason to believe that this would be the case and the commenter provided no such basis.

Comment:

None of EPA's studies analyze RIN cost pass-through for diesel fuel. Despite the fact that, as EPA well knows, small refineries produce disproportionately more diesel than their larger competitors.

Response:

The commenter is factually incorrect. As discussed in Section IV.D.2.d, as well as in past analyses supporting evaluating RIN cost passthrough,²³ EPA evaluated distillate markets as well. Furthermore, the form and structure of the RFS program, the RIN system, and compliance requirements are identical for gasoline and diesel fuel. There is no reason to believe that they would function differently, and the commenter has not provided any evidence to the contrary. In addition to EPA, a number of other studies also evaluated RIN cost passthrough in diesel fuel (e.g., Burkhardt 2019).

Comment:

EPA did not seem to consider that ethanol is often below the price of gasoline. One commenter's analysis showed that over the past four years, ethanol was discounted below gasoline nearly 60% of the time. There is no meaningful insight or change in RIN prices on those days. If EPA's assertion was correct, that the price of the RIN reduces the price of ethanol to meet the "market

²³ "Denial of Petitions for Rulemaking to Change the RFS Point of Obligation," EPA-420-R-17-008, November 2017.

demand” this would imply that if ethanol was below gasoline, Ethanol RINs would quickly move to 0. Clearly, this is not occurring in the markets. Additionally, a refiner blending ethanol priced below gasoline would have a RIN cost of zero, while a refiner who had to purchase RINs for compliance would have a non-zero compliance cost, equal to the D6 RIN.

Response:

As discussed in Section IV.D.2.d, including the examples provided, EPA has in fact considered the impact of ethanol’s cost relative to gasoline in its evaluation. More importantly, the commenter fails to understand how the RFS program and RIN system function. The commenter is mistaken that when ethanol is cheaper than gasoline, D6 RIN prices should be near zero. This should have been, and in fact was the case prior to 2013, before the RFS standards reached the E10 blendwall. However, the cost of blending ethanol at concentrations above 10% is far greater than when blending at 10% due to octane value and RVP control costs. Thus, when the RFS standards require more conventional renewable fuel to be blended than can be met with E10, the D6 RIN price rises to the point necessary to incentivize the next least expensive source of renewable fuels use. While this in some cases has meant increasing the use of ethanol through higher-level blends such as E15 and E85, in reality it has typically meant that biodiesel and renewable diesel volumes have increased instead, which is why D6 RIN prices since 2013 have tended to track with D4 RIN prices. The elevated D6 RIN prices then lower the effective cost of blending ethanol even as E10, and as explained in Section IV.D.2.d, this value is reflected in the market pricing of E10.

Comment:

For as long as DOE has been applying the scoring matrix, and EPA has been evaluating petitions for small refinery hardship relief, DOE has made clear that there was insufficient information to score metric 2.d, which measures whether a small refinery’s RVO is a net cost or a net revenue. While this metric was not scored in the 2011 Study because of an alleged “lack of consistency” among the responders to the DOE small refiner survey, DOE expressly noted that “depending upon the business model of the small refiner, complying with their RVO can either be a net cost if they purchase all of their RINs or can generate revenue should they be able to actively trade RINs in the open marketplace.”

Now, EPA claims DOE never “assess[ed] in [the 2011 DOE Study] whether their assumptions that refiners bear different costs for RINs and that they may not be able to pass these costs onto consumers in the marketplace actually occurred.” That is not true. DOE understood that parties would experience RFS costs differently—that is why DOE included metric 2.d (“RINs net revenue or cost”) in the scoring matrix. It particularly understood that RIN prices would become untethered from the price of blending after the E10 blend wall was reached—a concept that has grounded our understanding of the RFS for nearly 10 years but is not mentioned once in the Proposed Denial. As stated above, DOE predicted that as the RFS mandate increases, RIN-short parties “will need to purchase RINs and could suffer significant economic hardship.”

Response:

As explained in Section IV.C, the 2011 DOE Study did *not* consider that blending refineries would have to discount blended fuel by the price of the RIN; therefore, the projections envisioned by the 2011 DOE Study *have not occurred* in practice. Rather, as the 2009 DOE Study anticipated, the competitive market forces have resulted in the same cost of compliance whether that cost comes through the purchasing of RINs on the open market or through the discounting of the price for blended fuel sold by blenders. Moreover, neither the 2009 DOE Study nor the 2011 DOE Study anticipated the even more significant finding that, without regard to how refineries experience their RFS compliance costs, the RIN cost passthrough phenomenon applies—refineries pass those higher costs through to their customers in higher prices for the refined products they sell.

As part of EPA's evaluation of SRE petitions, EPA requested that petitioning small refineries provide data on some RFS compliance costs. EPA acknowledges that all of the petitioning refineries provided estimates of their RIN acquisition costs based upon a standardized spreadsheet that EPA created in 2013 and shared with petitioners. This spreadsheet is intended to provide summary information on the petitioner's annual total differential cost of purchased biofuel (relative to gasoline and diesel), and annual cost of purchased RINs needed for compliance. DOE has continually declined to evaluate this information as part of its scoring of metric 2.d RINs Net Revenue or Cost, explaining in 2011 that a "lack of consistency" among the petitioners made it impossible to score. More recently, DOE has decided not to score this metric explaining that there is no information available to compare a refinery's RIN cost/revenue with an industry average obtained from study of refineries' data (rather than a study of national price data) to determine DEH.

More importantly here, EPA now recognizes that the RIN acquisition costs in this spreadsheet lack two very important elements that have not been reported or accounted for in the submittals. First, the cost to acquire RINs for blending is calculated based on the price differential between the petroleum fuel into which it will be blended and the cost of the renewable fuel. This simplified approach assumes that the renewable fuel is a direct substitute for the petroleum fuel and therefore the cost difference should directly reflect the value of the RIN. However, for ethanol as an example, the lower energy content of ethanol means that ethanol needs to be discounted about 30% below the price of gasoline for a consumer to choose to buy it for use in a flex-fuel vehicle (i.e., as E85). Hence, ethanol needs to be discounted below the cost of gasoline. By not accounting for this additional discount (i.e., by not using the blended fuel price as an input to the calculation), the spreadsheet underestimates the acquisition cost to blenders to acquire RINs. In fact, in many cases it suggests that blenders are getting D6 RINs at a negative cost since ethanol is cheaper than gasoline in many instances, when in fact the actual RIN acquisition cost to refineries is most definitely significant. Second, the estimate of RIN acquisitions does not account for the increased revenue that refineries receive in their product prices as a result of RIN cost pass-through. In fact, we would argue that accounting for that for each petitioner would indicate no net cost to small refineries due to compliance with the RFS program.

Given the spreadsheet was not designed to capture any information regarding RIN cost passthrough in the price of the unblended transportation fuel nor to capture the RIN discount, the spreadsheet is not useful in quantitatively comparing RFS compliance costs, which is why DOE does not use it in scoring metric 2.d and EPA has chosen not to evaluate those estimates in the SRE Denial.

IV. Non-CBI Comments on EPA's Technical Analysis

1. EPA's analysis of DEH relies on incomplete or selective information.

Comment:

EPA's Proposed Denial fails to acknowledge and address literature showing variation in RIN cost passthrough based on location and fuels. Although there is general acceptance that there is, over time, at least some passthrough of RIN costs in most refined product markets in the U.S., there is significant dispute in the literature over the extent of passthrough and the level of variation between locations, over time, and across fuel types. EPA's Proposed Denial entirely ignores this information.

Even if one accepts the recent EPA analysis as showing passthrough for the examined ULSD fuel pairs in New York Harbor and the Gulf Coast, those are just two fuel pairs and two markets. The Knittel, Meiselman, and Stock studies reviewed passthrough in several regions, including New York Harbor, Gulf Coast, Chicago, and Los Angeles. The results varied significantly, and some markets did not produce usable results on passthrough levels. While fuel markets are often thought of as broad, the dynamics of refined product markets that affect passthrough can vary significantly across North America. For example, only certain markets currently absorb significant amounts of higher-ethanol blend gasolines or biodiesels, making entire markets short RINs and therefore net buyers exposed to potential compliance burdens. And as the Burkholder Report noted, smaller markets may also involve less competition in supply and demand for certain products, and fully competitive markets are often cited as a prerequisite for full passthrough.

Response:

EPA has considered a number of other studies, most importantly, all of the studies provided by the small refineries with their SRE petitions, supplemental submissions, and comments on the Proposed Denial. While as the commenter notes, some studies fail to find full RIN cost passthrough in all markets or for all time periods, as described in Section B.III.1, we find that on balance these studies provide more evidence in support of the conclusion that RIN costs are passed through than evidence to suggest they do not. As detailed in Section B.III.1, in many cases where they do not directly show RIN cost pass through, we believe there are other factors that may obscure such observations in the data.

Comment:

EPA notes that many petitioners have claimed that they believe their regional markets have different passthrough than the major markets dominated by the large integrated refiners. Proposed Denial at 27. Recognizing this as a significant challenge to their claim of full RIN passthrough, EPA tried to address variable passthrough, suggesting that passthrough in major markets leads to passthrough across all markets as prices equilibrate. The Agency stated: "Through thousands of decisions made by all the market participants each day, the prices

between the markets equilibrate to the same level, offset by the transportation costs between the markets.” *Id.* at 30. But EPA offers no proof of this equilibrium.

Response:

As an initial matter, EPA has extended its explanation for the interrelation between linked fuel markets in Section IV.D.2, noting importantly that many small refineries acting in local markets directly index the prices for the products they sell to the major coastal markets and posted prices from those markets. The terms of the contracts ensure that the local market price indexes (rises and falls) with those major markets. Further, because these local markets face significant competition, those market prices are the same for all of the market participants. Perhaps most fundamentally, the reason that EPA believes the markets equilibrate is because there are so many market actors whose very purpose is to perform arbitrage between these markets (i.e., to exploit minor price differences and in doing so close those differences). As but one example, fuel jobbers (operators of fuel tanker trucks) compare the prices at multiple fuel terminals and refinery truck racks within a region to determine which wholesaler offers the best price for the load of fuel they will deliver to a particular retail station after considering first their own transportation costs between the terminals and the retail station. Small variations in price are enough reason for the jobber to choose a terminal slightly further away, increasing demand at that terminal and dropping demand at the others. Multiple market actors all serving similar function provide feedback to the wholesalers at the terminals who, through these actors, must compete not only with other operators at the same terminal, but also with operators at other terminals in the region. If as the commenter suggests, there are markets that do not pass through their costs, those markets will quickly see increased demand while the other markets see a drop in demand. In other words, competition in the market will act to close that price anomaly and bring the whole system into equilibrium.

Further, if there are any fuel markets within the U.S. where such competitive dynamics do not occur (i.e., where the local market is monopolistic or oligopolistic), then the sellers in that market do have pricing power and can certainly be expected to pass on all of their costs and more to wholesale consumers. We do not believe the commenter is suggesting that they operate in such a market.

Comment:

On February 14, 2022, the Proceedings of the National Academy of Sciences published a study titled *Environmental Outcomes of the US Renewable Fuel Standard*. This study shows that the RFS has substantially increased production of corn, and that the increased production and use of corn for ethanol have significant environmental effects. Among other things, the use of ethanol for blending with transportation fuel results in more GHGs than the use of transportation fuel alone.

This conclusion has stark implications for EPA’s management of the RFS. One of the goals of the RFS is the reduction of GHG emissions. And its most recent proposed rule for the 2021 and 2022 RVOs states that the “proposed rule has the potential to reduce GHG emissions.” EPA

cannot adequately meet its obligations or make such statements without considering this new study.

It would be arbitrary and capricious for EPA to finalize the Proposed Denial without duly considering this new study. EPA's Proposed Denial is a blanket action that would deny all pending petitions for small refinery exemptions. The net effect of such a denial would mean that more ethanol—as the most-frequently-used renewable fuel—would be blended into transportation fuel. As the study shows, increased use and production of ethanol would likely result in increased harm to the environment through the higher number of GHG emissions. Thus, EPA must demonstrate that it has considered this issue before it takes actions that would increase the amount of ethanol use.

Response:

The comment period on EPA's proposed denial ended on February 7, 2022, one week before this study was completed and several weeks before the comment was submitted to EPA on March 22, 2022. While the comment may be relevant to the RFS program generally, it is not directly applicable to EPA's evaluation of small refinery exemptions under the relevant CAA provision in determining whether the small refinery experiences DEH caused by RFS compliance DEH and is therefore not addressed in this response to comments.

2. EPA concedes that there are circumstances under which obligated parties cannot passthrough their RIN costs.

Comment:

EPA's conclusion that exemption from the RFS standards results in "windfall" profits for small refineries is incorrect. EPA's implementation of the program has ensured that, even when small refineries receive hardship relief, they still suffer economic losses through the RFS program. 1) When EPA issues SREs well past the statutory deadline, small refineries are left scrambling in the RIN market, buying RINs from and/or selling RINs to unobligated parties that have no reason to participate in the marketplace other than to profit off of obligated parties. 2) When small refineries are forced to wait months or, in this case, years past the statutory deadline to know whether they received hardship relief, EPA's delay affects their ability to make decisions that could advantage their business.

Response:

As described in Section IV.D.2 and in responses to other comments herein, small refineries were paid for the cost of RFS compliance through the pricing of the gasoline and diesel in the marketplace, as those market prices reflected the cost of RINs. Accordingly, any revenue from RIN sales after an exemption is granted is gratuitous to small refineries' compliance costs. Nevertheless, EPA is aware of the extenuating circumstances that have resulted in this long delayed final action, and EPA has already taken reasonable steps to ease the impact of this delay on small refineries by twice extending the RFS compliance dates for small refineries in 2019, and all obligated parties for later years. Ultimately, all obligated parties, including small refineries, have compliance obligations under the RFS program. Those compliance obligations exist for small refineries until such time as an exemption is granted. We have previously told small refineries that they should not plan for an exemption but should instead plan to comply with their obligations, and many have done so.

Comment:

EPA's theory of RIN cost passthrough directly contradicts its longstanding approach to administering the RFS program and expectation regarding compliance. EPA is now punishing small refineries for behavior that is not only legal, but that EPA previously approved. Prior to the Proposed Denial, EPA never required obligated parties to purchase RINs at any particular time. In fact, EPA considered but abandoned the notion of requiring quarterly RIN retirement deadlines. Further, EPA has made clear in the past that obligated parties are not required to obtain RINs at the same time that they produce or import fuel but may, if they choose, simply purchase the required number of RINs by the end of the compliance period, once their annual production is known. The uncertainty surrounding EPA's implementation of the RFS Program for several years now has made it difficult for cash-strapped obligated parties, like small refineries, to justify spending millions on RINs before they even know their RVO or whether they will receive an SRE. Without question, EPA's delays in implementing the RFS Program have caused compliance planning uncertainty. To reach its conclusions in the Proposed Denial, EPA is taking a fundamentally inconsistent position as to how compliance planning should work.

In prior statements, EPA claims the RIN market program is designed to provide obligated parties sufficient time to plan for compliance. Implicit is the recognition that parties do not buy RINs ratably (and should not have to). For example, in EPA’s proposed extension of the 2019–2021 compliance deadlines, the Agency acknowledges “the importance to obligated parties of planning their compliance for a given calendar year by understanding their obligations for the years before and after.” 86 Fed. Reg. 67,419, 67,422 (Nov. 26, 2021).

Response:

As described in Section IV.D.2.d.i, all obligated parties have the opportunity to match their costs by buying RINs on a ratably basis and are responsible for making decisions when to buy RINs and how many RINs to buy at any given time. However, purchasing RINs ratably is not a requirement, but a compliance flexibility that allows obligated parties to comply with their RFS obligations without forcing them to blend renewable fuels with their petroleum based transportation fuels. Indeed, in the absence of the RIN credit program, refineries would have to directly ensure renewable fuel blending. In such a program design, a small refinery could, under the annual compliance provisions, choose to delay any renewable fuel blending until the last month of the year and then attempt to sell exclusively renewable fuel in the last month of the year at a volume to meet the obligation it accrued through the preceding 11 months. Such an approach would almost certainly lead to a much higher cost of compliance than would have occurred had the small refinery worked to demonstrate compliance on an ongoing basis each month through the year. As alleged by small refinery commenters, EPA would then be compelled to provide hardship relief due to the higher cost of RFS compliance for the small refineries that chose such a compliance mechanism. Such an approach, where the business decisions of the individual companies are made within the regulations but contrary to the purpose of the program, does not constitute DEH *caused* by the cost of compliance with the RFS program, and therefore cannot be a basis for hardship relief. Otherwise, all small refineries could simply choose such an impossible compliance approach, and then, having made this choice, be assured of relief from the RFS obligations. Similarly, individual business decisions made by an obligated party not to ratably accrue RINs as their obligation accrues, but instead to either purchase RINs in advance or delay RIN purchases until a later date, are business choices that companies may lawfully make.

Comment:

EPA’s theory that all RINs are passed through rests on an assumption divorced from the reality of the transportation fuels market. To present a simplified picture of how small refineries can achieve compliance and recover their costs, the Proposed Denial contains zero discussion of how RIN trading actually works. Instead, EPA claims that “individual business decisions made by an obligated party not to ratably accrue RINs as the obligation accrues, but instead to either purchase RINs in advance or delay RIN purchases until a later date, are speculation in the RIN market, a business activity not required to comply with the RFS program.” To characterize small refinery behavior as “speculation” is disingenuous. EPA’s statement reflects a naïve understanding of business behavior. Speculation is defined as “investment in stocks, property, or other ventures in the hope of gain but with the risk of loss.” Small refineries are not entering the RIN market in an attempt to make profit. They are RIN-short obligated parties *required* to show

compliance with the RFS Program and, because they are dependent on the RIN market to do so, they have no choice but to purchase RINs in the marketplace. If small refineries could avoid the RIN market altogether, they certainly would. Put simply, small refineries are making decisions about regulatory compliance, not speculating.

Response:

As discussed in Section IV.D.2.d.i and above in this Section B.IV.2, by purchasing RINs ratably, all obligated parties have the ability to match their RIN costs with the price they receive when they sell their fuel (i.e., to pass through their RIN costs). Alternatively, refineries can try to time their purchases in the RIN market, which may result in greater or lesser RIN costs. Either way, an obligated party's choices about when to procure RINs represent individual business decisions rather than RFS compliance requirements. Thus, the costs associated with timing purchases in the RIN market cannot be considered to represent DEH caused by compliance with the RFS program.

Comment:

In contrast to small refineries, other parties do speculate in the RIN market, because EPA allows them to do so. The CAA directed EPA to create a credit trading program in which the credits, or RINs, could be generated by parties that "over complied" and sold only to parties that needed them for compliance. Instead, EPA created a program in which any person may participate, generating credits for blending at any level they choose and selling RINs to anyone for any purpose. As a result, the RIN market has been captured and is controlled by large integrated refineries that generate excess RINs, large retailers (who control their own blending but are not obligated parties), and traders, all of whom are seeking to make a profit in the market.

Response:

As an initial matter, the commenter has failed to provide evidence that allowing any person to participate in the RIN market has caused harm to small refineries. EPA created the RIN market to ensure competition and liquidity. Furthermore, this assertion was made previously in the context of a previous EPA rulemaking, and EPA has since imposed additional reporting and record keeping requirements to determine whether any obligated party was holding RINs sufficient to manipulate the RIN market.²⁴ To date, we have not had any party report that they have exceeded the RIN holding thresholds under the RFS regulations. EPA addresses commenters' assertion that large retailers and traders disproportionately profit from the RIN market in Sections IV.D.2.c and d.

²⁴ 84 FR 26980 (June 10, 2019).

3. Small refineries are unable to recover the costs of RFS compliance in the prices of the fuels they sell.

Comment:

EPA's analysis does not account for the additional cost small refineries bear to buy Q-RINs; RINs that have been verified by an independent third-party auditor operating under an EPA approved quality assurance plan or QAP. EPA ignores the higher cost of Q-RINs, which small refineries would likely be forced to purchase, and rampant fraud in the RIN market.

Response:

This assertion is misleading for several reasons. First, Q-RINs²⁵ merely represent a cost to renewable fuel producers that is passed through in the cost of RINs in the market, which is then passed through to consumers as described in Section IV.D.2.d. Furthermore, all obligated parties have the option to purchase Q-RINs, and the risks of fraud in the RIN market are shared by all participants in the RFS program. There is no reason to believe that small refineries would have any greater need to purchase Q-RINs than any other obligated party, and certainly would not be "forced" to.

Second, the commenter overstates the higher cost of Q-RINs. The majority of Q-RINs are coded as D3 RINs for cellulosic biofuel, of which roughly 98-99% are Q-RINs. Cellulosic biofuel RINs are typically the most expensive D-code RIN. When one pools together the costs of all RINs across the different D-codes, the cost of the Q-RINs will appear on average more expensive. However, the cost comparison is separated by D-code, for example within the D6 code, the cost difference between a RIN and a Q-RIN is generally a few cents and the Q-RIN is not always more expensive. EPA used publicly available data²⁶ to perform this cost comparison and summarized the data in the following table.

²⁵ Q-RINs are RINs that have been verified by an independent third-party auditor operating under an EPA approved quality assurance plan or QAP. They are used to demonstrate the authenticity of RINs generated by renewable fuel producers.

²⁶ EPA has analyzed data available on EPA's website at <https://www.epa.gov/fuels-registration-reporting-and-compliance-help/rin-trades-and-price-information>.

Row Labels	2017	2018	2019	2020	2021	Grand Total
D3	2.45	1.88	1.43	1.99	2.65	2.03
Q-RIN	2.47	1.90	1.40	2.01	2.72	2.04
Unverified	2.39	1.79	1.52	1.92	2.50	2.01
D4	0.72	0.53	0.60	0.93	1.37	0.77
Q-RIN	0.73	0.52	0.60	0.89	1.39	0.76
Unverified	0.71	0.54	0.60	0.97	1.35	0.77
D5	0.82	0.46	0.47	0.86	1.47	0.82
Q-RIN	0.87	0.47	0.51	0.77	1.40	0.82
Unverified	0.79	0.46	0.45	0.92	1.53	0.82
D6	0.51	0.26	0.42	0.80	1.23	0.55
Q-RIN	0.58	0.24	0.46	0.79	1.19	0.51
Unverified	0.47	0.27	0.40	0.81	1.23	0.56

EPA found that average prices from 2017 through 2021 for Q-RINs compared to unverified RINs ranged from 3 ¢/RIN more for D3 RINs to 5 ¢/RIN less for D6 RINs, while prices for Q-RINs and unverified RINs were nearly equal for D4 and D5 RINs. Some refineries provided an analysis that incorrectly compared the average price for all RIN D-codes combined, rather than comparing individual RIN D-codes, and which consequently showed larger price differentials between Q-RINs and unverified RINs.

EPA also notes that small refinery commenters do not say what their additional cost would be, or even if they are certain that they would purchase Q-RINs at all. Small refinery commenters also say there is “rampant fraud in the RIN market,” but the data they provided shows 470 million fraudulent RINs identified by EPA over a 10-year period, or 47 million RINs per year on average. During these 10 years, approximately 16.5 billion RINs were retired each year on average, which means invalid RINs were 0.3% of the total RINs retired. That hardly constitutes “rampant fraud” as small refineries are claiming.

Comment:

Additionally, the EPA posits that “demand price for the renewable fuel, which is the price the market is willing to pay for the renewable fuel as a transportation fuel.” This is a misconception and doesn’t recognize that E10 is now the standard fuel in the industry. CBOB like ethanol is an intermediate product in the liquid transportation fuel value chain. Ethanol prices trade in several markets, including in a very transparent manner on the Chicago Board of Trade. These prices react to prices of corn, ethanol production, inventories, demand, US, Chinese and South American crop acreage, yield and production forecasts, weather and many other factors, certainly independent of RIN prices.

Response:

The commenter appears to be misinterpreting EPA’s statement by confusing “renewable fuel” with “E10.” E10 is not the renewable fuel, but rather the fuel blend that results from blending ethanol with gasoline blendstock (e.g., CBOB). EPA does not otherwise disagree with the commenter’s description of the CBOB and ethanol markets.

4. EPA's Proposed Denial is based on fundamentally inaccurate assumptions.

Comment:

EPA's theory does not explain the decision made by private companies or identify the mechanism by which the RIN discount can eliminate all differences in the cost of generating RINs.

Firms try to maximize profits in part by seeking to minimize their production costs, including the cost of complying with regulatory requirements. Under the RFS Program, firms have pursued a variety of different strategies for minimizing their compliance costs. Some have invested hundreds of millions of dollars to produce biofuel in the belief that they can make money by increasing revenue or reducing their RFS compliance costs (or both). Others have invested in pipelines or terminals or other blending infrastructure; some have invested capital to change their fuel slates, thus enabling them to produce more non-obligated fuel; others have chosen to increase the amount of fuel they export.

Remarkably, EPA now says that none of these decisions have actually made any difference in terms of reducing the compliance cost of any refiner relative to the compliance cost of any of its competitors: "Regardless of the mechanism by which small refineries and other obligated parties comply with their RFS obligations, the RFS compliance costs are the same for all obligated parties and thus no party bears RFS compliance costs that are disproportionate relative to others' costs." Proposed Denial at 1.

Senior executives and Boards of Directors at dozens of refining companies would probably be surprised to hear this. They believe that their RFS-related decisions, which have resulted in billions of dollars of expenditures, have given them some economic benefit. EPA insists otherwise. No matter what these companies do, their RFS compliance costs on a per gallon basis are all the same.

In the real world, RFS compliance decisions can be understood by the fundamentals of supply and demand. Refineries have two basic options for meeting their annual RVO obligations. They can take actions to generate RINs, or they can purchase RINs generated by others. Many refineries generate as many RINs as they feasibly can and then purchase the additional RINs they need to meet their annual RFS obligation. Decisions about which actions to take are based on the price (and expected future price) of RINs. Firms that, because of their circumstances and ingenuity, can generate RINs at a cost below the market price of RINs will choose to generate RINs; refineries that do not have this opportunity will purchase them.

RINs are bought and sold in a nationwide competitive market. As with most products, there is an upward sloping supply curve for RINs. If a refiner would blend biofuels even if the RFS did not exist, that refiner's cost for the production of RINs is zero. It is generating RINs by doing something it would have done anyway.

By design, the RFS Program has been increasing the demand for RINs. Higher demand drives RIN prices higher, which induces more RIN producers into the market—producers whose RIN

production costs are higher than zero but still below the market price for RINs. According to economic theory, the market price for RINs will reflect the marginal cost of producing the last RINs that will sell on the market. Thus, both the price and the total number of RINs sold would reflect the point at which the upward sloping supply curve intersects the demand curve.

Putting aside for now the RIN discount theory, it would appear that refineries that can generate RINs at little or no cost but can sell them at the higher market price, can make significant profits by selling RINs. This is sometimes referred to as “producer surplus” because the market price is higher than the cost at which they would have been happy to sell their RINs. Because of producer surplus, some refiners enjoy substantial profits because the money they get from generating and selling RINs is much more than the cost of producing them. Other refineries, including some small refineries, must pay enormous amounts to purchase the RINs they need but cannot produce at a cost below the RIN price. Even so, EPA argues that no refinery is harmed by the RFS Program because every refinery can pass through 100 percent of its RFS compliance cost to its customers.

This ignores the fact that for refineries that must pay the market price for a large portion of the total RINs they need for compliance they are at a significant economic disadvantage compared to their competitors who are able to generate all the RINs they need at little or no cost. Even if they are able to passthrough all their costs, they still face DEH under the RFS Program because the Program confers substantial economic benefits on their competitors.

Under EPA’s theory of RIN discount, however, this cannot occur because any profit that any refinery makes by selling RINs is precisely offset by the amount of the discount that the refinery must offer in order to sell its fuel. EPA does not provide (or cite to any source that provides) any data to support this theory. Nor does EPA explain the mechanism by which it works.

To be sure, there is evidence of some RIN discount that reduces the economic advantages that some refineries would otherwise have compared to others. But nowhere does EPA explain how this discount can so precisely offset the benefits that some RIN generators have over others because of their lower costs of production. The market can only discern the marginal cost of the highest cost RIN producer, as reflected in the RIN price. Thus, the market cannot simply “take away” the economic advantage enjoyed by relatively lower cost RIN producers, whose production costs are below the RIN price and cannot be discerned by the market.

EPA concedes that, when it comes to things other than RFS costs, some refineries have economic advantages over others, for a variety of reasons. The Agency should acknowledge that there are factors that provide some refineries with advantages over others when it comes to RFS compliance costs, and that some small refineries experience DEH because of the RFS Program.

Response:

The commenter is correct that a number of companies have made investments and are realizing returns on those investments to produce renewable fuels, to distribute renewable fuels and to blend renewable fuels. The distinction EPA makes in accounting for the cost of RFS compliance is that EPA considers the cost for parties to acquire RINs, not the cost of parties to produce

renewable fuels. This distinction can be made clear with an extreme example. If a refinery created a new line of business to produce ethanol from air at zero production costs, the company could produce ethanol at no cost. Further in the example, the rest of the ethanol industry has a production cost of \$2 per gallon of ethanol, and hence, the market price for that ethanol would be \$2. Lastly for this example, let us assume that RIN prices are \$1. The commenter's assessment of this example would be that this refinery by virtue of its ethanol business has no RFS compliance costs because it produces renewable fuel at no cost. In EPA's assessment, because the market price for ethanol is \$2, the return on the ethanol that the company gets for its investment (the same investments the commenter is referring to) is that \$2. Whether the company sells the ethanol into the ethanol market profiting \$2 or blends it into E10 and sells it as a blended product, the company is still profiting the \$2. Either way, EPA considers that to be the return on the ethanol plant investment. In determining this particular refinery's cost to acquire RINs, EPA would still note that the refinery has to discount the E10 it sells by the value of the RIN, or to sell its ethanol without the RIN for \$1 (i.e., if selling without the RIN, the ethanol has to be sold for \$1 rather than \$2), or sell its ethanol with the RIN for \$2 and then return to the RIN market to buy the RIN back for \$1. In all three cases, the refinery's cost to acquire the RIN it uses for compliance with the RFS program is the \$1 value of the RIN, whether that \$1 value is expressed in the market price or the RIN discount. In the end, it is the cost for the refinery to acquire the RIN that determines its RFS cost of compliance.

The same is true for other investments made by parties to blend or distribute conventional or renewable fuels. Those investments have the potential to earn a return on the investment.²⁷ That all occurs outside of the cost for parties to acquire RINs for RFS compliance. The RIN may be providing the demand for ethanol and through it the motivation for the company to invest money to create a cheaper means to produce ethanol, but in the end the actual RFS compliance costs become the cost for the company to acquire the RIN itself. Those costs, as described here and elsewhere, come down to the market price for RINs and the identical market discount for renewable fuels based on that market price for the RIN.

EPA discusses the data to support RIN discount in Section IV.D.2.d.ii and explains the mechanisms by which it works in Section IV.D.2.b. Section IV.D.3.f discusses that the cost to obtain a RIN by blending renewable fuel is not simply the fixed and operating costs for fuel blending (which are relatively minor), nor is it simply the price difference between renewable fuel and the petroleum fuel into which it is blended (e.g., the price difference between ethanol and gasoline or between biodiesel and diesel fuel). Instead, the cost to a blender to obtain a RIN is the price difference between the volume-weighted cost of the petroleum fuel (e.g., gasoline or diesel fuel) and the renewable fuel used to produce blended fuel, and the sales price of the blended fuel (e.g., E10 or B5). The data presented in Section IV.D.2.c demonstrates that the difference between the cost of the petroleum fuel and the renewable fuel used to produce blended

²⁷ We note that, despite the RFS program requirements, ethanol production has not always been profitable. In many years the return on investment in ethanol production have been very low. *See* Irwin, S. "Ethanol Production Profits in 2021: What a Ride!" *farmdoc daily* (12):18, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, February 10, 2022.

fuel and the sales price of the blended fuel is equal to the market price for the RINs associated with the blended fuel.²⁸

The finding that there is parity between the cost of obtaining RINs either by blending renewable fuel or purchasing RINs does not mean that RINs do not provide an incentive for the blending of renewable fuel. While blending renewable fuel does not result in windfall profits for blenders (since the revenue from RIN sales is passed through to consumers in a discount on the price for blended fuel), RIN revenue lowers the effective cost of renewable fuel, allowing blenders to offer blended fuel containing renewable fuel at lower prices. The examples presented in Section IV.D.2.c illustrate this point. The incentive for blenders to continue to blend renewable fuel when there is parity between the cost of obtaining a RIN through blending and the cost to purchase a RIN is not that the revenue from the sale of the RIN represents a windfall profit, but rather that the RIN discount allows blended fuel to sell at a lower price relative to unblended fuel after passing through the revenue of the RIN sales to the consumer.

EPA recognizes that private companies make investments expecting to realize a financial return. However, just because some obligated parties have chosen to make investments in renewable fuel production or in pipelines, terminals, or other blending infrastructure, it does not follow that they have done so in order to reduce their RFS compliance costs. Renewable fuel production can be, and in the past often has been, a profitable business before considering any impacts of the RFS program. Similarly, transporting, distributing, and blending both petroleum and renewable fuels has the potential to return profit to parties that invest in these operations. Many obligated parties invested in renewable fuel production and fuel distribution well before the RFS program existed, and many have chosen to divest of these operations after the RFS program was established. Neither of these actions would make sense if the sole purpose of participating in these markets was to reduce the cost of RFS compliance.

Comment:

EPA's evaluation of available market data does not support a claim of universal and complete RIN cost passthrough of RFS compliance costs.

Regarding ULSD and heating oil in New York Harbor, EPA claims that there is “strong correlation between these data sets” and that “[t]he market price premium for ULSD over that for heating oil consistently matches the RIN cost (i.e., the cost of purchasing the RINs needed to meet the RFS obligations.” Proposed Denial at 45. However, EPA's analysis only involved plotting the price spread between these two fuels from 2017–2020 against RIN prices on a time series graph and a scatter plot, then looking for visual signs of correlation. *See* Proposed Denial at 44–46 and Figures IV.D.2.d.i-1 and IV.D.2.d.i-2. While these figures suggest that the spread is correlated with the RIN cost (suggesting some RIN cost passthrough), it is impossible to draw a definitive conclusion about its extent from a visual inspection alone. Running a simple regression with the same data relied on by EPA, which included EIA fuel prices and OPIS RIN prices, shows that the pass-through coefficient is less than one, and far less than one when expanding the time period back to 2013. Also, it should be noted that observing a relationship on average

²⁸ See SRE Denial Figures IV.D.2.c-2 and 4.

can still leave room for variability in the relationship, and these variations can lead to different levels of passthrough for different refiners that are outside of their control.

Response:

As an initial matter, EPA does not assert, nor does it need to establish, “universal and complete RIN cost passthrough of RFS compliance costs.” We recognize that based on these data alone, definitive conclusions about the degree of RIN cost passthrough in all locations should not be made. However, the observed correlation between the price spread between these fuels and the RIN cost strongly suggests RIN cost passthrough, at least in New York Harbor. The way that fuels are generally priced in the U.S., with local pricing based on the price at a major fuel hub plus (or minus) transportation costs to or from that hub, strongly suggests that if RIN costs are passed through in major fuels markets, such as New York Harbor, these costs are passed through in other markets as well. While the passthrough coefficient is slightly less than one, it is very close to one (0.94) and likely impacted by observations when the RIN cost was very low. We did not include data prior to 2017 in our regression analysis because prior to 2017 higher-sulfur heating oil was sold in many states in the Northeast, and we expect the reported prices reflect this higher-sulfur heating oil, which is substantially different than ULSD.

Comment:

EPA conducted a similar review for ULSD and jet fuel in the Gulf Coast market. *See Proposed Denial at 45, 47 and Figures IV.D.2.d.i-3 and IV.D.2.d.i-4.* Here, EPA notes that “the correlation between the price difference of ULSD and jet fuel and the RIN cost is not as strong as the correlation between the price difference of ULSD and heating oil and the RIN cost.” Proposed Denial at 45. EPA admits that this data is less conclusive and only claims there is a “general relationship” between the spread and RIN costs. *Id.* at 45. Leaving aside many issues with using a set of graphs to determine statistical relationship, a claim of full RIN passthrough would require a finding of a specific relationship, not a general relationship. A general relationship only suggests that there is some level of passthrough. The specific relationship would be that the price spread moves 1-to-1 with the RIN cost, represented by a coefficient of 1 in a statistical study. Using the data cited by EPA, a simple regression suggests a coefficient of approximately 0.75. EPA argues that weaker correlation is expected because of differences in product quality between ULSD and jet fuel and their differing markets with “distinct supply/demand issues.” EPA admits there is more “noise” in this data, which means there are irregular, possibly random, variations in the relationship. This noise, which is obvious in EPA’s charts, makes it even more inappropriate to do a simple visual review and claim adequate correlation.

Response:

As with the correlation of the spread between ULSD and heating oil prices, we are not suggesting that this correlation in isolation demonstrably proves that RIN costs are completely passed through. Instead, this is one piece of evidence that suggests RIN costs are passed through. Jet fuel and ULSD are not perfect substitutes, and they have different markets whose demands can shift semi-independently. Thus, even in a situation with perfect RIN cost passthrough, we would not expect a one-to-one relationship between the spread between these fuels and the RIN

cost. Nevertheless, because these fuels have similar properties and relatively similar processing costs, we would expect there to be a relationship between the price spread between these fuels and the RIN costs. The observed data demonstrate that this relationship exists and is consistent with EPA's findings on RIN cost passthrough.

Comment:

EPA also attempted to support its theory of complete and universal RIN cost passthrough by considering the relationship between RINs and refining margins. Proposed Denial at 30. "EPA examined the refining margins for three groups of refineries—small refineries, large refineries, and all refineries—based on available public data (e.g., financial data from publicly traded companies) and confidential data, including data provided by petitioners. We compared these refining margins (operating profit per gallon of fuel produced) to the average RIN cost per gallon (the per gallon cost to acquire the RINs necessary to meet a refinery's RVO)." *Id.* Again, this analysis is not convincing. There is simply too much noise in publicly available refining margins for EPA to draw these conclusions. For example, each refinery has different product slates and sells into different markets. EPA would need data from *many* refineries over *many* time periods to draw any conclusions. EPA appears to rely on annual data, which is not nearly a large enough sample to do any statistical analysis. EPA states that it sees no correlation between refining margins and RIN prices, which would be consistent with full passthrough. However, a visual inspection of the chart provided by EPA suggests that RIN costs may move in the opposite direction of margins in most years. *See* Proposed Denial at 31 & Figure IV.D.2.b-1. Whatever EPA's sources, this analysis does not allow the Agency (or anyone else) to reach any reliable conclusions.

Response:

EPA does not believe that the data presented on average refining margins alone are sufficient to draw conclusions on RIN passthrough or the impact of the RFS program on small refineries. However, we do believe that these data would identify any consistent and significant impact on small refineries vs. larger refineries. EPA has received comments stating that parties that blend renewable fuels acquire RINs for free. This would suggest that in years when RIN prices are high these parties would see an advantage of >\$0.10 per gallon over parties that do not blend renewable fuels. A competitive advantage of this magnitude should be apparent in a high-level analysis such as the relationship between RINs and refining margins presented in the SRE Denial. The fact that a discrepancy between these parties cannot be seen in the data is not determinative on its own; it is one more piece of evidence EPA considered in reaching our decision on the 69 pending SRE decisions, along with the rest of the information presented in the SRE Denial and the responses to comments herein.

Comment:

EPA suggests that its passthrough analysis *must* be correct because, if not, EPA would expect to see parties change their business models:

While some parties dispute EPA's findings on RIN cost passthrough and the RIN discount, those same parties have not made business decisions over the last decade that would be logical if RIN cost passthrough and RIN discount were not occurring. For example, if RIN cost passthrough did not exist, we would expect to see refiners avoiding RFS obligations by shifting production to non-obligated fuel (e.g., heating oil, jet fuel) and/or export fuel. We would also expect to see actions to expand or modify their business models to include additional blending of renewable fuel to reap the alleged rewards that they claim independent blenders and marketers enjoy. Proposed Denial at 26.

This is nonsense. Each of those unobligated fuels involves a separate market with unique supply and demand dynamics and the availability of shifting production to other fuels is refinery-specific. Some small refineries have explained in their SRE petitions that they are not capable of avoiding their RFS obligations by shifting production to non-obligated fuels because there is little to no market for such fuels in their area. Additionally, small refineries have similarly explained that they cannot change their business model to reduce their RFS obligations by increasing their exports due to the inability to ship fuels from their refineries to the coasts. Additionally, even if there was a known benefit to blenders from incomplete passthrough, that incentive may still be insufficient for a small refiner to build blending capacity in order to obtain the benefit.

Response:

EPA's assertion that market actors would change their behavior in response to market opportunities (if they existed) was not meant to suggest that every refinery in the country would export all of their volume if RIN costs weren't passed through. Rather, if RIN costs are temporarily not passed through, those market actors that can export will do so until the market responds by raising the market price to recover the RIN. As EPA has detailed throughout the SRE Denial and our response to comments herein, economic theory and the data available to EPA show that market actors behave in a competitive manner and in doing so pass through the cost of compliance and must reflect the RIN discount in the price of blended fuel they sell. It is EPA's assessment that it is far more likely that wholesale refined product prices (CBOB and diesel fuel prices) would rise to cover the cost of RFS compliance if parties that can export started exporting all of their volume, than the counterfactual that the commenter seems to suggest, which is that domestic prices would stay static (not accounting for the cost of RFS compliance) as gasoline and diesel fuel supplies in the U.S. dropped due to increased exports. With nearly inelastic demand for transportation fuels, we can be very confident that domestic wholesale prices must rise to cover the cost of the RIN (i.e., RFS compliance) if that is what is necessary to keep all of the refineries in the Gulf, West, and East Coasts of the U.S. from exporting all of their fuel.

Comment:

EPA ignores the competitive advantage of refineries that are able to produce renewable fuel by assuming that the only paths to compliance are by purchasing renewable fuel for blending with refinery products or by buying RIN credits. There is, in fact, a third option that involves the

production of renewable fuels. This third option can dramatically lower the cost of RINs as can be seen in the recent profit margins of renewable diesel (RD) producers such as Valero's Diamond Green Diesel (DGD) which reported a per barrel EBITDA margin of \$2.34 in 2020 and \$2.97 in 1H 2021.

DGD has required roughly \$914 million in cumulative capex and utilizes Valero refining sites in Louisiana and Texas. Marathon and Phillips, similarly, are repurposing existing, obsolete refining equipment to produce RD. Chevron, meanwhile, has taken extensive advantage of co-processing at its large diesel hydrotreating units. Lastly, PBF is also planning to use obsolete refining equipment at its Chalmette, LA refinery to produce RD.

Some small refineries are unable to take advantage of any similar opportunities due to a lack of scale. They have conducted feasibility studies to examine the production of renewable fuel and determined it is not economically viable. They are not able to build a facility of this sort of scale, even if they wanted to invest in renewable diesel, due to a lack of available capital to build a viable RD production facility and the lack of a site to build it.

Response:

In the context of SREs, EPA only considers the petroleum refining portion of the parent company's business. Companies that own refineries may also own other businesses, including businesses that produce renewable fuels, but EPA does not consider the effect of these businesses when evaluating the cost of compliance with the RFS program. While it is true that a renewable fuel producer that can produce renewable fuel at a cost below the market price for the fuel will profit from that ability, EPA considers here that when the renewable producer sells the fuel at market prices (either as a 100% renewable fuel to other parties for blending or in blended fuels it sells itself), the profit it earns for that sale is the return on that renewable fuel business. The cost for RFS compliance is on top of the market price for the renewable fuel because the very function of the RIN is to discount the renewable fuel below that market price to incentivize its sale. When a refinery discounts the renewable fuel that it sells based on the "RIN discount" and retains the RIN it is acquiring that RIN at the price of the discount it must offer. Hence even if the refinery also produced the renewable fuel, the cost of discounting that fuel to sell it in compliance with the RFS program is still borne by the refinery.

Production of transportation fuel, whether it is renewable or non-renewable, is a cyclical business. Companies that own refineries and produce renewable fuels may sometimes produce renewable fuel and/or non-renewable fuel at a cost less than the market price at which it may be sold, and sometimes produce renewable fuel and/or non-renewable fuel at a cost greater than the price at which it may be sold.

Comment:

RIN costs are not fully passed through based on a comparison of the price difference between gasoline and diesel sold in two different locations (Los Angeles, CA and Tijuana, Mexico) with RVO cost from July 2018 through late 2021. If RIN prices are included in the price of

transportation fuel, this price difference should display a high degree of correlation with RVO cost. However, the price differential does not appear correlated with RVO cost.

Response:

The commenter does not say whether the price difference is based on wholesale or retail prices. If it is based on retail prices, the comparison makes little sense, since retail gasoline is typically E10 from which the RIN has already been separated and Mexican gasoline is a non-obligated fuel sold in a market in a foreign country. There is no reason to expect the price difference between two different products (one of which, Mexican gasoline, has no RFS obligation, and the other of which has almost no net RFS compliance costs as the increase in the CBOB price is offset by the RIN discount on the ethanol portion of the fuel) sold in two different countries to bear any relationship to RFS compliance costs.²⁹ If the price difference is based on wholesale prices, the commenter appears to be assuming that the only reason for their calculated price differentials is RFS compliance costs, which is incorrect. In reality there are many different factors that affect prices of various products in different markets, including crude oil prices, current supply and demand of the fuel, projected future supply and demand for the fuel, inventories of the fuel, and production costs of the fuel. The commenter's pairs do not offer a direct "apples-to-apples" comparison. They are not the same fuel; one with an RFS obligation and one without.

²⁹ While E10 sold in the United States can be used to estimate RIN cost passthrough it is very difficult to do so as the increase in the CBOB price is offset by the RIN discount on the ethanol portion of the fuel. Depending on the annual RFS percentage standards and the RIN prices at the time, the E10 price may be slightly lower or slightly higher than it would be without the RFS program (e.g., if it were an export volume in Mexico). To a first order approximation, the difference is zero.

5. Small refineries cannot buy their RINs ratably and should not be punished for employing a completely legal compliance strategy.

Comment:

Contrary to EPA's assertion, many petitioning refineries claim they cannot buy RINs ratably. First, as small volume refineries, they do not purchase RINs in large enough volumes to efficiently make purchases on a ratable basis. In contrast to integrated refiners and large unobligated retailers, small refineries must manage RIN transactions in small blocks, due partly to the significant price risks from the highly commoditized RIN market and EPA policy that influence such risk. Further, small refineries do not have the resources to establish a RIN trading desk to constantly monitor and purchase RINs and, even if they did, the daily RIN demand would likely fall well below the typical RIN transaction quantities on the market, meaning they would either have to delay or accelerate RIN purchases by several days, exposing them to market risk.

Response:

A number of small refineries provided similar comments suggesting that they could not acquire RINs ratably due to a lack of capital, an inability to afford the RINs, or specific limitations in their ability to buy RINs in the proper lot sizes without facing a much steeper cost to acquire the RINs.

Regarding the cost of capital and, more simply in some comments, the ability to afford RINs, EPA notes that the very concept of ratable RIN purchases means that the acquisition of the RIN is approximately concurrent with the sale of the fuel. This is different from other costs of production, such as crude oil, which companies must first purchase and then process before selling, resulting in a significant carrying cost for the company from the time of the crude oil purchase until the time of the refined product sale. Here, for RINs, those time sequences can be directly aligned and there is no need for the company to borrow to purchase the RINs. Rather, the proceeds from the sale of the fuel can be directly used towards the purchase of the RINs in ratable proportion to the company's obligation. For this reason, EPA rejects small refinery arguments regarding the cost of capital and more generally the arguments generally regarding the ability to afford RINs.

Regarding RIN lot size, EPA contends that small refineries can enter into contracts with various RIN brokers to purchase RINs on a ratable basis. The contract terms can look very similar (and quite reasonably might be made to have parallel elements) to the gasoline sales contracts that the companies enter into with their customers. Specifically, the contract would specify the intent to purchase a specific volume of RINs per month (e.g., 1.5 million RINs per month) at a price that is calculated based on the average posted market price for the month. The RIN broker will likely charge a service fee for such a contract, but we have no reason to believe this fee will be substantially different from the fee offered to other market participants buying in lots of more than 1 million RINs nor that such a fee would be more than the cost of a small refinery hiring staff to execute a series of trades with parties directly to acquire RINs in this manner. Hence, we do not think a small refinery paying such a fee would face a disproportionately higher cost for

RIN acquisition than companies that acquire RINs in other ways. Even parties that acquire RINs through blending have such administrative costs to track and transfer the RINs that they receive by buying renewable fuel and then separating the RINs when they blend the renewable fuel. Whether those accounting and administrative functions are done by staff employed by the company or under contract with service providers, they nevertheless are a cost the blenders face in order to accumulate the RINs they will use for RFS compliance. We think it unlikely that these costs are significantly different among the various parties as the actual labor that is being done and the value that is being added by that labor (i.e., the tracking of the RINs) is very similar among the various ways that parties may acquire RINs.

Comment:

Some small refineries claim that they have reasonably relied on their previous exemptions when choosing not to purchase RINs ratably. Citing reliance on the DOE scoring matrix and prior year exemptions, many petitioning small refineries state that they reasonably believed that they would receive an SRE from EPA for each of the pending petition years and, therefore, did not make the significant capital or other investments necessary to comply.

Response:

As an initial matter, EPA does not believe reliance on prior year exemptions is a sound compliance strategy or justification for not planning for compliance while current SRE petitions are pending. The requirements of the RFS program are mandatory unless and until EPA grants an exemption. Small refineries' reliance on prior exemptions is even more unreasonable in light of the numerous legal challenges to EPA's prior approach to SREs, and EPA's long-standing findings on RINs costs being passed on in the price of the transportation fuel they sell, as explained elsewhere in the SRE Denial and herein.

Appendices C–U – Confidential, Refinery-Specific Comment Summaries and Responses

[Information Redacted – Claimed as CBI]

Appendix V – Updated Illustrative Costs, Revenue, and Profit Tables

Table V-1: BOB, Ethanol, E10, and RIN Prices on May 2, 2022

Product	Price	Data Source
BOB Cost of Production	\$3.22	Assumed to be equal to the BOB Market Price without RIN Cost
BOB Market Price without RIN Cost	\$3.22	Calculated (BOB Market Price with RIN Cost less RIN Cost)
BOB Market Price with RIN Cost	\$3.41	EIA
Ethanol Market Price	\$2.79	OPIS
E10 Market Price with the RFS Program	\$3.20	Calculated using BOB Market Price with RIN Cost, Ethanol Market Price, and D6 RIN Price
E10 Market Price without the RFS Program	\$3.18	Calculated using BOB Market Price without RIN Cost and Ethanol Market Price
D6 RIN Price	\$1.50	OPIS
RIN Cost per Gallon of BOB	\$0.19	Calculated from 2022 RVO and OPIS RIN Prices
D6 RIN Cost per Gallon of E10	\$0.12	Calculated from 2022 RVO and OPIS RIN Prices
D3, D4, and D5 RIN cost per gallon of E10	\$0.06	Calculated from 2022 RVO and OPIS RIN Prices

Table V-2: Illustrative Costs, Revenue, and Profit for E10 Production

Line		Merchant Refiner		Integrated Refiner		Non-Obligated Blender	
		With RFS	No RFS	With RFS	No RFS	With RFS	No RFS
2-1	0.9*BOB Cost of Production	\$(2.90)	\$(2.90)	\$(2.90)	\$(2.90)	-	-
2-2	0.9*RIN Cost	\$(0.17)	-	\$(0.17)	-	-	-
2-3	0.9*BOB Market Price	\$3.07	\$2.90	-	-	\$(3.07)	\$(2.90)
2-4	0.1*Ethanol Market Price (with RIN)	-	-	\$(0.28)	\$(0.28)	\$(0.28)	\$(0.28)
2-5	0.1*Net Ethanol Market Price (no RIN)	-	-	\$(0.13)	\$(0.28)	\$(0.13)	\$(0.28)
2-6	E10 Market Price (per Gallon)	-	-	\$3.20	\$3.18	\$3.20	\$3.18
2-7	D6 RIN Purchases	\$(0.12)	-	-	-	-	-
2-8	D3, D4, and D5 RIN Purchases	\$(0.06)	-	\$(0.06)	-	-	-
2-9	D6 RIN Sales	-	-	\$0.03	-	\$0.15	-
2-10	Profit/Loss per Gallon E10	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

Table V-3: Diesel Fuel, Biodiesel, B5 and RIN Prices on May 2, 2022

Product	Price	Data Source
ULSD Cost of Production	\$4.33	Assumed to be equal to the ULSD Market Price without RIN Cost
ULSD Market Price without RIN Cost	\$4.33	Calculated (ULSD Market Price with RIN Cost less RIN Cost)
ULSD Market Price with RIN Cost	\$4.52	EIA
Biodiesel Market Price	\$7.84	OPIS
Biodiesel Tax Credit	\$1.00	N/A
B5 Market Price with the RFS Program	\$4.50	Calculated using ULSD Market Price with RIN Cost, Biodiesel Market Price, and D4 RIN Price, and Tax Credit Price
B5 Market Price without the RFS Program	\$4.45	Calculated using ULSD Market Price without RIN Cost, Biodiesel Market Price, and Tax Credit Price
D4 RIN Price	\$1.78	OPIS
RIN Cost per Gallon of ULSD	\$0.19	Calculated from 2022 RVO and OPIS RIN Prices
D4 RIN Cost per Gallon of B5	\$0.04	Calculated from 2022 RVO and OPIS RIN Prices
D3, D5, and D6 RIN cost per gallon of B5	\$0.14	Calculated from 2022 RVO and OPIS RIN Prices

Table V-4: Illustrative Costs, Revenue, and Profit for B5 Production

Line		Merchant Refiner		Integrated Refiner		Non-Obligated Blender	
		With RFS	No RFS	With RFS	No RFS	With RFS	No RFS
4-1	0.95*ULSD Cost of Production	\$(4.11)	\$(4.11)	\$(4.11)	\$(4.11)	-	-
4-2	0.95*RIN Cost	\$(0.19)	-	\$(0.18)	-	-	-
4-3	0.95*ULSD Market Price	\$4.29	\$4.11	-	-	\$(4.29)	\$(4.11)
4-4	0.05*Biodiesel Market Price (with RIN)	-	-	\$(0.39)	\$(0.39)	\$(0.39)	\$(0.39)
4-5	0.05*Tax Credit	-	-	\$0.05	\$0.05	\$0.05	\$0.05
4-6	0.05*Net Biodiesel Price			\$(0.21)	\$(0.34)	\$(0.21)	\$(0.34)
4-7	B5 Market Price (per Gallon)	-	-	\$4.50	\$4.45	\$4.50	\$4.45
4-8	D4 RIN Purchases	\$(0.04)	-	-	-	-	-
4-9	D3, D5, and D6 RIN Purchases	\$(0.14)	-	\$(0.14)	-	-	-
4-10	D4 RIN Sales	-	-	\$0.09	-	\$0.13	-
4-11	Profit/Loss per Gallon E10	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00