Kelly-Moore Paint Company Inc - Wash Water Reduction to Landfill

2022 TEEA Winner - Pollution Prevention



Kelly-Moore Paint Company Inc. (Kelly-Moore) is an employee-owned paint manufacturing company in Hurst, Texas. As part of their manufacturing process, Kelly-Moore must flush all production-associated equipment with water between each batch of paint. Historically, this led to the generation of over 1 million gallons of wastewater per year being shipped directly to the landfill for disposal.

The plan for their pollution prevention project was to install equipment to reduce wastewater generation by using a water treatment system that would segregate latex solids from the water through pH adjustment, flocculation, and filtration. The solids can then be sent for disposal as non-hazardous waste, while treated water can then either be discharged back to the local public water supply or recycled back into the production process. By installing this treatment system, Kelly-Moore reduced liquid waste going to the landfill by 63%, and approximately 50% of the wastewater is recycled back into the production process.

The project also uses a "pigging" system to clean all the piping associated with the batch making process. After each batch (but before the wash water rinse), a "pig" is sent through the pipes to scrape out any residual product, which is then combined with the paint batch. This system further reduces the amount of wash water needed to clean the pipes and thus reduces the amount of wash water that is used in the overall system. These projects save over half a million gallons of water each year.