

Project: Water Treatment Plant Clearwell Tank Replacement

Department: Water Department

The Clearwell is a tank with a capacity of 250,000 gallons of water that has been filtered and disinfected. The tank supplies water to a pump that backwashes the water filters to remove the buildup of organic material that has been trapped by the filter media. The current tank is an open top steel tank that was repurposed from a clarifier to the current usage as a clearwell. The ADEC views the open top tank as a cross connection hazard and has directed in the past, following mandated sanitary survey inspections, that it shall be covered to eliminate the hazard. The staff at the water treatment plant is responsible for ensuring that a cross connection does not occur. The process used during a backwash of the water filters in the plant prevents the introduction of any backwash water from the clearwell into the plant effluent very effectively and reliably. However, ADEC has not moved from their position and therefore, the Borough is seeking to replace the tank with a fully enclosed tank.

As mentioned, the tank is steel construction and was repurposed about 14 years ago. It has been in place since the 1970's and the corrosion on the exterior of the tank is progressing even though it has been re-painted a couple of times over the years. The utility has decided to replace the tank in lieu of retrofitting a cover due to the fact that the tank walls will not support a roof and the corrosion is advancing to the point where it is unsure if sandblasting and recoating will result in a repair that will last for the long term.

Costs of replacement are estimated to be \$1,000,000. This includes setting up a temporary clearwell system for backwash supply water, demolishing the old clearwell, improving/reconstructing the tank foundation, constructing/erecting a new fully enclosed clearwell on-site and removing the temporary backwash supply.



Water Utility Clearwell Tank