

Case Study: Persimmon Ridge

At the time of acquisition, the Persimmon Ridge lagoon was struggling to meet its permitted ammonia limits. The facility relied on aging and inefficient aeration equipment that could no longer provide adequate oxygen transfer for effective treatment. As a result, the system's performance was inconsistent, and the lagoon frequently operated at the edge of compliance.

To address these challenges, Bluegrass Water installed a Moving Bed Biofilm Reactor (MBBR) system to supplement the lagoon's existing treatment process. The MBBR technology introduced additional biological surface area and improved nitrification, greatly enhancing ammonia removal and overall effluent quality.

With these improvements, the Persimmon Ridge lagoon transitioned from a system limited by outdated aeration to one operating reliably and within permit standards. The upgraded process strengthened treatment performance, stabilized operations, and provided long-term environmental protection for the surrounding community.

Before After





