CASE STUDY

Electronic Bed Monitor (EBM-e)

Linwood Water Reclamation Facility, Gainesville, Georgia

PureAir
A cleanwater1™ Company

The City of Gainesville Department of Water Resources in Gainesville, Georgia is responsible for supplying the growing populations of Gainesville and Hall County with the highest quality water. The Linwood Water Reclamation Facility (LWR) processes the county's wastewater and treats the solids captured during processing. Unfortunately, this process releases H_2S, Ammonia, VOCs, and other unwanted gases into the environment that cause odors and complaints from staff, nearby residents, and businesses.

LWR reached out to PureAir Filtration (PureAir) to custom design an odor control solution to capture the high volume of gases emitted at the facility. PureAir provided LWR with a Packed Bed System (PBS-707) filled with both Sulphasorb XL™ and CPS12 Blend adsorbent media.

LWR also chose to install an Electronic Bed Monitor (EBM-e) in the PBS. An EBM measures actual media consumption in real time to avoid contaminant breakthrough, which makes system maintenance predictable and plannable. On the other hand, it also helps to ensure that as much value as possible is received from the adsorbent media by not replacing it too soon. This patented monitor is the only one in the industry capable of continuously measuring remaining media life in the field. Customers like LWR come to PureAir for the benefits of this innovative tool that assists their maintenance teams in keeping their system running as efficiently as possible.

In this case, installing the EBM-e served as a very proactive step, because it alerted LWR that the media was reaching its expiration date sooner than the predicted two years. In fact, their odor levels were four times higher than initially indicated in specifications. The EBM-e also demonstrated that the media outperformed expected filtration performance for such an elevated level of odors and prevented odors from escaping. Without the EBM, LWR would have experienced unexplained odor breakthrough, as the adsorbent media would not have been replaced in time.

When it came time to replace the media, LWR chose to upgrade to the latest version of the EBM-e, which has even further precision and robustness against field conditions.

The EBM and its newest version (EBMv2) are examples of PureAir's innovativeness and continued focus on research and development.