

Nittany Engineering & Associates, LLC

Biological Nutrient Removal (BNR)

Wastewater
Treatment Plant -
Bellefonte, PA



What Can We Do For You?

Nittany Engineering & Associates, LLC (NEA) is a consulting engineering firm located in Centre Hall, Pennsylvania. For the past two decades, we have selected the most appropriate technologies to meet our customer's goals. We understand the competitive environment of industry and the budget constraints of our clients. In order to meet our customer's goals, we commit appropriate resources to every project and have created an efficient yet flexible company structure that allows us to operate with low overhead. After the strategic goals for a project are determined, our team of experienced professionals attacks those objectives by combining traditional design experience with the latest state-of-the-art technology.

We have the capability of supplying complete engineering services on all of our projects. This includes the initial surveying, drafting, designing and specifications development. As the design progresses, we obtain permits required at the federal, state, and local levels. After the project is under construction, we provide construction stakeout, construction inspection services (to ensure that the project is completed according to the design), and construction management. After construction is complete, we provide ongoing technical support for proper operation of the project. We provide a complete service from concept through construction and to final operation.

BNR TECHNOLOGIES



Denitrification filter (w/ chemical phosphorus removal) (Bellefonte, PA)

- NEA has designed and operated a 36,000 GPD pilot denitrification filter.
- Non-flammable carbon sources, including *MicroC G* and *Unicarb DN* were tested.
- Effects of high dissolved oxygen and low temperatures were tested.



Oxidation Ditch (Brockway, PA)

- 1.5 MGD Sewage Treatment Plant
- The adjustable rotors create anoxic and aerobic zones for nutrient removal.
- 2008 “Wastewater Systems of the Year Award”



Membrane Bioreactor (MBR) (Millheim, PA)

- 0.1 MGD Sewage Treatment Plant
- Dedicated anoxic tank with nitrate recycle
- Automated D.O. control and submersible mixers

“Nittany Engineering & Associates, LLC takes pride in providing our clients with honest, ethical, value-added professional services. We will serve as your agent and partner, directing you with the recommendations that will be in your best interest. When we work for you, its not just another job, it’s another opportunity to enhance our reputation for providing the highest professional service at the most economical cost.”

Robert S. Decker, PE
President

NEA is also specialized in chemical phosphorus removal and other biological nutrient removal technologies, including Modified Ludzak-Ettinger (MLE), Sequencing Batch Reactor (SBR), etc.

| Project Samples | Client Contact |
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| Bellefonte Borough - 3.22 MGD sewage treatment plant upgrade to meet BNR standards --- denitrification filter plant and pilot unit design, headwork pump station, fine screen pretreatment, aerobic sludge digester, UV disinfection system design, and construction management. Currently in the project bidding phase. | Tom Smith, Plant Manager (814) 355-1505 |
| Brockway Area Sewage Authority - 1.5 MGD treatment plant (extended aeration, activated sludge and nitrification/denitrification oxidation ditch, membrane sludge thickening). Successfully operating since 2004. | Jim DeSantis, Plant Manager (814) 265-0830 |
| Millheim Borough STP - Design new 0.10 MGD Activated Sludge/MBR plant with anoxic denitrification process for nitrogen removal. Currently in the project construction phase. | Roy Rupert, Plant Manager (814) 349-5350 |
| Gregg Township Sewage Authority - 0.100 MGD sequencing batch reactor treatment plant, influent & collection pumping stations, and 23,500 feet of collection sewers | Gil Morrison, Chairman (814) 422-8779 |