# Regulation of Fuels and Fuel Additives: Renewable Fuel Standard Program

# Summary and Analysis of Comments

Chapter 11 Other

Assessment and Standards Division Office of Transportation and Air Quality U.S. Environmental Protection Agency



United States Environmental Protection Agency

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#### **11 OTHER**

The items raised in the following comments were not all specifically proposed in the NPRM, therefore many of these comments do not have a corresponding NPRM section. For those that do, we have provided (in our response) information on where the item can be located in the proposal.

# **11.1 Voluntary Labeling Program**

What Commenters Said:

# Supports Voluntary Labeling Program

Several commenters expressed general support for the proposed voluntary labeling program. The commenters believe that this will support the goal of sustainable renewable fuels. The commenters all had suggested ways of improving and implementing such a program, as detailed below.

Environmental Defense commented that a voluntary labeling system will provide important mile-markers to judge what the biofuels industry is capable of – which will be important in informing future policy decisions about biofuels policy. The commenter suggested that the Agency not implement a voluntary labeling program based on a "binary" (black/white) indicator of certain renewable fuels as "green" ("G"). The commenter suggested that EPA consider a more flexible and robust approach, that specifies a procedure by which a fuel supplier can determine Equivalence Values (EVs) on the basis of a specific fuel's RIN-linked lifecycle (full fuel cycle, or FFC) greenhouse gas (GHG) intensity. The commenter stated that under this approach, EVs would be used for fuel labeling. The commenter also noted that this voluntary labeling program could then use 'grades' based on a fuel's FFC GHG intensity reduction relative to conventional gasoline or diesel fuel (e.g., standard (undifferentiated) ethanol, with an EV of 1.0, could be assigned the label "G15", representing a 15% reduction in FFC GHG intensity (its labeling would be optional)). The commenter stated that fuels that document a greater degree of GHG intensity reduction could have proportionally higher EVs and be labeled accordingly. The commenter stated that it believes that a dynamic, procedural approach driven by data submitted by fuel suppliers rather than a static, regulatory one, can help EPA to: establish a market mechanism for encouraging innovation in renewable fuel supply; avoid politically loaded "green" vs. (by implication) "not green" debates with the fuels industries; illustrate what is truly meant by a performance-based paradigm; and, discourage policy implementation that relies on assumption-driven models, such as GREET, which are not subject to empirical checks.

Environmental Defense also commented that it strongly supports a voluntary labeling program to distinguish environmentally superior fuels. The commenter suggested that the best, most concise way to achieve the goals of this important program is to have a  $CO_2/BTU$  metric used to decide which renewable fuels are indeed "green." First, the carbon value of a fuel is

going to be intricately linked to the entire lifecycle process of the renewable fuel in a way that no other standard would be; to get a "green" carbon score, a fuel must reduce its energy footprint, and therefore, its pollution footprint, at every stage of development (from planting to production). Second, achieving a reduced carbon rating by definition will mean that a fuel is improving benefits to the air and water quality since these factors will all be included in attaining a low carbon score. The commenter suggested that EPA create a carbon rating for all fuels, not just ethanol, to allow for comparisons. The commenter also suggested that the following criteria be used in developing a voluntary "green fuel" labeling program: a reasonable starting point for labeling (i.e., 13-20% GHG reduction below traditional gasoline); provide a way to determine and reward the best carbon-scoring fuels and allow for continual improvement from the industry (e.g., "G20" would be a rating for a fuel that is 20% below traditional GHG emissions of gasoline, "G85" for 85% reduction, etc.).

The American Petroleum Institute (API) and Shell/Motiva also commented that they believe that EPA should build the voluntary labeling concept into the renewable identification number (RIN) for the final rule, and work out the details of the voluntary program later. Shell/Motiva further commented that a voluntary labeling program could help to address issues such as increasing public concern related to water use, land use, farming practices, and competition with the food chain associated with the use of renewable fuels. The commenters also stated that they believe EPA should develop such a program along the lines of the Energy Star program. They further recommended that EPA engage with groups that are already working on certification programs for renewable fuels and recognize the certifications provided by such groups. The commenters noted that there are already groups established that are developing certification programs for palm oil-based biodiesel, soy-based biodiesel, and sugar-based ethanol. The commenters encouraged EPA to engage with the Roundtable for Sustainable Palm Oil (RSPO) and other similar groups; and to encourage the corn-based ethanol industry to establish a similar group, with broad stakeholder involvement, to establish a certification program for corn-based ethanol.

The Union of Concerned Scientists (UCS) specifically suggested that the voluntary labeling program be made more comprehensive. The commenter stated that it does not believe that the proposed "G" appendix to the RIN would be sufficient to accomplish a meaningful labeling program. The commenter stated that a labeling program should provide quantified environmental data, under pre-set categories of parameters based on lifecycle assessment, in a transparent manner so that it can be verified by a qualified third party and thus provide accountability, transparency and flexibility for all fuel producers, blenders, and the public. The commenter believes that if EPA uses the energy-based EVs, and does not include the lifecycle greenhouse gas emissions into this factor, space should also be included in the RIN for the value of the lifecycle GHG emissions associated with the fuel. The commenter stated that it believes that GHG emissions should be one of the key criteria in the voluntary labeling program. The commenter also noted that other nations are quickly moving towards sustainability standards for renewable fuel production. The commenter believes that a more comprehensive fuel labeling program could help the U.S. to be more competitive in a global biofuels marketplace while providing information to ensure renewable fuels are truly better for the economy and the environment.

The Natural Resources Defense Council (NRDC) specifically commented that it believes that a single bit of information ("G" or no "G") is insufficient to encourage product differentiation. The commenter suggested that EPA allow at least two alpha-numeric characters to provide room for the voluntary program to grow and evolve. The commenter also encouraged EPA to consider the Energy Star system as a model. The commenter also stated that if EPA does not adopt a lifecycle GHG based EV, it believes that GHG emissions should be included, but it should also be broader including feedstock management and harvesting practices.

The National Wildlife Federation (NWF) also commented that it believes the addition of an identifier to the RIN denoting superior land, air, and water protection (or other best) practices in production can be highly effective in providing a means for the RIN market to drive reductions in overall pollution impacts. The commenter recommended that a two-digit code be used to allow greater product differentiation and encourage and reward producer best practice innovation. The commenter also suggested a phase-in of the labeling system, along with an appropriate certification process. The commenter stated that two basic categories should be used initially; one indicating best soil and water conservation practices in the growing of feedstock, and one indicating best air and water pollution reduction practices by ethanol plants. The commenter suggested that EPA should discourage practices such as manufacturing/refining biofuels in a manner which violates existing air and water regulations, or that uses water in an unsustainable fashion, and breaking out of land not previously farmed (i.e., "sod busting") for the growth of fuel crops under the RFS program. The commenter stated that sod busting and forest destruction release carbon sequestered in soils, increasing GHG emissions. The commenter also stated that most croplands are less valuable for wildlife habitat than native ecosystems, and cultivating conservation lands or buffer zones can aggravate soil depletion and water pollution.

DuPont commented that it agrees that providing consumers a reasonable way to differentiate amongst biofuels can provide incentives for "greener" biofuels. The commenter stated that a reasonable set of best practices can be a manageable method to assign such a "G" label. The commenter noted however that EPA must take into account both the factors related to the production of the biofuels and their inherent properties and downstream benefits, such as lower emissions and higher fuel mileage in such determinations.

# **Opposes Voluntary Labeling Program**

The American Coalition for Ethanol (ACE) and the Renewable Fuels Association (RFA) commented that they do not support the voluntary labeling program, and they believe that the proposed approach is not workable. ACE specifically commented that it supports efforts to encourage the most energy-efficient production of ethanol, however it is concerned that the proposed voluntary labeling approach will be virtually unworkable. The commenter stated that feedstock production, transportation, and conversion to ethanol occur along a broad spectrum of energy efficiencies, and measuring the energy efficiency with which each of these processes is carried out and determining how to accredit ethanol produced from these processes with a green label will be extremely challenging and probably cannot be achieved with consistency and accuracy. The commenter instead suggested the establishment of new incentives by Congress for ethanol producers to retrofit existing plants with the most energy-efficient production technologies in new

plants, while providing financial incentives to farmers to employ energy-efficient crop production practices.

RFA further commented that it does not believe that EPA has the expertise to implement a voluntary labeling program, and that such a program would be impractical to implement. The commenter further commented that EPA is not charged with, and does not have, the expertise in addressing farming practices. The commenter stated that it believes that a voluntary program would give EPA policy-making decisions Congress declined to make as to what renewable fuel is preferred over others.

#### Letters:

Alliance of Automobile Manufacturers (Alliance) OAR-2005-0161-0176 American Coalition for Ethanol (ACE) OAR-2005-0161-0218 American Petroleum Institute (API) OAR-2005-0161-0185 DuPont OAR-2005-0161-0168 **Environmental Defense** OAR-2005-0161-0172, -0223 National Wildlife Federation (NWF) OAR-2005-0161-0209 Natural Resources Defense Council (NRDC)OAR-2005-0161-0229 Renewable Fuels Association (RFA) OAR-2005-0161-0192, -0228 (hearing) Shell Oil Company/Motiva Enterprises OAR-2005-0161-0215 Union of Concerned Scientists (UCS) OAR-2005-0161-0226

#### Our Response:

As discussed in Section II.C of the preamble to the final rule, EPA has decided not to adopt Voluntary Green Labeling. Although some commenters noted that voluntary labeling would provide an important role in helping to identify and promote the most environmentally beneficial renewable fuels, others pointed to the potential complexity. We continue to believe that a voluntary labeling program would provide a valuable means for producers to distinguish their fuels, and would help blenders and ultimately consumers to express preferences for "green" products through their RIN purchases. However, given the wide range of comments received on the topic, we believe it is important to continue the dialogue with the various stakeholders prior to putting such a program in place. For instance, there are several additional aspects that could be considered should the Voluntary Green Labeling Program be implemented in the future, such as the suggestions from commenters that we model this program after EPA's Energy Star program, or include some type of lifecycle analyses. EPA will continue to review this voluntary program to determine if implementation is warranted.

#### **11.2 State Provisions**

# 11.2.1 State Opt-in

# What Commenters Said:

API and Chevron correctly observed that the regulations do not allow noncontiguous states and territories to opt-in to the RFS program until the 2008 compliance year. They believe

EPA should amend the regulations to provide a means for these states and territories to opt-in to the first compliance period starting July 2007 to preserve the flexibility intended by the Energy Act. NPRA commented that it supports EPA's consistent use of the Energy Information Administration's (EIA) Short-term Energy Outlook published each October to determine the applicable standard for the 48 states and any opt-in areas for the following compliance year. The commenter also noted that noncontiguous states and territories could not opt-in until 2008 and raised no objection to this practice.

The Missouri Department of Natural Resources (MDNR) suggested that EPA require a petition to opt-in be received at least 120 days prior to the current October 31 deadline. The commenter believes more lead time would ensure there is no difficulty in processing the request and publishing the adjusted standard by the November 30 statutory requirement for the subsequent compliance year.

ExxonMobil stated its belief that a noncontiguous state or territory which opts-in should be required to remain in the program for at least five years.

#### Letters:

American Petroleum Institute (API) OAR-2005-0161-018	5	
Chevron OAR-2005-0161-0193		
ExxonMobil Refining & Supply Co. OAR-2005-0161-0197		
Missouri Department of Natural Resources (MDNR)	OAR-2005-0161-0217	
National Petrochemical and Refiners Association (NPRA)	OAR-2005-0161-0170, -0232	

#### Our Response:

With respect to when noncontiguous states and territories can first opt-in to the RFS program, we are finalizing the proposal to allow noncontiguous states and territories to opt-in beginning with the 2008 compliance year. The statute clearly states that the program may apply to noncontiguous states and territories (that have petitioned EPA) at any time after these regulations have been promulgated. Given the short period of time between publication of the final rule and the effective date of the program, the need for a state and regulated parties to discuss opting-in with knowledge of the final version of the rule, and the requirement for EPA to notify obligated parties with sufficient lead time to any change in the standard, EPA believes 2008 is the earliest practical date for an opt-in to be effective. In addition, EPA notes that none of the noncontiguous states or territories indicated a strong interest in opting-in for the remainder of the 2007 compliance period. [The State of Hawaii contacted EPA by phone to inquire when the ability to opt-in would become available, but did not express a desire to be able to opt-in for the 2007 compliance period.]

We are changing the current October 31 deadline for submitting a petition to opt-in to the program to November 1 for consistency with other program deadlines. EPA will use the EIA Short-term Energy Outlook, which is typically published in October, and therefore an earlier deadline for petitions will not necessarily ease calculation of the standard. We believe that the November 1 deadline provides sufficient lead time to factor in any states or territories which have opted-in, correctly calculate the standard, and publish the result by November 30 as

required by statute.

Once a state or territory opts-in to the program it is treated as identical to any of the 48 contiguous states. The current regulations do not allow a state to opt-out and the only form of relief from the program is a waiver, in whole or in part, of the national renewable fuel volume requirement. Noncontiguous states and territories should be aware of the obligations of the program and should only choose to opt-in if they expect to meet those obligations for the indefinite future. If in the future a state believes EPA should change its regulations and allow an opt-out the state could petition EPA to change the regulations. As in other situations where a party petitions EPA to revise its regulations, EPA would be in a position at that point to consider the concerns raised by the state as well as other interested stakeholder and to determine whether it would be appropriate to revise the regulations.

# 11.2.2 State Waivers

#### What Commenters Said:

Environmental Defense and the Renewable Fuels Association (RFA) both commented that they believe regulations pertaining to State waivers should be promulgated, although for different reasons. Environmental Defense believes that EPA is required to promulgate waiver regulations and that there is nothing in EPAct to prohibit EPA from directing the reduced renewable fuel requirement to the state requesting the waiver, despite EPA's contention otherwise in the proposed rule. RFA believes waiver regulations should be promulgated to provide the public a meaningful opportunity to participate in the process. RFA believes these regulations should be composed of specific criteria EPA will consider in the waiver evaluation process.

MDNR observed that there is no provision in the Act that would permit EPA to reduce or eliminate any obligations of the RFS program specifically for parties located within the state that petitioned for the waiver. However, MDNR raised the point that there may be unforeseen extreme situations, such as a natural disaster, that call for the flexibility to provide relief to individual parties. MDNR believes EPA should consult with the U.S. Department of Agriculture (USDA) and the Department of Energy (DOE) to examine this issue.

CHS is concerned that waivers may detract from the Congressional intentions to make the RFS program a national program and urges caution in waiving any requirements. CHS also believes that inadequate domestic supply should not be confused with an inadequate state or regional supply and that a glut of renewable fuel, especially in the mid-continent, was more likely than not. Both CHS and RFA stated their belief that EPA should publish the waiver request in the Federal Register before making a final decision on the need for a waiver.

#### Letters:

CHS Inc.OAR-2005-0161-0203Environmental DefenseOAR-2005-0161-0172, -0223Missouri Department of Natural Resources (MDNR)OAR-2005-0161-0217

Renewable Fuels Association (RFA) OAR-2005-0161-0192, -0228 (hearing)

#### Our Response:

With respect to the need for waiver regulations, EPA is taking no action to promulgate such regulations in the final rule. Contrary to the Environmental Defense's assertion, the statute states that "[t]he Administrator ... may waive the requirements ... by reducing the national quantity of renewable fuel required".<sup>1</sup> Congress's clear intent was to limit EPA's authority to provide relief under the state waiver provision of section 211(0)(7). Relief under that provision is limited to reducing the total national volume required under the RFS program. Thus, the renewable volume obligation for regulated parties would be reduced, but the reduced obligation would still apply to all obligated refiners, blenders and importers, including those in the state that requested the waiver. This may provide relief to one part of the country, but EPA is not authorized to grant other relief such as reducing the percentage for some refiners and not others or refusing to count towards compliance renewable fuel that is produced or used in certain parts of the country.<sup>2</sup> Further, while EPA acknowledges RFA's desire that waiver regulations contain specific criteria, each situation in which a waiver may be requested will be unique, and promulgating a list of more specific criteria in the abstract may be counter-productive. Communication between the petitioning state(s), EPA, DOE, USDA, and public and industry stakeholders should begin early in the process, well before a waiver request is submitted, and public involvement will be welcomed.

MDNR is correct in its observation that EPA cannot waive obligations for specific entities or locations. However, the waiver provision authorizes EPA to waive the obligations of the program, in whole or in part, depending on the severity of the situation.

EPA is aware of the concerns expressed by CHS and RFA regarding publication of waiver requests and the issuing of waivers. EPA recognizes that the RFS is a national program and will carefully assess the domestic supply of renewable fuel when evaluating a potential waiver situation. Petitions will be published in the Federal Register, as required by statute, to provide public notice and opportunity for comment.

#### 11.2.3 State Renewable Fuel Mandates

#### What Commenters Said:

Marathon Petroleum Company (MPC), NPRA, the American Petroleum Institute (API), the National Association of Convenience Stores (NACS), and the Society of Independent Gasoline Marketers of America (SIGMA) all commented that they are concerned about the impact of state renewable fuel mandates on the efficiency and flexibility of the fuel distribution

<sup>&</sup>lt;sup>1</sup> CAA Section 211(o)(7), as added by Section 1501(a) of the Energy Policy Act of 2005

<sup>&</sup>lt;sup>2</sup> CAA Section 211(o)(2)(iii) provides that "the regulations promulgated ... shall not ... restrict geographic areas in which renewable fuels may be used." Refusing to count towards compliance renewable fuel that is produced or used in certain parts of the country would not be consistent with this provision even if it would not technically be a restriction on use of the fuel in those parts of the country.

system. MPC and NPRA support the EPA preemption review process and the expansion of the scope of this analysis in section 1541 of EPAct. They believe that Clean Air Act section 211(c)(4)(C) was amended by EPAct section 1541 to require EPA and DOE to jointly review motor fuel control choices by state and consider the regional supply implications of such choices. NPRA commented that they believe state renewable fuel mandates should be subject to the same analysis as is required for other changes in local gasoline and diesel standards and states must be granted a waiver from EPA for any new state biofuel regulation to be implemented. NACS and SIGMA specifically commented that they believe that Congress' intent of RFS as a national program to promote the use of renewable fuels and EPA's intent for a nationwide RFS is being undermined by state governments that are adopting state renewable fuel mandates. NACS and SIGMA urged EPA to defend the national RFS program by seeking federal restrictions on state boutique renewable fuel mandates. NACS and SIGMA both stated that they believe that without such restrictions, there is no assurance that the flexibility that Congress built into the RFS and the flexibility that EPA is attempting to build into the regulations implementing the RFS, will not be destroyed by a patchwork of additional state boutique fuel mandates. Both MPC and NPRA stated that they would support legislation to explicitly preempt these programs to remedy this problem.

In its comments, the National Wildlife Federation (NWF) stressed the important and complementary role that it believes state renewable fuels standards and incentives can play in building a robust, diverse and widespread renewable fuels industry. The commenter stated that States are able to target local standards to local crops and industrial capabilities and jump start the innovation that will be necessary to maximize the speed and minimize the cost of a transition to clean, domestically produced, renewable fuels.

#### Letters:

American Petroleum Institute (API) OAR-2005-0161-0185
Marathon Petroleum Company (MPC) OAR-2005-0161-0175
National Petrochemical and Refiners Association (NPRA) OAR-2005-0161-0170, -0232
National Wildlife Federation (NWF) OAR-2005-0161-0209
Society of Independent Gasoline Marketers of America/National Association of Convenience Stores (SIGMA/NACS) OAR-2005-0161-0234

#### Our Response:

Implementing the Renewable Fuels Standards will result in a significant increase of the use of renewable fuels, and specifically the amount of gasoline blended with ethanol. Coordination amongst many organizations is required in order to optimize fuel and ethanol distribution while considering economics, logistics, and potential air quality impacts.

In general, section 211(c)(4)(A) prohibits States from prescribing or attempting to enforce, "for the purposes of motor vehicle emissions control", non-identical controls respecting motor vehicle fuel or fuel additive characteristics or components if EPA has prescribed "a control or prohibition applicable to such characteristic or component of the fuel or fuel additive," under section 211(c)(1). We have promulgated the renewable fuels standards under section 211(o), not under section 211(c)(1). In addition, it appears that state renewable fuel mandates are generally not adopted for purposes of motor vehicle emissions control. Therefore, the federal renewable fuel program adopted in this rulemaking does not lead to preemption of state renewable mandates under the express preemption provisions of CAA section 211(c)(4)(A).

Further, the EPAct 2005 amends our authority to grant waivers of preemption for nonidentical fuel controls, under section 211(c)(4)(C) by placing three additional restrictions on our authority. For example, EPA may only approve a state fuel program into a SIP under section 211(c)(4)(C) if 1) it would not increase the number of fuels specified by EPA on the Boutique Fuels List (71 FR 78192), 2) the fuel is included in a SIP in the PADD, and 3) in certain cases, EPA evaluates the impact of the new program on fuel supply. State renewable fuel mandates would not be subject to these EPAct 2005 restrictions unless EPA was acting to approve the state fuel program into the SIP, and was doing so under section 211(c)(4)(C) based on the express preemption provision of section 211(c)(4)(A). States have not in the past sought approval of their renewable fuel mandates into state SIPs, hence the issues of approval into a SIP under section 211(c)(4)(C) and the related EPAct 2005 boutique fuel restrictions are not likely to arise. The only way the EPAct 2005 provisions would apply is if a state sought to approve its renewable fuels mandate into the SIP and EPA's approval into the SIP was based on section 211(c)(4)(C). In that case the various restrictions on boutique fuels would apply to state renewable fuel mandates.

EPA notes, however, that a court may consider whether either state renewable fuel mandates or standards are implicitly preempted under the supremacy clause of the U.S. constitution. Courts have determined that a state law is preempted by federal law where the state requirement actually conflicts with federal law by preventing compliance with the federal requirement, or by standing as an obstacle to accomplishment of congressional objectives.

With respect to the comments from NWF, EPA acknowledges that state renewable fuel standards can have beneficial impacts on local communities. However, these benefits are not the only considerations we take into account when determining the legality of these programs.

# 11.3 Impacts on the Agricultural Sector

# What Commenters Said:

Choren commented that it believes that the long-term potential of biomass to liquid (BTL) fuel is in the use of non-food feedstock that include agricultural, municipal, and forestry wastes as well as fast-growing, cellulose-rich energy crops. The commenter stated that the use of the entire plant results in less land used per unit of energy produced. This is true second generation, rather than utilizing only the sugar or oil parts of a plant via esterifcation, hydrotreating, or fermentation.

The American Farm Bureau Federation, the National Corn Growers Association, and the National Council of Farmer Cooperatives commented that they believe that ethanol is extremely significant for U.S. agriculture. The commenters noted that ethanol has been widely recognized for stimulating and expanding the rural economy of the country, further, nearly 50 percent of

ethanol plants in the U.S. are farmer-owned cooperatives. The commenters stated that the spending associated with ethanol production circulates throughout the local economy creating new jobs, tax revenue, demand, and additional household income. The commenters further stated that they believe that the use of ethanol protects surface waters, groundwater, and soil from contamination, because ethanol is rapidly biodegraded, unlike other gasoline additives. Lastly, the commenters stated that they believe that they believe that ethanol can dramatically reduce greenhouse gas emissions (such as  $CO_2$ , a contributor to global warming).

#### Letters:

American Farm Bureau Federation (AFBF) OAR-2005-0161-0188		
CHOREN Industries OAR-2005-0161-0195		
National Corn Growers Association (NCGA)	OAR-2005-0161-0188	
National Council of Farmer Cooperatives (NCFC)	OAR-2005-0161-0188	

#### Our Response:

EPA concurs that cellulose-based ethanol production represents an opportunity for future expansion of ethanol production, with potential volumes not as limited as corn-based ethanol production. Cellulose ethanol also appears to have the potential for ethanol production with lesser amounts of fertilizer or pesticides and using other techniques with lesser risk of water pollution and soil erosion compared to corn-based ethanol. However, cellulosic ethanol is still an emerging technology so assessment of many of the factors going into its productions, both on the farm as well as at the plant, requires broader assumptions than the more mature corn ethanol production. Consequently, additional investigation and careful monitoring of developments in farm production practices and production facility technologies will be necessary to improve the full lifecycle assessment of this renewable fuel pathway.

EPA also recognizes that expanded ethanol and biodiesel production is likely to have economic benefits for farmers and rural areas in general. As part of this rulemaking, we have estimated the general increase in farm income resulting from expanded renewable fuel production in the U.S. This initial assessment however can likely be improved upon and warrants additional investigation and assessment, perhaps as part of a future rulemaking relating to renewable fuels.

#### 11.4 Comments Outside Scope of the Proposal

#### 11.4.1 Fuel Quality

#### What Commenters Said:

The Alliance recommended that EPA begin a substantially similar rulemaking for diesel fuel to ensure that new types fuels intended for use in diesel engines can be adequately judged for suitability as a fuel for on-highway vehicles. The commenter stated that it believes that EPA needs to fully define what an acceptable fuel is for diesel engines in the same way it has done with gasoline, which it believes will also help the Agency to review the acceptability of new diesel fuel additives. The commenter noted that section 211(f)(1) of the Clean Air Act (CAA)

already authorizes EPA to adopt such a requirement – this provision prohibits fuel or fuel additive manufacturers from introducing into commerce any fuel or fuel additive for use in lightduty motor vehicles which is not substantially similar to that used to certify vehicles or engines under section 206 of the CAA. The commenter stated that it believes it is time for EPA to apply "substantially similar" to diesel because of the rapid introduction of biodiesel and other unconventional diesel fuel blends as well as an expected increase in the numbers of light-duty diesel vehicles with highly sophisticated emission control systems and engine technologies. The Alliance further commented that, while EPA has registered biodiesel as an additive, it has not set any restrictions on the amount of biodiesel that can be added to diesel or any specifications for the final blend. The Alliance commented that it believes that a substantially similar rulemaking would allow EPA to consider and investigate just what level of biodiesel should be considered the same as diesel fuel. The commenter believes that this will help promote confidence and certainty in the marketplace. The commenter noted that biodiesel and possibly other alternative diesel fuels have the potential to degrade during storage, which can result in a fuel that is substantially different from the fuel that leaves the production facility. Further, degraded biodiesel can cause vehicle corrosion and plugging, which materially affects fuel system function and emissions; some fuels also may experience phase separation during storage or commingling. The Alliance noted that EPA did not have to address such issues when it adopted the gasoline "substantially similar" rule, but recommends that EPA do so for diesel. Lastly, the Alliance commented that it believes that EPA should consider fuel storage life, in-use practice and other production and handling issues when establishing the criteria for a substantially similar diesel fuel.

The New York State Department of Environmental Conservation (NYDEC) commented that it believes that EPA should conduct further testing of the short and long term emissions performance of E85 capable vehicles, and define and promulgate standardized certification procedures for vehicles using E85.

FutureFuel commented that it believes that it is imperative for the biodiesel industry that biodiesel quality be regulated—the proposal did not address this issue. The commenter noted that for B20 blends to be successful, engine manufacturers must be satisfied as to the performance of such biodiesel for things such as engine warranties. Further, if biodiesel being marketed does not meet certain quality standards, it could have a negative impact on overall biodiesel acceptance. The commenter requested that the Agency consider whether there should be regulatory oversight to the industry to audit/regulate fuel quality in the marketplace (including at the producer level). The commenter also suggested that EPA review the National Biodiesel Accreditation Program, a voluntary program for the accreditation of producers and marketers of biodiesel called BQ-9000. The commenter noted that the program includes storage, sampling, testing, blending, shipping, distribution, and fuel management practices. The commenter stated that it believes that EPA should allow for labeling BQ-9000 qualification as a quality indicator.

The Alliance also commented that it believes that EPA should support and participate in continued biofuels research to further understand their impacts on air quality and vehicle performance. The commenter noted that there has been some concern that blending heavily hydrotreated ultra-low sulfur diesel fuel (ULSD) with biodiesel may result in a final blend with different properties than the current low sulfur diesel fuel (LSD) blended with biodiesel. The

commenter thus stated that it urges EPA to validate the stability of different biodiesel blends to ensure that consumers are adequately protected.

#### Letters:

Alliance of Automobile Manufacturers (Alliance) OAR-2005-0161-0176 FutureFuel OAR-2005-0161-0198 New York State Department of Environmental Conservation (NYDEC) OAR-2005-0161-0169

#### Our Response:

Regarding the Alliance's comment that there is a need to codify a rule defining a "substantially similar" definition for diesel fuel, section 211(f)(1) of the Clean Air Act prohibits the introduction of motor fuels or additives that are not substantially similar to the fuels that were used to certify these vehicles. EPA has promulgated an interpretive rule which defines the term "substantially similar" for gasoline (56 FR 5352, February 11, 1991). EPA is attempting to collaborate with other parties, both governmental and non-governmental to design a program to answer questions about the emissions effects of biodiesel at various blend levels. As to the suggestion that an analogous interpretive rule to define "substantially similar to certification fuels" for diesel, the Agency is carefully studying the issue and will decide when sufficient data exist to begin such a rulemaking. In short, we plan to address these concerns in the future as reliable data becomes available.

Current EPA in-use testing regulations do not require that the manufacturer measure emissions on E85 flex fueled vehicles. Current regulations allow the manufacturer to apply correction factors, based on ratios of certification emission measurements using both gasoline and E85, to the in-use gasoline results and obtain estimates of the E85 non-methane organic gas (NMOG) and formaldehyde (HCHO) emissions. However, EPA is considering what regulation changes are necessary and what timely implementation strategies are available to fully describe in-use testing when using an E85 fuel.

With regard to the comments from FutureFuel and the Alliance on biodiesel quality and research, we note that biodiesel is registered with EPA as a motor vehicle diesel fuel and motor vehicle diesel fuel additive. It is registered for use at any blend level from B0 to B100 in both highway and nonroad diesel vehicles. Manufacturers of motor vehicle fuels and fuel additives must register with EPA as authorized by section 211 of the Clean Air Act and Part 79 of the Code of Federal Regulations (40 CFR 79). Biodiesel producers are manufacturers of motor vehicle fuel. As part of EPA's registration process for fuel manufacturers, biodiesel producers must complete and submit EPA registration form 3520-12 (Fuel Manufacturer Notification for Motor Vehicle Fuel, available at http://www.epa.gov/otaq/regs/fuels/ffarsfrms.htm), and also provide the following information:

- 1) The feedstocks used to produce biodiesel.
- 2) A description of the manufacturing process used to produce biodiesel.
- 3) Emissions and health effects testing on the manufacturer's biodiesel, or alternatively proof of registration with the National Biodiesel Board (NBB) showing access to the Tier 1 and Tier 2 emissions and health effects testing data.

4) Test results from a representative sample of the manufacturer's biodiesel demonstrating compliance with the parameters specified in ASTM D 6751.

Since emissions and health effects testing for biodiesel is very expensive, biodiesel producers normally arrange for access to "group data" on the testing of biodiesel which is representative of all products in that group. The NBB has provided EPA with the required group data on biodiesel that met the nationally accepted biodiesel standard at the time of testing. This standard has since been adopted as ASTM D 6751. Thus, a biodiesel producer may meet EPA's emissions and health effects testing requirement for biodiesel by registering with the NBB, and have the NBB provide direct verification to EPA that the biodiesel producer has access to the required test data. Any biodiesel producer who does not have access to NBB's data must provide EPA with emissions and health effects test data as part of the registration process.

Since NBB's group data was generated using biodiesel that met ASTM D 6751 specifications, EPA also requires that all biodiesel production from biodiesel producers who register with EPA using NBB's group data must also meet ASTM D 6751. During registration, such biodiesel producers must provide test results from a representative sample of their biodiesel which demonstrate compliance with ASTM D 6751 specifications. Any registration of biodiesel based on the NBB group data has been conditioned on compliance with ASTM D 6751 (i.e., the registration only covers biodiesel that meets this ASTM specification. Since all biodiesel producers currently registered with EPA are using NBB's group data to meet EPA's testing requirements, all biodiesel production should meet ASTM D 6751.

In addition to registering with EPA under 40 CFR 79, biodiesel producers are also required to register under 40 CFR 80. Under 40 CFR 80, diesel fuel producers must complete and submit EPA registration forms 3520-20A (Fuels Programs Company/Entity Registration) and 3520-20B1 (Diesel Programs Facility Registration). Both of these forms are available at http://www.epa.gov/otaq/regs/fuels/rfgforms.htm.

Biodiesel producers must also comply with all of EPA's regulatory requirements for diesel fuel producers in 40 CFR 80, Subpart I. The primary standard for diesel fuel producers in Subpart I is the 15 ppm sulfur standard, which will be phasing in for all motor diesel fuel from now through 2014. Although biodiesel typically contains less than 15 ppm sulfur, biodiesel producers are still required to test each of their biodiesel batches for sulfur, and appropriately designate their product as required by subpart I. Subpart I also contains diesel fuel standards for minimum cetane index (40), or a maximum aromatics content (35 volume percent), which biodiesel typically meets.

EPA is a member of ASTM, and is participating in several ongoing ASTM activities regarding biodiesel quality and standards. ASTM recently added a stability specification to ASTM D 6751, and expanded the applicability of D 6751 to all diesel fuels (D 6751 was previously applicable to just highway diesel fuel). EPA's renewable fuels standard regulations, recently finalized in 40 CFR 80, Subpart K, require biodiesel producers to meet all specifications in this most recent standard (ASTM D 6751-07) for all biodiesel that is treated as a renewable fuel for purposes of compliance calculations under Subpart K. ASTM is also considering whether to expand their standard for "conventional" diesel fuel (ASTM D 975) to include diesel

blends that contain up to 5 volume percent biodiesel, and is developing a standard for B20.

EPA also plans to increase enforcement efforts to ensure that biodiesel producers are complying with EPA's standards, in particular ensuring that all biodiesel meets ASTM D 6751. Section 211(a) of the Clean Air Act gives the Administrator of the EPA regulatory authority to "...designate any fuel or fuel additive...and...no manufacturer or processor of any such fuel or fuel additive may sell, offer for sale, or introduce into commerce such fuel or additive unless the Administrator has registered such fuel or additive...." This is codified in EPA's regulations at 40 CFR 79.4(a)(1), which states that "no manufacturer of fuel designated under this part shall ... sell, offer for sale, or introduce into commerce such fuel unless the Administrator has registered such fuel that meets ASTM D 6751 has been registered with EPA, biodiesel that does not meet ASTM D 6751 will be considered an unregistered fuel subject to the penalty provisions in 40 CFR 79.8 (civil penalties of up to \$25,000 per day per violation).

# 11.4.2 Fuel Testing and Certification Fuels

#### What Commenters Said:

Neste Oil (Neste) commented that, especially for second-generation renewable diesel fuels, there are several regulatory hurdles that are significant. In particular, the commenter noted that pre-registration testing requirements under 40 CFR 79 can be extensive and encouraged the Agency to examine whether such fuels which produce regulated emissions significantly lower than conventional (i.e., baseline) diesel fuels, should be treated the same as baseline fuels as a class in connection with the testing required for registration. The commenter further suggested that changing a small section of the language in 40 CFR 79 could, in fact, accomplish this (the commenter suggested deleted §79.56(e)(3)(ii)(A)(5)).

API commented that it believes that EPA should require that new vehicles be certified on E10 to address permeation emissions. API recommended that EPA begin to make the necessary vehicle emission regulatory revisions to correct the impact of increased fuel permeation on new vehicles due to increased ethanol blending. The commenter suggested that EPA could insure that new vehicles continue to meet current emission standards by changing the certification fuel to E10. Lastly, API commented that E10 is now the predominant fuel in urban areas most challenged for ozone attainment and new vehicles should be designed to comprehend this and the growing use of ethanol as a gasoline blend stock.

NYDEC commented that EPA should require certification test fuel to contain 10 percent ethanol; the commenter also stated that it believes that test fuel for evaporative emissions should contain 10% ethanol with an RVP of 10 psi.

#### Letters:

American Petroleum Institute (API) OAR-2005-0161-0185 Neste Oil OAR-2005-0161-0191 New York State Department of Environmental Conservation (NYDEC) OAR-2005-0161-0169

#### Our Response:

The testing requirements Neste Oil referred to are so-called Tier 1 and Tier 2 testing requirements at 40 CFR part 79, as part of the fuel and fuel additive registration program. Tier 1 requirements essentially include a literature search on the health effects of new fuels or additives as well as emissions speciation of such fuels. Tier 2 requirements include exposure of laboratory animals to emissions of new fuels or additives and testing for certain toxic endpoints to assure that no unexpected toxics effects result from the emissions of these fuels. Furthermore, the regulations allow for the grouping of certain similar fuels and additives allowing for groups to perform testing instead of testing each individual fuel or additive within the group. EPA recognizes that, for purposes of this testing, bio-derived fuels are in a different grouping than conventional petroleum-derived fuels. It is EPA's interpretation that, in the case of bio-derived fuels that are very similar to conventional petroleum fuels, the regulations would allow a manufacturer of such a fuel to argue that Tier 2 testing is not needed. However, the regulations make no such allowance for Tier 1 requirements. EPA will continue to study this comment. However, the Agency believes that, in the context of the RFS rulemaking, no such proposal was put forward and the RFS final rule would not be the appropriate place to address this issue.

With regard to the comments that certification test fuel should contain E10, we note that current regulations require manufacturers to use E10 in their durability process for meeting evaporative emission standards. All vehicles meeting current exhaust emission standards are also designed to be able to use real-world fuels containing up to 10 percent ethanol by volume and still function the same as if they were using gasoline without ethanol. As EPA determines what detailed regulatory changes are needed to ensure compliance (including emissions compliance) on E85, we will also consider the appropriateness of changing the gasoline certification test fuel to include ethanol.

#### 11.4.3 Stage I and II Controls

#### What Commenters Said:

The Alliance commented that it believes that EPA must control the materials and construction of the fuel-dispensing infrastructure along with controlling fuel quality. The commenter noted that the same compatibility issues that affect vehicles also affect dispensing pumps; and further, affected pump materials can cause contamination of the fuel in the pump. The Alliance further noted that automakers care most about the quality of the fuel as dispensed, not just the quality of the fuel produced. Lastly, the commenter stated that service station storage tanks and fuel dispensing equipment are significant potential sources of contamination and should be regulated. Similarly, NYDEC commented that it believes that there should be more widespread use of Stage I and II controls to reduce evaporative emissions in areas not currently covered by these controls.

Letters:

Alliance of Automobile Manufacturers (The Alliance) OAR-2005-0161-0176

New York State Department of Environmental Conservation (NYDEC) OAR-2005-0161-0169

#### Our Response:

Stage I controls are pipes and hoses installed to collect and transfer vapors (which are generated during the loading of gasoline into an underground tank, or exist in the tank and are displaced out a vent to the air) back into the tank truck tank. Then, the vapors travel back to where the truck is loaded and the vapors are recovered or destroyed. Stage II controls—which are controls on fuel pumps—allow the gasoline vapor displaced from a vehicle tank to be captured and returned to the gasoline storage tank, instead of being lost to the atmosphere. These vapors are then recovered through Stage I controls when a gasoline tank truck makes a delivery at a station, thereby closing the loop.

Stage I vapor balance systems are used in ozone non-attainment areas to reduce volatile organic compound emissions; Stage II vapor recovery systems are required to be used at gasoline dispensing facilities located in serious, severe, and extreme non-attainment areas for ozone (under section 182(b)(3) of the CAA). While these controls are required to be used in non-attainment areas, we do not require that all states/areas use these controls, nor does EPA have the authority to do so. Thus, we cannot mandate the use of Stage I and II controls on areas that are not required to do so.

# 11.4.4 CAFÉ Standards

#### What Commenters Said:

MDNR commented that it believes that the RFS program combined with a meaningful increase in the Corporate Average Fuel Economy (CAFE) standard and the promotion of other transportation alternatives (i.e., mass transit, car/van pooling, telecommuting) may result in a more significant reduction in petroleum use with a corresponding reduction in the Nation's dependency on non-domestic fuel sources.

#### Letters:

Missouri Department of Natural Resources (MDNR) OAR-2005-0161-0217

#### Our Response:

There are a variety of potential mechanisms for reducing U.S. consumption of petroleum, including those listed by the commenter. While the Energy Act does not provide EPA the authority to address these in the context of the RFS program, a variety of other EPA efforts are aimed at promoting transportation alternatives. Please see: www.epa.gov/ebtpages/polltransportationalternatives.html

# 11.4.5 Pump Labeling

#### What Commenters Said:

The Alliance of Automobile Manufacturers (Alliance) commented that consumers also need some protection from the influx of new and different fuels, as manufacturers have limits on the fuels blends covered by vehicle warranty, which makes it critical for consumers to know what fuels they are putting into their vehicles. The commenter suggested that EPA adopt regulations to require labeling for all ethanol blends greater than 10% (volume) and all biodiesel blends regardless of concentration to help vehicle owners comply with their warranties and generally learn about these fuels. The commenter noted that the Federal Trade Commission has adopted rules to require customer labeling for E85 and some other non-petroleum fuels (but not biodiesel), and that many states have already adopted incentive programs for different levels of biodiesel but not necessarily requiring the pumps to be labeled. The commenter stated that labeling must include a reminder for consumers to consult their owner guides and the manufacturers of their vehicles, if necessary, to confirm warranty coverage for their vehicle. The commenter recommended that EPA pursue the development of a mechanism to help consumers clearly identify the type of fuel dispensed by each pump (such as color-coding of fuel nozzle "boots" for the different fuels that are available, including diesel), given the potential proliferation of alternative fuels in the marketplace. The commenter believes that this would help bring some order to the marketplace and reduce the likelihood of misfueling. The commenter also suggested that EPA develop a comprehensive communication strategy to make sure the public is appropriately informed about the use of these new fuels.

#### Letters:

Alliance of Automobile Manufacturers (Alliance) OAR-2005-0161-0176

#### Our Response:

EPA will work with industry to encourage appropriate labeling and will study the possibility and statutory authority to require labeling if a voluntary approach proves not to work as intended. We agree with the Alliance that consumers should consult their owner's guides and take all steps to determine that the fuel used is consistent with the instructions in the owner's manual.

#### **11.5 Other Comments**

#### 11.5.1 Enforcement and Attestation/Audit Provisions

#### What Commenters Said:

FutureFuel and Flint Hills Resources (FHR) commented that they strongly support the Agency's decision not to make presumptive liability a part of the RFS program.

FHR also commented that it agrees that invalid RINs should not be used to satisfy a

party's obligations under the rule; however it believes that EPA should clarify that the mere discovery that a party has used an invalid RIN should not lead to that party being in violation. The commenter further stated that it believes that if the party did not know that the RIN was invalid when it tried to use it, and can cover its obligations for that period by purchasing other RINs or carrying over a deficit into the next year, then that party should not be guilty of a violation of the rule. The commenter stated that it agrees that a company that knowingly tries to use invalid RINs is arguably already guilty of a criminal violation under Section 113 of the Clean Air Act (42 U.S.C. §7413(c)(2)(A), also 18 U.S.C. §1001). FHR commented that it believes that a company that acquires and uses the RINs in good faith, only to later find out that they are invalid, should not be penalized for making this mistake. The commenter further noted that the rule provides options for a company to cover itself in such a situation, and it should be allowed to do so without penalty. The commenter stated that it believes that the suggestion in the preamble at 71 FR 55580 that a penalty against a party using invalid RINs might include a punitive component is completely inappropriate where the party acted in good faith. The commenter also stated that it believes that if a company acts in good faith and transfers a (invalid) RIN which it believes to be valid, such a company may be subject to contractual liability via a civil lawsuit from the company that received the invalid RIN, but that company should not be subject to EPA enforcement (as stated at §80.1160(b)(2)).

FHR also commented that it believes that §80.1161(c), which provides that a parent corporation is liable for any violation committed by a subsidiary, is inappropriate.

API commented that it believes that independent audit or attestation provisions should not be required of obligated parties. The commenter further stated that it believes that EPA can easily check producer versus obligated party use of RINs. API also commented that the data is not such that an attest is needed, as there is no verification of raw data as with other programs (such as lab results for reformulated gasoline (RFG), batch volumes to pipeline tickets, overall volume balances, etc.). The commenter noted that reports allow EPA to crosscheck data with other reporting entities; and that renewable producers need an attest to verify reported production and RIN volumes. The commenter stated that it believes that if there are attest requirements for obligated parties, then the requirement needs to change significantly. The commenter noted that the proposed language requires the auditors to check documentation for every RIN transaction ("there will be thousands", the commenter noted); however it instead believes that, at most, a limited sample should be required.

#### Letters:

American Petroleum Institute (API) OAR-2005-0161-0185 Flint Hills Resources (FHR) OAR-2005-0161-0222 FutureFuel OAR-2005-0161-0198

#### Our Response:

Regarding the comment on the use of invalid RINs, the regulations prohibit any party from creating, transferring or using invalid RINs. These invalid RIN provisions apply regardless of the good faith belief of a party that the RINs are valid. We believe that these enforcement provisions are necessary to ensure that the goals of the RFS program are not compromised by

illegal conduct in the creation and transfer of RINs. For this reason, obligated parties, and RIN brokers, should use good business judgment when deciding whether to purchase RINs from any particular seller, and should consider including prudent business safeguards in RIN transactions, such as requiring RIN sellers to sign contracts with indemnity provisions to protect the RIN purchases in the event penalties are assessed because the RINs are determined to be invalid. Similarly, parties that sell RINs should take steps to ensure any RINs that are sold were properly created, to avoid penalties that result from the transfer of invalid RINs. Where a party determined to be a good faith purchaser uses invalid RINs, EPA will hold the party responsible for the existence of the invalid RINs liable for the violation, and require that party to purchase RINs to make up for the invalid RINs used by the good faith purchaser and pay an appropriate penalty. If the responsible party cannot be identified or is out of business, or EPA is otherwise unable to obtain relief from the party, then the obligated party that used the invalid RINs would be required to purchase RINs to make up for the invalid RINs. However, a penalty for a good faith purchaser, if any, would likely be very small, particularly where EPA is able to obtain relief from the party that was responsible for the invalid RIN.

With regard to the comments on the provisions for parent corporation liability, we disagree that it is inappropriate to hold a parent corporation liable for violations committed by its subsidiaries. We believe that the ability to hold a parent corporation liable for violations caused by a subsidiary company is necessary in order to ensure that the goals of the RFS program are met in the event that relief cannot be obtained by the subsidiary company. This approach is consistent with the gasoline sulfur program, the Highway and Nonroad Diesel sulfur programs, and other fuels programs.

Regarding the comment on the requirement for attest engagements for obligated parties, we continue to believe that the attest engagements are an appropriate means of verifying the accuracy of the information reported to EPA. In addition to documentation of RIN transactions and use, the reports submitted by obligated parties include information on production and import volumes and calculation of the party's RFS obligation. We believe that attest engagements are necessary in order to verify that the underlying data regarding production and import volumes and RFS obligation, as well as the underlying data regarding RIN transactions and use, support the information included in the reports. We agree, however, that examination of representative samples of RIN transaction documents would provide sufficient oversight and that the requirement included in the proposed regulations would be unnecessarily burdensome. As a result, the attest engagement provisions have been modified to require the auditor to examine only representative samples of RIN transaction documents.

In addition to obligated parties and renewable fuel producers and importers, we believe that an attest engagement requirement is necessary for any party who takes ownership of a RIN. As discussed above, attest engagements provide an appropriate and useful tool for verifying the accuracy of the information reported to EPA. Like obligated parties and renewable fuel producers and importers, the final rule requires RIN owners to submit information regarding RIN transaction activity to EPA. We believe that attest engagement audits are necessary to verify the accuracy of the information included in these reports. As a result, the final rule also includes an attest engagement requirement for RIN owners who are not obligated parties or renewable fuel producers or importers. We believe that inclusion of the requirement in the final rule is a logical outgrowth of the proposed attest requirements for other parties who are required to submit similar information regarding RIN transaction activity to EPA.

# 11.5.2 Emission Impacts on State Implementation Plans

#### What Commenters Said:

In its comments, the National Renewable Energy Laboratory (NREL) requested that EPA provide guidance to states that B20 use is unlikely to have a significant impact on air quality and that B20 use should not be restricted based on air quality concerns given the small percent change, the relatively small volumes of biodiesel use that are projected, and the undisputed positive benefits for PM, energy security, and greenhouse gas emission reduction.

In its comments, Griffin Industries requested that EPA make every possible effort to complete the evaluation of biodiesel on NOx emissions being done in conjunction with NREL and the National Biodiesel Board (NBB) and include relevant results in the final RFS regulation because state emission control planners are anticipated to rely upon EPA's numbers.

Griffin Industries and Baker Commodities commented that States are currently preparing emission control plans for the 8-hour ozone standard, thus states may make decisions to restrict renewables based on emissions estimates contained in the final RFS regulation for both biodiesel and ethanol. The commenters requested that EPA clarify the freedom and also the limitations states have to make decisions on ozone control plans for the 8-hour ozone standard. The commenters noted that restrictions on renewables in nonattainment areas would severely damage the RFS program since these are the areas of the country which utilize the largest volumes of renewables in motor fuels. Further, the commenters stated, it would needlessly harm the RFS program if renewable fuels, such as biodiesel or ethanol were banned or restricted by states based on an incomplete analysis of EPA data and conclusions, especially when EPA is currently evaluating newer data, which is more representative of the real emission effects of renewable fuels.

The New York State Department of Environmental Conservation commented that it believes EPA should mitigate any increased emissions due to ethanol use in gasoline. The commenter noted that EPA estimated increases of the emissions of both VOCs and  $NO_x$  as a result of increased ethanol use in gasoline. The commenter stated that it believes that EPA should hold harmless state SIPs from this increase. The commenter further stated that it believes that the maximum Reid vapor pressure (RVP) for conventional gasoline should be reduced to 7.8 in all nonattainment areas not subject to RFG.

BioSelect commented that it encourages EPA to recognize that state air quality implementation plans will not be affected by the RFS.

Letters:

Baker Commodities OAR-2005-0161-0003 through -0006, -0173 Galveston Bay Biodiesel (dba- BioSelect) OAR-2005-0161-0206 Griffin Industries OAR-2005-0161-0189 National Renewable Energy Laboratory (NREL) OAR-2005-0161-0179 New York State Department of Environmental Conservation (NYDEC) OAR-2005-0161-0169

#### Our Response:

EPA recognizes NREL's concerns about the impact of biodiesel on motor vehicle emissions. We agree with NREL that biodiesel has many benefits, including reduced PM emissions and promoting energy independence and security. However, EPA is also aware that the magnitude of biodiesel's effect on  $NO_x$  emissions remains controversial. We believe that significant new testing will be required in order to better estimate the impact of biodiesel on NOx and other exhaust emissions from the in-use fleet of diesel engines. EPA is a participant in the Collaborative Biodiesel Test Program with other industry, public, and governmental stakeholders to carry out such analyses. A report summarizing the results from this program is likely and guidance may also accompany this report, but EPA cannot definitively state what information or conclusions will be expressed in these documents until the testing has been completed.

EPA takes note of Griffin's request that the joint study to evaluate biodiesel  $NO_x$  emissions be included in the RFS final rulemaking. We agree with the commenter that further study on this subject is needed. The Collaborative Biodiesel Test Program, to which Griffin appears to refer, is in the early stages of development and timing will not permit inclusion of this study in the final rule. We have documented previous studies that we and others have conducted in this rule, and state emission control planners should rely on these evaluations.

Regarding the comments from Griffin and Baker about restricting renewable fuel use, EPA believes it is important to differentiate between ethanol and biodiesel in this context. As the commenters note, renewable fuel use is prevalent in nonattainment areas. However, the renewable fuel in use in nonattainment areas is predominantly ethanol, which is blended with reformulated gasoline (RFG). Many fuel suppliers voluntarily transitioned to ethanol, as a preferred alternative to MTBE, for blending with RFG and EPA is not aware of any states taking action to restrict the use of ethanol. Biodiesel use, on the other hand, is still relatively limited and centered in the Great Plains and Midwest where nonattainment areas are not highly concentrated; therefore, State Implementation Plan (SIP) development should not be significantly impacted. A notable exception to this trend is Texas where the use of biodiesel is a part of the SIP in the context of the requirements of the Texas Low Emission Diesel (TXLED) Program. EPA is working with stakeholders and participants in the Collaborative Biodiesel Test Program to determine the impacts of biodiesel on NOx emissions as it pertains to Texas and the nation.

With respect to the comments from NYDEC and BioSelect, the Energy Act requires that certain volumes of renewable fuel be used in the U.S. each year. Based on our analysis, there will most likely be some small emission increases in certain areas as a result of increases in the use of renewable fuels. However, renewable fuels such as ethanol have been used long before the RFS program began, and states have always been responsible for meeting the applicable National Ambient Air Quality Standards (NAAQS) regardless of the unique types and

distribution of fuels in a particular area. The Act provides no authority for EPA to lower the statutorily required volumes of renewable fuel to reduce any potential emission increases, nor does it provide any authority to loosen the NAAQS to accommodate the RFS program. Thus, states remain responsible for meeting the NAAQS.

# 11.5.3 Next Steps/Further Studies

#### What Commenters Said:

The American Coalition for Ethanol (ACE) commented that it believes that RFS implementation workshops, co-hosted by EPA and other stakeholders, would be beneficial; as these workshops could help producers and others to become familiar with the registration, recordkeeping, and reporting requirements that will be inherent with the RFS program. The commenter stated that all stakeholders should have the appropriate time necessary to prepare for the ABT program to apply in the out-years of the program under the collective compliance approach for 2007.

Gary-Williams Energy Corporation (GWEC) commented that it believes that EPA should commit to a revision of the RFS program and/or to promoting other public policy solutions if DoE or other data show that ethanol-blended gasoline is not evenly distributed across the country. The commenter stated that it believes this should include, for example, subsidies or tax credits to the rail, trucking, and barge industries to assist in the construction of the specialized vessels required to transport ethanol.

Baker Commodities and Griffin Industries commented that they support Congressional appropriations, and additional Congressional funding for EPA, for EPA to complete regulatory requirements and implementation of the RFS program. Organic Fuels also commented that it supports an increase in EPA's budget to enable EPA to have the resources to conduct additional renewable fuels emissions testing, as necessary.

Some commenters stated that they believe EPA should coordinate with other federal agencies to implement renewable fuels programs. Specifically, Delta-T commented that it believes that USDA, DOE and EPA need strong coordination so that new technologies developed will rapidly come to fruition and meet the President's goal of 15 billion gallons of renewable fuels by 2012. Also, the Biodiesel Coalition of Texas commented that it believes that EPA should work with other federal agencies to ensure that all states (including Texas) understand the importance of creating a favorable regulatory environment for renewable fuels.

CHS commented that, according to the Energy Policy Act of 2005 (conference report pages 488-499), DOE and EPA must do multiple studies (and most of these are to be performed annually). The commenter stated that it encourages EPA to publish these studies in the Federal Register, and place links on the EPA website to the DOE studies as they become available.

#### Letters: American Coalition for Ethanol (ACE) OAR-2005-0161-0218

Baker Commodities OAR-2005-0161-0003 through -0006, -0173 Biodiesel Coalition of Texas (BCOT) OAR-2005-0161-0186 CHS Inc. OAR-2005-0161-0203 Delta-T Corporation OAR-2005-0161-0196 Gary Williams Energy Corporation (GWEC)OAR-2005-0161-0207 Griffin Industries OAR-2005-0161-0189 Organic Fuels OAR-2005-0161-0190, -0233 (hearing)

#### Our Response:

Regarding the comments on a potential implementation workshop, we welcome the opportunity to take part in such forums and will work with all stakeholders to inform them of the procedures involved in reporting activities and other aspects of the RFS program.

Regarding revisions to the RFS program, and comments supporting additional funding and coordinated federal programs for alternative fuels work, we note that the President (in his January 2007 State of the Union address) set specific goals reducing the amount of gasoline usage in the United States by 20 percent in the next 10 years. Therefore, given the necessity to address the post-2013 period under the Energy Act and the prospect of continued attention by the Administration and Congress to this issue, EPA will continue to devote attention to the issue of renewable and alternative fuel volumes.

We do intend to utilize the EPA web site to share information related to the RFS program (such as reports, guidance documents, and implementation information), the RFS program web site is: <u>http://www.epa.gov/otaq/renewablefuels/index.htm</u>. We also encourage interested stakeholders to visit DOE's Office of Energy Efficiency and Renewable Energy website at: www.eere.energy.gov.

#### 11.5.4 Other

#### What Commenters Said:

A private citizen commented that if alternative fuels do not adequately reduce the dependency on crude oil, electrical energy could make up the difference in some cases. The commenter stated that it believes that the country is close to overloading the current electrical generating capacity, so it could take building more powerhouses to accomplish this and thus create the problem of getting permits required to build powerhouses. The commenter noted that nuclear energy is an option, and stated that it believes that nuclear plants should continue to be constructed unless there are significant flaws in the plans. The commenter further discussed the pros and cons of coal, natural gas, wind, and solar power as possible alternative energy sources. The commenter stated that it hopes that EPA looks at the total picture before the final rule. The commenter questioned whether or not ethanol plants would exist if tax credits and government incentives were removed; noting when tax credits were removed in Louisiana, ethanol plants also went away. The commenter urged EPA to consider that tax credits and other government (state and local) incentives are money coming from taxpayers, and expressed the concern that the cost

of fuel goes up with most alternative fuels. The commenter noted that some biodiesel and possibly ethanol made from manure, etc. may be more economical, but recommended that EPA do an energy balance around the whole system for any alternative fuel (i.e., from the plowing of the ground, planting, cultivating, transporting crops to the ethanol plant, making the ethanol, through distributing the ethanol to the end user).

#### Letters: Private CitizenOAR-2005-0161-0156

#### Our Response:

These comments are outside the scope of this rulemaking. However, we note that in developing the final rule, we did take a comprehensive look at various aspects of renewable fuels. We note that the cost to regulated entities as a result of any regulatory program is separate from the price that a consumer later pays; the cost associated with a regulation is one of many factors that influences price. Please see chapter 7 of the final RIA to this rulemaking for a discussion on the costs of the rule for regulated entities.