Nexom®

Blue Nite® 7 BIOLOGICAL DENITRIFICATION

Criteria		Blue Nite®
Effluent Quality		
Nitrates	<1 mg/L	●
Total Phosphorus*	0.02 mg/L	●
Advantages		
Patented Control system makes nitrate control easy		●
Lowest capital and O&M means denite is accessible		●
Eliminates upsets, gas bumps and high-rate backwash cycling		●
California Title 22/Class 1A-Approved for Water Reuse		●
Applications		
Municipal denitrification for nitrate-regulated cities		●
Industrial mitigation for nitrates		●
End-of-pipe denitrification for existing WWTPs		●

*With compatible Blue PRO reactive filtration

Problem

Your wastewater treatment plant has been hit with nitrate or total nitrogen limits and with a limited capital/O&M budget, you are looking for options that don't include overhauling everything.

The Nexom Answer

Blue Nite biological denitrification turns your existing plant into a nitrate-eliminating machine. Here's how:

- **Can consistently meet <1 mg/L NO_x-N** so you never have to worry about compliance again
- **Modular, end-of-pipe solution** meaning you don't need to fix the rest of your plant if it isn't broken
- **Accommodates high or fluctating** influent nitrate levels
- **Works with alternative carbon sources**, such as glycerin or acetate
- **Works simultaneously in the same vessel** with Blue PRO reactive filtration for total nutrient removal

How Blue Nite works

Reaction kinetics of denitrification are well-established, so the challenge is not turning nitrates into the gas that comprises 70% of our atmosphere. Rather, how do you build denitrifying biomass most efficiently?

Built on the Centra-flo® continuous-backwash upflow sand filter platform, biomass is able to take hold on the ample surface area of the sand media as the carbon source is distributed evenly throughout, with proven platform and patented controls eliminating system upsets.

Designed to be better

The Centra-flo platform is both Title 22-approved and the basis for Blue PRO reactive filtration, which meets North America's lowest-known municipal phosphorus limit.

technologies for cleaner water

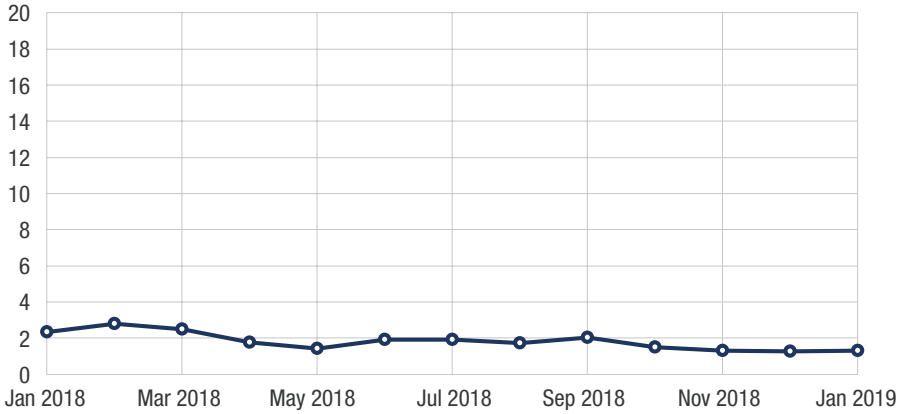
5 Burks Way · Winnipeg MB · R2J 3R8
888·426·8180 • **www.nexom.com**

Blue Nite helps Bellefonte, PA's WWTP become total denutrification system

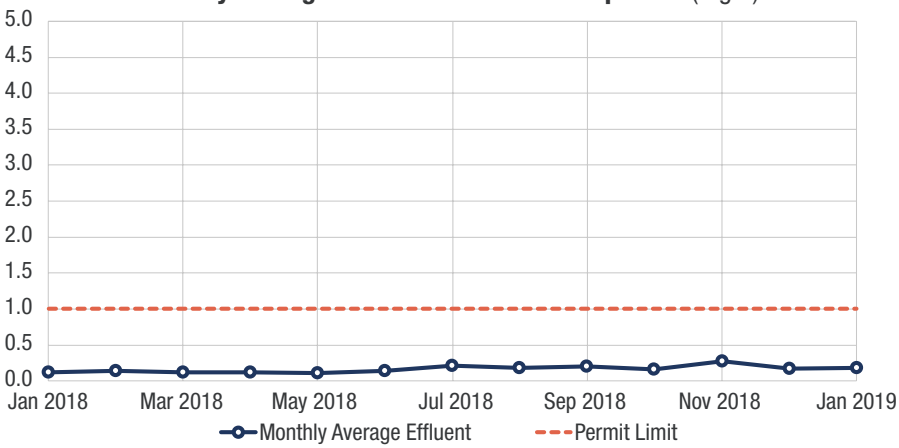
In central Pennsylvania, just north of State College on the edge of Pennsylvania's beautiful system of State and National Forests, sits Bellefonte, a small town of only 6,200 but the seat of Center County and part of the State College Metro Area.

Originally constructed to remove Total Nitrogen in 2009, the site (*picture, at right*) was subsequently upgraded to remove Phosphorus as well to become a total nutrient solution. Since that time, the site has safely complied with all nutrient permit requirements while exhibiting notably efficient ferric and carbon usage.

Weekly Average Effluent NO_2 & NO_3 as N (mg/L)



Monthly Average Effluent Dissolved Phosphorus (mg/L)



Nexom knows filtration

The Nexom team has been pushing the bounds of filtration for over decade, covering hundreds of projects across the U.S and Canada. Our engineers are the leading experts in a range of technologies and pioneered Blue PRO reactive filtration.

Nexom brings this experience to the world of denitrification with Blue Nite. With 18 sites across North America (and counting) already using the technology, Blue Nite is the proven technology for end-of-pipe nitrate removal!

UPGRADING WITH BLUE NITE IS EASY AND EFFECTIVE

1 We walk you through exactly what project details we need. Call 888-426-8180 or email info@nexom.com.

2 We supply design-ready drawings, proprietary technologies, and responsive support.

3 You never worry about your nitrate or Total Nitrogen limits again.