

After more than 32 years in operation, Enaqua replaces one of its longest running non-contact UV systems with new and improved version

The City of Buckhannon, West Virginia, recently dedicated their sewer plant to long time manager Sam Ludlow. At the Sam Ludlow Sewer plant you can find one of the first non-contact UV reactors built by Enaqua and still in operation. However, that is about to change. After more than 32 years, the Buckhannon plant is ready for a new disinfection system, and there is no doubt in their minds, its successor will be an Enaqua non-contact UV system as well.

THE SITUATION

In 1987, two parallel UV systems were installed at the Sam Ludlow Sewer Plant to provide disinfection of the treated wastewater before its discharge into a small local river. After a few hiccups with the brand-new technology were resolved, the system quickly proved its worth to the staff at the sewer plant.

Thanks to the non-contact UV technology, the system provided high-quality results, low operating costs, not to mention improved safety:

“A comparison to the hazards associated with chlorine and sulfur dioxide to both sewer department personnel and to the entire community, makes us appreciate our UV units,” says Sam Ludlow, former manager of the sewer plant.

A further benefit is the extremely low maintenance needs caused by the longevity of the system parts.

“we continue to use the same inlet/outlet boxes, “Teflon” tubes, lamp racks, and stainless-steel enclosures. None of those components have caused us issues. We consider the units to be basically maintenance free,” says Sam Ludlow.

After more than 32 successful years in operation, the systems are now naturally approaching the end of their service life, and when the city staff of Buckhannon had to start planning for the future, they didn’t think twice about contacting Enaqua. They had complete trust not only in Enaqua’s products, but in their guidance as well.

THE SOLUTION

The new Enaqua non-contact UV unit will come with improvements to controls, fluoropolymer tubes (AFP tubes) as well as to the overall design. Engineers and other representatives from Enaqua visited the site to make sure the new UV unit fit the plant’s needs and made modifications to the plan based on their assessment of the existing unit as well as their records of the plant staff’s concerns and experiences.

The lengths Enaqua has gone to in order to ensure the quality of the new design has been much appreciated by the Buckhannon staff and only reinforced their trust in Enaqua’s personnel and products:

“This was not an obligation on the part of Enaqua, but definitely an activity that improved the product that they will deliver to Buckhannon,” says Sam Ludlow.

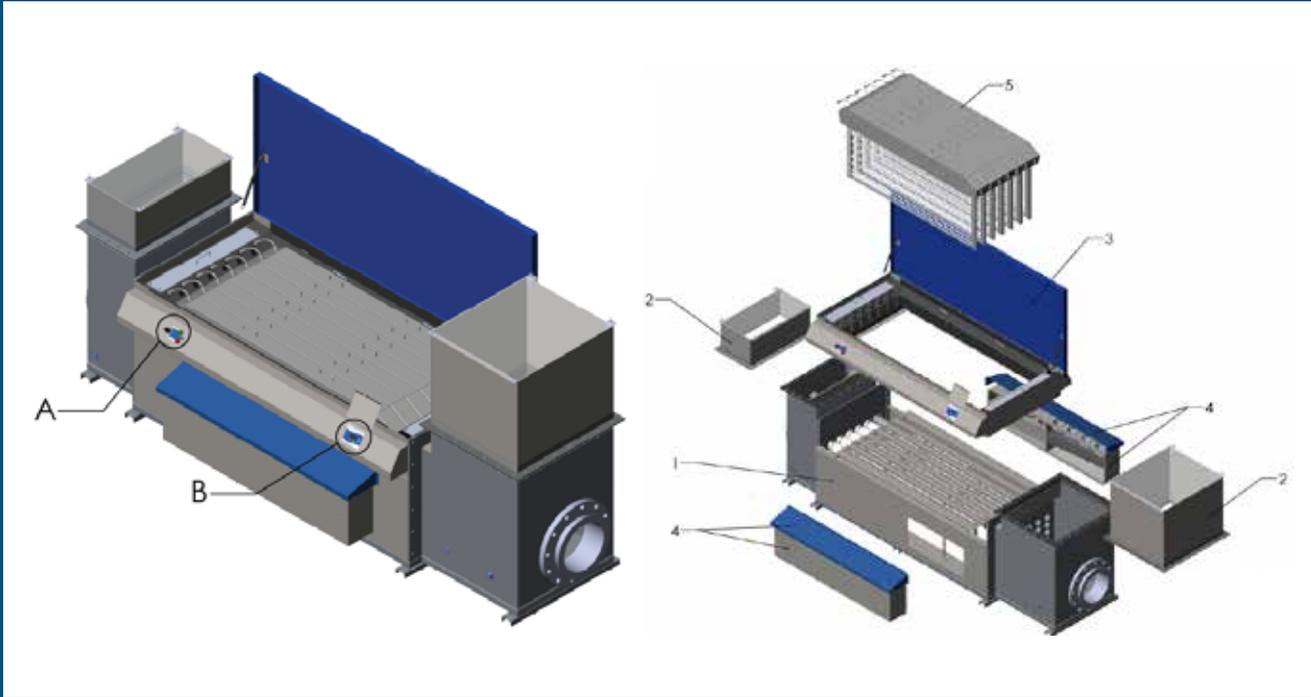


It was also their trust in Enaqua that made the Buckhannon staff switch plans from upgrading the existing system to installing a new one when their trusted local Enaqua rep suggested this:

“Since Rick McIntyre visited our plant in 2015, we have considered him a valuable contact. He is familiar with our operation and has helped us obtain materials and get technical assistance. He was the person who advised us on the advantages of installing a new unit rather than attempting to upgrade our old unit,” Sam Ludlow explains.

However, installing the new unit comes with great practical challenges, as the underground structure where the old system is placed is only accessible through a small access hatch in the roof that does not fit a standard sized Enaqua system.

To overcome this challenge, Enaqua custom-designed a UV reactor where parts could be removed and reinstalled after moving it through the access hatch. The whole process, including making a 3D replica of the access hatch and the custom-designed system to ensure it would fit, only extended from 2018 to April 2019 with the installation of the new system scheduled for October 2019.



Specific UV reactor designed with removable parts

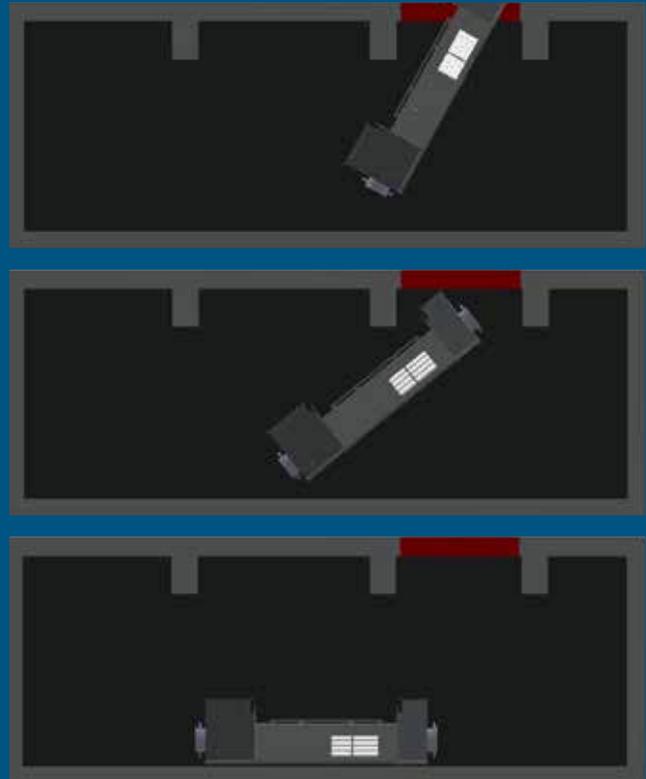
THE OUTCOME

For many years, the staff at the Sam Ludlow Sewer Plant have been free of worries about the quality of their water disinfection thanks to their Enaqua non-contact UV system. And with their new unit, come October 2019 they can continue to rest assured that they are producing clean water with minimum maintenance:

“This is a function of the treatment plant that does not require much attention because it is so consistently satisfactory. Easily available test results show consistent, excellent disinfection performance,” Sam Ludlow explains.

Due to their great experiences with the quality, longevity and low maintenance and operating costs of their Enaqua non-contact UV system, the Buckhannon staff are now steadfast proponents of these systems and have complete faith in Enaqua products and personnel.

“We are very pleased with our UV units and with Enaqua. We have found that with an effective prior treatment process, UV disinfection is a very reliable, operator-friendly and safe process. Overall cost, reliability, and operator attention requirements have made our disinfection system a very positive part of our operation.”



Fitting the new UV reactors through the access hatch at Sam Ludlow Sewer Plant

After more than 32 years in operation, Enaqua replaces one of its longest running non-contact UV systems with new and improved version

The City of Buckhannon, West Virginia, recently dedicated their sewer plant to long time manager Sam Ludlow. At the Sam Ludlow Sewer plant you can find one of the first non-contact UV reactors built by Enaqua and still in operation. However, that is about to change. After more than 32 good years, the Buckhannon plant is ready for a new disinfection system, and there is no doubt in their minds, its successor will be an Enaqua non-contact UV system as well.

THE SITUATION

In 1987, two parallel UV systems were installed at the Sam Ludlow Sewer Plant to provide disinfection of the treated wastewater before its discharge into a small local river. After a few hiccups with the brand-new technology were resolved, the system quickly proved its worth to the staff at the Sam Ludlow Sewer Plant.

Thanks to the non-contact UV technology, the system provided high-quality results, low operating costs, not to mention improved safety:

“A comparison to the hazards associated with chlorine and sulfur dioxide to both sewer department personnel and to the entire community, makes us appreciate our UV units,” says Sam Ludlow, Manager of Sam Ludlow Sewer Plant.

A further benefit is the extremely low maintenance needs caused by the longevity of the system parts.

“ we continue to use the same inlet/outlet boxes, “Teflon” tubes, lamp racks, and stainless-steel enclosures. None of those components have caused us issues. We consider the units to be basically maintenance free,”

Sam Ludlow, Manager of Sewer Plant

After more than 32 successful years in operation, the systems are now naturally approaching the end of their service life, and when the city staff of Buckhannon had to start planning for the future, they didn't think twice about contacting Enaqua. They had complete trust not only in Enaqua's products, but in their guidance as well.

THE SOLUTION

The new Enaqua non-contact UV unit will come with improvements to controls, fluoropolymer tubes (AFP tubes) as well as to the overall design. Engineers and other representatives from Enaqua visited the

site to make sure the new UV unit fit the plant's needs and made modifications to the plan based on their assessment of the existing unit as well as their records of the plant staff's concerns and experiences.

The lengths Enaqua has gone to in order to ensure the quality of the new design has been much appreciated by the Buckhannon staff and only reinforced their trust in Enaqua's personnel and products:

“This was not an obligation on the part of Enaqua, but definitely an activity that improved the product that they will deliver to Buckhannon,” says Sam Ludlow.

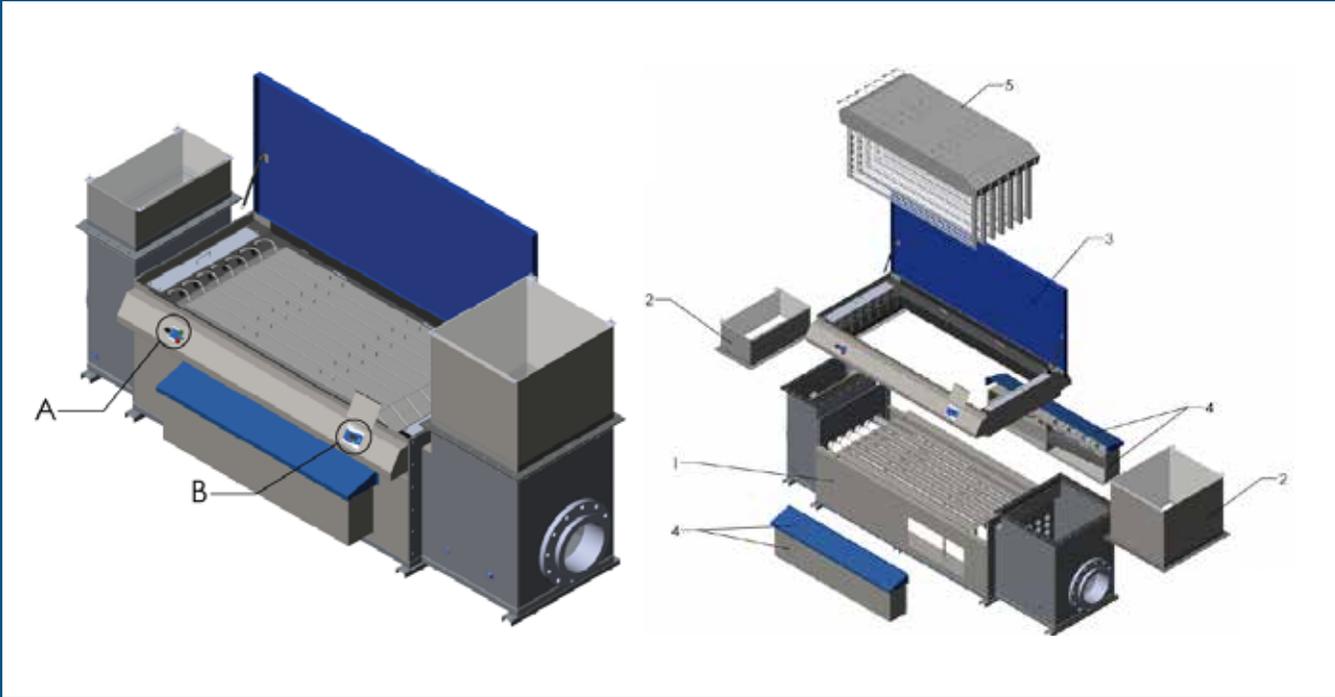


It was also their trust in Enaqua that made the Buckhannon staff switch plans from upgrading the existing system to installing a new one when their trusted local Enaqua rep suggested this:

“Since Rick McIntyre visited our plant in 2015, we have considered him a valuable contact. He is familiar with our operation and has helped us obtain materials and get technical assistance. He was the person who advised us on the advantages of installing a new unit rather than attempting to upgrade our old unit,” Sam Ludlow explains.

However, installing the new unit comes with great practical challenges, as the underground structure where the old system is placed is only accessible through a small access hatch in the roof that does not fit a standard sized Enaqua system.

To overcome this challenge, Enaqua custom-designed a UV reactor where parts could be removed and reinstalled after moving it through the access hatch. The whole process, including making a 3D replica of the access hatch and the custom-designed system to ensure it would fit, only extended from 2018 to April 2019 with the installation of the new system scheduled for October 2019.



Specific UV reactor designed with removable parts

THE OUTCOME

For many years, the staff at the Sam Ludlow Sewer Plant have been free of worries about the quality of their water disinfection thanks to their Enaqua non-contact UV system. And with their new unit, come October 2019 they can continue to rest assured that they are producing clean water with minimum maintenance:

“This is a function of the treatment plant that does not require much attention because it is so consistently satisfactory. Easily available test results show consistent, excellent disinfection performance,” Sam Ludlow explains.

Due to their great experiences with the quality, longevity and low maintenance and operating costs of their Enaqua non-contact UV system, the Buckhannon staff are now steadfast proponents of these systems and have complete faith in Enaqua products and personnel.

“We are very pleased with our UV units and with Enaqua. We have found that with an effective prior treatment process, UV disinfection is a very reliable, operator-friendly and safe process. Overall cost, reliability, and operator attention requirements have made our disinfection system a very positive part of our operation.”



Fitting the new UV reactors through the access hatch at Sam Ludlow Sewer Plant