

## WASTEWATER TREATMENT PLANT

From July 1, 2014 through June 30, 2015 Berlin's Pollution Control Facility took in and processed 705.77 million gallons of sanitary sewer flows, and received another 24.284 million gallons of leachate from the AVRDD Landfill last year. We also accepted 547,025 gallons of septage waste from outlying communities and residents not connected to City Sewers.

As part of the process (=Activated Sludge) we produced 1,682.85 tons of dried municipal sludge, which we trucked up to the AVRDD Landfill for disposal.

The Activated Sludge Process removed 94.8% of the BOD (= Biological Oxygen Demand, ie, material dissolved in water that consumes Oxygen) and 97.1% of the TSS (= Total Suspended Solids, ie, material insoluble in water) measured at the point where it comes into our facility and where we discharge it to the River. The whole of our treatment process is driven by the conditions imposed by the Permit-to-Discharge issued to us by the EPA.

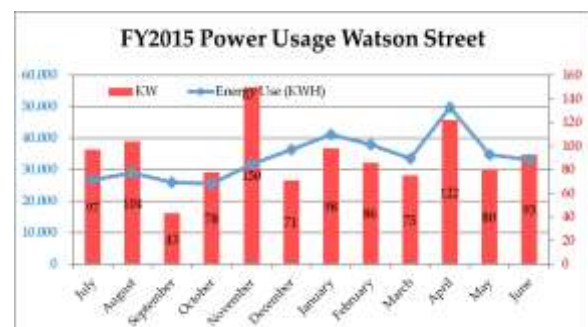
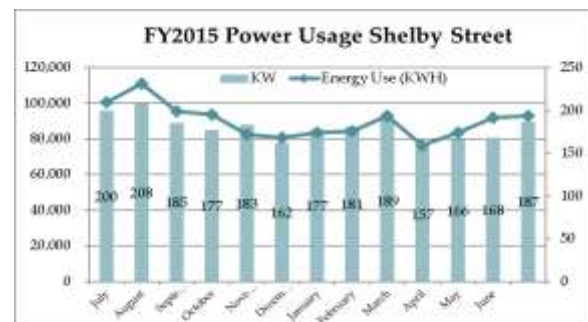
Our 2+year project achieved Substantial Completion this Fiscal Year and we have taken operational control of these changed processes. Computer controls promise to streamline and coordinate operations, but have been complicated to master. Our new Screw Press is a good example of a complex process requiring much trial and error (and patience and understanding) of our operators. Punch list items are being worked down, but new ones have come up that we want addressed.

Average monthly power usage at the Main Plant 89,936.5kWH and at our main pump station at Watson Street 32,916.7kWH; average monthly kW at the Main Plant was 180.0kW and at Watson Street 92.1kW. Power usage is up about 112% at the Main Plant but

down to 99% of last year at Watson Street; demand at the Main Plant increased 106% and at Watson Street decreased to 87% of the previous year's.

Energy demand (kW) follows the peak flows through the sewers and is a measure of the success of the City's program to reduce Inflow and Infiltration. Actual power usage continues to increase due to all the new control equipment remaining live around the clock, high-power consumption to pump oxygen into the water, and new equipment online.

We started to accept flow from the Burgess Biomass in this fiscal year and flows peaked out from the new Federal Prison (FCI-Berlin). These new flows and the associated loadings are important to the performance of our upgraded Facility. We have additional capacity built in to accept new flows and loadings and we need to keep these up for optimal Treatment.



Respectfully Submitted:

Henry Noel  
Wastewater Superintendent