

# Hardwick WPCF Superintendents Report

July 10, 2017

## Completed:

6/13/17 Phone line to Wheelwright Pump Station not operating again, called in Comcast who changed modem again as well as connections at alarm dialer and atop pole.

6/14/17 Alarm 5am Wheelwright Pumping Station. #2 Air compressor not running; called in Lagrant Electric to troubleshoot. Cleaned float and throttled back on sewage inlet valve so station can keep up while one compressor is on line. Another alarm at 7:30am: single compressor is not keeping up. Monitored/ran station until Lagrant showed up at 9am; he opened electrical enclosure to find motor starter tripped. Reset for motor starter linkage is too short which is why we couldn't reset it. He checked amp draw and both motors look good at this time.

6/23/17 Home tied into force main from Dow Rd. by Gerulaitus. Potter and Young on-site to inspect.

6/24/17 A.Joubert alerted me to sewer backing up from manhole cover in front of Eagle Hill Pump Station. On arrival, wet well was full with Low Level, High level, Pump #1 failure to start, Pump #2 failure to start, Backup float operation and float high level alarms active but no attempt by dialer to call out alarms. Pumps would not run even in hand, low level appeared to be locking pumps out. Low level alarm on PLC touchscreen would not reset. Unplugged power to PLC to reboot same. On plugging back in, low level was cleared, both pumps started and dialer started calling out high level alarm. Left message at Gilbertville WWTP before I acknowledged it on dialer. Both pumps pumping 29GPM at 100% speed after force main was filled; surprisingly inadequate. Took nearly 3 hours to pump from 14+feet to 3 feet. Reason for Low Level alarm was wet well being vacuumed out by Desantis Septic on Friday 6/23 due to very heavy floatables accumulation. Was just vacuumed out ~6 months ago. Spread lime over spill area to disinfect and reduce potential odor. Reported "SSO" to MassDEP as required. Returned Sunday 6/25 to check for odor; none noted.

Received new cell phone w/ waterproof case. 774-757-7150. Reprogrammed alarm dialers at all working locations to include this new number.

6/28/17 false alarm at Wheelwright WWTP: #1 SBR High Level. Reading 24 feet at an actual 9 feet. Cleaned level transducer probe and attempted to calibrate antiquated controls. Probe is responding but adjusting the level is changing the set points for high level, low level, etc. Called in Lagrant Electric. Changed out level transducer with new spare, working now. Obtained 2 quotes for replacement spare for \$883.99, negotiated down to \$800 from USABluebook and ordered same.

6/30/17 Phone line to Wheelwright Pumping Station alarm dialer out again; called in Comcast again. Changed modem and cable line running across Barre rd. Line operational at 2pm.

Wheelwright RAS pumps are failing causing even lower than usual D.O. and poor mixing. Hayes Pump price: \$10,300. (both pumps, installed). These pumps are completely worn out and way past their effective life. Ordered new pumps per Alan; Installed by Hayes 7-6-17. Dramatic increase in pumping with new pumps #1 went from 10/15psi discharge to 38. Much better mixing and more air getting pulled into system; Dissolved Oxygen levels rose from 0.10 mg/L to 5.00 mg/L.

7/5/17 Sewer backup at 464 Main St., Gilbertville. Called in Ware for mutual aid; Sewer Jet and one Operator. Potter and Young assisted. Large chestnut tree directly over line, manhole was buried in front yard of 446 Main. Manually removed

roots, bricks, rocks and loose change from manhole and jetted upstream toward 464, blockage cleared. Rinsed manhole and line with remaining water in jet tank.

## Ongoing:

-Attempting to reach original builders of control panel at Eagle Hill Pump Station to troubleshoot poor operation and/or reprogram system to correct problems outlined above. He will be back from vacation 7/11/17

## Proposals:

-Order new cutting unit for JWC Channel Monster at Wheelwright WWTP? Franklin Miller is now making new cutting units to fit JWC gearboxes. Negotiated price on their new unit for less than a JWC rebuilt unit. Same warrantee. \$8436 New F/M vs \$8754 Rebuilt JWC **Critical, this is completely worn out and having negative effect on operation and surcharging incoming sewage line to plant.**

-With new fiscal year, do we want to address alarm system repairs at Wheelwright WWTP? TOTAL PROJECT COST \$6,500.00 **Required by our permit.** We should also have Industrial Technical Services plan on spending a day or two in Wheelwright when they do the alarm system to work on the instrumentation at this plant. We need to repair/replace all Dissolved Oxygen meters and restore accurate communication between meters/panels and main control system.

-Purchase (1) new Gorman Rupp pump to have on-hand for Wheelwright (we have no backup pumps and can't afford downtime). \$3815.45 is the price I have negotiated for these which is likely less than a rebuild considering the condition of the originals we just had removed. This pump would also serve as an emergency backup pump for Gilbertville as they are the same model#.

-Purchase 2 Gorman Rupp pumps for Gilbertville. These pumps are beyond their useful life and may not make it until the upgrade. Roughly \$10,300. We can get a rebate from upgrade contractor or eliminate this if it gets rebid.

-I understand the Towns financial situation but it is my strong opinion that we need to have staffing in Wheelwright full time. We cannot functionally run and maintain all facilities with 2 men. Having 2 WWTP's is crippling to the small amount of users but these plants need to be operated and maintained much better than in the past. With the additional staff we should have another vehicle; a surplus truck or even car would be fine.

