

## **Brief related to Docket #2023-0530-MWD**

### **Permit #WQ0016189001**

#### **As a health question**

I would like to open by asking how many people on this Commission would buy a home and raise their family within 1 mile of an existing waste water treatment facility? My guess is no one would deliberately expose their loved ones to such a health risk. There are over 20 families within 1 mile of this proposed facility which are not being given that choice. We have lived and paid taxes here for, in most cases, decades yet have little or no say in what health risks we are now to be subjected to. These health risks include contamination of the groundwater where all the families in the area get their drinking water; air pollution known to be more intense near these types of facilities; and risks of disease spread by pests such as flies, mosquitos, mice, birds, and other wildlife common to this area. Below are some excerpts from scientific studies at Cornell and Harvard I found after just a quick online search that outline some of these health concerns we are being forced to accept.

At the hearing held in Gunter there was a jar of “treated” water set out for display. It was explained that this “almost clear” water was a sample of what would be discharged into Buck Creek. I found it insulting that the parties affiliated with Buck Creek WWTP, LLC thought such a display would convince anyone of the effectiveness of their process. Millions of microbial contaminants harmful to humans, only visible through a microscope, could be present in a single drop of that cloudy water. If you want to convince me the water poses no health risks, then drink a glass full. However, even that would not eliminate the health concerns related to air quality and the increase in disease carrying insects and other pests that inevitably come with such a facility

#### **As a legal question**

What gives Buck Creek WWTP, LLC, or anyone else for that matter, the right to pump sewage to a point that it will discharge and flow through my creek. I have checked the law and it states that any non-navigable streambed and its minerals are the property of the private land owner. There is a portion of Buck Creek that is under the jurisdiction of The Army Corps of Engineers but that is west of my property line, closer to the lake, and is therefore irrelevant. My wife and I own the creek that is within our property boundary's and have not granted permission to anyone to use our creek for any purpose. There is a law stating that once diffused water reaches a water course it becomes state owned surface water. However, I believe that means naturally occurring water from precipitation, not sewage water unnaturally pumped to a point then discharged. If my interpretation is incorrect then that means the state owns the sewage water that would flow through my creek and would therefore be liable for any contamination from said discharge.

Absolute Owner Rule- States simply that the groundwater below land is the property of the land owner. This is also known as the rule of capture.

The law further states that if there is contamination of water in a landowner well then the landowner may take action.

The water for all the families in this area is through wells tapping into the ground water. I have no doubt sewage water dumped into Buck Creek at a point upstream of all these families will contaminate the aquifer system and our drinking water, crops, and livestock.

#### **Final thoughts**

It has been stated repeatedly both verbally and in legal notices that TCEQ does not have jurisdiction over matters related to loss of property value. Can someone at TCEQ direct all of us who will suffer financial loss due to this facility to the

correct party? Please consider that TCEQ is the party responsible for approving a facility by issuance of a permit, that will, even by their own admission, impact not only our health and quality of life but our property values.

As I discussed at the public meeting, we would prefer this facility be located somewhere that will impact fewer if any current residents or at the very least be constructed to be enclosed to mitigate at least some of the concerns regarding air quality, odor, and pests. Being in the development/construction industry myself, I am aware Buck Creek WWTP, LLC will be opposed to either of these options for financial reasons. Hopefully TCEQ will apply the same standard with regards to their financial concerns as they have those of the local residents and do what is right for the citizens in this area. Regardless of option is ultimately approved, if this facility is permitted in any form that discharges sewage water into my creek I will engage legal representation to stop construction until this can be adjudicated.

A handwritten signature in black ink that reads "Dale Connor". The signature is written in a cursive style with a horizontal line underneath it.

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Dale Connor

626 Scoggins Rd., Tioga, TX 76271

214-683-0968

# What Are the Dangers of Living Near a Wastewater Treatment Facility?

by June Farquhar / in [Health](#)

Cornell University's "Health Hazard Manual: Wastewater Treatment Plant and Sewer Workers" by Nellie J. Brown outlines the dangers faced by workers at treatment plants; in conditions that are ideal for the pathogen or organism, some of these dangers can be extended to the communities surrounding wastewater treatment plants. Responsible management has been shown to reduce the dangers associated with the wastewater treatment process, but those living in proximity to them would be well served to be aware of the potential risks, however small they are.

## **Airborne Hazards**

Chemicals from wastewater treatment facilities become airborne when they're air-stripped. Air-stripping occurs when organisms, chemicals or particles in water find their way into air, where they can subsequently be inhaled. The water must be splashed or somehow moved through the air for this to take place, something that occurs in the aeration and dewatering processes, which put droplets and particles into the air. Studies have shown that coliform bacteria and total organisms are more prevalent at night, and they're highest when it's windy or the humidity is above 35 per cent. With the exception of mercury, hazardous metals can't be air-stripped.

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## Respiratory and Gastrointestinal Infections

If particles, organisms or pathogens that are air-stripped are inhaled, they go through the bronchial tubes and lungs, are cleared from the lungs, and then swallowed. This can cause respiratory and gastrointestinal exposure. Some organisms pass directly into the bloodstream. Experts at Cornell University report that though air-stripping occurs during aeration and other processes, it occurs less at wastewater treatment plants because the particles tend to attach to solids rather than water. The effects of inhaled organisms vary from upper respiratory irritation accompanied by eye irritation to depression, central nervous system damage and severe systemic poisoning. Plant workers are often the first affected. If they realise they've been affected, they're able to alert managers to correct the problem.

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## Pests

Houseflies, as well as other pests such as cockroaches, can also present a health hazard for those living near wastewater treatment facilities. Flies land on the food they eat to taste it, and raw sewage attracts houseflies. The hairs on a single housefly can carry millions of pathogens, which are transferred to whatever the fly next lands on. National Small Flows Clearinghouse (funded by the U.S. Environmental Protection Agency) relates in its newsletter "Pipeline" that transferring these pathogens through flies and other pests is nowhere near as common as through drinking water or eating food that's been contaminated by sewage. Wastewater treatment facilities that treat and dispose of contaminants properly protect the communities surrounding them. Through proper maintenance of the facility, the spread of disease by flies, cockroaches, lice, mosquitoes, mice and rats can be controlled.

# Correlation between Air Quality and Wastewater Pollution

WRITTEN BY

Karzan Mohammed Khalid

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### 3. Effects of polluted air on human health

According to the investigation published by the World Health Organization, the number of died people was estimated by 7 million as a result of air pollution exposure in 2012 [50]. This number indicates one out of eight total global deaths and confirming that air pollution is the world's largest health risk. Thus, the mortality rate much higher than that caused by malaria and AIDS. Air pollution is not only the concern of one nation or country, while it is increasing daily along with increase urbanization and industrialization. The universal cooperation is the only solution to overcome this critical issue (air pollution) which has crisis on humanity, and air is a natural resource without geopolitical boundaries [4]. Individuals are affected by different types of emissions directly and indirectly via inhalation of pollutants and climate change (for instance; when solar radiation gets trapped by gaseous and suspended particulate matters in atmospheric layers, respectively [51].

Many people exposed to these emissions and microorganisms may show unhealthy signs of respiratory problems and digestive system issues [34]. Bio-aerosols are known to contain various types of microorganisms that can cause disorders of the respiratory system, digestive system, and skin. Bio-aerosols also affect the quality of air in the surrounding. Moreover, it was found that domestic sewage containing animal and human excreta contains the highest amounts of microorganisms. They are usually treated and released by municipal wastewater plants which cause various micro-organisms to enter the atmosphere [52]. The spread of microorganisms in atmosphere depends on the weather and season [53].

Chronic obstructive pulmonary disease, acute lower respiratory illness, ischemic heart disease and lung cancer have been contributed to most air pollution related cases and even deaths. Inhalation of fine particles from air (particulate matter) and produced ozone are detected as the origin of those diseases [50]. All studies agreed on the presence of correlation between green technology improvement and environmentally sustainable. For instance, Khan and his colleagues (2020) have prepared two important hypotheses, which are "(1. Greater environmental performance reduces the health expenditure) and (Country environmental performance has a positive correlation with economic growth)" [28].