

Green Plains Inc. (Chris Knutson)

Public Comment on Proposed Amendments to Chapter 173-424 WAC (Clean Fuels Program Rule)
Submitted on behalf of Green Plains Inc.

To: Washington State Department of Ecology
Re: Proposed Amendments to WAC 173-424 (Clean Fuels Program Rule)
Docket No.: 24-01-065
Date: July 31, 2025

Dear Department of Ecology Rulemaking Staff,

Green Plains Inc. is a leading U.S. ethanol producer committed to delivering ultra-low carbon fuels through innovation and investment in carbon reduction technologies, including carbon capture and storage (CCS). We appreciate the opportunity to provide comments on the Department of Ecology's proposed amendments to the Clean Fuels Program rule (WAC 173-424). As one of the leading U.S. ethanol producers, Green Plains supports Washington's continued leadership in decarbonizing its transportation fuel sector and welcomes efforts to enhance program clarity, integrity, and alignment with national clean fuel market developments.

We respectfully submit the following comments:

1. Recognition and Enablement of CCS-Enhanced Ethanol Pathways

Ethanol producers like Green Plains are investing in CCS to deliver deep lifecycle greenhouse gas (GHG) reductions. Washington's Clean Fuels Program should continue to encourage such innovation by ensuring a clear, science-based framework for the treatment of CCS in fuel pathway approvals.

We urge Ecology to:

- Explicitly recognize CCS within the rule text as a valid emissions reduction strategy when CO₂ is permanently sequestered in secure Class VI geologic formations.
- Provide technical guidance on the lifecycle accounting of CCS—including system boundaries, CO₂ transport and storage emissions, permanence criteria, and leakage risk assumptions.
- Allow for crediting of CCS reductions via Tier 2 custom pathway applications, supported by third-party engineering documentation and verification.
- Consider referencing formal standards to validate CCS permanence.

Further, to accelerate deep decarbonization, we urge Ecology to consider programmatic incentives for early adopters of CCS among biofuel producers:

- Expedited review timelines for pathway applications that include CCS.
- Coordinated communications with the Oregon DEQ and California ARB to harmonize CCS treatment across state clean fuels programs.

2. Support for Sustainable Aviation Fuel (SAF) Integration

We commend Ecology's proposed updates to incorporate sustainable aviation fuels (SAF) into the

program, as required under ESSB 5447. We agree that encouraging SAF production and use is vital to decarbonizing hard-to-electrify sectors like aviation.

However, we urge Ecology to:

- Clarify the process for SAF producers to secure fuel pathway certification in a timely manner.
- Allow flexibility in data submission deadlines, especially for novel pathways where carbon intensity (CI) data may be evolving.
- Ensure parity between SAF and other fuel types in how credits are generated and tracked under book-and-claim mechanisms.

2. Comments on Book-and-Claim Accounting and Mass Balance Provisions

Green Plains supports enhanced rigor in book-and-claim accounting and mass balance reporting. However, ethanol producers—particularly those that integrate carbon capture and low-CI inputs—face complex verification needs.

We request that Ecology:

- Provide additional guidance on demonstrating chain-of-custody and "specified source" feedstock attribution.
- Phase in new mass-balance reporting requirements to allow fuel producers to update internal accounting and verification systems.
- Where CCS pathways are used, mass-balance tracking systems must accommodate CO₂ sequestration that occurs off-site (e.g., via pipeline transport).

3. Third-Party Verification Requirements

We support the proposed adoption of third-party verification similar to programs in California and Oregon. However, the rollout must balance integrity with administrative feasibility. Further, As CCS is integrated into ethanol operations and regional infrastructure (such as pipeline networks), tracking and verifying those reductions will be critical.

We recommend:

- Establishing a grace period or pilot phase before requiring full third-party verification of quarterly and annual reports.
- Clearly delineating which fuel pathway types or CI models require mandatory verification.
- Include flexibility for group or aggregated CCS verification submissions in cases where multiple facilities (e.g., multiple biorefineries tied into a pipeline) send CO₂ to a shared sequestration site.
- Verification protocols should include auditor guidance on CCS data, including injection well monitoring, site operator attestations, and EPA-approved storage monitoring reports.

4. Alignment with National and Regional Programs

Consistency across state programs is critical for producers operating in multiple jurisdictions. Green Plains supports Ecology's proposed refinements to definitions and CI calculations, which better align Washington's framework with California's LCFS and Oregon's CFP.

We encourage Ecology to:

- Continue participating in regional harmonization efforts, especially on CI lifecycle modeling and GHG accounting standards.
- Consider adopting a tiered approach to fuel pathway approval, leveraging Tier 1/Tier 2 structures used in other states.

5. Enforcement and Deficit Provisions

We appreciate the need to maintain program integrity but caution against overly punitive enforcement of reporting errors.

We request:

- Clear guidance on what constitutes "material" versus "minor" reporting discrepancies.
- An opportunity to correct or appeal unintended deficits resulting from administrative or data-entry errors before penalties apply.

6. Conclusion

Green Plains remains committed to providing low-carbon ethanol and biofuels to Washington and other jurisdictions seeking to reduce GHG emissions in transportation. We appreciate Ecology's thoughtful rulemaking process and urge the agency to continue engaging with regulated entities to ensure workable, science-based implementation of these important updates.

Please do not hesitate to contact us if additional technical or programmatic input would be helpful.

Sincerely,

Chris Knutson
Director of Sustainability, Government & Regulatory Affairs
Green Plains Inc.
chris.knutson@gpreinc.com (402) 952-4847



Green Plains Inc.
1811 Aksarben Drive
Omaha, NE 68106
Phone: 402.884.8700
Fax: 402.884.8776
gpreinc.com

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