

Wastewater Treatment

Protecting Public Health & Sustaining a Healthy Environment

The City of Northglenn's Wastewater Treatment Facility, located on the corner of 168th Avenue & Weld County Road 11 has been in operation since 1982. As homes are being constructed near the facility, the city continues to work at being a good neighbor, by investing in upgrades that help reduce odor. However, sometimes odors are simply inherent to the treatment process.

Please take a few moments to read about our efforts and know the city is doing its best to be responsive and respectful of surrounding residents by adhering to or exceeding all state odor regulations.

What's that smell?

Collection, treatment and disposal of wastewater often omit odors. Wastewater treatment is strictly biological and can potentially generate odors. These odors are generated from hydrogen sulfide (H₂S), which smells like rotten eggs. Occasionally, preventative maintenance takes place, causing odors to arise. These events are scheduled to be completed in timely manner to avoid any potential lingering smells.

Good Neighbor Policy

The city follows a Good Neighbor Policy and is devoted to minimizing odors, by doing everything possible, within our means, to contain odors inside the facility, but some odors naturally drift out of the plant. Situations beyond our control such as, weather, wind direction, low-pressure systems and humidity are some factors impacting odor migration.

What does the future hold?

Northglenn budgeted projects which include;

- Lift Station & Forcemain Project, which began in 2020, with the goal of optimizing chemical additions, minimizing odors by increasing the velocity of raw sewage, preventing long sewage travel times.
- Optimizing chemicals to prevent H₂S formation.
- Adding digesters for Waste Activated Sludge & the decommissioning of the final two biosolid lagoons.
- Investing in two Solar Bees, recently added to the remaining lagoons, which add an oxygenated water cap to help lock in odor.

Odor Mitigation Practices

Chemical Additives

- Bioxide +71 is added at lift stations, oxidizing sulfur compounds inside the force main.
- Bioxide is used at the facility, reducing odors at the biosolid lagoons.
- The facility underwent a multimillion dollar upgrade, in 2016, including the decommissioning of two lagoons which had held 20 million gallons of raw sewage.
- A headworks building went in to service in April 2017, equipped with state of the art odor neutralizer. This ionization system produces positive & negative ions which oxidize the hydrogen sulfide to reduce odors.

Odor Control Program

- An Odor Control Program was developed to follow Regulation Number 2 for Odor Emission to ensure we are following the Good Neighbor Policy.
- Regulation 2, by the Colorado Department of Public Health and Environment's (CDPHE) Air Pollution Control Division, states "No person, wherever located, shall cause or allow the emission of odorous air contaminants from any single such source to result in detectable odors which are measured in excess."
- Staff members have attended the State's Odor School and are certified to ensure compliance in the monitoring of the property's fence line using the Nasal Ranger (Scentometer).
- Staff monitors and measures odors throughout the week with no odors detected intense enough to constitute a regulatory odor violation.
- Information on Regulation Number 2 is located on the state's website-<https://www.colorado.gov/pacific/cdphe/aqcc-regs>

