From:	Chris Baldwin <ccbaldwin73@hotmail.com>
Sent:	Wednesday, March 23, 2022 8:22 AM
To:	Water Draft Permit Comment
Cc:	pmccarkansas@gmail.com
Subject:	Discharge Permit Number AR0053210, AFIN 60-05010

Mr. Khan and ADEQ,

Regarding the Discharge Permit Number AR0053210, AFIN 60-05010, I would like express thoughts based on facts that I have researched and impacts I have seen.

Water and Habitat Contamination

"The most immediate effect of wastewater on the environment is when it contributes toward the contamination and destruction of natural habitats and the wildlife that live in those habitats by exposing them to harmful chemicals that would otherwise not be present over the natural course of things." **[i]**

From my understanding, the treatment plant being built for Paradise valley will be discharged into Mills Bayou. Mills Bayou weaves through a large part of Roland before finally going into the Arkansas River.   People have property that backs up to Mills Bayou.   Property that contains crops, livestock, horses, personal gardens, family pets.

Squalor

"Wastewater is one of the worst sources and carriers of diseases. According to a report from the World Health Organization, more than 3.4 million people die each year from a **waterborne disease.** **Besides** *the disease's wastewater carries, the combination of human waste, solvents, and paints create fumes that aren't only putrid but they also expose people to harmful fumes. There's a real danger when you inhale sewage gas."* i

I've lived in Roland for several years and spent some time in Waterview Estates, which also has one of these wastewater treatment plants. From personal experience, I can say that there have been several times that I have been able to smell a strong stench while I was in Waterview Estates.   I need to point out that the houses in Waterview are spread out onto large lots. I can only assume that a more highly concentrated neighborhood will have a much worse impact.

Soil Degradation

"Wastewater is often treated and repurposed for use in irrigation. As if that wasn't bad enough on its own, water treatment processes are not completely effective. Chemicals that are harmful to crops may find their way to the soil when the wastewater isn't properly treated. These chemicals will cause the soil to yield

fewer crops at a slower rate. Consider also the fact that these crops will eventually be eaten, which can also harm humans." i

As stated earlier, many people in Roland have livestock and personal gardens that back up to Mills Bayou.   The release of any chemicals into a water source that so many households back up to is not appropriate.

Wastewater Effects on Water Bodies

"Waterways are generally most at risk to the harmful effects of wastewater. Toxic compounds in the effluent disrupt aquatic ecosystems. When a large amount of biodegradable substances end up in the water, organisms will start to break them down, and they use a lot of dissolved oxygen. Dissolved oxygen is critical for marine life to thrive, and as it becomes depleted, it can be life-threatening for fish.

Wastewater also contains oil and grease that are harder to break down and can settle on the surface of the water. This blocks that light the photosynthetic aquatic plants need. It can also suffocate fish and get caught in birds' feathers. Like heavy metals, such as lead and mercury, these are toxic to both humans and animals. If someone drank from or ate fish from a contaminated water source, they could also suffer from serious health effects. The same happens with the animals and plants living in the water." i

Having so many residents of Roland being so close to Mill Bayou, the planned dumping zone, is quite frightening.   The Bayou is just that. It's a Bayou. It is not consistent flowing water. Much of the time it is standing water. Its an area where kids end up playing, family pets and livestock drink water, and crops grow.

Please turn down the request for this permit,

Chris Baldwin

    15401 Wild Oak Ln, Roland, AR 72135

[1] https://www.conserve-energy-future.com/effects-wastewater-environment.php