

DATE: October 10, 2024
TO: Terrebonne Sanitary District
FROM: Ryan Rudnick, PE
SUBJECT: OHA Waiver Process and Rationale
PROJECT NUMBER: 297-2509-008
PROJECT NAME: Terrebonne STEP Collection System

The proposed sanitary sewer system in Terrebonne will facilitate the removal of groundwater pollution sources (i.e. drillholes, drainfields) in Terrebonne, which will reduce the risks of groundwater contamination by sewage. This Septic Tank Effluent Pump (STEP) collection system was laid out in a manner that is direct, cost-effective, and compliant with the applicable sewer construction standards in OAR 340-052.

A short segment of low-pressure effluent sewer main on B Avenue was planned to be approximately 80-feet from TDWD Well #4. Upon review of OAR 333-061-0050, it appeared that a pressure sewer line was not allowed within 100-feet of a public well, unless a waiver was granted by the Authority (OHA). Therefore, a waiver request was submitted to the appropriate regulatory agencies - the Oregon Health Authority (OHA) and the Department of Environmental Quality (DEQ). The OHA regulates drinking water systems, while the DEQ oversees wastewater systems.

During the review process, the regulatory agencies clarified that the construction standards in OAR 333-061-0050 apply only to drinking water systems, not to sewer line installations. Specifically:

- **OAR 333-061-0010: Scope** (1) These rules apply to all public water systems providing piped water for human consumption as defined by the Act.
- **OAR 333-061-0050: Construction Standards** (1) General: (a) These standards shall apply to the construction of new public water systems and to major additions or modifications to existing public water systems.

According to DEQ and OHA, sewer system design and construction is regulated by the standards set forth in OAR 340-052, which require sewer mains to be installed at least 50-feet from existing water supply wells. Therefore, the regulatory authorities (DEQ, OHA) determined that the Terrebonne Sanitary District would not need a waiver for installation of the B Avenue sewer main approximately 80-feet from the TDWD Well #4, as this location complied with the applicable sewer standards.

However, because the well construction standards (OAR 333-061-0050) require wells to be located at least 100-feet from pressure sewer lines, OHA issued a waiver to safeguard the water district's continued use of Well #4 even if a pressure sewer main were to be installed within the nominal 100-foot setback. A hydrogeologic review by OHA determined that the well's water quality would not be affected by the sewer line installation, because the well was properly constructed (over 500' deep) and draws water from a confined aquifer. The favorable hydrogeologic conditions of Well #4 provide excellent protection against the remote risk of potential groundwater contamination, even if the sewer line is installed closer than the standard 100-foot setback.



Although the initial intent of the waiver request was to seek approval for the sewer line placement, the purpose of the waiver that was ultimately issued was to proactively safeguard the water district's use of Well #4, as the proposed sewer line location was compliant with the standards it is subject to (50' minimum from wells per OAR 340-052).

TDWD interpreted the waiver as authorization for the sewer line to be installed within 100-feet of Well #4 and demanded OHA to withdraw the waiver. On July 16, 2024, OHA withdrew the waiver, stating that: "The withdrawal is not a statement by OHA that the waiver does not satisfy OAR 333-061-0055. However, given your request to withdraw the waiver and OHA's determination that the waiver is likely premature at this time, OHA has decided that withdrawing the waiver is appropriate."

The waiver was not withdrawn because of any procedural, legal, or hydrogeologic issues, but because the Water District didn't need it at this time and didn't want it anyways. If the Sanitary District were to (hypothetically) proceed with installation of the sewer main 80-feet from the well in compliance with the applicable sewer standards (OAR 340-052), then TDWD could simply have the waiver reinstated to address the substandard separation from the pressure sewer - a condition that OHA and its hydrogeologist has already approved based on the proper well construction into a confined aquifer.

Despite the findings from the OHA hydrogeologist that the well is not at risk of contamination from potential sewer leaks, the TDWD expressed serious concern about the sewer line placement contaminating its water source. In a generous response of good faith towards TDWD, the Terrebonne Sanitary District (TSD) offered to implement additional pipe protection measures that would further minimize the risk of sewer leakage. These additional measures are not required by law and would increase construction costs for the TSD.

Fluid leaks from buried pipes can occur due to accidental destruction by heavy equipment, operational loads, or leaks at joints or seams. Modern trenching standards, such as marking tape and locate wire, minimize the risk of accidental damage. To further protect against leaks, measures like dual containment piping, steel encasement, and restrained joints can be used. Additionally, waterproofing methods such as using bentonite clay backfill or a sealed waterproof liner in the trench can provide extra protection. These additional measures could cost the TSD an extra \$3,000-\$40,000 for implementation along a 150-foot segment within the 100' well buffer.

In conclusion, the Terrebonne Sanitary District (TSD) and Parametrix have conducted their actions with legality, reasonableness, and concurrence from regulatory agencies, always respecting the integrity of the TDWD wells. The proposed sanitary sewer system is designed to effectively remove groundwater pollution sources, significantly reducing the risk of contamination. By adhering to the applicable standards and consulting with the regulatory authorities (OHA, DEQ), the TSD has demonstrated a commitment to safeguarding the community's water resources. The additional protective measures offered, though not required, further underscore TSD's dedication to ensuring the highest level of environmental protection and community trust.

