

## Policy Update: EPA Issues New Rules Requiring Renewable Fuels to Meet Greenhouse Gas Emissions Performance Standards

On February 3, 2010, the Environmental Protection Agency (EPA) finalized long-awaited regulations implementing amendments to the Renewable Fuel Standard Program (RFS2) made by Congress through the Energy Independence and Security Act of 2007 (EISA). RFS2 imposes a major increase in the overall renewable fuel mandate; adds greenhouse gas (GHG) emission thresholds to the definition of various categories of renewable fuels; establishes volumetric requirements for different subcategories of biofuels; and creates a new definition of “renewable biomass” that determines feedstock eligibility.

In the final rule, EPA made substantive changes to the proposed rule (which is discussed in a prior Policy Update from May 9, 2009, “EPA Issues Proposed Renewable Fuels Standard Implementing Regulations; Administration Makes Stimulus Funds Available for Biofuels”), updating the lifecycle emissions profile of ethanol from corn starch, allowing certain types of corn starch ethanol to qualify for RFS2, reducing the 2010 requirement for cellulosic biofuel, specifying additional compliance procedures, and clarifying the eligibility of certain feedstocks.

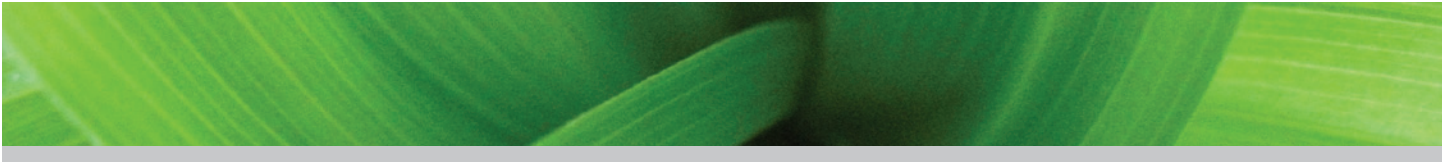
### LIFECYCLE GHG THRESHOLDS

Under the RFS2 program, a qualifying renewable fuel will not be eligible unless that fuel’s lifecycle GHG emissions are a certain percentage less than the 2005 baseline average of the gasoline or diesel fuel that it replaces, as specified in the following table.

Lifecycle GHG Thresholds Specified in EISA	
(Percent reduction from 2005 baseline)	
Renewable fuel	20%
Advanced biofuel	50%
Biomass-based diesel	50%
Cellulosic biofuel	60%

### *Some Corn Starch Ethanol Will Qualify*

In a notable change from its proposed rule, EPA revised its “fuel pathways” analysis so that conventional corn starch ethanol produced at efficient facilities using natural gas, biomass or biogas for process energy, as well as biobutanol from corn starch, *will* meet the 20% GHG emission reduction threshold. The original model for corn ethanol’s fuel pathway resulted in considerably higher GHG lifecycle emissions, based primarily on the presumed impact of indirect international land use changes that would have excluded the most prominent domestic biofuel feedstock from eligibility. For the final rule, EPA updated its modeling and assumptions, resulting in a qualifying fuel pathway for corn ethanol.



The lifecycle emissions estimate for soybean-based biodiesel was also lowered from the original rule, thus making more soy-based fuel eligible in 2010. EPA also found that biodiesel and renewable diesel produced from algal oils or sugarcane comply with the 50% GHG reduction threshold for advanced biofuels.

### CELLULOSIC BIOFUEL TARGET FOR 2010 SCALED BACK DRAMATICALLY

EPA originally proposed that a standard of 100 million gallons of cellulosic biofuels could be met in 2010. But in light of the number of cellulosic biofuel projects that have been “put on hold, delayed, or scaled back,” EPA determined that this target could no longer be met and reduced the 2010 target by over 93% to the “reasonable and achievable” target of 5 million gallons (6.5 million ethanol-equivalent gallons). While this is lower than the level prescribed by EISA, EPA asserts that the larger overall requirement for advanced biofuels, of which cellulosic biofuels are just one subcategory, can still be met in 2010, through a projected increase in biomass-based biodiesel production.

For obligated parties that cannot meet their 2010 cellulosic biofuel Renewable Volume Obligation (RVO) with cellulosic biofuel Renewable Identification Numbers (RINs, the serial code based RFS compliance mechanism), EPA will offer “Cellulosic Biofuel Waiver Credits” for sale to obligated parties in 2010 at \$1.56 per gallon. This price is based on the statutory formula in EISA that waiver credits must be offered at the price of the higher of 25 cents per gallon or the amount by which \$3.00 per gallon exceeds the average wholesale price of a gallon of gasoline in the United States.

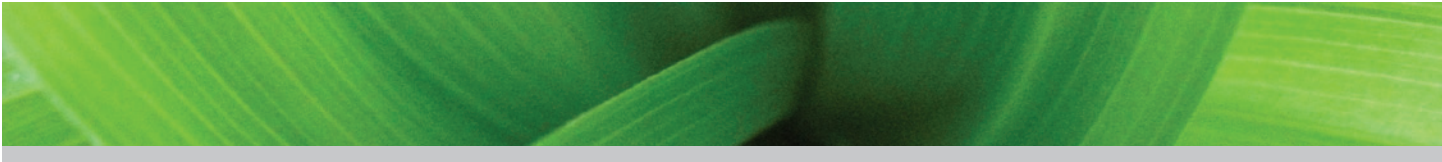
EPA placed a number of restrictions on the use Cellulosic Biofuel Waiver Credits. The waiver credits will only be available for purchase if, at the annual compliance demonstration before EPA, the obligated party establishes that it owns insufficient cellulosic biofuel RINs to meet its cellulosic biofuel RVO. Obligated parties must apply all their cellulosic biofuel RINs to their cellulosic biofuel RVO before applying any waiver credits to their cellulosic biofuel RVO. These waiver credits cannot be used to meet RVOs for other fuel types. These waiver credits will also be nontransferable and nonrefundable. Unlike RINs, obligated parties will not be able to carry waiver credits over to the next calendar year, nor can these credits be used to meet a prior year deficit obligation.

The exact procedures for waiver credit sales and purchases have yet to be established by EPA, but will be before the end of the first annual compliance period in 2010.

### NEW DEFINITIONS DETERMINE ELIGIBILITY OF VARIOUS FEEDSTOCKS

In response to EISA’s requirement that “renewable fuel” be made from “renewable biomass,” EPA codified into RFS2 regulations the types of biomass that qualify as renewable, as well as the types of land from which such biomass may be harvested. “Renewable biomass” was defined by the statute and codified in the final rule to include:

- Planted crops and crop residue from agricultural land cleared prior to December 19, 2007 and actively managed or fallow on that date;
- Planted trees and tree residue from tree plantations cleared prior to December 19, 2007 and actively managed on that date;

- 
- Animal waste material and byproducts;
  - Slash and pre-commercial thinnings from non-federal forestlands that are neither old-growth nor listed as critically imperiled or rare by a State Natural Heritage program;
  - Biomass cleared from the vicinity of buildings and other areas at risk of wildfire;
  - Algae; and
  - Separated yard waste and food waste.

### *Eligibility of Municipal Solid Waste*

EPA notes that biofuels derived from municipal solid waste (MSW) will only qualify as renewable biomass if they are derived from “separated yard waste or food waste” that remain as biogenic residue “after reasonably practicable efforts to remove recyclable materials...(including paper, cardboard, plastic, textiles, metal and glass).”

### *Types of Agricultural Lands on which Qualifying Energy Crops Can Be Grown*

EPA clarified the meaning of the term “agricultural land”—land from which “crops and crop residue” can be harvested for RIN-generating renewable fuel production—to include cropland, pastureland, and land enrolled in the U.S. Department of Agriculture’s Conservation Reserve Program. Rangeland, however, was excluded by EPA for a variety of primarily environmental reasons, such as the risk of “large releases of GHG stored in the soil” that might occur upon conversion of rangeland.

### *Broader Range of Tree Plantations Eligible*

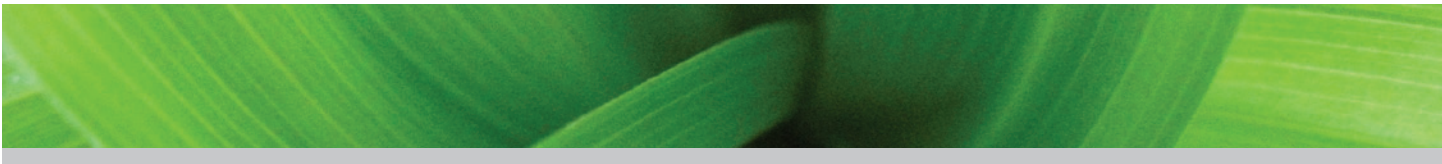
EPA modified its proposed definition of “tree plantation,” by removing the limitations on the number and species of trees. To qualify as eligible land for planted tree renewable biomass, a tree plantation needs to have been cleared prior to December 19, 2007 and actively managed on that date, and include one acre or more of land primarily composed of trees “established by hand- or machine planting of a seed or sapling, or by coppice growth from the stump or root of a tree that was hand- or machine-planted.”

## **EFFECTIVE DATE AND 2010 COMPLIANCE**

The final rule will take effect on July 1, 2010. Compliance with the annual volume requirements will continue to be based on a calendar year; therefore, renewable fuel volume requirements will be calculated based on all gasoline and diesel produced and imported between January 1, 2010 and December 31, 2010. Obligated parties are required to demonstrate compliance in February 2011. For biomass-based diesel, a blended compliance year has been established, meaning that RINs from 2009 and 2010 can be used to meet the combined mandate of 1.15 billion gallons.

## **MEETING VOLUME MANDATES**

Annual RVOs for various categories of fuels will be dictated by the four volume mandates under RFS2 and the volume of gasoline or diesel a refiner or importer has produced during that year. By February 28, 2011, obligated parties will be required to demonstrate to EPA that they have obtained sufficient RIN credits to satisfy their 2010 RVOs.



## VERIFYING VALIDITY OF RINS, ELIGIBILITY OF RENEWABLE BIOMASS FEEDSTOCKS

RINs are the framework for ensuring that the statutorily required volumes of renewable fuel are used as transportation fuel in the U.S. RINs are only to be generated for fuels made from feedstocks that meet the definition of renewable biomass, and thus qualify under RFS2. Certain provisions governing RINs remain as they did under RFS-1—namely, the distribution of RINs, separation of RINs, use of RINs to demonstrate compliance, provisions for exporters, recordkeeping and reporting, deficit carryovers, and the valid life of RINs.

Finally, EPA requires renewable fuel producers to comply with one of three new mechanisms for verifying that their feedstocks meet the definition of qualifying renewable biomass: individual recordkeeping and reporting, participation in a third-party consortium that conducts annual, EPA-approved quality surveys, and an aggregate compliance mechanism using USDA's publicly available agricultural land data as the basis for determining compliance.

### FOR ADDITIONAL INFORMATION

Van Ness Feldman has assisted clients throughout the Renewable Fuel Standard rulemaking process, and provides advice to various biofuels companies and associations on a wide range of issues. The firm closely monitors congressional and executive branch developments on climate change and energy policy, and is in a strong position to provide expert analysis and advice on emerging legislation and regulatory activity, the surrounding policy and political debate, and the implications for your organization. If you would like more information, please contact Curt Rich, head of the VNF Policy Practice at (202) 298-1886 or [jcr@vnf.com](mailto:jcr@vnf.com).

---

© 2010 Van Ness Feldman, P.C. All Rights Reserved. This document has been prepared by Van Ness Feldman for informational purposes only and is not a legal opinion, does not provide legal advice for any purpose, and neither creates nor constitutes evidence of an attorney-client relationship.