

Ken McQueen
Secretary of Energy & Environment



J. Kevin Stitt
Governor

STATE OF OKLAHOMA
OFFICE OF THE
SECRETARY OF ENERGY & ENVIRONMENT

July 24, 2023

Rachel Lipsey
Arkansas Department of Energy and the Environment
Division of Environmental Quality (DEQ)
Office of Water Quality
5301 Northshore Drive
North Little Rock, Arkansas 72118-5317

Dear Ms. Lipsey:

On behalf of my office and the Oklahoma Department of Environmental Quality ("ODEQ"), please accept the following comments in response to the draft permit for Synagro-WWT, Inc. ("Synagro"), in Benton County, Arkansas (Permit No. 5384-W) for land application of wastewater residuals with the Arkansas Department of Energy and Environment - Division of Environmental Quality ("ADEQ"). The draft permit, if issued, would have a substantial impact on the State of Oklahoma. Therefore, Oklahoma would like to take this opportunity to provide comments on the draft permit and to share its concerns related to the draft permit. Oklahoma greatly appreciates this opportunity.

The draft permit is for land application of wastewater residuals from unspecified food and vegetable processing plants, animal processing plants, and animal food processing plants. Generally, these residuals come from wash-down water, dissolved air flotation ("DAF") skimmings, waste activated sludge, wastewater lagoon sludge, and grease trap water. The residuals are commonly organic solids or semi-solid residues. The sites for the proposed land application would be various farm fields in Benton County, Arkansas, covering approximately ninety (90) acres. These fields are within the Illinois River watershed, which flows through the State of Oklahoma. The Illinois River is a designated scenic river in Oklahoma. The Waste Management Plan ("WMP") submitted by Synagro estimates about 12 million gallons of residuals will be land applied annually. However, ADEQ notes that this amount may vary due to "various additional generators."

ODEQ has concerns that the WMP submitted by Synagro does not adequately provide detail on the wastewater residuals generators or the "various additional generators" who may contribute to the estimated amount of residuals to be land applied. The uncertain nature of these generators raises concerns about the actual amount of residuals that will be land applied in the sensitive Illinois River watershed. Given the watershed's known sensitivity, a more precise statement on the amount of residuals to be land applied should be provided. If this permitting action moves forward, Oklahoma requests that hydraulic loading calculations be completed and considered as a limiting loading rate. Likewise, it is unclear who these additional generators would be. ODEQ has additional reporting requirements for industrial sludge (also called wastewater residuals) generated outside the State of Oklahoma. [OAC 252:616-11-5(a)(7)]. Because of potential impacts to the State, Oklahoma requests that a similar reporting requirement be included in this permit if it moves forward.

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This concern is also highlighted by the importance that proper management practices has in ensuring the Illinois River watershed is protected from high concentrations of nutrients, especially Phosphorus. Oklahoma recognizes the draft permit requires Synagro to follow proper management practices; however, it cannot be overstated that proper management practices are crucial to protecting surface water and groundwater. These permit conditions, while protective, are difficult to enforce and could have severe impacts when violated.

ODEQ prohibits the land application of industrial sludge in scenic river basins [OAC 252:616-11-1(g)]. The proposed sites exist upstream of areas designated as scenic river areas in Oklahoma. Oklahoma is concerned that ADEQ's permit is not adequately protective of downstream water quality standards. Oklahoma requests that ADEQ, our upstream partners, improve the protections in this permit and consider implementing a similar prohibition for the protection of Oklahoma's downstream water quality standards, scenic rivers, and Outstanding Resource Waters.

In particular, Oklahoma has grave concerns that land application in Benton County, Arkansas could negatively impact the concentration of Phosphorus in the Illinois River watershed. ODEQ has numerous protections in place for the Illinois River watershed in Oklahoma, with many of the waterbody segments impaired by Total Phosphorus ("TP"). ADEQ's approach of limiting the land application of these wastewater residuals to areas classified as low or medium risk by the Arkansas Phosphorus Index ("API") is inadequate for the protection of downstream waters impaired by TP. If this permit moves forward, Oklahoma requests that the phosphorus uptake of the cover crop be calculated and considered as a limiting loading rate.

To add to Oklahoma's misgivings of the protectiveness of the API, Section 5 of the WMP shows that all four sites evaluated have a P Index Range of "medium." However, the soil analyses provided in Section 4 of the WMP show Phosphorus values as high as 243 mg/kg still attaining a designation of "medium" on the API. At what level of Phosphorus might the API rate a site as "high" or "very high?" Oklahoma would also like to emphasize that some of the constituents of the wastewater residuals, specifically DAF skimmings and grease trap water, have potential to clog soil pores and increase the risk for runoff as they build-up in the soil over time. Oklahoma requests that ADEQ re-evaluate the protectiveness of this approach in nutrient sensitive areas and for nutrient sensitive downstream waters.

Again, the State of Oklahoma appreciates the opportunity to comment on the draft permit. Oklahoma strongly supports the protection of the Illinois River watershed. For the reasons stated above, Oklahoma believes there should be a more definitive statement concerning the generators of the residuals in the draft permit. As set forth above, Oklahoma also believes the draft permit should take further steps to ensure the residuals covered by this draft permit do not further contribute to the nutrient concentrations of the Illinois River watershed with particular focus on Phosphorus.

Sincerely,



Ken McQueen
Secretary of Energy & Environment



ARKANSAS
ENERGY & ENVIRONMENT

Sarah Huckabee Sanders
GOVERNOR
Shane E. Khoury
SECRETARY

September 15, 2023

Ken McQueen, Secretary
Oklahoma Energy & Environment
204 N. Robinson,
Suite 1010
Oklahoma City, OK 73102

RE: Illinois River Watershed

Secretary McQueen,

I am in receipt of your letter on the draft permit for Synagro-WWT, Inc. (“Synagro”) in Benton County, Arkansas (Permit No. 5384-W) for land application of waste materials. I appreciate your comments, and agree that the protection of the Illinois River Watershed is important for both of our states. Your comments and Arkansas’s response provide an opportunity for renewed communication regarding our efforts to protect this shared resource, the Illinois River. To echo the spirit of your comments, I agree that Arkansas and Oklahoma should act in concert with each other for the mutual benefit of that resource, and resultantly, for both of our states. Over the last several months it has become apparent to me that a realistic solution to nutrient issues in the Illinois River should involve an integrated approach that addresses both point-source dischargers and non-point source contributions.

As you know, Arkansas’s Department of Agriculture has also been engaged in Arkansas’s work in this watershed. Currently, Arkansas’s Department of Agriculture is working on a SWAT model that will help identify practices that can produce measurable nutrient reductions on the Arkansas side of the watershed. I have asked Secretary Wes Ward to join me in stating the intentions of both the Arkansas Departments of Energy & Environment and Agriculture to outline what we believe an integrated approach could look like.

Arkansas Department of Agriculture:

- *Review of existing Nutrient Management Plans in Benton and Washington Counties, Arkansas.*
- *Review of the Phosphorus Index utilized in creation of Nutrient Management Plans.*
- *Beginning a Stakeholder process for input on Nutrient Management Plan Best Management Practices that can realistically be implemented within the watershed.*

Arkansas Department of Energy & Environment

Point Source Intentions:

- *A commitment to review and issue NPDES permits in accordance with the Illinois River Memorandum of Agreement (MOA).*
- *A renewed effort to create and implement a market-based nutrient trading regime for the Illinois River Watershed.*
- *An increased focus on increasing, where logistically possible, efforts to regionalize smaller municipal and non-municipal systems to the major NPDES Municipal Permittees.*

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- *An increased focus on increasing, where logistically possible, efforts to consolidate non-point source systems (domestic wastewater treatment systems) to point-source systems.*
- *A commitment to review and engage with both Washington and Benton Counties, Arkansas on their Municipal Stormwater (MS4) permits to address the contributions of nutrients from the discharges associated with those permits.*

Non-point Source Intentions:

- *Review of existing Land Application permits in Benton and Washington Counties, Arkansas to verify that all appropriate conditions are included and that the records for these permits are up to date.*
 - *Phosphorus uptake of cover crops included as a permit condition and limitation.*
 - *Where appropriate, increased buffer strip requirements.*
- *Review of existing domestic wastewater systems permitted under Rule 17 (e.g. large septic systems).*
- *For new domestic wastewater systems permitted under Rule 17, DEQ will request documentation of a determination that the area served could not realistically be connected to a Publicly Owned Treatment Works (POTW).*
- *While Dept. of Agriculture reviews the phosphorus index, DEQ will commit to study the effects of potential removal of fields in the "medium" phosphorus category from new applications for Land Application permits located in Benton and Washington Counties, Arkansas.*

Additional non-regulatory intentions:

- *Continue engagement with non-governmental stakeholders to pursue creative solutions to encourage nutrient removal.*
- *Engage the stakeholders interested in nutrient trading and the development of a rule for nutrient trading.*

Both the Arkansas Department of Energy and Environment and the Arkansas Department of Agriculture welcome a renewed discussion regarding the above-listed intentions as well as any other substantive ideas regarding the Illinois River. To that end, I would like to schedule a meeting to discuss potential collaborative efforts and to identify effective pathways forward for the Illinois River Watershed. I have copied Sec. Harsha of the Cherokee Nation to make him aware of our communication and to likewise invite him to participate in any future discussions regarding the Illinois River.

I look forward to speaking with you soon about this important matter.

Sincerely,



Shane E. Khoury,
Secretary
Arkansas Department of Energy and Environment

cc: Chad Harsha, Secretary of Natural Resources, Cherokee Nation
Wes Ward, Secretary, Arkansas Department of Agriculture

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