

Nancy Koon (adpce.ad)

From: Brendan Stack <bcstackjr@gmail.com>
Sent: Tuesday, November 29, 2022 10:33 AM
To: Water Draft Permit Comment
Attachments: Mill Bayou, Roland, AR Dec 2022.docx

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Brendan C. Stack, Jr., M.D.

December 2022

Loretta Carstens, P.E., Permits Branch, Office of Water Quality, Division of Environmental Quality,

5301 Northshore Drive North Little Rock, Arkansas 72118-5317

Re: Proposed discharge of large volumes of under-treated sewage into Mill Bayou, AR, Discharge Permit Number AR0053210, AFIN 60-05010

Dear Ms. Carstens,

As a resident of Roland, AR since 2005, I petition you to consider the under-regulated discharge of lightly treated human sewage effluent into the standing surface water of Mill Bayou to be both reckless and dangerous. I hope my concerns outlined below will give the ADEQ pause with regards to this specific petitioner and other current or future proposed large scale, high-density developments in the Lake Maumelle Watershed, its adjacent areas, and the rural Roland community of west Pulaski County, AR. This proposed activity has far reaching impacts upon terrestrial and aquatic wildlife as well as implications related to flooding in the Roland area from large precipitation events and negatively impacting the community's quality of life.

I request that ADEQ deny the revised permit being considered for the Paradise Valley sewage facility and I request a NEW public hearing. The revised draft permit has failed to address stated concerns and would allow pollution of a pristine wetlands area, Mill Bayou and its tributaries. The sewage facility would endanger drinking water, livestock, wildlife and the environment. This proposal represents an existential threat to the quality of life of the Roland, AR community.

Maumelle Water Corporation (MWC), my drinking water source, has asked repeatedly for a study to determine the sewage facility's impact on the aquifer that supplies their wells. **That crucial study has not been performed and is not addressed in the revised draft permit.** It appears that MWC's request is being ignored by the developer and your agency. In the previous comment period, outside experts provided data and analysis on the damage the sewage facility would inflict on the Mill Bayou Watershed. By ignoring the MWC study request, ADEQ is sending a clear message to the Roland community that protecting drinking water and the environment in the Mill Bayou Watershed is not important.

Mill Bayou is a place of extremes: drying, stagnation, and flooding. Mill Bayou is a basin, more similar to a shallow lake than a flowing stream. The water quality in Mill Bayou is currently pristine as documented by recent testing; this water quality must be maintained. ADEQ describes Mill Bayou's water as "fishable, swimmable, drinkable" and this will no longer be the case if ADEQ allows the sewage facility to be installed. The sewer water generated by the treatment facility will simply accumulate in Mill Bayou's basin during low flow and dry periods.

Nominally treated human effluent contains compounds which can interfere with the human endocrine (hormone) system and are described as "endocrine disruptors" (EDs). EDs effect all genders and all ages exposed. EDs often mimic normal hormonal elements and confuse the endocrine system which can result in lower or higher levels of hormone expression. This can result in a plethora of symptoms which adversely effect quality of life and health, cause permanent effects in children, are costly, and are avoidable by maintaining a clean environment.

It is reckless to discharge large volumes of contaminated water into a relatively stagnant body of water such as Mill Bayou. Motion provided by a brisk moving current and dilution into a large volume of the recipient body of water are fundamental considerations for dilution, aeration, and

natural degradation/purification of sanitary system effluent. This WILL NOT happen in Mill Bayou. The discharge will foul the southeast entrance to the Roland, AR community where the bayou crosses under AR highway 300 and will diminish the quality of life of its residents. This effluent will lead to the deposition of known contaminants from human refuse (illicit drugs, pharmaceuticals, pathogenic bacteria and viruses, etc.) which will concentrate into the soil over time and create both a potential environmental “brown site” that will require future mitigation and leach into the ground water and contaminate wells from the Maumelle Water Corporation.

The “package” sewer treatment plant which has been proposed will not remove Pharmaceuticals, EDs, and other contaminants from the effluent. They will, however, end up in our drinking water. The US Clean Water Act stipulates that “best available control technology” should be utilized for waste water treatment. Reverse Osmosis (RO) would be the current technology which would best remove pharmaceuticals, heavy metals, and other known and unknown ED compounds from what will eventually become our drinking water. RO is not part of the sewer treatment proposed for this development.

A long or severe dry period (as recently experienced, with photographic evidence provided to ADEQ) will mean that undiluted sewer water will soak into the ground and potentially migrate into the aquifer(s) beneath Mill Bayou. Hazardous algae blooms will then form. When significant rains bring flooding, the accumulated sewer water will be spread to surrounding properties and ponds. This infringes on the property rights of others. A sewage facility should never be allowed to discharge into Mill Bayou!

The sewage facility would require daily supervision and action by a licensed operator: manually raking solid waste from the input screen, bagging waste, and hauling it away for proper disposal. The revised draft permit does not require a 3-day retention tank to collect waste for contingencies. What happens if operational maintenance is not done? What if the sewage facility breaks down? What if the developer declares bankruptcy or leaves the area? Arkansas environmental regulations and training materials define a “bad actor” as a person with a history of noncompliance with federal and state environmental regulations. The Paradise Valley developer has a history of noncompliance with environmental regulations requiring litigation. Who would be responsible for the clean-up of a potentially derelict water treatment plant: Pulaski County? The State of Arkansas? The U.S. E.P.A.? Consequently, this proposed sewage facility would be an environmental disaster waiting to happen.

It is my desire that AEDQ is a prudent steward of our environment as regulators of our Roland, AR home and disapproves of this application and holds a public hearing.

Thank you,



Brendan C. Stack, Jr, MD, FACS, FACE

Fellow, American College of Surgeons and American College of Endocrinology

21001 Lake Vista Dr., Roland, AR 72135

bcstackjr@gmail.com, <https://scholar.google.com/citations?hl=en&user=rUPjPH4AAAAJ>