

Pataskala Utilities Department

Water Reclamation Facility Upgrade

The Pataskala Utility Department is currently undergoing a Water Reclamation Facility (WRF) upgrade project. This project was outlined in a social media post made to this page in July of this year: <https://www.facebook.com/cityofpataskala/photos/a.122350291150225/3307836925934863/> The main goals of the upgrade are to allow for increased control of our treatment processes as well as to meet an upcoming EPA mandate to remove phosphorous from our effluent stream. The construction portion of this upgrade is about to begin.

In order to complete this project, our main components of the WRF must be taken offline. While those components are offline, the only treatment option that we have at the WRF is its lagoon treatment system. This system consists of two large lagoons that work in series with each other. There is a biological treatment process that takes place in the lagoons. While this method is still used throughout Ohio, it is not nearly as efficient as our usual main treatment components are. The lagoons also do not lend themselves to easy instant operational control. Because they are so large, adjustments that are made can take several days to be fully realized.



We began using the lagoons on October 1st of this year to prepare for the upgrade construction. On October 12, we noticed that the water in the lagoon system had turned a darker color and had a septic odor to it. By working with other lagoon treatment experts as well as the Ohio Environmental Protection Agency, we have deduced that the best way to get the lagoons to balance themselves out and control the odors and color issue is to increase the oxygen levels in the lagoon system. We have placed a recirculation pump that pulls water from the second lagoon and propels it through the air to the first lagoon. This gives the process more time to work and adds extra oxygen. We also have added sodium nitrate, a chemical that both helps raise the dissolved oxygen levels as well as provides high quality food for the microbes in the lagoon system. The plan is to get the microbes healthy again so that we can regain the balance of the lagoon ecosystem. Should these methods prove unsuccessful, we have a backup plan to rent some aeration equipment for the duration of the construction. This option comes at a significant cost, but if it is necessary, it is an option that we will exercise.

The entire Utility Department is aware that the color and odor issue currently associated with the WRF are not ideal. As I said lagoon treatment is a long-standing way to treat waste-water but it takes constant monitoring and tweaking to be efficient. We are dedicated to the task of good treatment AND good odor control. We are in constant contact with the Ohio EPA and other experts to navigate the issues that this upgrade project presents. Until then, the department will remain diligent in our pursuit of the highest level of treatment that we can provide.

We welcome the opportunity to discuss this issue with all affected. If you have a question or comment please contact: The Utilities Department, 430 South Main St, 740-964-6275.

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“Clean Water In, Clean Water Out”