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COMMITMENT & INTEGRITY DRIVE RESULTS

# Monthly Operating REPORT

Monmouth, Illinois

Department of  
Public Works

October 2018



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## EXECUTIVE SUMMARY

The October Public Works monthly report provides an overview of the month's activities and statistical data including: safety training, wastewater treatment effluent quality, water production, billing and collection statistics for municipal services, maintenance activities, maintenance and repair costs vs. monthly thresholds, water treatment chemical costs, overall project cost and performance to annual budget.

After the water main break event in late October that resulted in a City wide boil order, it was determined the best course of preventative action would be to install 4 new shut off valves on the 12" water main on North 5<sup>th</sup> Street including 1 at the intersection of East Detroit and North 5<sup>th</sup>, 1 at the intersection of East Girard and North 5<sup>th</sup>, 1 at the intersection of North 6<sup>th</sup> and East Euclid, and 1 at the intersection of Park Street and East Euclid. Street Department crew did all the excavating and backfilling for the valves, Laverdiere Construction did the valve installations during the week of November 12<sup>th</sup>. Street Department crew then replaced approximately 8 feet of the water main that had caused the boil order issue.

Leaf pickup was slowed due to the above mention valve project and several breakdowns of the machine. Crews resorted to picking up leaves using the end loader and trucking them to the compost site. Unfortunately, we were not able to get them all picked up prior to the blizzard this past Sunday night. After the snow melts off, we will figure out a plan to get the remaining leaves picked up from the streets.

Feel free to stop by the office or give me a call, 309-734-4026 if you have any questions or comments.

Regards, Andy

## 1. HEALTH AND SAFETY/STAFF

Staff completed the annual CPR training. There were no safety incidents or near misses in October.

## 2. WASTEWATER TREATMENT

The Consolidated WWTP treated and discharged 153 million gallons of wastewater in the month of October. There were no combined sewer overflow events in October. The weather station at the plant reported 4.5" of rain during the month. The Consolidated Plant continues to produce excellent effluent quality. The table below outlines the water quality vs. NPDES permit limits.

**Table 2-1: Water Quality vs. NPDES Permit Limits**

	Monthly Average	Permit Limit
Flow (MGD)	4.95	4.62
Ammonia N mg/l	0.2	1.5
CBOD5 mg/l	1	10
Total Phos	0.8	1
Chlorides mg/l	287	500
Suspended Solids mg/l	5	12

## 3. WATER TREATMENT

The water treatment plants produced 87 million gallons of finished water in October. Finished water quality met all standards per the Clean Water Act for drinking water. The table below outlines the chemical usage for ion exchange softening for the month.

**Table 3-1: Monthly Chemical Usage for Ion Exchange Softening**

	Daily Average	Monthly Total
Treated Water to System	2.8 MG	87 MG
Poly Phosphate Usage-lbs.	93 lbs	2,889 lbs
Salt Usage = tons	5.3	166 tons
Chlorine Usage - lbs.	109	3,377 lbs



## 5. TOTAL ANNUAL COST

Table 5-1: Annual Budget – Year 6

Budget Category	Month Budget	Month Actual	YTD Budget	YTD Actual	Annual Budget	over(under)
Labor (D.L. + FB)	\$126,442	\$119,066	\$758,654	\$726,049	\$1,517,309	(\$32,605)
Utilities	\$3,175	\$2,111	\$19,050	\$16,263	\$38,100	(\$2,787)
Chemicals Costs	\$25,250	\$19,861	\$151,500	\$155,449	\$303,000	\$3,949
Maintenance\Repair	\$27,642	\$28,357	\$165,850	\$185,040	\$331,700	\$19,190
Sludge Disposal Costs	\$500	\$1,671	\$3,000	\$1,671	\$6,000	(\$1,329)
Lab Supplies\Equip	\$3,479	\$2,513	\$20,875	\$22,990	\$41,750	\$2,115
Office Supplies	\$1,504	\$1,557	\$9,025	\$10,118	\$18,050	\$1,093
Miscellaneous Expenses	\$4,058	\$3,754	\$24,350	\$25,031	\$48,700	\$681
Other Operating Costs	\$12,529	\$19,430	\$75,175	\$112,350	\$150,350	\$37,175
Overhead (G.A.)	\$28,552	\$26,886	\$171,309	\$163,947	\$342,618	(\$7,362)
Subtotal Year 5	<b>\$233,131</b>	<b>\$225,206</b>	<b>\$1,398,789</b>	<b>\$1,418,908</b>	<b>\$2,797,577</b>	\$20,120
Fixed Fee Year 5	\$16,785	\$16,215	\$100,713	\$102,161	\$201,426	\$1,449
<b>Total</b>	<b>\$249,917</b>	<b>\$241,421</b>	<b>\$1,499,501</b>	<b>\$1,521,069</b>	<b>\$2,999,003</b>	<b>\$21,568</b>

## 6. MAINTENANCE/REPAIR ACTIVITIES

### A SUMMARY OF MAINTENANCE & REPAIR ACTIVITIES:

#### Water/Street Facilities

Maintenance staff completed 86 routine/preventative and 16 corrective work orders for the water plants, distribution system, sewer collection system, and fleet in October. 119 requests for service were responded to by service personnel. 146 requests for City utility locates from the J.U.L.I.E. call center were completed. Water distribution system and sewer collection system items:

- Preventative sewer cleaning on Lincoln Road, North 6<sup>th</sup> Street
- Repaired water main 1300 Highway 67 North
- Repaired water main at North 5<sup>th</sup> and East Euclid
- Repaired curb stop 1011 West 6th
- Repaired curb stop 423 West 8th
- Repaired curb stop 833 South 2nd

#### Wastewater Facilities

Maintenance staff performed 138 routine/preventative and 14 corrective work orders at the Consolidated Plant and North Pretreatment Plant.

- Install new VFD on gas blower
- Install flow dampener on Alum pump
- Install new motor on RAS pump
- Install new stator on phos plant sludge pump
- Replace starter on North Lift Station pump #2
- Install new building heater at chlorine pump building
- Replace belts and motor on screw conveyor for grit removal system
- Repaired purge blower on building 800 HVAC system
- Install new building heater at raw pump station control building

#### Street/Grounds/Right of Way/Fleet

- Various tree removal and trimming, utility patching, street sweeping
- Scheduled vehicle service work (lube, oil, filters)
- Replaced blower motor on T14
- Replaced headlight T4
- New tire on T18 and T19
- Repaired exhaust system on T19
- Leaf machine bearings need replaced, awaiting parts

## 7. CAPITAL PROJECTS

Several capital projects in the que include the design and construction of the remaining North Pre-Treatment Plant once the financing arrangements with Smithfield have been agreed upon and executed, and, Phase 2 design of the CSO Long Term Control Plan which is due to IEPA next spring.