

Koon, Nancy

From: Richard Carter <r-carter@msn.com>
Sent: Sunday, April 3, 2022 10:03 PM
To: Water Draft Permit Comment
Cc: pmccarkansas@gmail.com
Subject: RE: Discharge Permit Number AR0053210, AFIN 60-05010
Attachments: Arkansas Division of Environmental Quality (AEDQ).docx

To Fiazan Khan:

Being related to the owner of a home in Paradise Valley, we felt compelled to give our viewpoint concerning the detrimental effect that building of the Paradise Valley sewage treatment facility will have on the surrounding area.

A project of this size (450 homes), would require a large sewage treatment facility to handle the waste generated by a large number of individuals (>1350 considering more than 3 per household). This is larger than the existing population of Roland (2010 census: 746)! Would there even be enough water to continuously supply all these homes? The waste treatment project would require a facility that always operates at peak efficiency in order to prevent the effluent leaving the plant into the Mill Bayou from causing eutrophication in estuaries-that, is an increased load of nutrients. It is well-known that human urine contains large amounts of nitrogen and phosphorous as well as hormones and pharmaceutical residues. Added to this are organic pollutants and micro-pollutants. If not handled correctly, this results in algal blooms, dead zones due to lack of oxygen, fish kill, and a decrease in biodiversity in the area.

As a field engineer, having worked in waste treatment plants to service variable frequency drives that control the speed of pumps at these facilities, I have seen that often these facilities are not up to specifications. Many times, the plant personnel receive insufficient training, are understaffed, and poorly paid. Funding for the operation is often insufficient to buy needed spare parts to keep automated equipment running as required. An inefficiently run facility leads to the excessive utilization of energy. The energy needed to run the plant is one of the largest expenses for wastewater management. As the electrical bill increases, funding for other areas can suffer. Also, when flooding in the area occurs, the waste treatment plant can't handle the excess storm water that often is sent to the facility. This results in untreated waste being dumped directly into rivers and streams. Pathogens from the plant can then spread waterborne communicable diseases with seepage

affecting surface and ground water, poisoning crops with E.coli, and possibly affecting potable water. There is further concern that the pathogenic sludge filtered by the waste treatment plant would be indiscriminately dumped.

Often facilities have a safety factor based on 50-year and 100-year events. With climate change, these numbers will be occurring or exceeded much more frequently. Thus, the plant will inevitably run beyond capacity with anachronistic guidelines. With the increased number of homes in the valley, the eradication of woodlands would result in erosion and excessive runoff.

An onsite wastewater sewage treatment plant will not only create water pollution, but also air pollution decreasing real estate values. We have a real concern that this project would end up into an ecological disaster costing the state of Arkansas millions to rectify. Thus, the ADEQ must deny the permit and hold a public hearing.

Richard Carter, PhD
Dorothyann Lindes, MD
46-318 Haiku Rd. Apt. 39
Kaneohe, HI 96744