



For generations, it was assumed that unpleasant odors were an inevitable aspect of treating wastewater. Today, the wastewater industry has become increasingly cognizant of the importance of odor control as communities expand and the areas around wastewater treatment plants become more populated.

SD1's Dry Creek Wastewater Treatment Plant strives to be a good neighbor while cleaning an average of 33 million gallons of wastewater a day from more than 94,000 homes and businesses throughout Boone, Campbell and Kenton counties. This award-winning facility has been operated seven days a week, 24 hours a day since 1979 by dedicated and experienced staff.

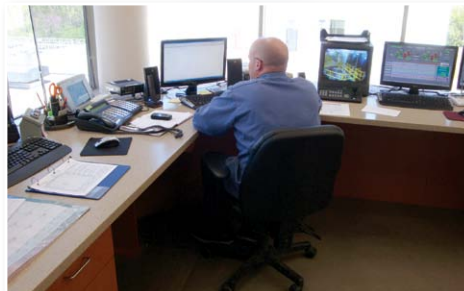
SD1 is aware that odor control is a vital part of our customer service. Despite many technological upgrades and the integration of state of the art tools, Dry Creek still occasionally experiences odor control issues.

WHAT CAN I DO IF I'M AFFECTED BY ODOR FROM DRY CREEK?

SD1 makes every effort to respond to odor complaints with prompt and efficient service. Sometimes, sewer odors arise from a local system or private property. Please notify SD1 or the property owner in the event of an odor issue because such odors can be the sign of underlying problems.

If you have concerns or would like more information, contact the Dry Creek Plant Manager or Director of Operations at 859-331-6674 or email info@sd1.org.

SD1 welcomes visitors to tour our facility. Please contact us if you are interested in learning more about what we do.



DRY CREEK WASTEWATER TREATMENT PLANT
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SD1

Managing Northern Kentucky's
Wastewater and Storm Water



WASTEWATER TREATMENT



CLEARING THE AIR

ODOR CONTROL AT DRY CREEK WASTEWATER TREATMENT PLANT

An aerial view of
Dry Creek Wastewater
Treatment Plant, 2011

WHAT IS SD1 DOING TO IMPROVE ODOR CONTROL?

SD1 is committed to addressing off-site odors. Every component of the wastewater treatment process at Dry Creek is closely monitored, and workers are ready to respond if odor levels become problematic.

To minimize odors, SD1 has:

- Chlorinated the wastewater as it enters the treatment plant.
- Replaced a system that used heat to remove water from solids with one that utilizes different technology.
- Added hydrogen peroxide to the sewage sludge.
- Put tarps on dumpsters that haul sewage sludge and other solids.
- Added odor-reducing chemicals to incoming water at pump stations.

In addition, SD1 continues to explore new and innovative solutions to odor issues. Projects are scheduled that will continue to improve SD1's ability to keep odors contained to the Dry Creek site through cutting edge technologies.

WHY ARE THERE ODORS?

Wastewater undergoes a series of processes at Dry Creek Wastewater Treatment Plant before it can be discharged into the Ohio River. Throughout each stage, biodegradable materials are broken down, sometimes creating unpleasant odors.

Preliminary Process

In addition to haulers bringing in the contents of septic tanks, two large pipes carry water into the treatment plant, one from the Bromley Pump Station and one from the Lakeview Pump Station. Immediately, this incoming water is treated with chlorine to control odor. Then, as it enters the Headworks building, it is filtered through bar screens that separate out debris. This garbage is hauled by truck to a landfill.

Primary Process

Water is then held in a quiet tank for several hours, allowing solid particles to settle to the bottom and greases to float to the top. The solids and greases are separated out to receive further treatment.

Biological Process

Next, oxygen is pumped into the water, stimulating the growth of microorganisms that absorb the organic matter from the sewage as their food supply.

Clarifier Process

The water is then sent to new tanks to settle. The microorganisms that digested the waste sink to the bottom while the cleansed water on top flows into an exit pipeline, where it is disinfected one last time with chlorine.

Dechlorination Process

Before it is released back into the natural world, the chlorine must be removed from the treated water to make it safe for the environment. Sodium bisulfite is added to neutralize the chlorine, and the clean water is discharged into the Ohio River.

