

## **Improvements to Wastewater Treatment Plant include Odor Control**

We have all smelled it, whether being downwind, living in close proximity, or driving by on I-5, the distinctive odor from the Wastewater Treatment Plant is unmistakable. But that will change with the upcoming plant expansion and upgrade.

“The bottom line is that we have odors coming in that overwhelm our current system” said Utilities Manager Monica Anderson. “Our system cannot adequately take care of what is coming in.”

Falling behind the technology curve, coupled with Wilsonville’s population growth, has put the plant behind the eight ball. Over the years, upgrades served only as band aids, and did not sufficiently help the plant meet today’s demands. That will all change this fall when the city hires a company to make the needed improvements. Monica says having a firm on board to expand and upgrade the facility will significantly reduce the odors that are emitted from the plant.

“What really saddens me is that public perception is that we are not treating the wastewater successfully because of the odors, which is not the case” said Monica Anderson. It is not always easy to pinpoint the source of odors since they are generated by more than one culprit, such as the headworks, digesters, and/or centrifuge.

“We had a lot of odor complaints in the 80’s and 90’s and they covered the digesters with diamond-plate aluminum and put in a Calgon activated carbon tower and that worked great,” said Lead Operator Dan Snyder. “The carbon lasted four to five years and complaints went away.”

Snyder said that during a plant upgrade in 1998, the secondary process tanks were converted into biosolids storage units and connected to the tower. He said the carbon lasted about five months and needed to be changed, but a decision was made to replace them with a bark chip filter. That worked for a couple of years, but there was so much hydrogen sulfide and organics in the air that it eventually broke down the media and filter. This was replaced with potting soil that didn’t work, which eventually led to the installation of the current twin tower bio-filters.

Snyder recommends rebuilding and enclosing the headworks, and incorporating a system designed for what is in the ingredient of the influent, or stream flowing into the plant. He also suggests installing anaerobic digesters for solids handling.

Anderson says that odor issues are an important part of what she and staff mitigates on a daily basis. Working with staff on this is important to diligently make sure that the city, as a whole is a good neighbor.