Robert Foss

June 15, 2026
Ms. Gwen Ricco
Office of Legal Services, MC 205
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087
Submitted electronically via https://tceq.commentinput.com/comment/search
RE: Public Comment on Rule Project No. 2026-006-309-OW; Proposed Amendments to 30 TAC Chapters 210 and 309 Implementing SB 1145 (Land Application of Treated Produced Water)

Dear Ms. Ricco and Members of the Commission:
Thank you for the opportunity to comment. I write in strong support of this rulemaking, and to ask the Commission to take one additional step that would multiply its benefit: build an expedited authorization track for produced water reuse projects that recover critical minerals as part of their treatment process. That is the bottom line, and the rest of this letter explains why it is both safe and smart.

By way of background, I am a career energy executive who has served as CEO, President, and CFO across upstream, midstream, and marketing operations, and I now lead Hinds Feat Advisors, a Texas firm that works hands-on with operators in the lower middle market. I have sat in the chair on both the operations and the finance side of water handling, so I offer these comments as a practitioner, not a theorist.

The rule gets the big decision right
The Commission is correct to add produced water regulated under 40 CFR Parts 435 and 437 to the list of process wastewater exceptions eligible for reuse under Chapter 210, Subchapter E, and to carry SB 1145's transfer of permitting authority from the Railroad Commission into workable permit mechanics.1 SB 1145 and HB 49 together gave Texas a clear mandate to move produced water from a disposal liability toward beneficial use, and this rule is the machinery that makes the mandate real.2 Theodore Roosevelt put the principle plainly more than a century ago: "conservation means development as much as it does protection." The wise course is not to bury a resource, but to put it to work.

Consider the scale of what we are talking about. The Permian Basin alone produces roughly 19 to 20 million barrels of water for every day of oil and gas operations.3 For years the industry's answer has been to inject most of that volume into saltwater disposal wells, a practice now linked to induced seismicity across West Texas. A barrel reused is a barrel that never has to be forced back underground. The Commission's rule opens that door. My request is simply that the Commission widen it for the projects that do the most good.

How critical mineral recovery actually works, and why it matters here
To understand the recommendation, it helps to understand the process. Produced water is not just salty water; it is a dilute brine carrying dissolved metals, including lithium and other elements the federal government has designated as critical to national security.4 Recovering those minerals is now happening at commercial scale in Texas through a family of methods known as direct lithium

extraction, or DLE.

Walk through the train one stage at a time. First comes pretreatment: the water is stripped of oil, suspended solids, and scaling hardness so it can be handled cleanly. Next comes selective capture, the heart of the process, where the brine is passed across a lithium-selective sorbent, an ion-exchange medium, a specialized membrane, or an electrochemical cell that pulls the target metal out of solution while leaving the bulk of the salt behind. The captured lithium is then stripped, concentrated, and finished into battery-grade lithium carbonate or hydroxide. What flows out the back end is a far cleaner, lower-salinity stream than what came in.5

Here is the point that should drive the Commission's thinking. The very technologies used to recover these minerals were borrowed from desalination and wastewater treatment in the first place.6 Recovering a critical mineral and purifying the water are not competing goals; they are two sides of the same coin. You cannot selectively pull lithium that sits at roughly 30 parts per million out of a brine, and sell a product that meets battery specification, without running one of the most rigorous treatment trains in the entire water sector. The recovered mineral is, in effect, a receipt proving the water was thoroughly cleaned.

That is why a project built around mineral recovery is the wrong place to fear a cut corner. An operator who has invested in the equipment and chemistry to capture a saleable metal has every commercial incentive, reinforced by the laws of physics, to drive contaminants down. The cleaner the feed has to be to make the product, the cleaner the water that comes out the other end.

Why these projects deserve to go to the front of the line

Four reasons, and I will keep them tight.

First, environmental performance. As explained above, recovery projects clear the highest treatment bar by necessity. They are the lowest-risk applicants the Commission will see, not the highest, and the review process should reflect that reality rather than ignore it.

Second, seismicity and disposal. Every barrel routed through a reuse-and-recovery facility is a barrel diverted from a disposal well. Fast-tracking these projects is one of the few regulatory levers that directly reduces injection volumes, and with them the seismic risk that now threatens the social license of the entire basin.

Third, national security and the Texas economy. The United States imports more than 80% of its rare earth elements, most from a single foreign supplier, and recent federal policy has made domestic critical mineral production an explicit priority.7 Texas is positioned to lead. Independent estimates put Delaware Basin lithium recovery at 170,000 to 225,000 tonnes per year of lithium carbonate equivalent, with revenue potential near $19 billion,8 and Texas operators have already brought the first new domestic lithium carbonate facility online in more than half a century.9 Calvin Coolidge reminded us that the business of America is business; here the business of Texas and the security of the nation point in the same direction. A permitting queue measured in years works against both.

Fourth, investment certainty. These plants are capital-intensive, and capital moves to where timelines are predictable. An expedited, well-defined track tells builders that Texas rewards the operators willing to do the hard, clean work. That is how you win the projects rather than watch them go elsewhere.

A concrete recommendation

I am not asking the Commission to lower a single water-quality standard. I am asking it to reward the applicants that exceed them. Specifically, I recommend that the Commission, in this rulemaking and in the companion Chapter 309 permit mechanics, establish a tiered, expedited authorization pathway for produced water reuse projects that incorporate a qualified critical-material recovery process, structured on four principles:

1. Eligibility tied to outcomes, not equipment. Qualify a project based on verified effluent quality and a recovery train that meets defined advanced-treatment performance criteria, so the environmental bar stays high and technology-neutral.
2. A defined review shot clock. Commit to a target technical-review timeline for qualifying applications, with the recovery train treated as presumptive evidence of advanced treatment to avoid duplicative analysis.
3. Full monitoring retained. Keep all sampling, reporting, and water-quality endpoints fully intact; expedite the review, never the oversight.
4. A general-permit option where appropriate. For standardized, well-characterized recovery-and-reuse configurations, offer a general permit or registration pathway in place of an individual permit, reserving individual review for novel or higher-risk cases.

In closing

Texas has a rare chance to solve three problems with one well-built rule: take pressure off disposal wells, secure a domestic supply of critical minerals, and put a wasted resource to productive use. The projects that recover critical materials are precisely the ones doing all three at once, and they happen to be the cleanest applicants in the queue. Reward that. Build them a faster, well-guarded lane, hold the water-quality line exactly where it is, and let the operators who are willing to do the hardest, cleanest work get to it sooner.

I appreciate the Commission's work on this rulemaking and would welcome the chance to be a resource as the permit mechanics take shape. Thank you for your consideration.

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Respectfully submitted,

Robert Foss
Founder & Managing Partner, Hinds Feat Advisors

Endnotes

1. Texas Commission on Environmental Quality, Proposal Preamble, 30 TAC Chapter 210 (Use of Reclaimed Water), Rule Project No. 2026-006-309-OW, proposed amendments to Sec. 210.54 implementing SB 1145. Comment period closes 11:59 pm, June 16, 2026.
2. SB 1145, 89th Texas Legislature, Regular Session (2025), amending Texas Water Code Sec. 26.131, transferring permitting authority for land application of treated produced water from the Railroad Commission of Texas to TCEQ for applications filed on or after September 1, 2025. See also HB 49 (2025), establishing liability protections for treated produced water.
3. Enverus Intelligence Research, "Permian's Potential Multibillion Dollar Bonanza: Direct Lithium Extraction" (2025). The Permian generates roughly 19 to 20 million barrels of produced water per day, the majority historically managed through saltwater disposal injection.
4. U.S. Geological Survey, 2025 List of Critical Minerals (designating lithium and rare earth elements as critical to national and economic security); see also 2025 federal Executive Orders directing expanded domestic critical mineral production.
5. Direct lithium extraction methods (adsorption, ion exchange, membrane separation, solvent extraction, and electrochemical techniques) are adaptations of technologies originally developed for desalination and wastewater treatment. See, e.g., reviews in npj Materials Sustainability (2025) and Frontiers in Chemical Engineering (2022).
6. Ibid. On the produced-water treatment train and selective-capture chemistry, see also Lithium Harvest, "Direct Lithium Extraction from Produced Water," and Enverus Intelligence Research (2025), noting average lithium concentrations near 30 ppm in Permian produced water.
7. U.S. Department of Energy critical minerals supply-chain initiatives (2025); the United States imports more than 80% of its rare earth elements, the majority from a single foreign supplier.
8. Enverus Intelligence Research (2025) estimates Delaware Basin recovery at roughly 170,000 to 225,000 tonnes per year of lithium carbonate equivalent, with revenue potential cited near $19 billion.
9. Element3 (Fort Worth, Texas) reports a commercial-scale lithium carbonate facility serving the Permian Basin, described as the first new domestic lithium carbonate production facility to come online in more than 50 years; LibertyStream and others are advancing field-scale direct lithium extraction in the Permian and Bakken.