RESPONSE TO HOUSE ENERGY & COMMERCE: **BLEND WALL**

April 2013

The Clean Air Task Force is a non-profit environmental organization that works to protect the earth's atmosphere by improving air quality and reducing global climate change through scientific research, public advocacy, technological innovation, and private sector collaboration. CATF appreciates the opportunity to provide this response to the Energy and Commerce Committee's inquiry about the blend wall and the complications caused by the Renewable Fuel Standard.

This response focuses specifically on the following question posed by the Committee:

> Can blend wall implementation challenges be avoided without changes to the RFS? Is the existing EPA waiver process sufficient to address any concerns? If the RFS must be changed to avoid the blend wall, what should these changes entail? Should any changes include liability relief or additional consumer protections for addressing misfueling concerns?

EPA's Capacity to Address the Blend Wall

The first part of the Committee's question ("Can blend wall implementation challenges be avoided without changes to the RFS?") is timely because EPA is currently engaged in a rulemaking process could be used to substantially alleviate the blend wall problem. As long as cellulosic biofuel production falls short of the goals that Congress set in 2007, EPA must make annual adjustments to the RFS cellulosic volume mandate. (The Agency is currently proposing to shrink the 2013 requirement from 1 billion gallons to 14 million gallons.) Congress gave EPA the authority to make corresponding reductions to the overarching annual volume requirements for "advanced biofuels" (mainly sugarcane ethanol and soy biodiesel) and conventional "renewable fuel" (mainly corn ethanol).[1] So far, though, the Agency has declined to make corresponding reductions, opting instead to allow extra production of "advanced biofuels" like sugarcane ethanol and biodiesel to make up for the missing cellulosic fuels.

In 2013, the RFS cellulosic biofuel target will exceed actual production levels by about a billion gallons; by 2022 the gap will grow to more than 10 billion gallons as rapidly expanding RFS targets outpace the slow ramp-up in cellulosic capacity. If EPA continues to allow non-cellulosic "advanced biofuels" to fill the cellulosic gap, the resulting demand will overwhelm the sustainably producible supplies of both sugarcane ethanol and biodiesel

[1] CAA §211(o)(7)(D)(i).

and kick off a new parade of horribles. A study by the Organization for Economic Cooperation and Development and the international Food and Agriculture Organization found that this new RFS-driven demand for sugarcane would lead Brazilian producers to export much of their product to the United States. With their homegrown ethanol being shipped north, Brazilians will meet their own national biofuel requirements by importing corn ethanol from the US. The inflated US demand for "advanced biofuels" would thus drive additional production of Brazilian sugarcane ethanol and, ironically, US corn ethanol – perhaps the least "advanced" biofuel of all.

Meanwhile, the new demand for biodiesel (the other subset of non-cellulosic biofuel that the RFS defines as "advanced") would divert soybeans and other oilseeds from food markets to the fuel market. Much of the resulting unmet demand for vegetable oil will be filled by palm oil produced at plantations in Indonesia and Malaysia that have displaced indigenous people, erased critical wildlife habitat, and accelerated global warming by transferring millions of tons of plant- and soil-carbon into the atmosphere.

EPA can, and must, avoid these problems by making corresponding reductions to the annual volume requirements for advanced biofuels and total renewable fuels. Fortunately, by doing so, EPA would significantly postpone the blend wall problem.

In our recently submitted[2] comments on EPA's proposed 2013 volume requirements rule, the Clean Air Task Force made the following points about the blend wall:

> **Volume Adjustments and the Blend Wall**
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> **A. The Blend Wall Creates Compliance Difficulty**
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> In the proposed rule, EPA "request[s] comment on whether the blendwall presents any difficulty in terms of compliance with the RFS volume requirement in 2013." 78 Fed Reg. at 9301/2. The answer is yes, but EPA can begin addressing that difficulty by making corresponding reductions to the advanced biofuel and total renewable fuel volume requirements when it adjusts the cellulosic biofuel requirement.
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> In a recently issued white paper, the House of Representatives Committee on Energy and Commerce referred to the blend wall, or "the limit at which ethanol can be readily added to the gasoline supply in order to comply with the RFS," as "[c]hief among the challenges posed by the RFS." EPA has determined that gasoline containing 15 percent ethanol, known as E15, can be safely used in model year 2001 and newer cars. The Agency ruled out the use of E15 in cars built before 2001, however. Automakers have warned that the use of E15 could

[2] CATF's April 5, 2013 comments can be found at http://www.catf.us/resources/filings/biofuels/

void warranties, and gasoline retailers have been reluctant to sell the blend due to concerns about the likelihood of misfueling, the possibility that they could be held liable for engine damage, and the cost of installing specialized tanks and pumps.

Because many of the cars driven in the United States have not been cleared to use gasoline that contains more than 10 percent ethanol, the blend wall is effectively 10 percent and, according to the Energy and Commerce white paper, "approaching must faster than anticipated." If the RFS continues to push more ethanol into the US market each year, more US cars will have to begin using E15 or higher blends like E85. Otherwise, writes the Committee, "the evidence suggests that it will not be possible for the nation as a whole to remain in compliance with the targets in the RFS."

Early evidence of the blend wall's impact on RFS compliance can be found in the market for RINs. The price of RINs has jumped dramatically in recent months, "zooming from a penny a gallon in December to more than $1 in March," reports Reuters.[3] According to a market analyst quoted in a recent *Platts* article, "the real issue [behind the spike] is that you have obligated parties looking forward to 2014, where even with a carryover, it is unlikely that there will be enough D6 RINs available to meet the anticipated 14.4 billion gallon requirement at an E10 blend ratio."[4] Concerns about compliance in 2014 and beyond are negatively affecting the current RIN market and, as a result, complicating compliance in 2013.[5]

Accordingly, the answer to the question raised by EPA – "whether the blendwall presents any difficulty in terms of compliance with the RFS" – is yes: the blend wall is making compliance with the RFS more difficult. The difficulties will be less acute in 2013 than in subsequent years, but EPA can and should begin mitigating current and future problems by taking appropriate steps when it sets the volume requirements for this year.

[3] "Key US senator blames speculators for high ethanol RIN price," REUTERS. March 27, 2013 (http://www.reuters.com/article/2013/03/27/usa-congress-ethanol-idUSL2N0CJ0QY20130327)
[4] Gary Gentile, Shameek Ghosh, and Beth Evans, "Skyrocketing RIN prices signal ethanol blend wall imminent," PLATTS. March 5, 2013 (http://www.platts.com/RSSFeedDetailedNews/RSSFeed/Oil/6229745)
[5] The discussion about whether the surge in RIN prices is caused by "speculation" is beside the point; the RINs are being bought in response to blend wall-related concerns.

B. Blend Wall Difficulties Are Another Reason Not to Backfill the Cellulosic Void

EPA can postpone or even avoid a collision with the blend wall by making corresponding reductions to the advanced biofuel and total renewable fuel volumes when it adjusts the cellulosic requirement. Doing so will create additional time that can be used by EPA and other stakeholders to more effectively address the substantial concerns about E15 and other high-ethanol blends.

The cellulosic void will grow quickly over the next decade. If EPA addresses the void by reducing the advanced biofuel and total renewable fuel volume requirements by the same amount that it reduces the cellulosic volume requirement each year, it can substantially alleviate the pressure created by the blend wall. According to OECD and FAO, an RFS implementation strategy that makes corresponding reductions to the advanced and total renewable volume requirements would "lead[] to lower percentages of ethanol blended into the regular gasoline: the blend wall is not achieved in any year of the projection period and consequently there is no need to expand the fleet of flex-fuel vehicles."[6] In contrast, allowing advanced biofuel to backfill the cellulosic void would increase ethanol use 40% by 2021; ethanol blending would "reach the assumed blend wall limit from 2014 onward."[7]

Allowing advanced biofuels to backfill the cellulosic void, as EPA has done in previous years and proposes to do in 2013, will strain the global agricultural sector in ways that will result in higher food prices and higher net GHG emissions. EPA's proposed approach will also complicate RFS compliance and actualize many of the challenges associated with E15 and other high-ethanol blends. Consequently, the blend wall and its related complications is one more reason why EPA should not allow non-cellulosic advanced biofuels to backfill the cellulosic void.

It is worth reemphasizing the following points from the analysis by OECD and FAO:

- An RFS implementation strategy that makes corresponding reductions to the advanced and total renewable volume requirements would "lead[] to lower percentages of ethanol blended into the regular gasoline: the blend wall is not achieved in any year of the projection period and consequently there is no need to expand the fleet of flex-fuel vehicles."
- Allowing advanced biofuel to backfill the cellulosic void would increase ethanol use 40% by 2021; ethanol blending would "reach the assumed blend wall limit from

[6] OECD-FAO, *Agricultural Outlook 2012-2021* 98 (2012).
[7] *Id*.

2014 onward."

The OECD-FAO analysis is presented in Chapter 3 of *Agricultural Outlook 2012-2021*, which is attached to this response.

EPA's Willingness to Address the Blend Wall

EPA will help answer the second part of the Committee's question ("Is the existing EPA waiver process sufficient to address any concerns?") when it announces its final volume requirements for 2013.

If EPA makes corresponding reductions to the annual volume requirements for "advanced" and conventional biofuels when it reduces this year's cellulosic target, the Agency can alleviate some of the pressure on food prices and the environment. Keeping RFS-related demand for sugarcane ethanol and biodiesels in check would prevent concomitant increases in corn ethanol and palm oil production. And, most relevant to this inquiry, it would postpone the "blend wall" problem by effectively limiting the proportion of ethanol in gasoline to around 10 percent nationally.

If instead EPA declines to make reductions to the 2013 volume requirements for advanced biofuels and total renewable fuels and/or it fails to signal its intent to do in subsequent years, the authority that Congress granted to EPA to make such reductions[8] should be viewed as functionally insufficient to address concerns related to the blend wall.

"If the RFS must be changed to avoid the blend wall…"

The Committee asks, "If the RFS must be changed to avoid the blend wall, what should these changes entail?" Congress could change Section 211(o)(7)(D)(i) of the Clean Air Act by replacing the term "may" with the term "shall" and deleting the phrase "or a lesser". The revisions are shown below:

(i) For any calendar year for which the projected volume of cellulosic biofuel production is less than the minimum applicable volume established under paragraph (2)(B), as determined by the Administrator based on the estimate provided under paragraph (3)(A), not later than November 30 of the preceding calendar year, the Administrator shall reduce the applicable volume of cellulosic biofuel required under paragraph (2)(B) to the projected volume available during that calendar year. For any calendar year in which the Administrator makes such a reduction, the Administrator ~~may~~ **shall** also reduce the applicable volume of renewable fuel and advanced biofuels requirement established under paragraph (2)(B) by the same ~~or a lesser~~ volume.

[8] CAA §211(o)(7)(D)(i).