



Demonstration Program – Upper Blackstone Water Pollution Abatement District (UBWPAD), Millbury, MA

Opportunity

UBWPAD is a large, 45 MGD, facility facing challenging seasonal permit limits of less than 5 mg/L for Total Nitrogen (TN) and less than 0.1 mg/L Total Phosphorus (TP). With a fairly significant industrial influent base (36 permitted industrial dischargers monitored by the facility), the facility desired to achieve permit compliance without the use of chemicals. CLEARAS WATER RECOVERY® was challenged to investigate if its Advanced Biological Nutrient Recovery (ABNR™) solution could achieve permit compliance.

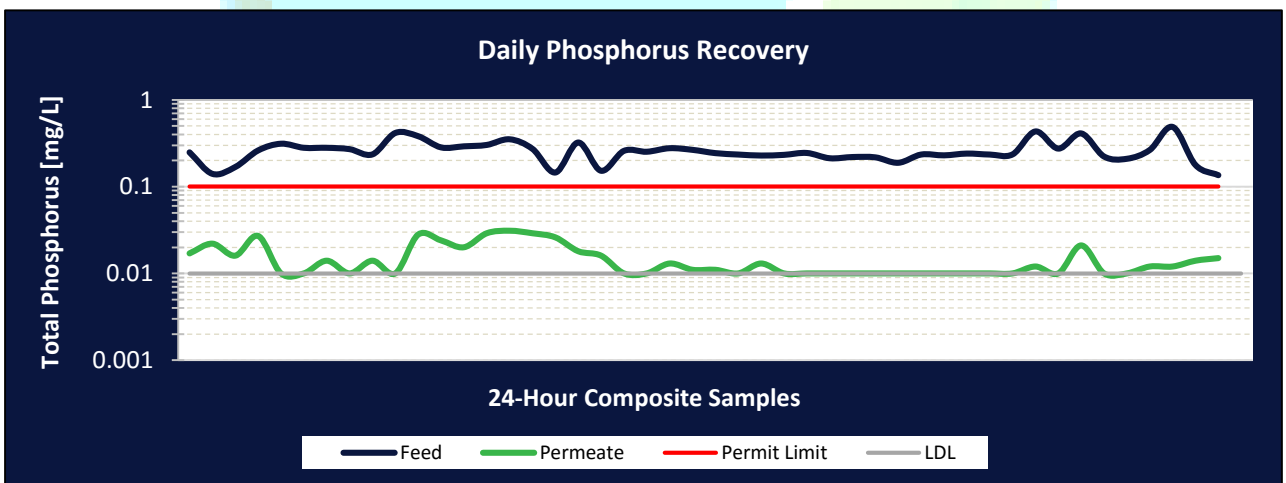


Clearas Approach

An initial Nutrient Recovery Test (NRT) demonstrated the ABNR technology was able to meet and exceed permit limits without the need for any pretreatment or chemical addition. Based on this result, an on-site Demonstration Program was initiated in June of 2014 to confirm laboratory performance. The Demonstration Program developed was uniquely setup as a public-private partnership between UBWPAD, CDM Smith, The Lorusso Foundation (the largest charitable foundation on Cape Cod committed to the improvement of water quality on the Cape), and Clearas.

Results & Impact

During the Demonstration Program, Clearas was able to successfully demonstrate the ability to exceed permit requirements on a continuous basis by achieving a 94% recovery of phosphorus (as shown below). Based on these results, the decision was made that the compelling benefits of ABNR warranted a continued investigation as a possible technological solution to UBWPAD’s TMDL challenges.



Other case studies are available upon request. Visit our website at www.ClearAsWater.com.