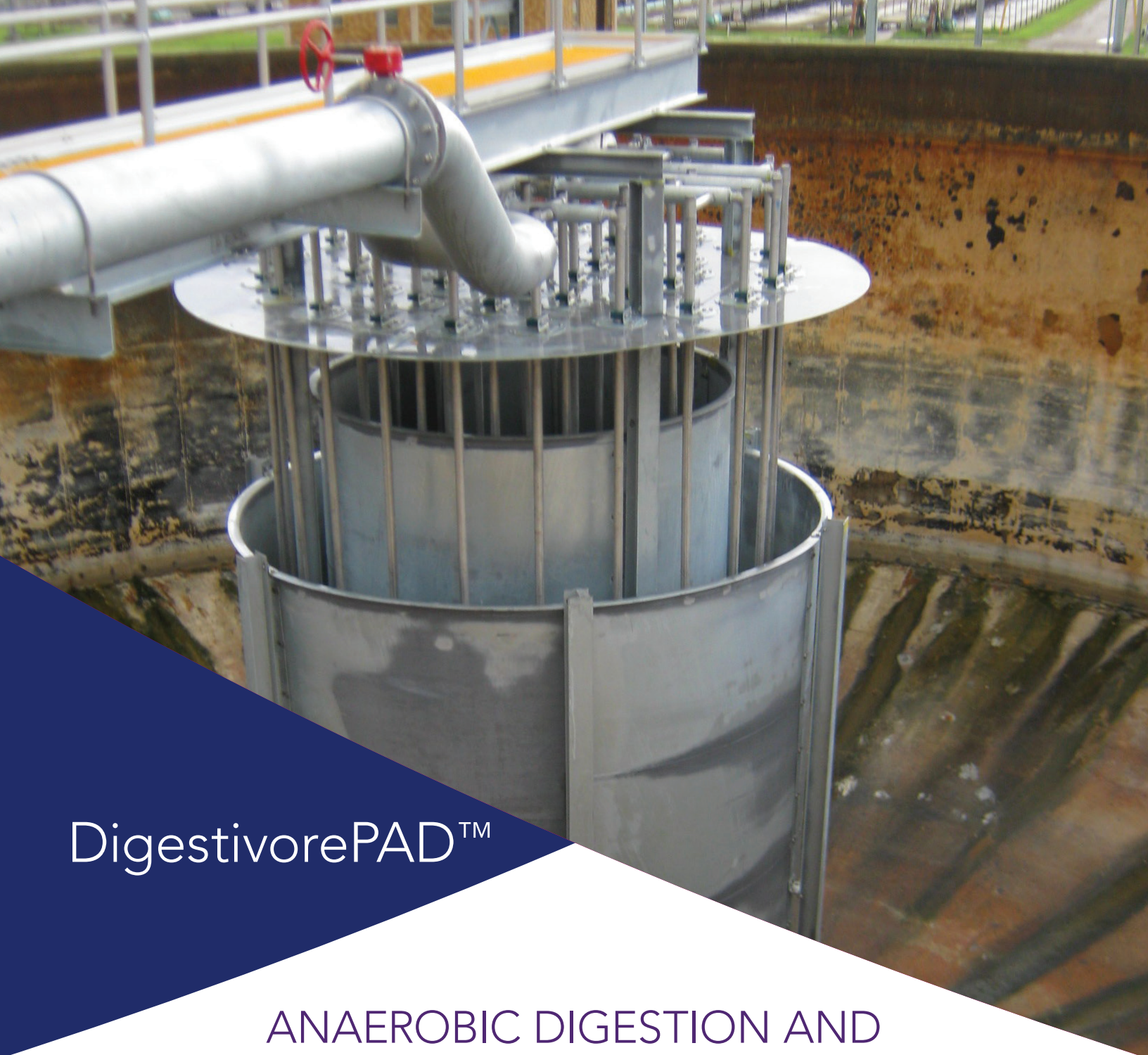




DigestivorePAD™

ANAEROBIC DIGESTION AND POST-AEROBIC DIGESTION

A simple, easy-to-implement, comprehensive solution to
common problems associated with biosolids management.



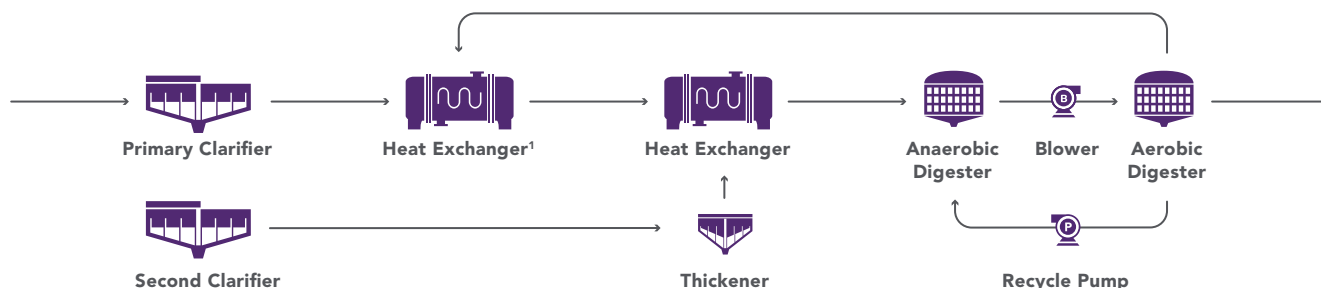
OVIVO®

Worldwide Experts in Water Treatment

DO YOU HAVE THESE BIOSOLIDS MANAGEMENT ISSUES?

- High biosolids management costs due to lack of volatile solids reduction
- Issues meeting total nitrogen and phosphorus effluent limits
- Reduced plant efficiency and high O&M costs due to struvite scaling formed in piping, pumps, and dewatering equipment
- Odor issues in the dewatering building or at your land application sites

TYPICAL DIGESTIVOREPAD™ PROCESS FLOW DIAGRAM



¹ Heat exchanger will be dependent upon heat balances.

OUR SOLUTION

Ovivo brings its extensive experience and expertise in the areas of anaerobic digestion as well as aerobic digestion to offer utilities a revolutionary concept, DigestivorePAD™.

Ovivo's DigestivorePAD process consists of anaerobic digestion followed by post-aerobic digestion. Aerobic digestion, operating in conjunction with anaerobic digestion, provides enhanced volatile solids reduction, increasing performance by 10% to 30%. Increased volatile solids reduction results in reduced biosolids management costs and improved dewaterability of biosolids.

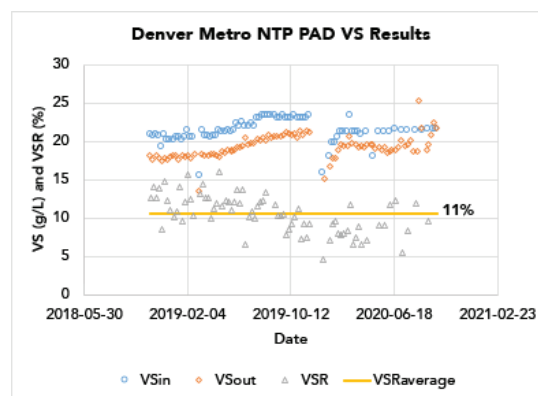
DigestivorePAD uses anoxic and aerobic conditions in the post-aerobic digestion to create nitrification and denitrification environments. This results in up to 90% ammonia nitrogen and total inorganic nitrogen (TIN) removal in the side stream. This is especially beneficial for utilities facing stringent nitrogen discharge limits. Almost complete removal of ammonia reduces the nuisance odor which is a common operational issue.

DigestivorePAD also reduces the struvite scaling issues by removing a key component required for its formation, the ammonium content. Further, the post-aerobic digestion step strips sludge off CO₂ and stabilizes the pH so that any struvite formed remains in the sludge. This results in significantly reduced phosphorous levels in the sidestream.

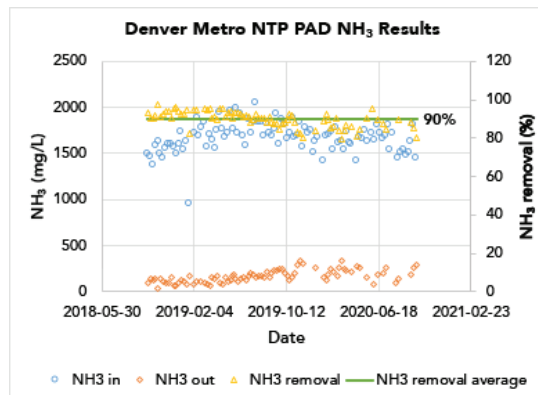
DENVER METRO NORTH TREATMENT PLANT

(Based on Data Provided by Denver Metro Wastewater District)

• Denver Metro NTP PAD VS Results



• Denver Metro NTP PAD NH₃ Results



ovivowater.com