

Regenerative Biofuel Feedstock Rule:

Nutrient Management



Overview

USDA's Regenerative Biofuel Feedstock Rule establishes a framework to connect regenerative agriculture practices to new markets within the biofuel supply chain for corn, soybeans, sorghum, and spring canola. These standards include:

- ◆ Covered biofuel feedstock crops and participating entities throughout the supply chain;
- ◆ Field-level quantification of crop-specific carbon intensity;
- ◆ Mass balance chain-of-custody standards, including traceability and record keeping;
- ◆ Auditing and verification requirements; and
- ◆ Regenerative agriculture practice standards for covered feedstock crops.

About the Practice

- ◆ All farms using USDA Feedstock Carbon Intensity Calculator (USDA FD-CIC) to generate a reduced Carbon Intensity score for their feedstock crop must follow the nutrient management standards.
- ◆ Nutrient Budget: Before applying nutrients, develop and document a planned nutrient budget, yield goal, and applications of nitrogen (N), phosphorus (P), and potassium (K) in pounds per acre. The budget must account for all measurable nutrient sources and removals, including fertilizers, manures, legume crops, residues, compost, biosolids, wastewater, organic materials, soil nutrients, and irrigation water.

- ◆ Basis for Budget: The nutrient budget must be based on either:
 - Current soil test results (no older than 2 years), or
 - The professional opinion of an Agricultural Expert (unrelated to the farm producer), employed by the Cooperative Extension System, university agriculture departments, or approved by the Federal Crop Insurance Corporation as an Agricultural Expert. These include:
 - Certified by the American Society of Agronomy (ASA) as Certified Crop Advisers and Certified Professional Agronomists;
 - Certified by the National Alliance of Independent Crop Consultants (NAICC) as Certified Professional Crop Consultants;
 - Certified by the American Society for Horticultural Sciences as Certified Professional Horticulturists;
 - Certified by the International Society of Arboriculture as Certified Arborists;
 - An employee certified by the Natural Resources Conservation Service (NRCS) to make Determinations regarding good cover cropping practices.

More Information

To learn more about USDA's technical guidelines for the production of regenerative agricultural biofuel feedstocks, visit usda.gov/technical-guidelines-regenerative-biofuel-feedstocks.

USDA's Feedstock Carbon Intensity Calculator is available at usda.gov/usda-fdcic.



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Record Keeping

- ♦ Nutrient Application: Record the date, method, location, and amount (in lbs/acre) of all nutrient applications for each field or management unit.
- ♦ Receipts & Documentation: Keep receipts identifying the source and type of nutrients supplied, including nutrient content.
- ♦ Planting & Acreage: Document planting/seeding dates and total acreage for each field or management unit producing reduced-CI crops.
- ♦ Yield Records: Record total bushels harvested from each field or management unit.
- ♦ Nitrification Inhibitors: If used, maintain records of receipts showing the amount and type applied. Nitrification inhibitors must be defined by the Association of American Plant Food Control Officers (AAPFCO) and be accepted for use by the State fertilizer control official, or similar authority, with responsibility for verification of product guarantees, ingredients (by AAPFCO definition) and label claims.
- ♦ For details on requirements for manure application, see the manure application factsheet.

Maintain all records for five years, including:

- ♦ Documented nutrient budgets
- ♦ If using soil tests:
 - Soil test results
 - Soil test methods
 - Laboratory
 - Date of soil test

- ♦ If using professional opinion of an Agricultural Expert:

- A signed statement from the Agricultural Expert documenting professional certification;
- Any in-season soil or tissue samples;
- Date(s), method(s), location(s) of all nutrient applications in pounds per acre for N-P-K per field or management unit;
- Receipts identifying the source and type of nutrients supplied, including nutrient content;
- Planting or seeding date for each field or management unit where reduced-CI crop is produced;
- Total acreage for each field or management unit where reduced-CI crop is produced; and
- Total bushels of the crop harvested from each field or management unit where reduced-CI crop is produced.
- If applying nitrification inhibitors, records of receipts identifying the amount and the type of nitrification inhibitors applied.
- See the manure fact sheet for information on record keeping requirements for manure application.

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