

THE CITY OF MONDOVI TO BUILD GREENFIELD WASTEWATER PLANT CENTERED AROUND ABNR

CITY OF MONDOVI WASTEWATER TREATMENT FACILITY



FACILITY DATA:

Location: Mondovi, WI

Size: 0.3 MGD

Future Discharge Limit: 0.05 mg/L TP
Target constituents: Phosphorus and Ammonia

Average Influent (phosphorus): 1.52 mg/L
Average Effluent (phosphorus): 0.02 mg/L

Average Influent (ammonia): 18.43 mg/L
Average Effluent (ammonia): 8.53 mg/L

OBJECTIVE

The City of Mondovi is designing a new wastewater treatment facility to replace significantly aging infrastructure and increase its loading capacity to welcome industrial dischargers and septage receiving. A focal point of this upgrade was to identify and integrate sustainable technologies as part of a broader vision to become a utility of the future. After learning about CLEARAS' sustainable Advanced Biological Nutrient Recovery (ABNR) solution, the decision was made to pilot the ABNR technology and evaluate its ability to achieve ultra-low level phosphorus requirements.

RESULTS

The ABNR process was piloted at the Mondovi Wastewater Treatment facility in February 2020. A variety of waste stream combinations were tested in an effort to simulate water quality that will be experienced at the new location. Tests included pre-chemical and post-chemical secondary effluent, with and without the presence of industrial dischargers. The ABNR system performed exceptionally well, reducing total phosphorus by 99%. The successful pilot, CLEARAS' proven track record and a pre-qualification process provided enough information for Mondovi to pre-select ABNR and advance its commercial installation. The project is expected to break ground in Q1 of 2021 with commissioning later that year.