

EPA Issues Supplemental Final Rule for New Qualifying Renewable Fuels under the RFS Program

The Environmental Protection Agency (EPA) is issuing a supplemental final rule associated with the Renewable Fuel Standard (RFS) program. This rule contains a lifecycle greenhouse gas (GHG) analysis for renewable fuels made from giant reed (*Arundo donax*) and napier grass (*Pennisetum purpureum*), and a regulatory determination that such fuels qualify as cellulosic renewable fuel under the RFS program. EPA is addressing concerns over the potential for these feedstocks to behave as invasive species by adopting a set of new registration, recordkeeping, and reporting requirements that apply only to fuels produced under these pathways.

Background

In the March 2010 RFS final rule, EPA assessed the lifecycle GHG emissions of multiple renewable fuel pathways (defined as feedstock, fuel type, and fuel production process). Assessment of lifecycle GHG emissions is necessary to determine which fuel pathways meet the GHG reduction thresholds for the four required renewable fuel categories specified in the Energy Independence and Security Act of 2007 (EISA), which made revisions to the RFS program. EISA requires a 20% reduction in lifecycle GHG emissions for renewable fuel produced at new facilities (those constructed after enactment), a 50% reduction for biomass-based diesel or advanced biofuel, and a 60% reduction for cellulosic biofuel.

Assessing whether a fuel pathway meets these thresholds requires a comprehensive evaluation of the lifecycle GHG emissions of the renewable fuel as compared to the lifecycle GHG emissions of the gasoline or diesel fuel that it replaces.

Although EPA included lifecycle GHG assessments for a number of fuel pathways in the final RFS rule, EPA recognized at the time that new pathways would require assessment in the future. EPA established a petition process to handle such situations

and provide a mechanism by which new pathways could be evaluated. This mechanism allows parties to request that EPA conduct a lifecycle GHG assessment for a new fuel pathway and provide a determination of the RFS fuel category for which the new pathway may be eligible. In response to requests we received through the petition process, this supplemental final rule adds determinations for new feedstock and process technology pathways to the regulations.

Our Analysis

In order to calculate lifecycle GHG emissions for this final rule, EPA utilized models developed for the 2010 RFS final rule. These models take into account energy and emissions inputs for fuel and feedstock production, distribution, and use, as well as economic models that predict changes in agricultural markets. Our analysis of lifecycle GHG emissions associated with renewable fuels produced from giant reed and napier grass found that they met the statutory lifecycle GHG emissions reduction requirement for cellulosic biofuels (60 percent below the baseline gasoline/diesel level).

Rulemaking Process

EPA published a direct final rule (77 FR 700) and a parallel proposed rule on January 5, 2012 (77 FR 462) to amend the RFS regulations (Table 1 of § 80.1426) by identifying the additional renewable fuel production pathways and pathway components described above. EPA subsequently received adverse comment on certain aspects of the direct final rule and on March 5, 2012, EPA withdrew the direct final rule (77 FR 13009). Comments on that proposed rule focused on the potential for giant reed and napier grass to behave as invasive species. On March 5, 2013, EPA finalized many of the provisions included in the proposed rule (78 FR 14190). In that action, EPA did not take action on our analysis related to giant reed and napier grass, and instead stated that we would continue to consider the issues that were raised in comments.

In this supplemental final rule, EPA has determined that renewable fuel made from napier grass and giant reed meet the GHG reduction requirements for cellulosic biofuel under the requirements of the RFS program. In response to comments on the proposal concerning the risk of these crops behaving as invasive species and requiring remediation activities that may cause additional GHG emissions, EPA is adopting additional registration, recordkeeping, and reporting requirements to minimize this risk. For example, EPA is requiring that renewable fuel producers demonstrate that the growth of giant reed or napier grass will not pose a significant likelihood of spreading beyond the planting area or that such a risk will be minimized through an EPA-approved Risk Mitigation Plan (RMP). The RMP will include plans for early detection and rapid response to potential spread, best management practices as modeled by existing state and federal invasive species management programs, continuous monitoring and reporting of site conditions, a plan for site closure and post-closure monitoring, and identification of a third party auditor who will evaluate the performance of the RMP on an ongoing annual basis.

For More Information

For more information, please visit the RFS website at:

www.epa.gov/otaq/fuels/renewablefuels/regulations.htm

To submit a question on the RFS program, and to view Frequently Asked Questions, please visit:

www.epa.gov/otaq/fuels/renewablefuels/compliancehelp/index.htm