

# NIPSCO chooses a greener path to comply with NPDES regulations

NIPSCO uses a large reservoir for settling out suspended solids prior to discharging the water back to the Kankakee River. This water is rich in nutrients, causing algae to grow at an undesired rate. Algae has a direct effect on pH and TSS levels in water. By using MPC-Buoy, NIPSCO has improved their water quality and their environmental impact.



- ✓ Reduced TSS levels at the plant discharge
- ✓ Improved plant discharge water quality and environmental impact
- ✓ Eliminated UV blocker chemical from their treatment program
- ✓ Reduced quaternary amine algaecide usage by 25% in the first year

## Complying with NPDES regulations

In order to comply with NPDES effluent regulations, power facilities have to keep their discharge within strict pH and TSS ranges. The inability to comply with the discharge limitations in their permit could result in hefty fines and potentially result in the inability to operate the generating units. Not being able to discharge could also result in damage to the large cooling units, which are costly to repair.

## A safe and effective solution

NIPSCO is a company that is continually working to manage and improve their environmental impact. In their search to find a safe and effective solution for their algae problems, this led them to the LG Sonic MPC-Buoy. Together with LG Sonic, NIPSCO is taking steps to a cleaner energy future. LG Sonic ultrasound technology is chemical-free, proven to be safe for fish, plants and does not cause algae to release their toxins in the water. NIPSCO is one of six power plants where MPC-Buoys are being used to safely improve the water quality.

## Improved water quality and safe discharge water

Since the start of the project NIPSCO has seen significant improvement in their water quality. After a few months of tuning the technology, the MPC-Buoy systems successfully controlled the growth of algae in the reservoir. This reduced the TSS levels, making sure that their discharge water is safe and generating units stay operational.



*"We were using both an algaecide (quaternary amine) and a UV-blocker at all our cooling towers. By the end of the season we eliminated using the UV-blocker chemical and we reduced the algaecide by 25%. We intend to reduce more in 2020 [with MPC-Buoy]."*

*You have a quality product [MPC-Buoy] that has potential to help many customers such as ourselves. We enjoy working with quality people."*

**Brian Snyder – Senior Chemical & Environmental Specialist, NIPSCO**