New York Times, January 9, 2012

A Fine for Not Using a Biofuel That Doesn't Exist

By MATTHEW L. WALD

WASHINGTON — When the companies that supply motor fuel close the books on 2011, they will pay about $6.8 million in penalties to the Treasury because they failed to mix a special type of biofuel into their gasoline and diesel as required by law.

But there was none to be had. Outside a handful of laboratories and workshops, the ingredient, cellulosic biofuel, does not exist.

In 2012, the oil companies expect to pay even higher penalties for failing to blend in the fuel, which is made from wood chips or the inedible parts of plants like corncobs. Refiners were required to blend 6.6 million gallons into gasoline and diesel in 2011 and face a quota of 8.65 million gallons this year.

"It belies logic," Charles T. Drevna, the president of the National Petrochemicals and Refiners Association, said of the 2011 quota. And raising the quota for 2012 when there is no production makes even less sense, he said.

Penalizing the fuel suppliers demonstrates what happens when the federal government really, really wants something that technology is not ready to provide. In fact, while it may seem harsh that the Environmental Protection Agency is penalizing them for failing to do the impossible, the agency is being lenient by the standards of the law, the 2007 Energy Independence and Security Act.

The law, aimed at reducing the nation's greenhouse gas emissions, its reliance on oil imported from hostile places and the export of dollars to pay for it, includes provisions to increase the efficiency of vehicles as well as incorporate renewable energy sources into gasoline and diesel.

It requires the use of three alternative fuels: car and truck fuel made from cellulose, diesel fuel made from biomass and fuel made from biological materials but with a 50 percent reduction in greenhouse gases. Only the cellulosic fuel is commercially unavailable. As for meeting the quotas in the other categories, the refiners will not close their books until February and are not sure what will happen.

The goal set by the law for vehicle fuel from cellulose was 250 million gallons for 2011 and 500 million gallons for 2012. (These are small numbers relative to the American fuel market; the E.P.A. estimates that gasoline sales in 2012 will amount to about 135 billion gallons, and highway diesel, about 51 billion gallons.)

Even advocates of renewable fuel acknowledge that the refiners are at least partly correct in complaining about the penalties.

"From a taxpayer/consumer standpoint, it doesn't seem to make a lot of sense that we would require blenders to pay fines or fees or whatever for stuff that literally isn't available," said Dennis V. McGinn, a retired vice admiral who serves on the American Council on Renewable Energy.

The standards for cellulosic fuel are part of an overall goal of having 36 billion gallons of biofuels incorporated annually by 2022. But substantial technical progress would be needed to meet that — and lately it has been hard to come by.

Michael J. McAdams, executive director of the Advanced Biofuels Association, said the state of the technology for turning biological material like wood chips or nonfood plants straight into hydrocarbons — instead of relying on conversion by nature over millions of years, which is how crude oil originates — was advancing but was not yet ready for commercial introduction.

Of the technologies that are being tried out, he added, "There are some that are closer to the beaker and some that are closer to the barrel."

The Texas renewable fuels company KiOR, for example, has broken ground on a plant in Columbus, Miss., that plans to start turning Southern yellow pine chips into gasoline and diesel components in the fourth quarter of 2012 at an annual rate of 11 million gallons, although Matthew Hargarten, a spokesman, said the quantity to be produced this year might be adjusted.

Mr. McGinn of the council on renewable energy, defends the overall energy statute. Even if the standards for 2011 and 2012 are not met, he said, "I am absolutely convinced from a national security perspective and an economic perspective that the renewable fuel standard, writ large, is the right thing to do." With oil insecurity and climate change related to greenhouse gas emissions as worrisome as ever, advocates say, there is strong reason to press forward.

The oil industry does not agree.

Mr. Drevna of the refiners association argued that in contrast to 2007, when Congress passed the law, "all of a sudden we're starting to find tremendous resources of our own, oil and natural gas, here in the United States, because of fracking," referring to a drilling process that involves injecting chemicals and water into underground rock to release gas and oil.

What is more, the industry expects the 1,700-mile Keystone Pipeline, which would run from oil sands deposits in Canada to the Gulf Coast, to provide more fuel for refineries, he said.

But Cathy Milbourn, an E.P.A. spokeswoman, said that her agency still believed that the 8.65-million-gallon quota for cellulosic ethanol for 2012 was "reasonably attainable." By setting a quota, she added, "we avoid a situation where real cellulosic biofuel production exceeds the mandated volume," which would weaken demand.

The underlying problem is that Congress legislated changes that laboratories and factories have not succeeded in producing. This is not for want of trying, and efforts continue.

One possible early source is the energy company Poet, a large producer of ethanol from corn kernels. The company is doing early work now on a site in Emmetsburg, Iowa, that is supposed to produce up to 25 million gallons a year of fuel alcohol beginning in 2013 from corn cobs.

And Mascoma, a company partly owned by General Motors, announced last month that it would get up to $80 million from the Energy Department to help build a plant in Kinross, Mich., that is supposed to make fuel alcohol from wood waste. Valero Energy, the oil company, and the State of Michigan are also providing funds.

Yet other cellulosic fuel efforts have faltered. A year ago, after it was offered more than $150 million in government grants, Range Fuels closed a commercial factory in Soperton, Ga., where pine chips were to be turned into fuel alcohols, because it ran into technological problems.

Airlines have had marginally more success with renewable fuels, but mostly because they have been willing to pay huge sums for sample quantities. Alaska Airlines said recently it had paid $17 a gallon. Lufthansa plans to fly a Boeing 747 from Frankfurt to Dulles International Airport near Washington using 40 tons of a biofuel mix.

New York Times, January 31, 2013

Trying Again on Celluosic Biofuels

By MATTHEW L. WALD

The Environmental Protection Agency said on Thursday that commercial production of cellulosic fuels would start this year (even though it said the same thing last year and in 2011 and was proved wrong). And it proposed to require that refiners use 11 million gallons of the material this year.

The agency also proposed a system to cut down on fraud in the renewable fuels system and to allow the victims, mainly the refiners, to avoid penalties in some cases.

The proposal comes a week after the United States Court of Appeals for the District of Columbia ruled that when the E.P.A. set a quota of 8.65 million gallons for last year, it improperly allowed its policy goal — getting such fuels to market — to cloud its projection of how much would be commercially available. (None was.) The proposed new rule, on which the agency will seek public comment for 45 days, also sets standards for bio-diesel and other advanced biofuels. It drew predictable responses.

Michael McAdams, president of the Advanced Biofuels Association, said the rule would "help bring additional investment into advance biofuels because it builds the marketplace and supports increased production by the industry."

The American Petroleum Institute meanwhile called the mandate a "stealth tax" on gasoline. "The court recognized the absurdity of fining companies for failing to use a nonexistent biofuel," said Bob Greco, director of the institute's group that focuses on refining and retailing. ""But E.P.A. wants to nearly double the mandate for the fuel in 2013.''

The quotas for various biofuels are managed through a system of "renewable identification numbers." Refiners that are obligated to use the fuel do not have to actually take possession of the physical gallons; they need only purchase the certificates that are generated when the fuel is made.

The problem is that in several high-profile cases, operators gamed the system by simply selling the certificates when they were not really making the fuel. The buyers were hit with penalties for having bought and submitted fake credits, and as a result, have been trying to audit the producers to make sure the credits are real. Generally they have been avoiding small producers because the effort is too great to be worth it.

The E.P.A.'s new proposal would create a "voluntary quality assurance program" that independent third parties would use to audit producers. Buyers who got their credits from a producer under such a program would be protected against fines if the credits turned out to be bogus, and in some cases they would not have to replace the fake credits with real ones.

Celluosic biofuels are made from cellulose, meaning trees, the nonedible portion of food crops or even waste paper and similar materials. Several companies have made strides toward commercial production but have not yet gotten there.