

## **Process Water Discharge Line**

In 1995 Norlite installed a Waste Water Treatment Plant (WWTP) to treat process and non-contact cooling waters associated with its Light Weight Aggregate (LWA) manufacturing operations. By a permit issued by the New York State Department of Conservation (NYSDEC), Norlite's treated waters are authorized to be pumped through a series of underground pipes and discharged into the Mohawk River at the confluence of the Mohawk and Hudson Rivers just north of Green Island, NY.

The underground pipe system, originating on the Norlite facility, is a series of private and public pipe lines with private and public right of ways and easements traveling a distance of approximately 1 mile to the Mohawk River.

Over the 30+ years that Norlite has been discharging its treated waters, Norlite has received infrequent but periodic odor complaints from downstream stakeholders regarding sulfide and bleach odors. Sulfide odors (rotten egg odor) are caused by natural bacteria activity in the pipeline and the bleach odor arises from the use of industrial strength bleach used to disinfect the pipeline of the natural bacteria. The potential for odors being generated is highest during the hot dry summer months in which Norlite increases its use of disinfectant.

Norlite maintains continuous process monitoring in its WWTP to pre-empt and treat for odor generation. Additionally Norlite's management team is on call to respond to downstream stakeholders.

Norlite is currently pursuing an alternative to its direct discharge to the Mohawk River namely a discharge to the Albany County Sewer District (ACSD), North Treatment Plant. The ACSD is a Publicly Owned Treatment Works (POTW) that accepts sanitary waste and waste waters from municipalities and industrial operations for treatment prior to discharge to the Hudson River. Norlite is pursuing the ACSD alternative as the preferred environmentally beneficial long term operating scenario for its LWA manufacturing operations that has been producing specialty construction materials since the mid -1950's. A discharge to the ACSD provides a second level of treatment to Norlite's waste waters that are currently treated in accordance with federal and state regulations. Additionally, a discharge to the ACSD eliminates the complexity of the existing pipe system for the benefit of downstream stakeholders.

Norlite has applied for discharge to the ACSD in 1994 and 2010. Both applications were denied by the ACSD due to technical and regulatory arguments presented by the ACSD. Norlite's current application which is intended to be submitted in May 2016 will address, based on science and technology, the arguments previously highlighted by the ACSD.