HB 393 Opposition Testimony
House Energy & Natural Resource Committee
Adam Rissien, January 23, 2018

Good afternoon, Chairman Landis, Vice Chair Hagan, Ranking Member O'Brien and members of the House Energy & Natural Resource Committee. The Sierra Club Ohio Chapter offers the following testimony in opposition to House Bill 393. Sierra Club is the nation's largest grassroots-led environmental organization with over 180,000 members and supporters in the state of Ohio. Our mission is to explore, enjoy and protect the planet.

Our opposition to HB 393 stems from concerns over potential contamination to Ohio's rivers, streams and lakes from the sale and surface application of brine derived from the production, operation or plugging of oil and gas resources. Certainly HB 393 includes provisions demonstrating a clear intent to make brine waste commodities safe for commercial use, but unfortunately, they lack the specificity and direction to adequately prevent damage or injury to public health, safety, or the environment.

Key Points:

- **HB 393 provides for commodity permit authorizations based on documentations from, or approved by, the Ohio Department of Transportation (ODOT), which lacks testing protocols or an adequate process to ensure the safety of approved commodities for deicing or snow control.**
    - Specifically, there is no section in the Revised Code or Administrative Rules specifying any process for ODOT to approve the uses of such commodities, rather the department relies on "best practices" that lack adequate measures or controls on the application of brine from petrochemical operations.
    - The ODOT is not the proper agency to protect Ohio's natural resources or the health of people exposed to processed brine. Rather that duty should properly fall to the Ohio Department of Natural Resources and the Ohio Environmental Protection Agency.

- **Processed brine can still contain heavy metals, semi-heavy metals, and radiologicals (TENORM) that pose unnecessary environmental risks.**
    - In fact, according to ODNR, third party testing of AquaSalina product samples have shown the existence of these materials.
    - A recent Duke University study showed a buildup of radioactive materials at the bottom of three Western Pennsylvania waterways from treated conventional oil and gas wastewater.[1] In an NPR news article covering the report's release, Paul Ziemkiewicz, director of the West Virginia Water Research Institute at West Virginia University stated, "[w]hen we've compared conventional and unconventional brines, chemically they're almost identical," he said. "It would be surprising to me if radium didn't show up."[2]
    - The Natural Resource Defense Council issued a comprehensive report specific to oil & gas development in the Marcellus Shale region that found resulting "...pollutants can be dangerous if they are released into the environment or if people are exposed to them. They can be toxic to humans and aquatic life, radioactive, or corrosive. They can damage ecosystem health by depleting oxygen or causing algal blooms, or they can interact with disinfectants at drinking water plants to form cancer-causing chemicals."[3]
    - Contaminant levels range widely from well to well, or even from the same well, and can change over time. There is no single treatment for brine that would render it "safe" according to a California study on hydraulic fracking.[4]

- **HB 393 lacks appropriate safeguards to ensure the safety of processed brine.** Instead it specifically restricts testing frequency and even makes such testing optional. Starting at line 116 on page 5, the bill states that Chief of the ODNR Division of Oil and Gas, "***may*** establish reporting and testing requirements as are reasonably necessary…," and "***may*** at reasonable times collect samples of the commodity,'' but "shall not collect more than four samples of a commodity annually." ***Testing should not be optional or restricted.***
    - HB 393 should require sampling and testing rules be promulgated that require, at a minimum, as many as necessary to ensure public health and safety, and prevent any groundwater contamination or degradation of waters of the state.
    - Such samples and testing rules should direct that testing be conducted by an Ohio-EPA certified lab.
    - Adequate testing and sampling is especially important given the proprietary nature of chemical additives that makes safe treatment particularly challenging.

---

[1] The study appears in the journal Environmental Science & Technology, and was funded by the National Science Foundation and the Park Foundation.

[2] https://stateimpact.npr.org/pennsylvania/2018/01/20/study-conventional-drilling-waste-responsible-for-radioactivity-spike-in-rivers/

[3] https://www.nrdc.org/sites/default/files/Fracking-Wastewater-FullReport.pdf

[4] See http://documents.latimes.com/study-hydraulic-fracking/

- HB 393 egregiously restricts the chief's authority over processed brine used for commodities. Specifically, at line 124 on page 5, the bill states. “[t]he chief shall not adopt rules or establish or impose additional requirements applicable to commodities governed by division (C)(9)(a) of this section.”
    - The uncertainty and evolving risk associated with the use of processed brine as a commodity is substantial and concerning.
    - The current lack of specificity and oversight to obtain a permit allowing for processed brine to be used as a commodity is more than risky, and one that will likely need addressing should HB 393 become law. A fact that this provision seems to anticipate, not by directing the chief to proactively take action, but instead, by preventing any rulemaking whatsoever, essentially tying the chief’s hands.
    - We urge subsection (C)(9)(c) instead be replaced with the following language:
        - <u>The chief shall adopt rules, provide clarifying guidance. and when necessary, establish additional requirements applicable to commodities governed by division (C)(9)(a) of this section that ensures the prevention of damage or injury to public health, safety, or the environment.</u>

While we certainly recognize the intent to provide a safe processed brine permit program, the fact remains, HB 393 lacks adequate provisions to ensure public health and safety, or to protect the environment. It does not provide sufficient sampling and testing provisions, and it fails to account for the presence of heavy metals, semi-heavy metals, and radiologicals. FInally, it unnecessarily restricts the chief’s authority. For these reasons, we urge the committee to vote against passing HB 393.