



# Water/Wastewater

## INTRODUCTION

Population growth and limited resources for potable water are the primary concerns for continuous uptime in the water treatment industry. Most Water/Wastewater treatment plants are relatively small and operate on legacy equipment, requiring routine or spontaneous maintenance that results in downtime. Uptime is critical when a plant's downtime can result in the loss of water for the population it serves.

## THE WATER/WASTEWATER PROBLEM

Treatment plant downtime at best can be quick and routine, but at worst can be long and unplanned for, with the risk of leaving an entire city without water for an unprecedented amount of time. That is where the need for minimizing downtime becomes apparent. For example, during a reactive maintenance scenario where something has gone awry that was unplanned for, this is where 70% of injuries occur. It's important to allow maintenance personnel to perform their duties both safely and efficiently, but safety first.

Whether it is a routine shutdown or an emergency, performing Lockout/Tagout (LOTO) may be required. This procedure is one of OSHA's most cited violations due to the frequency of missteps that occur when following the steps outlined in NFPA 70E Article 120.5: Process for Establishing and Verifying an Electrically Safe Work Condition. A single LOTO procedure in treatment plants can take up to or over an hour and requires not one, but two people; an electrician and a technician.

The moment **safety becomes compromised** is when **efficiency goes out the door** as well.

## THE WATER/WASTEWATER SOLUTION

Installing a ChekVolt Permanent Electrical Safety Device (PESD) onto an enclosure that requires LOTO has proven to reduce procedure times by 35-40 minutes and requires a single qualified electrician to perform. The ChekVolt provides LED voltage indication and, rather than opening an enclosure, allows for qualified electrician to perform an absence of voltage test safely and efficiently from the outside. Now that hazardous electrical exposure risks have been mitigated, the procedure can now be completed with one person and in less than 5 minutes.



Prior to the addition of a ChekVolt, two personnel had to coordinate a visit to each lift station and perform LOTO testing as well as reset the station. This was usually a 1-hour time frame reduced to a mere 5 minutes. Cost savings are quickly realized as the ChekVolt essentially pays for itself after just 2-3 procedures. More importantly, when using the ChekVolt, the risk of exposure to energy was mitigated.

## ABOUT THE CHEKVOLT®

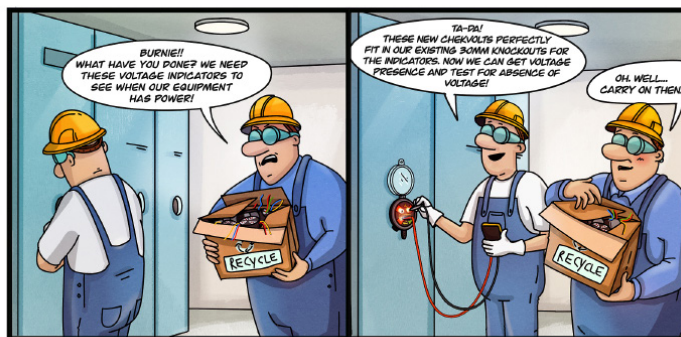
Safer access and cost savings is driving installation of ChekVolts at treatment plants that are pursuing reduced downtime, whether they plan for it or not. Incorporating a ChekVolt into a treatment plant's LOTO procedure will improve safety by eliminating the risk of direct exposure to energy while performing routine or irregular maintenance tasks. Additionally, the added benefit of the ChekVolt's voltage indication will warn personnel when voltage is present when they may have assumed it was isolated, preventing a hazardous incident.

The ChekVolt is a compact device that enables absence of voltage testing from outside of the cabinet and features LED voltage presence indication rated up to 1000V. The device installed through a single, 30mm knockout and includes four terminal connections that make installation quick and simple. The ChekVolt is designed to work directly with a qualified electrician's multimeter and ensures the user has a safer method of testing for absence of voltage while complying with the steps outlined in NFPA 70E Article 120.5.



This PESD is designed to work directly with a qualified electrician's portable test instrument (i.e. Voltmeter or multimeter) and ensures the user has a safer method of testing for absence of voltage through high impedance protected test points. ChekVolt is uniquely designed for Lockout/Tagout (LOTO) procedures and enhances compliance with the steps outlined in NFPA 70E Article 120.5: Process for Establishing and Verifying an Electrically Safe Work Condition.

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