Water Line Overview, Layer Site 3 EPA Well

Well Site to Water Room

The VFD controlled well site that supplies water to the Trillium Farms, Layer 3 processing facility at 11652 Clover Valley Rd is located approximately 220' south of the site water room. The water is pumped through a 2" SDR21 PVC pipe, transitioning to 2" SCH80 PVC. All known fittings and joints between the well's pitless adapter and the water room are glued PVC or gasketed, bell/spigot. Several points along the supply line have been excavated and repaired, and visually verified to be PVC pipe.

Water Room Layout

The water line enters the water room in the southeast corner as a 2" SCH80 PVC pipe. (Trillium does not know for certain where the transition from SDR21 to SCH80 takes place.) Once in the water room the pipe is connected to a pressure tank with a tee from the main line, and then continues up the wall and overhead, hanging from the ceiling. It then passes through a softener system, and then towards a chlorine injection system. Before the chlorine injection system, a ¾" service line tees off, through an RPZ, and terminates in the boiler room to supply make-up water to our closed-loop boiler system.

The main line continues to the chlorine injection system. The chlorine injection system is composed of an injection pump, meter, galvanized mixing tank, and a bypass to allow for system maintenance during operations. All treated water that goes to the processing facility passes through the mixing tank, and exits the water room through the floor near the northwest corner of the water room via a 1.5" SDR21 pipe. The entire main line pipe in the water room is SCH80 PVC with the exception of the copper lines that supply water to the boiler system. There are no soldered joints. All connections and fittings are threaded or glued.

Main Water Line Enters Processing

The 1.5" SDR21 PVC water line enters the processing facility through the floor in the northwest corner of the dry dock. The pipe travels up the wall, through a meter, and transitions to SCH80 PVC. The pipe continues up the wall until it reaches the ceiling where it tees towards the processing plant floor (north), and to the facility's front office area (east).

Main Water Line Branches into Processing Area

The plant's water line passes through the dry dock/plant wall, and continues north towards the processing equipment. After the wall, a service line tees off to an emergency chemical shower. The emergency shower line is SCH80 PVC. The main plant service then passes through an RPZ. After the RPZ, another service line tees off to the clean-up room. The clean-up room service is SCH40 PVC, and is used to supply water to a pressure washer. The plant's main line then splits. One side supplies cold water to hose connections, the egg washers, and the bioroom showers (installed in 2014, lead-free). The other side of the main line split passes through a heat exchanger and supplies hot water to the hose connections, final rinse bar on the egg washers, and the bioroom showers. The main supply line after the clean-up room service is copper and galvanized steel pipe. It is connected with crimp-on fittings, threaded joints and solder (all installed after 2012). The supply lines to the egg washing equipment and hose connections are all fitted the same way.

Water Line Overview, Layer Site 3 EPA Well (cont'd)

Main Water Line Branches to Supply Front Office Area

Before the main line enters the processing plant through the dry dock/plant wall, it tees off towards the front of the facility to the office, breakroom, and restroom areas. The service hangs from the ceiling, and follows the dry dock/plant wall until it turns into the attic space above the office/break room area. The supply line splits in the attic to supply cold water to a breakroom sink, a hand wash station, and two restrooms. The supply line also supplies cold water to an electric hot water heater (located in the attic). The hot water heater provides hot water to a breakroom sink, a hand wash station, and two restrooms. The main line is SCH80 PVC and glued fittings until it reaches the maintenance shop. Inside the maintenance shop the service lines are SCH40 PVC, CPVC, and PEX. All water lines to the break room, restrooms, and hand wash station were installed in 2011. The only copper pipe in this area of the system was used to stub-out for the toilets and drinking fountains, and was connected to PEX supply lines with Sharkbite fittings.







