

Policy Pennings by Daryll E. Ray & Harwood D. Schaffer

USDA to prepare carbon measurement and management guidelines

In the February 18, 2011 issue of the Federal Register, the United States Department of Agriculture (USDA) published a "notice of project undertaken to develop technical guidelines and scientific methods for quantifying greenhouse gas (GHG) emissions and carbon sequestration at the practice-, process-, farm- and entity-scales." Readers can access the notice at <http://edocket.access.gpo.gov/2011/2011-3731.htm>.

The project is being undertaken in response to a provision of the 2008 Farm Bill that says the "USDA shall prepare technical guidelines that outline science-based methods to measure the carbon benefits from conservation and land management activities." The "USDA anticipates that the methods will be used by farmers and by [the] USDA to improve management practices and to identify actions to reduce greenhouse gas emissions and increase carbon sequestration."

It is expected that "the guidelines and methods could be used by farmers, ranchers, and forest owners to facilitate their participation in voluntary State and regional systems. In order to make the guidelines and methods most useful to a broad audience, a Web-based, user-friendly tool will be developed following the drafting of the guidelines and methods."

Interested parties need to respond to the notice by 11:59 p.m. Eastern Time on April 19, 2011. Those responding to the USDA notice need to respond to the numbered topics that are included in the supplementary information section of the notice. "Specifically, USDA requests comments on:

"How may USDA best improve upon existing greenhouse gas estimation guidelines for the agriculture and forestry sectors, while at the same time simplifying input requirements and enhancing the ease of use for individuals and entities?"

"USDA intends to develop a standard set of methods for practice-, process-, farm- and entity-scale inventories which could provide a technical basis for improved methods for current voluntary State and regional systems. Are there specific areas where a USDA guideline would be most useful to current State and regional systems? Are there limitations to using the proposed quantification tools in the context of State and regional systems?"

"Objectives. The guidelines will result in a methodology for an integrated emissions inventory

at the entity scale for all agricultural (crop and livestock) and forest management activities, including (but not limited to) those listed" in numbered sections dealing with cropland agriculture, animal agriculture, and forests and afforestation, plus a series of questions.

With regard to crop agriculture the USDA will be examining "crop, residue and soil management practices and technologies to increase carbon sequestration and reduce nitrous oxide emissions on mineral and cultivated wetland soils, including tillage systems, crop rotations, nutrient management, fertilizer technologies, liming, water management, cover crops, agroforestry, wetland restoration, residue removal and alternatives to biomass burning." Because rice production is responsible for methane production that is released into the atmosphere, the USDA wants to identify "rice cultivation practices and technologies to reduce methane emissions, including improved water table management, cultivation and fertilizer management."

When it comes to animal agriculture, the USDA will be focused on looking for "management practices and technologies to reduce methane emissions from enteric fermentation, including dietary modification, additives, feeding management, and reproductive management (genetic selection, gender differences, etc.)" as well as "grazing land management practices and technologies to increase carbon sequestration and reduce nitrous oxide emissions, including rotational grazing and improved forage management." They will also look at "manure management practices and technologies to reduce methane and nitrous oxide emissions, including digesters, lagoon management, land application practices, and composting."

They are asking respondents to identify if there are "additional grazing land and animal agriculture activities, management practices or technologies to be accounted for to enhance completeness and comprehensiveness of the guidelines, estimation and reporting tools?"

The USDA recognizes that "afforestation practices and technologies...increase carbon sequestration." Some of the things they are looking at in this area are "agroforestry practices and technolo-

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gies to increase carbon sequestration through windbreaks, riparian buffers and silvopasture."

Overall they are asking respondents if "there [are] opportunities to reduce GHG emissions and increase carbon sequestration in the agriculture and forestry sectors that should be reflected in the methods."

In developing their guidelines and models they have identified a set of criteria that they will use: transparency, consistency, completeness, accuracy, cost effectiveness, and ease of use. They then ask "are these appropriate criteria by which to formulate GHG estimation and reporting guidelines, methods and tools? Are there other criteria that should also be considered?"

The USDA is looking for public input on these

issues. To make sure that their input is taken into consideration, it is important that respondents go to the Federal Register website (above) and read the full notice, using section number designations to categorize their comments. The timeline for response is 60 days from the publication in the Federal register so all responses will have to be submitted by the deadline date. Details on how to submit comments are included in the Federal Register notice.

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