

A G E N D A

HENDERSON WATER & SEWER COMMISSION **(270) 826-2421**

May 19, 2014
Monday @ 4:30pm

A. ROLL CALL

B. INVOCATION

C. PRESENTATION OF SAFETY AWARDS

D. APPROVAL OF MINUTES

- Approval of Minutes from April 21, 2014

E. MONTHLY REPORTS

- Financial
- Operating
- Engineering
- Human Resources
- Safety Report
- General Manager's
 - Policy and Procedures Manual Documents for Board Review and Approval
 - Water/Wastewater Operators – Special Requirements Revision 1
 - Adjustments to Bills for Water Leaks Revision 1

F. BUSINESS

- 2014-2015 Budget Review and Approval
- Action Report #2014-17 – SOC and NWTP Paving
- Resolution #2014-18 – Revisions to the Sewer Use Ordinance
- Action Report #2014-19 – Pad-Mounted Transformers

G. EXECUTIVE SESSION (None Requested)

PRESENTATION

- Safety Awards to NWTP, SWTP and SWWTP

ACTION MINUTES OF MEETING
April 21, 2014

ACTION MINUTES
APRIL 21, 2014
HENDERSON WATER & SEWER COMMISSION

A. ROLL CALL

Present at the meeting was Commissioner Paul Bird, Chairman, who presided over the meeting; along with Commissioners George Jones, John Henderson, and Julie Wischer. Commissioner Gary Jennings was unable to attend the meeting. Tom Williams, General Manager, and Eric Shappell, Attorney, were also in attendance. Staff members present included Leason Neel, Rodney Michael, John Baker, Kevin Roberts, Kathy Ambrose, Greg Nunn, Jeremy Duncan, Les Boyd, and Patty Brown. Also attending were Mayor, Steve Austin, City Commissioner, Tom Davis, Assistant City Manager, William “Buzzy” Newman, and Reporter, Frank Boyett with “The Gleaner”. Cathy Boyd was also present for the 20 year service recognition of her husband, Les Boyd.

B. INVOCATION – Kevin Roberts

C. RECOGNITION OF LES BOYD - 20 YEARS OF SERVICE

James Leslie Boyd was presented with a Certificate of Appreciation for 20 years of service to Henderson Water Utility beginning April 7, 1994. Chairman of the Board, Paul Bird and General Manager, Tom Williams, on behalf of the Water and Sewer Board of Commissioners, acknowledged his dedicated service and also presented him with a jacket. Mr. Boyd thanked everyone who hired him and gave him the opportunity to work for HWU.

D. APPROVAL OF MINUTES

- Approval of Minutes from March 17, 2014

Minutes were approved as submitted.

E. MONTHLY REPORTS

- Financial – *Discussed and approved as submitted.*

Leason Neel reported that we would probably exceed budgeted revenues for the year, based on what has happened so far and this could end up being as good a year as last year was net wise. He stated that it will be in the next month or two that we will begin the process of going through the City to start the issuance of the last \$6,000,000.00 segment of bond money needed. He also reported that work is being done on the next fiscal year budget and should be ready for the board meeting next month, with exception of a couple of things needed from the City. Tom Williams stated that we plan to get the proposed budget to the board members a week in advance of the board meeting so there will be time for everyone to review the numbers.

- *Operating – Discussed and approved as submitted.*

Rodney Michael discussed the spring cleaning planned for the utility and noted that the time will be changed to the first of June instead of the first of May, due to crews having to catch up from all the problems encountered this winter. There are price estimates on landscaping, paving items, and building repairs that are being obtained and prioritized for this. There are a lot of things needed utility wide and everything might not get done at one time. Some numbers will be brought to you next month concerning this.

He also noted that we have hired 3 new employees this month. Mark Sears at the North Water Treatment Plant as Operator, Wayne Griffin as Automation Specialist and Steve Brown as Vehicle Mechanic. Tim Black was also promoted to the Locator position and Bobby Chancey, an operator, passed the Class IV Operators certification.

City Commissioner Tom Davis questioned whether a problem with a 36 inch pipe at the Capp residence on Gaslight Drive in Frontier has been addressed. Tom Williams reported that it has been looked at but not repaired yet. The pool has to be moved and it was on an easement. The homeowner has also stated that she wants the pool taken down.

- *Engineering – Discussed and approved as submitted.*

Tom Williams noted that the 13 easements for the Janalee Drive pump station are completed and thanked Eric Shappell for his work on obtaining them.

He also updated the board on the South Plant study by Wauford. Wauford was asked to expedite looking at the condition of the clearwell. A diver had inspected it late last year and found it to be in very poor condition. It is beginning to pit and rust on the inside. The cost to paint was estimated at \$400,000, and the cost to replace is \$800,000.

- *Human Resources – Discussed and approved as submitted.*

Tom Williams reiterated, as was stated in the operating report, that we have filled 3 of our open full time positions and that we are working on getting the rest of the positions listed in the HR report filled.

- *Safety Report – Discussed and approved as submitted.*

Jeremy Duncan reported that there was one recordable injury from last month that turned into a loss time accident when the sludge press operator injured his nose and had to go back and have some surgical procedures done.

Rodney Michael reported that quotes were obtained for a storm shelter at the SOC and will come to around \$15,000 and have a capacity of 25 people. One is an above ground concrete unit and will basically take up a parking area.

- *General Manager's – Discussed and approved as submitted.*

- *Policy and Procedures Manual Documents for Board Review and Approval*
 - *Licenses, Certifications and Training Revision*
 - *Water and Sewer Taps*
 - *Disconnection of Downspouts from Combined and Sanitary Sewers*
 - *Cleanout Installation*

Tom Williams discussed the 4 policies included in the report and noted that the Licenses, Certifications and Training Policy revision was changed to limit payment for certification testing so that the utility does not pay for repeated failures to pass the test.

He also explained that the Water and Sewer Tap Policy has included some of the things that the City and the Planning Commission are doing to encourage renewal of old structures and reconstruction in older areas of town. The idea being to give people a break for those kind of tap fees because typically the facilities are already in place.

The Downspout Disconnection and Cleanout Installation are pretty much the same as we have been doing in the past and this just formalizes what we have been doing.

Motion was made and approved to accept the 4 policies listed above as presented.

Mr. Williams also stated that we plan to renew the sludge hauling contract for another year.

F. BUSINESS

- Action Report #2014-10 – North Wastewater Treatment Plant (NWWTP) Plant Upgrade – Including Upgrades to the Janalee Drive Pump Station

Approved Action Report #2014-10 for North Wastewater Treatment Plant Upgrade including Upgrades to the Janalee Drive Pump Station, awarding the contract for the pump station upgrade to M. Bowling, Inc. in the amount of \$749,850.00 and the contract for the force main to Scott & Ritter, Inc. in the amount of \$244,060.00. These bids are within the approved overall budget amount for the North WWTP Upgrade (Headworks Project) which included this work.

- Action Report #2014-11 – Griffin Property Remainder

Approved Action Report #2014-11 for leasing part of the Griffin Property surplus to the Henderson County Detention Center on Borax Drive to grow produce that will be used in the food service operations at the Jail. Board approval authorizes the General Manager to sign a revocable lease agreement with the County Jailer, allowing the Community Service program to utilize the remaining acreage of the Griffin Property for their supplemental food production program on a year to year basis at no cost to HWU. Community Service will be responsible for mowing of the right of way and for upkeep of the grounds.

- Action Report #2014-12 – Myrene Drive Sewer Pump Station – Design Study

Approved Action Report #2014-12 for the Myrene Drive Sewer Pump Station Design Study awarding the contract for design to J. R. Wauford & Company of Nashville, as the most qualified firm. The selection was made by an internal staff committee. A contract in an amount not to exceed \$40,000. has been negotiated with that firm, to cover preliminary engineering work. This amount will be taken out of the Contractual Services account. Since most of the work will be billed after the start of the new fiscal year, we will include an amount to cover this study in the FY 2014-15 budget.

- Action Report #2014-13 – Copiers for SOC and Admin Buildings

Approved Action Report #2014-13 to purchase Copiers for the SOC and Admin. Bldg. The bid was awarded to Ricoh who had the lowest evaluated bid for both copiers of \$23,415.00 which is a budgeted amount.

- Action Report #2014-14 – SOC Mechanic Shop Expansion with Equipment

Approved Action Report #2014-14 for the SOC Mechanic Shop Expansion with Lift Equipment in the amount of \$30,000 which will be taken from the “Unidentified Capital Projects” line item in the 2013-14 Budget.

- Action Report #2014-15 – Trimble R10 GPS System

Approved Action Report #2014-15 for a Trimble R10 GPS System in the amount of \$27,960.01 from Precision Products as a sole source purchase. This equipment will be used by the camera crew to collect accurate sewer manhole rim and invert elevations during their daily camera inspection of sanitary sewers. This amount will be taken from the “Unidentified Capital Projects” line item in the 2013-14 budget.

- Action Report #2014-16 - Water Modeling Services

Approved Action Report #2014-16 for Water Modeling Services in an amount not to exceed \$40,000.00 awarding the contract to Strand Associates of Louisville, Kentucky who was selected by an internal staff committee as the most qualified firm. Funds will be taken from the Contractual Services account. Since most of the work will be billed after the start of the new fiscal year, the additional amount will be included in the FY 2014-15 budget.

G. EXECUTIVE SESSION (None Requested)

Approved Motion to Adjourn.

The next scheduled monthly meeting will be held on May 19, 2014.

FINANCIAL REPORT

Henderson Water Utility
Financial Summary
For Ten Months Ended April 30, 2014

Henderson Water Utility
Operating Revenues and Expenses Summary
For the Ten Months Ended April 30, 2014

	April Actual	April Budget	Year to Date Actual	Year to Date Budget	Fiscal Year Budget
OPERATING REVENUES					
Water Sales	\$ 622,305	\$ 535,852	\$ 6,189,363	\$ 5,864,521	\$ 7,029,226
Water Penalties	1,931	2,324	23,017	23,244	27,893
Water Fees	3,654	3,947	36,637	39,473	47,367
Wastewater Sales	842,545	755,203	8,518,017	7,973,581	9,555,986
Wastewater Penalties	2,894	3,045	34,560	30,453	36,543
Wastewater Fees	11,961	16,633	185,331	166,328	199,594
Total Operating Revenues	<u>1,485,290</u>	<u>1,317,005</u>	<u>14,986,925</u>	<u>14,097,600</u>	<u>16,896,609</u>
OPERATING EXPENSES					
Salaries and Wages	262,635	349,399	3,065,905	3,493,986	4,192,783
Payroll Taxes	18,396	25,296	216,227	252,957	303,548
Health Insurance	78,425	99,167	861,202	991,667	1,190,000
Pension Benefits	45,360	63,924	541,017	639,235	767,082
Workers Compensation	5,459	10,004	95,308	120,043	120,043
Other Employee Benefits	3,468	1,787	18,165	17,867	21,440
Car Allowance	900	1,350	9,900	13,500	16,200
Electricity	116,032	111,159	1,142,285	1,111,585	1,333,902
Natural Gas	5,535	3,000	33,337	34,560	36,000
Chemicals	118,857	87,917	984,606	879,167	1,055,000
Inventory Expense	(2,861)	12,079	128,300	120,786	144,943
Fuel	12,846	12,617	140,398	126,167	151,400
Tools & Small Equipment	5,147	10,775	84,634	107,750	129,300
Safety Supplies	2,789	3,625	32,723	36,250	43,500
Clothing Supplies	-	516	601	5,159	6,190
Clothing/Cleaning Allowance	-	-	15,340	16,120	16,120
Vehicle Repair	4,321	4,583	58,496	45,833	55,000
Other Equipment Repair	30,781	19,626	283,417	196,264	235,517
Other Structures Repair	8,425	15,171	194,881	151,708	182,050
SCADA Expense	1,370	3,125	18,385	31,250	37,500
Administrative Services	47,500	47,504	475,000	475,035	570,042
Contractual Services	97,628	101,533	987,069	1,015,325	1,218,390
Professional Services	1,114	2,917	22,100	29,167	35,000
Equipment Rental	2,546	4,443	44,230	44,429	53,315
Audit Expense	-	-	20,000	20,000	20,000
Trust Fees	38	1,250	4,435	12,500	15,000
Public Contributions	-	-	1,250	-	-
Insurance	66,054	66,013	267,676	267,128	267,128
Technology Expense	6,259	10,417	68,248	104,170	125,000
Office & Field Supplies	11,784	13,796	132,355	137,958	165,550
Telephone	3,305	3,334	31,449	33,335	40,002
Medical Exams	1,111	300	4,999	3,000	3,600
Travel and Training	3,772	2,306	25,774	23,063	27,675
Dues and Subscriptions	331	1,127	11,135	11,267	13,520
Printing	577	212	1,828	2,117	2,540
Miscellaneous	820	304	6,445	3,042	3,650
Depreciation	308,333	233,333	2,408,333	2,333,333	2,800,000
Total Operating Expenses	<u>1,269,057</u>	<u>1,323,903</u>	<u>12,437,453</u>	<u>12,906,720</u>	<u>15,397,930</u>
Operating Income	<u>\$ 216,233</u>	<u>\$ (6,898)</u>	<u>\$ 2,549,472</u>	<u>\$ 1,190,879</u>	<u>\$ 1,498,679</u>

**Henderson Water Utility
Variance Analysis
Ten Months Ended 4/30/2014**

Actual Operating Revenues	\$ 14,986,925
Budgeted Operating Revenues	14,097,600
Favorable (Unfavorable) Variance	<u>\$ 889,325</u>
Percentage Difference	6.31%
Billable Gallons	
Through 4/30/2014	2,133,840,300
Through 4/30/2013	2,167,427,977
Difference	<u>(33,587,677)</u>
Percentage Difference	-1.55%
Actual Operating Expenses	\$ 12,437,453
Budgeted Operating Expenses	12,906,720
Favorable (Unfavorable) Variance	<u>\$ 469,267</u>
Percentage Difference	3.64%

Breakdown of Volumetric Differential Ten Months Ended :

	Apr-14	Apr-13	Differential %
Residential	530,735,092	550,157,298	-3.53%
Industrial	929,275,070	921,194,193	0.88%
Commercial	673,830,138	696,076,486	-3.20%

Chemical expense is over budget because of need for extra product (alum, caustic soda and carbon) due to high elevation of river and DPB testing. See more detailed explanation in Operations report.

**Henderson Water Utility
Capital Expenditures Report
For the Ten Months Ended April 30, 2014**

	Beginning Balance	Current MTD Activity	Current YTD Activity	Project to Date Balance	Fiscal 2014 Budget	Total Capital Budget	Action Report No.
Construction In Progress:							
Canoe Creek Interceptor	\$ 12,456,189	\$ 13,130	\$ 599,992	\$ 13,056,181	\$ 500,000	13,453,380	12-13
Center & Julia	1,382,288	-	-	1,382,288	100	2,520,000	08-03
NWWTP Basin 1	1,878,441	-	-	1,878,441	100	2,000,000	12-08
Pump Station Modifications	27,545	-	-	27,545	50,000	110,000	13-14
NWWTP Basin #2 Repair	-	(261)	45,945	45,945	56,150	56,150	13-26
NWWTP Headworks Project	556,981	617,715	2,364,697	2,921,678	8,000,000	13,630,139	13-24
NWTP Rehab	6,584	-	81,616	88,200	78,000	86,000	
Golden Corral Pump Station	-	-	-	-	20,000		13-14
Wright Street Pump Station	-	-	-	-	20,000		13-14
Period Tables Pump Station	-	-	-	-	20,000		13-14
Green River Road Project	130,548	40,559	170,459	301,007	407,500	407,500	13-05 & 07
14th Street Sewer By-Pass	-	-	51,311	51,311	60,000	60,000	13-20
Lincoln Ave Sewer Project	-	14,601	21,233	21,233	95,500	95,500	13-25
SWTP Rehabilitation	-	-	-	-	45,000	45,000	13-23
Tiger Ditch Stormwater	-	-	10,925	10,925	98,000	98,000	13-38
City-County Reimbursable Project	-	6,603	10,172	10,172			
Special Projects	-	-	-	-	171,250		
Total Construction In Progress	16,438,576	692,347	3,356,350	19,794,926	9,621,600		
Buildings and Improvements:							
HS Building Hoist System	-	-	-	-	100		
NWWTP Digester Blower	-	-	13,887	13,887	20,000	20,000	13-27
Main Building Repairs	-	-	14,090	14,090	25,000		
Storm Shelter SWWTP	-	-	-	-	5,600	5,600	14-06
Blower Bldg # 1 Roof	-	-	-	-	7,500		
Total Buildings and Improvements	-	-	27,977	27,977	58,200		
Equipment and Vehicles:							
Generator	-	-	-	-	15,000		
VFD Controls	-	-	-	-	95,000		
ISCO 2150 CSO Point Automation	-	-	43,497	43,497	100	43,497	13-21
Auto Flush Hydrants	-	-	23,877	23,877	36,000		
Copiers	-	-	-	-	24,000		
Sludge Bucket	-	-	6,884	6,884	12,000		
Meter Test Equipment	-	-	-	-	12,000		
HVAC SPBldg NWWTP	-	-	-	-	6,000		
HACH Software	-	-	55,214	55,214	60,000	53,950	13-18
NWTP Dioxide Generator	-	20,847	26,766	26,766	46,000	46,000	14-07
One Ton Crew Truck	-	1,881	31,371	31,371	21,000	32,095	14-09
Total Equipment and Vehicles	-	22,727	187,609	187,609	327,100		
Total Capital Expenditures	\$ 16,438,576	\$ 715,074	\$ 3,571,936	\$ 20,010,512	\$ 10,006,900		

Henderson Water Utility
Financial Statements
For Ten Months Ended April 30, 2014

**Henderson Water Utility
Statement of Net Position
April 30, 2014**

ASSETS

Current assets:	
Cash	\$ 5,121,176
Unrestricted Investments	2,089,567
Restricted Investments	1,275,232
Receivable - 2013A Bonds	5,416,109
Accounts receivable	686,772
Inventories	944,305
Total current assets	<u>15,533,161</u>
Noncurrent assets:	
Construction in progress	19,794,926
Utility plant and equipment, net of accumulated depreciation	52,817,241
Other assets	283,750
Total noncurrent assets	<u>72,895,917</u>
Total assets	<u><u>\$ 88,429,078</u></u>

LIABILITIES

Current liabilities:	
Accounts payable	\$ 267,939
Retainage payable	196,958
Deposits payable	77,788
Accrued liabilities	1,414,660
Current portion of long-term debt	64,723
Total current liabilities	<u>2,022,068</u>
Noncurrent liabilities:	
Long-term debt	<u>36,725,086</u>
Total noncurrent liabilities	<u>36,725,086</u>
Total liabilities	<u>38,747,154</u>

NET POSITION

Net investment in capital assets	41,522,217
Restricted for debt service	561,129
Unrestricted	<u>7,598,578</u>
Total net position	<u>49,681,924</u>
Total liabilities and net position	<u><u>\$ 88,429,078</u></u>

Henderson Water Utility
Statement of Revenues, Expenses, and Changes in Net Position
For the Ten Months Ended April 30, 2014

	April Actual	April Budget	Year to Date Actual	Year to Date Budget	Fiscal Year Budget
OPERATING REVENUES					
Water sales and fees	\$ 627,890	\$ 542,124	\$ 6,249,017	\$ 5,927,241	\$ 7,104,486
Wastewater services and fees	857,400	774,881	8,737,908	8,170,360	9,792,123
Total operating revenues	<u>1,485,290</u>	<u>1,317,005</u>	<u>14,986,925</u>	<u>14,097,601</u>	<u>16,896,609</u>
OPERATING EXPENSES					
Salaries, wages, and benefits	414,643	550,925	4,807,724	5,529,243	6,611,096
Contractual services	148,826	157,646	1,554,084	1,596,459	1,911,747
Supplies and materials	136,778	127,528	1,386,602	1,291,399	1,546,453
Utilities expense	121,567	114,159	1,175,622	1,146,150	1,369,902
Repairs and maintenance	44,897	42,506	555,179	425,060	510,067
Other services and expenses	94,013	97,808	549,909	585,080	648,665
Depreciation	308,333	233,333	2,408,333	2,333,331	2,800,000
Total operating expenses	<u>1,269,057</u>	<u>1,323,905</u>	<u>12,437,453</u>	<u>12,906,722</u>	<u>15,397,930</u>
Operating income	<u>216,233</u>	<u>(6,900)</u>	<u>2,549,472</u>	<u>1,190,879</u>	<u>1,498,679</u>
NONOPERATING REVENUES (EXPENSES)					
Investment income	1,983	4,258	15,406	42,583	51,100
Other income	-	575	19,980	5,750	6,900
Interest expense	(104,594)	(97,777)	(958,248)	(977,767)	(1,173,320)
Amortization expense	(2,961)	(3,500)	(29,616)	(35,000)	(42,000)
Total nonoperating revenues (expenses)	<u>(105,572)</u>	<u>(96,443)</u>	<u>(952,478)</u>	<u>(964,433)</u>	<u>(1,157,320)</u>
Income before distribution	110,661	(103,343)	1,596,994	226,446	341,359
Distribution to City of Henderson	-	-	-	-	(400,000)
Change in net position	110,661	(103,343)	1,596,994	226,446	(58,641)
Net position, beginning of period	<u>49,571,263</u>	<u>48,414,720</u>	<u>48,084,930</u>	<u>48,084,930</u>	<u>48,084,930</u>
Net position, end of period	<u>\$ 49,681,924</u>	<u>\$ 48,311,377</u>	<u>\$ 49,681,924</u>	<u>\$ 48,311,376</u>	<u>\$ 48,026,289</u>

**Henderson Water Utility
Statement of Cash Flows
For the Ten Months Ended April 30, 2014**

	April	Year to Date
CASH FLOWS FROM OPERATING ACTIVITIES		
Receipts from customers	\$ 1,449,057	\$ 15,154,286
Payments for goods and services	(442,470)	(5,652,843)
Payments for employees	(414,643)	(4,777,231)
	<u>591,944</u>	<u>4,724,212</u>
CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES		
Distribution to City of Henderson	-	-
	<u>-</u>	<u>-</u>
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES		
Acquisition and construction of capital assets	(673,422)	(3,842,393)
Principal payments on long-term debt	-	(2,265,672)
Interest payments on long-term debt	(417,293)	(969,225)
Bond proceeds	1,349,390	4,432,074
Capital contributions	-	134,209
	<u>258,675</u>	<u>(2,511,007)</u>
CASH FLOWS FROM INVESTING ACTIVITIES		
Investment and other income received	1,693	37,639
Proceeds from sales and maturities of investments	-	858,474
Purchase of investments	(29,326)	(501,713)
	<u>(27,633)</u>	<u>394,400</u>
Net cash provided (used) by investing activities		
	<u>822,986</u>	<u>2,607,605</u>
Net increase (decrease) in cash		
Cash, beginning of period	<u>4,298,190</u>	<u>2,513,571</u>
Cash, end of period	<u>\$ 5,121,176</u>	<u>\$ 5,121,176</u>

Henderson Water Utility
Cash Flow Projection
July 1, 2014 Through June 30, 2019

Henderson Water Utility
Projected Cash Flows

	Actual 6/30/2009	Actual 6/30/2010	Actual 6/30/2011	Actual 6/30/2012	Actual 6/30/2013	Estimated 6/30/2014	Budgeted 6/30/2015	Projected 6/30/2016	Projected 6/30/2017	Projected 6/30/2018	Projected 6/30/2019
Projected Operating Revenues	14,687,498.00	14,746,532.00	16,107,887.17	15,734,477.00	17,024,715.85	17,200,000.00	17,826,443.00	18,629,009.84	19,471,318.96	20,355,478.53	21,283,714.06
Projected Operating Expenses	12,961,663.00	13,188,295.00	14,206,053.43	14,429,794.00	14,087,150.19	15,397,930.00	16,339,177.00	16,829,352.31	17,334,232.88	17,854,259.87	18,389,887.66
Net Operating Income	1,725,835.00	1,558,237.00	1,901,833.74	1,304,683.00	2,937,565.66	1,802,070.00	1,487,266.00	1,799,657.53	2,137,086.08	2,501,218.67	2,893,826.40
Projected Depreciation	2,357,741.00	2,398,941.00	2,465,606.70	2,546,946.00	2,565,136.21	2,800,000.00	3,100,000.00	3,100,000.00	3,100,000.00	3,100,000.00	3,100,000.00
Current Asset/Liability Changes	117,579.00	(166,684.00)	(1,055,028.50)	997,765.00	(472,515.00)	(671,000.00)					
Net Cash Operating Income	3,965,997.00	3,790,494.00	3,312,411.94	4,849,394.00	5,030,186.87	3,931,070.00	4,587,266.00	4,899,657.53	5,237,086.08	5,601,218.67	5,993,826.40
Debt Service	1,483,432.00	1,484,984.44	1,634,501.18	2,182,623.87	2,801,449.00	3,388,091.57	3,719,219.08	3,249,959.59	3,256,159.22	3,248,376.02	3,253,293.69
Proceeds From Debt Assumed	-	-	10,000,000.00	9,817,515.00	-	9,848,182.72	5,800,000.00	-	-	-	-
Capital Spending on Separation Projects	1,753,370.38	1,604,446.88	7,774,875.46	6,255,939.59	11,490,282.18	5,151,086.00	9,600,000.00	-	-	-	-
Estimated Other Capital Spending	1,968,743.62	3,182,122.12	185,798.54	3,533,924.41	3,839,629.97	1,506,800.00	1,430,900.00	1,500,000.00	1,500,000.00	2,000,000.00	2,000,000.00
PILOT Payment	400,000.00	400,000.00	400,000.00	400,000.00	400,000.00	400,000.00	400,000.00	400,000.00	400,000.00	400,000.00	400,000.00
Contributed Capital and Investment Income	351,915.00	527,371.00	487,726.00	757,693.54	1,189,508.00	192,209.00	125,000.00	31,864.55	29,680.18	30,786.25	30,622.54
Change In Unrestricted Cash and Investments	(1,287,634.00)	(2,353,688.44)	3,804,962.76	3,052,573.23	(12,311,666.28)	3,525,484.15	(4,637,853.08)	(218,437.51)	110,607.04	(16,371.10)	371,155.25
Unrestricted Cash and Investments @	12,406,643.00	10,052,954.56	13,857,917.32	16,910,490.55	4,598,824.27	7,824,308.42	3,186,455.34	2,968,017.83	3,078,624.87	3,062,253.77	3,433,409.02
Debt Service Coverage	2.66	2.65	1.53	1.72	1.79	1.09	1.14	1.42	1.52	1.63	1.74

Assumptions:

Rate increase of 5.85% each 7/1/ through 7/1/18.

PILOT payment remains \$400,000 a year.

New Contract rates go into effect based on audited cost throughout year ending 6/30/2018.

2015 Debt Interest assumed to be 3.75%

Projected Operating Expenses Increase @ 3.0% a year

LTCP projects @ \$43,600,000

Borrow an additional \$6 million 7/1/14

OPERATING REPORT

Operations Report

5-19-2014



General Operations:

A. **Spring Cleaning:** We are planning a spring cleaning event the first week of June to spruce up some of our locations that have seen a bit of neglect with all of the major projects we have been doing. There is some paving we are planning at the SOC and the NWTP that we want to do and will be an action item for the board this month. The remainder of the items will be expensed items and there is a spreadsheet attached to show you what some of those are. The items add up to a little over \$38,000 for all of the areas. We will expense these cost within our current budget. We are looking forward to getting some of these needed items done before the busy summer construction begins.

B. WTP North:

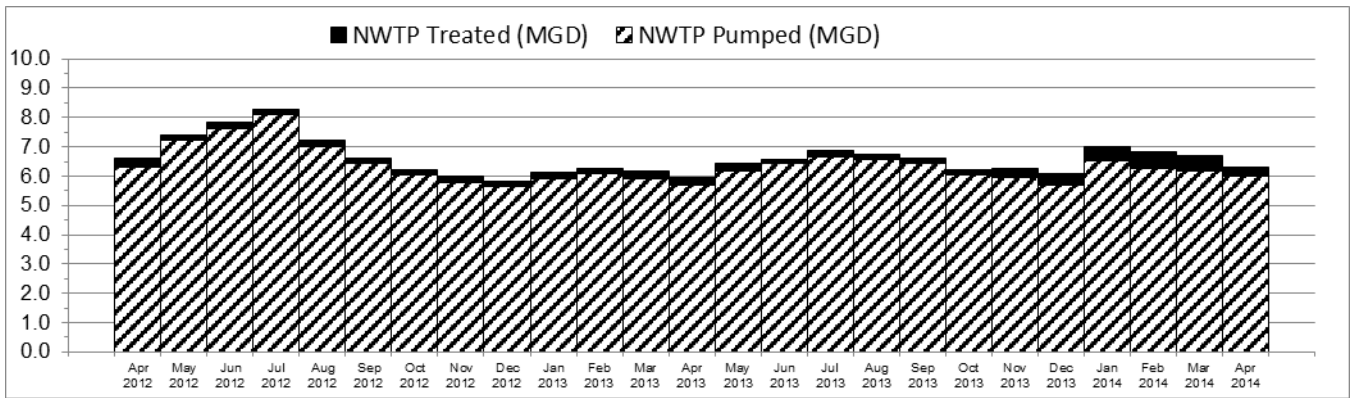
Treatment Quality:

1. All reportable treatment goals were met.
2. **Update:** We are working on the finalization of the CCR. Notification for the CCR will be included on a flyer that will go out with the utility billing during the month of June. The flyer will direct customers to a webpage that has the CCR posted on it. This will save us about \$2000 in printing the full report.
3. Ashley is in the process of completely over-hauling the Laboratory SOP book. Like several other documents, it had become outdated.

Operations:

1. **Update:** The new generator is expected to go fully online towards the end of June. *The new chlorine dioxide generator is installed and has passed the start-up process. We are waiting on a few more items to be installed (bulk chemical tank and transfer pump) and we will then put it online.*
2. **Update:** Mark is working out very well and has learned very quickly. He began his training on night shift and will likely be on his own by the end of June. *Mark Sears was offered and accepted the vacant WTO1 position. Mark will bring a lot of experience to HWU with having worked for more than 20 years with the Health Department. His training began last week.*
3. Chemical expenditures were slightly over budget.
4. Basin #1 was cleaned this past month. At this time, it was also inspected by CDI personnel for verification of design and potential changes to the scope of rehab project.

5. Average water treated & water pumped data trend:



Note: These values are current readings, but the actual billed readings are approximately 45 days behind.

C. WWTP North:

Treatment Quality:

1. Effluent quality is not as good as we'd like it but it's still good considering the amount of work and disruption that the Headworks Project has required.
2. We have conducted and passed all necessary sludge testing for landfill certification. This is good for 3 years. Hazex and Blackfoot (Advanced Disposal) continue to work very well.

Operations:

1. **Update:** We have still not been able to diagnose the problem here. It doesn't appear to be a problem with the blowers themselves. We are continuing to investigate and troubleshoot. *We are experiencing air delivery problems on #2 Aeration Basin. Indication is that there is not enough air flow causing an inability to run all three blowers. It's possible that this could be due to the additional head from setting the diffusers on the bottom of the basin. We are still investigating.*
2. Chemical expenditures were under budget. Fuel (Off-Road Diesel) is also much higher due to the amount of usage required for diesel pumps during construction. This fuel used to come from the SOC, but we have started using the storage tank onsite.

D. WTP South:

Treatment Quality:

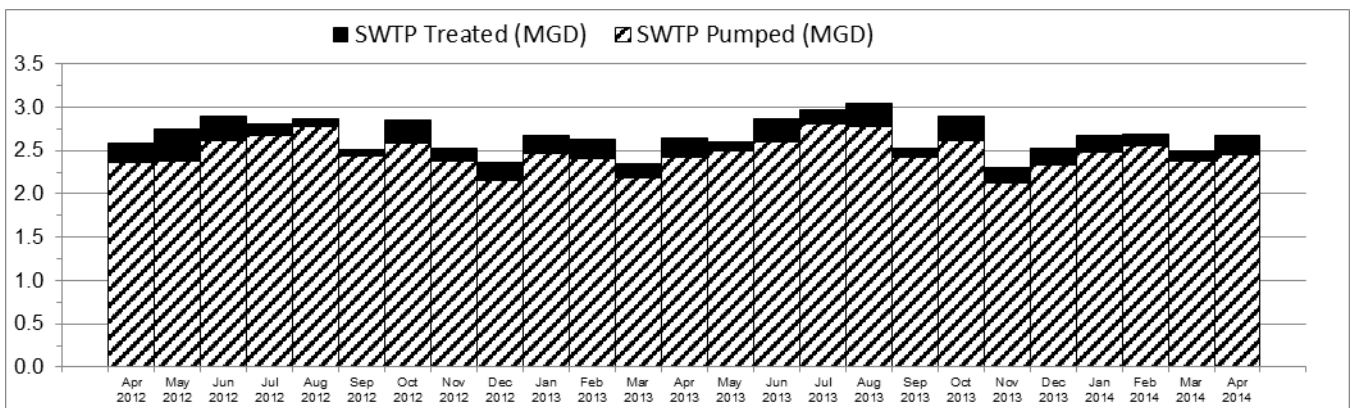
- All reportable treatment goals were met.
- No Water Quality complaints logged
- Jar testing was conducted by Brenntag with a new flocculant that could potentially be a more efficient and economical option for us.

Operations:

1. **No Change:** Our Sodium Chlorite bulk storage tank began leaking around the bottom fitting over the last month. Rather than attempting a repair of the fitting, we are in the process of replacing the tank

with one that will be pumped out of the top (no fittings). The Sodium Chlorite tank is also being enclosed according to 10 States Standards.

2. **Update:** Bobby Chancey resigned unexpectedly. His last day was 5/7/14. The reason given was a family related issue that was causing him to move out of town. *Bobby Chancey passed the Class 4A certification exam at the most recent KWWOA Conference in Louisville. We will begin the process for promoting him into a WTO2 position.*
3. Chemical expenditures were significantly over budget this month due to the purchase of a polymer that we buy only 1x per year. There was also an extra purchase of carbon to prepare for Disinfection By-Product compliance testing.
4. Average Treated & Pumped water trend:



Note: These values are current readings, but the actual billed readings are approximately 45 days behind.

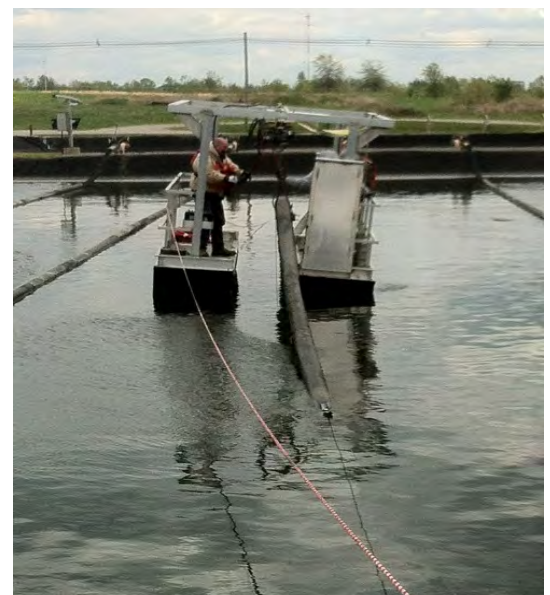
E. WWTP South:

Treatment Quality:

1. **No Change:** Plant quality has stabilized and we are seeing very significant improvements. Sludge inventory is dropping due to switching the North plant to Blackfoot. We are hauling two trailers per day to Hopkins County Regional Landfill.

Operations:

1. We will be conducting interviews for a vacancy due to the termination of one of the operators.
2. **Update:** This is scheduled to be finished by 5/23/14. *Work has begun on the installation of the storm shelter.*
3. Work has begun on the sludge press that needed extensive repairs to the rollers. All of the rollers have been removed and are at the repair facility.
4. Airline repairs have been going for most of the month. The process is slow but we're hoping that the time and care being put into this will keep us from having as many future airline troubles. Maintenance personnel continue to be very pleased with the new boat.



5. **No Change:** *There is a massive problem (at all of our plants) with birds in the buildings. Not only do they cause considerable damage to the insulation but also to the buildings and equipment inside. They also pose a significant health issue by their droppings everywhere. We have tried many different, humane, ways to prevent them from getting into the buildings, but nothing has worked. To have a professional service come in to bird-proof is very expensive (> \$20,000). We must find a solution to this.*

F. Pretreatment Program:

- **Update:** The Local Limits have been conditionally approved by KDOW and were published in the paper on 5/16, which begins a 30-Day comment period. At the end of this, provided there are no changes that need to be made, we receive formal notification from KDOW that they are officially accepted. Informal notification of the proposed changes to the local limits will be sent by HWU to each of our Industrial Users in the program as a courtesy.
- **Update:** KDOW conducted our Pretreatment Program Inspection this past month. During this time, we performed an annual inspection on Teknor Color and Hydro Aluminum. Both are doing an outstanding job. For our part, the inspection went well. We still have a few things to clean up and change (IU permits) but these will be completed in short order once the Local Limits are passed and our Sewer use Ordinance (SUO) is amended.

G. Automation Department:

- We attended an ICS-CERT (Industrial Control Systems – Cyber Emergency Response Team) webinar regarding the Heartbleed bug. The Heartbleed bug allows anyone on the Internet to read the memory of the systems protected by the vulnerable versions of the OpenSSL software. SSL stands for Secure Sockets Layer and is a cryptographic protocol designed to provide confidential communications between computers, software, instrumentation and various devices. OpenSSL has been utilized by hardware and software manufacturers for many years and is widely distributed throughout industrial control system products. The webinar covered topics for detection of the Heartbleed bug and methods for resolution and protection, including a tool for scanning software executable vulnerability. We used this tool and tested all automation software. Everything passed and our software does not utilize OpenSSL. We followed this webinar up with another hosted by Palo Alto Networks, the manufacturer of our firewall, to specifically address the Heartbleed bug vulnerability in relation to our firewall. Palo Alto Networks released a content update on April 9th, 2014 that automatically detects and immediately blocks attempted exploitation of the Heartbleed vulnerability. We continue to actively monitor all security bulletins and react appropriately to maintain a healthy cyber-environment for HWU.
- The City - County Flood Mitigation Board has requested that we install a SCADA monitoring station on Canoe Creek at Clay Street. All hardware has been installed and we should have the software programming completed by the time of this Board meeting. The Flood Mitigation Board will be financing this project. These costs will be reflected as a deferred asset until reimbursed by Flood Mitigation Board.
- **No Change:** We have started trenching/boring for conduit installation on our CSO point monitoring system locations. Most of the monitoring sites will have instrumentation powered by battery and solar panel, but a few locations will utilize City power. We expect to have this system online by June with a publicly accessible website.
- We have made VFD programming and PLC logic changes to the North Fork Pump Station in order to maximize flow through the station to the NWWTP. These changes should help to alleviate heavy flow to Second Street Pump Station as well as the Third Street CSO Basin.

H. Customer Service:

Customer Service Calls and Work Orders (NORTH):

These are the customer calls we responded to and by no means represent all of the calls that came in. We provided the following services to customers last month:

<u>Service</u>	<u>Qty.</u>
Water Taps	1
Sewer Taps	4
Water Meter Installation	2
Sewer Service Line Locates - Developer Installed	3
Water Main Repairs	1
Water Service Line Repairs	4
Sewer Main Repairs	3
Sewer Service Line Repairs	1
Storm line Repairs	3
Storm Intake Repairs	3
Sewer Manhole Repairs	4
Sewer Main Cleaning	2
Sewer Main Unblocking	7
Water Meter Inspection	18
Water Meter Changes	15
Water Meter Repair	21
Water Meter Disconnected	4
Water Meter Raised/Lowered	4
Fire Hydrant Repairs	2
Low Water Pressure Calls	6
Sink Hole Calls	17
Stormwater Flooding Calls	15
Clean/Unblock Intakes	2
Sewer Backup Calls	36
Sewer Odor Calls	3
Water Leak Calls	16
Water Quality Calls	1
No Water Calls	2
Shut Water off/Turn Water On Calls	10
Install Temporary Hydrants	1
Pump Station Repairs	7
Pump Station Inspections	126
Pump Station Cleaning	1
Pump Station Maintenance	43
Inspect Misc. Items	44
Sewer Overflow Calls	5
Smoke Test Lines	6
Camera Inspect Lines	6
Downspout Removal Letters Mailed	5

We have mailed out a total of 167 downspout letters to date and 147 have complied and been inspected.

I. Collection System:

The collection system has working well this month.

J. Distribution System:

- The Distribution system is working well this month.

K. Stormwater Phase II:

KSA, the Kentucky Stormwater Association, holds four meetings each year: three quarterly meetings and a large, 3-day annual meeting. This year's annual meeting will be held June 25-27 at the new Owensboro Convention Center in Owensboro, Kentucky. This conference provides a great opportunity for networking with representatives from over 50 Kentucky communities, engineers, scientists, and service vendors.

Presentation topics will include:

- Integrated watershed planning
- Changes in local, state and federal stormwater policy
- Green Infrastructure: Programs, policies, projects and incentives
- MS4 monitoring programs
- TMDLs for MS4s
- New and innovative stormwater technologies

Presentations are focused on the following audiences:

- Elected Officials
- MS4 Managers and Staff
- New and Experienced MS4 Practitioners

L. Information System Department:

- 3 more security cameras were added at the SOC.
- Beginning the final push to replace all Windows XP computers at HWU because of the ending of support for the operating system by Microsoft. 10 replacement PCs have been ordered. There are approximately 20 PCs left to replace at this point.

M. GIS Department:

- We now have a new seasonal employee that is making some much needed data input to our maps. He is making all of the mark-up changes that the crews have made.
- Continue to update GIS to reflect changes from recent construction projects and mapping projects.

Spring Cleaning Quotes and Estimates
Admin Office

Work to be Contracted Out	Cost Estimate/Quote	Vendor	Comments
INSIDE			
Paper Shredding	\$ 25.00	Piranha (monthly cost per qty)	
OUTSIDE			
Landscaping: remove and replace barberries with azeleas, remove stump and plant crepe myrtle, repair edging, repair weed fabric, replace gravel as needed. Bring in dirt to level front then strip top layer and replace with sod. Remove shrubs down side, put down sod. Make a pad with pavers and put up	\$ 3,523.20	Daugherty's	
Repaint Parking Lot Stripes front & side		Public Works	
Roof Repair		Rodney getting prices to replace	
Entire Bldg. Stucco Repair & Painting	\$ -	Not going to be able to do this year	
Work to be done by HWU Employees			
INSIDE			
Wash windows			
Remove big maps in hall beside GM office	\$ -		
Paint Hall, Board Room, Entryway, Bathroom Walls (Drywall Repair needed)	\$ 200.00		
Painting Supplies	\$ 100.00		
Remove Old Towel Holders in Bathrooms	\$ -		
Replace Towel Holders in bathrooms (3)	\$ 60.00		
Replace damaged ceiling tiles throughout building	\$ 40.00		
Replace light bulbs that are out	\$ -		
Replace cabinet hardware in bathrooms	\$ 25.00		
Install stained chair rail in Board Room	\$ 375.00		
Clean Air Intakes	\$ -		
OUTSIDE			
Street Address Numbers Placed On Bldg. (4 or 5-inch)	\$ 100.00		
Wash Windows			
Clean Exterior Lights			
Outside Electrical Outlet needs Cover	\$ 10.00		
Cleaning Outside Entry Way Porch Ceiling-Walls - try blower			
Gutter Cleaning - Repair			
Parking signs for front area	\$ 100.00		
Paint Rail on Side Stairway	\$ 50.00		
Total	\$ 4,608.20		

Spring Cleaning Quotes and Estimates

SOC

Work to be Contracted Out	Company	Cost Estimate/Quote	Comments
Strip, wax and buff tile floor	Hasgoe	\$1,400.00	
Clean carpet	Hasgoe	\$263.00	
Landscape front	Pierson's	\$2,425.00	
Re-stripe front parking area	City of Henderson	300.00	
Purchase 30' flag pole	Flag Pole Company	\$1,200.00	
Sub-Total		\$5,588.00	
Work to be done by HWU Employees	Labor Hours	Material Estimate	
Wash windows	30		
Paint walls		\$1,200.00	
Replace ceiling tiles	20	\$500.00	
Repair sink faucet in men's bathroom downstairs		\$100.00	
Repair men's toilet in SCADA Office	1	\$20.00	
Replace siding on parts room building		\$2,188.20	
Repair rebar on front parking concrete stops	10	\$100.00	
Paint rear fence		\$170.00	
Paint Training Room floor	60	\$500.00	
Install 30' flag pole	30	\$125.00	
Gate control repair (Wire in concrete)		\$1,600.00	
Concrete entrance pavement on Alvasia St side	160	\$3,000.00	
Pressure wash siding	150	\$1,000.00	
Sub-Total		\$10,503.20	
Total	461	\$16,091.20	

Spring Cleaning Quotes and Estimates
Plants

Work to be Contracted Out	Company	Cost Estimate/Quote	Comments
SWTP			
Buildings Siding Repairs, Insulation Replacement & Repaint	Robinson Painting	\$ 43,690.00	
High Service		\$2,210.00	
Bleach Bldg		\$12,640.00	
Carbon Bldg		\$9,840.00	
Chemical Bldg		\$15,200.00	
4Star		\$1,000.00	
Main Bldg (external)		\$2,800.00	
Landscaping	Daugherty	\$1,500.00	Frontage needs some work
Work to be done by HWU Employees	Material Estimate	Labor Hours	Comments
NWTP			
Atkinson Park Tank Controls Bldg Repainted	\$300.00	12	
Remove fallen tree behind Atkinson Park Tank		16	
Sample hydrants (1 repaired or replaced; 5 repainted; 7 need rip-rap laid)	\$500.00	24	
Strip and reseal/wax floors	\$300.00	40	
Clean windows and screens of HS Building	\$0.00	5	
Carpet and Drop ceiling in foyer to meeting room	\$1,000.00	40	
Painting of Pipe Gallery Floors and Piping	\$400.00	40	
Touch up White/Blue paint throughout the interior of the plant	\$100.00	10	
Paint Bleach room Floor	\$40.00	10	
Pressure Wash building and pavement areas	\$0.00	20	
Frame in and insulate large grage door on the chemical building	\$1,000.00	40	
Backfill around New Transformer Pad	0 (If we have Dirt)	10	
Move old Tanks to BoneYard, if they are not sold	\$0.00	8	
Remove growth from fence line	\$0.00	8	
Repair Access way to pipe gallery (concrete block)	\$250.00	16	
Paint lower outside portion of the carbon building	\$20.00	20	
Remove old materials to the boneyard or dispose of them	\$0.00	10	
Repair Siding on Chemical Building	\$750.00	40	
Remove fallen tree at Green river Road	\$0.00	4	
Fill holes in the ground around Atkinson Park Tank	\$0.00	4	
SWTP			
Siding on cone buildings is busted in places.			
Some of the yellow boxes on the floor are faded and could be repainted.	\$100.00	16	
All of the bulk tanks need to be cleaned		16	
Clean and possibly redo some of the containment walls in chemical room around bulk tanks.	\$50.00	48	
All buildings still have spider webs and cleaning needs inside (bugs, dust, dirt, spider webs on all I-Beams, floors, pipes and in ceiling etc).		32	
Ruts in yard filled		48	
Clean debris/growth away from back fence at plant and out of fence around lake.		40	
All exterior siding can be cleaned.		40	
Manholes and manhole lids need to be repainted.	\$100.00	32	
Doors/ door facings need to be stripped and repainted.	\$160.00	36	
Broken pipe in EQ basin needs to be fixed or at least disguised.	\$150.00	6	
Pick up trash and haul off - general cleaning		8	
Clean all mud out of EQ basin once pump is fixed and reinstalled		24	
Fix the gutter so it doesn't leak directly overhead of door on filter building going to chemical room. This is a safety hazard in the winter since the dripping water freezes on the sidewalk just outside the door from filter room to chemical room.	\$50.00	4	
SWWTP			
New SWWTP Flagpole	\$1,600.00		
New floors installed at SWWTP	\$1,500.00		

Spring Cleaning Quotes and Estimates
Plants

NWWTP			
Paint inside of Headhouse all areas except for training room & main lab	\$750.00	80	
Clean, wax floors that are salvagable	\$200.00	24	
Replace flooring in operator office	\$1,000.00	36	
Replace urinal in men's room	\$500.00	12	
Replace shower in men's room	\$1,000.00	12	
Quality Lab Rehab (cabinets painted, countertops replaced...)	\$2,000.00	80	
Operator Lab Rehab (cabinets repainted, counters, floor, sink...)	\$2,000.00	80	
Clean, clear out & paint basement in Headhouse including large pumps & piping not in use or expected to be	\$250.00	36	
Clean, clear out & paint basement in old digesters including large pumps & piping not in use or expected to be	\$500.00	80	
Paint fenceline - at minimum the area at the front of the plant	\$300.00	32	
Remove trees in fenceline all the way around plant & repair fence as necessary including washouts at rear of plant		40	
Clear out flower bed at South end of office bldg and plant small perennials			
Fill in sinkholes around the older plant		24	
Paint handrails on tanks	\$300.00	40	
Clear weeds from concrete pad Aerated BioFilter Bldg, paint/install American flag in proper proportions	\$250.00	24	
Total	\$17,420.00		

Henderson Water Utility
 April 2014 Door Tags

Date	Crew #	Address	Comments	Rodney's Comments
4/2/2014	146	1661 Bruce St.	Thank you for your promptness and efficiency in helping to solve our sewer problem. We appreciate your services. Two seniors at Bruce St.	
4/4/2014	135	315 Rudy Ave.	Employees Steve Bender and Michael Patterson. The men could not have been nicer. I was so pleased.	
4/9/2014	124	314 S. Elm Pl.	The workers were very helpful and on time.	
4/14/2014	124	133 Rankin	Very courteous and polite.	
4/17/2014	135	333 Elk Ave.	The workers had the pipe fixed in about 15 minutes. Very nice people. Thanks so much.	
4/17/2014	135	1660 S. Main St.	Very nice man! So helpful. Give him a raise!!	
4/11/2014	135	1027 Homestead Pt.	No comments.	
4/15/2014	124	1131 Killicrankie	Troy was also very nice when he came last week. This time it was Bobbie and Scott. Thank you too Joe Bentley.	
4/2/2014	124	197 US 41	No comments.	
4/25/2014	135	2826 Sunset Ln.	Steve and Curt were very friendly and courteous. They explained what work was going to be complete the job. The water dept. responded quicker than I had thought they would. Thank you.	
4/29/2014	124	918 Osage Dr.	No work has been done yet. Still under investigation.	This is a stormwater problem that is still under investigation. I went to look at this problem.
4/25/2014	135	513 S. Ingram St.	He was very kind to talk to. Did his work well.	
4/29/2014	124	339 Barnett	We appreciate your quick response to check our water leak in garage.	
4/30/2014	124	9 Willow Dr.	No comments.	
				38 Service Request Tags Given Out
				20 Work Order Tags Given Out
				14 Door Tags Returned

ENGINEERING REPORT



Engineering Report 19 May 2014

1. North Wastewater Treatment Plant (NWWTP) Upgrade Project

The North WWTP Improvements (Headworks) continues to move ahead. Contractor is 8 weeks behind the original schedule now due to heavy rains in April, but timing of completion of the project is not critical for us, at this point. Concrete has been poured for the base slab and lower walls of the UV structure, and for the Headworks/grit chamber base. Some site piping has also been installed too. Contractor also suggested a change to some deep piping that removes some work and simplifies installation, which will save us both time and money.

Equipment for the Janalee Drive pump station, which we procured separately, is on order. Pre-construction meetings on the pump station rehab and the force main have been held, and materials will be ordered by the contractors, as soon as shop drawings are approved. The force main installation will begin before the end of May; pump station upgrade will follow a little later (waiting on equipment delivery).

2. North Water Treatment Plant – Rehab and Basin Repair Project:

We have received the final report that outlines various project facets. As part of this project, we included floating cover devices on the basins; we currently use Styrofoam sheets, and that material needs to be replaced this year. We are going to move ahead with this floating cover project, which will keep us from wasting money on material that will only be used for a year or two. We will buy the materials (for floating, hexagon shaped plastic covers, which automatically interlock when floated on the basin), with installation being performed by staff; should be in an Action Report at next month's meeting.

Moving forward, the design engineering for the critical improvements from this report will be performed in the coming fiscal year, with construction to follow as funds become available. Design funding is included in the new budget.

3. Myrene Drive Sewer Pump Station:

We issued an RFP in March for an engineering firm to assist us in designing an upgrade or replacement for this station. The existing station is a Cantex unit that is difficult to maintain, and the station does not have adequate storage to meet current standards in the event of a malfunction. Wauford was chosen for this work, and the kickoff meeting will be held in June. Flow monitoring will be the first step, to determine if we have infiltration and inflow problems in that sewerage basin. One of our goals over the next three to five years is to eliminate the remaining five Cantex stations, if possible.

4. Water Model:

We also issued an RFP in March for assistance in setting up our water model for the North water distribution system. We purchased software in order to perform this work in-house about three years ago, but haven't had the time or energy to complete this work. This is a critical element for planning purposes. Contract with Strand has been signed, and work should begin soon.

5. Water Tank Condition Assessment:

All tanks have been inspected, and we've received reports from Pittsburg Tank and Tower on their portion of the work. We will use these report to program tank painting and repair projects in upcoming budgets. It appears from preliminary reports that Frontier, Vine Street and College tanks need coating and repair in the fairly short term, and we'll likely program those projects, one each over the next three years.

6. Lincoln Avenue Storm and Sanitary Sewer: Project Complete

This project removed a potential source of I & I in the separate sanitary system, and is now complete.

7. Tiger Ditch Stormwater Project:

Project will correct erosion problems in the ditch running from Stadium Drive north to Second Street, as well as provide a thorough cleaning and clearing of brush and vegetation. Work will be performed with our construction crew, but likely won't start until mid-summer, when things dry up. Erosion along the section just north of Stadium Drive will require us to install a fence/rock wall as we've done at several other locations.

8. South Water Treatment Plant – Rehab Project:

J.R. Wauford, the consultant on this study, has completed study of options to paint or replace the Clearwell, and is also looking at the raw water supply system, which draws from the cooling water supply lines at the Big Rivers complex. This does not address the critical issue of boosting the capacity of the plant, but the clearwell and the raw water supply are major risk factors at this time, and will be a part of the plant whatever expansion strategy we choose. We've made sure that we anticipate the eventual work to increase capacity in looking at these preliminary phases. It's likely we'll do design and construction of some work at this plant in the coming fiscal year.

9. Drury Lane Water Booster Station (South Pressure Zone):

We have received preliminary plans for the foundations of this building, which will be located on Drury Lane across from the North WWTP offices. Work on this project will be performed by our crews. We are designing this project reusing a temporary building that's being relocated from the former "emergency" booster station on Barrett Boulevard. The foundation for this building will be constructed in a manner that will allow us to replicate the Atkinson Park Booster Station building at this location, when funding is available. For now we will utilize the metal building currently at the Barrett Boulevard location.

10. Sludge Storage at South WWTP: (No Change Since Last Report)

Wauford is designing a covered-shed area with a concrete pad, next to the sludge press building at the South WWTP, in order to give us some small amount of storage for sludge. The operation of the sludge dewatering facilities at that plant is hampered by the need for a truck to be in place at all times that the press is running. Building a "side-saddle" storage area will allow us a bit more leeway in the timing of sludge press operation. Construction will be fairly simple, and will be done with our own forces, but as a separate capital project.

11. Highway #41A South, Sewer System Project: (No Change Since Last Report)

This project will ultimately serve Finley Addition and some other un-sewered areas just outside the City limits, but within our service territory. Project is on hold for easements.

12. Budget, Regulatory and Legal Issues

We met with City staff to review several small drainage projects that we are prioritizing for the new fiscal year. Their input validated our priorities, and helped coordinate with their road paving schedule as we move forward.

Staff has been involved in the usual array of regulatory issues in the month past, including work on revisions to our Sewer Use Ordinance, including revisions to our Local Limits. These SUO and Local Limits changes will be the subject of a resolution at this Board meeting.

An effort to define by ordinance what can and cannot be constructed in a utility easement is awaiting final discussions with other City departments for forwarding and approval by the City Commission. A similar ordinance regulating trenchless construction (directional drilling and boring & jacking) has been prepared, awaiting approval by gas, water and electric staff. These are efforts to protect City utilities from costs associated with damages, either to Utility property or to homeowner's property that we damage as a result of our operations.

HUMAN RESOURCE REPORT

HWU Human Resources Summary: May 19, 2014

Staffing Levels:

1. Environmental Compliance & Pretreatment Coordinator [1 position]: Register forwarded to HWU staff, waiting on direction
2. NWWTP Wastewater Treatment Operator, part-time [1 position]: Register sent March 17, waiting on direction
3. Locator/Geospatial Technician [1 position]: Promotion scheduled to become effective May 12
4. SWTP Water Treatment Operator [1 position]: Current register in place, contacting candidates to determine if still interested in continuing through selection process
5. Utility System Worker I [1 position]: Advertised May 4; exam scheduled for May 15
6. Utility System Worker II [1 position]: Posted internally May 12 for HWU staff only; exam scheduled for May 15
7. Seasonal Utility System Worker [2 positions]: HWU staff evaluating applications
8. Seasonal Utility System Worker [3 positions]: No request for action
9. SOC Seasonal Position [1 position]: Candidate background check in progress
10. SOC Seasonal Position [2 positions]: No request for action

Safety Report (as of 4/30/2014):

	HWU	Change
Hours Worked	51,163	+ 11,776
Total Cases	3	+2
↳ Days Away/Restricted Time Cases	1	0
↳ Days Away From Work Cases	1	0
↳ Actual # Days Away From Work	5	0
↳ Transfer/Restricted Cases	1	+1
↳ Actual #Days Restricted Duty	21	+21

Incident Rates	HWU	Change	2012 NAICS 2213
Total Recordable Rate	11.73	+ 6.68	2.8
↳ DART Incident Rate	3.91	- 1.42	1.4
↳ DAFW Rate	3.91	+ 1.41	0.8
↳ Trans / Restrict. Rate	3.91	+ 3.91	0.6

- 2012 NAICS is the classification for Utilities: Water, Sewage, and other systems
- DART = Days Away, Restricted, or Transferred
- DAFW = Days Away From Work
- How incident rates are calculated: $[(\# \text{ Cases}) \times 200,000] / \text{Employee Hours Worked}$
- Change data compared to data at the end of the previous month.

- One recordable incident in April that was neither a loss-time or restricted case.

The April comprehensive fixed facility safety audit of the South Water Treatment Plant had a minor safety issue that was corrected immediately; flammable liquids were moved into a flammable liquids locker that had finally arrived at the site. The South Wastewater Treatment Plant had a lightning issue that is being addressed by HWU maintenance. There is one repeat issue in the report; there is exposed wire that was listed in the previous report that is not "live" but should be removed.

Other:

- Upcoming City-wide training is planned in the coming months
 - Harassment in the Workplace training conducted on April 22 and April 29. Video is available for staff that missed the training.
 - Respiratory Physicals for all affected positions are scheduled for May 13 – 15
 - Super Supervisor training is scheduled for May 22
 - Trench training is scheduled for May 27 and May 28
 - Fall Protection training is schedule June 4
 - MUTCD-Basic Flagger class is scheduled on June 12
 - Rigger & Fall Protection training is scheduled June 5

SAFETY REPORT

Safety Report

5-19-2014



A. Safety Committee:

The monthly safety committee meeting was held on April 28th most discussion was on portable eye wash stations.

B. Training

Training performed in April:

1. Safety meetings are continuing for the crews at the SOC.
2. New employees and some seasonal employees received fork lift, lock out/ tag out training. New employees received GHS training

C. Safety Inspections:

1. Administration Building

- There were no significant safety issues found during site visits.

2. Systems Operation Center (SOC):

- There were no significant safety issues found during site visits.

3. WTP North:

- There were no significant safety issues found during periodic site visits. These visits unlike the complete audits below may not cover every area of the facility on the day visited. Site visit dates in April were on the 3rd, 9th, and 29th.

4. WWTP North:

- There were no significant safety issues found during periodic site visits. These visits unlike the complete audits below may not cover every area of the facility on the day visited. Site visit dates in April were on the 3rd, 7th, 9th, and 14th.

5. WTP South:

- See facility audit below

6. WWTP South:

- See facility audit below.

7. Water Distribution/ Collection System:

- There were no safety issues with employees observed during safety site visits and proper PPE and signage was being used.

D. Comprehensive Safety Audits:

1. SWTP:

There were a few minor issues noted all of which have been corrected or in the process of being corrected.

2. SSWTP:

There were a few minor issues noted all of which have been corrected or are in the process of being corrected.

E. Recordable Injuries:

1. There was one employee on Modified duty related to a January injury that wasn't recordable at that time.
2. One recordable injury in April an employee lacerated their finger on a piece of glass there was no lost time and no restrictions.

GENERAL MANAGER'S REPORT



General Manager Report 19 May 2014

HWU Policies

This month we are submitting a change to the policy on water leak abatement, to clarify that irrigation meters do not qualify for any adjustment; this has been our long-standing policy. Also attached is a minor change to the policy on Special Requirements related to the Water and Wastewater operators, and how they are compensated for their 12-hour shifts.

Small Tools and Safety Supplies

While we have procedures in place to monitor usage of parts in work orders, a goodly portion of the purchasing at the SOC is for Personal Protection Equipment (PPE), small tools, and consumable supplies. The on-hand quantities of these items are difficult to monitor and it is difficult to be sure that we maintain adequate levels on-hand.

Two of our regular vendors, Grainger and Fastenal, offer a vending machine solution for these types of supplies. Employees enter their individual code and the chosen item is dispensed. These machines have software which sends automatic notification to the vendor as soon as the supply reaches the re-order level, and the vendor will then re-stock the machine.

There are several advantages to the vending system:

- Usage tracked by employee (limits per employee are possible but not required)
- When stock of item is low, vendor brings more product and re-stocks machine; we only pay for items used
- We can set up real-time reporting, and automated reports & alerts
- Pricing is competitive
- Multiple configurations are available for small items or large items
- Products can be packaged by vendor in the quantities which we use them (4 D batteries, 2 pair jersey gloves, one pair of safety glasses) at no additional charge
- Vendor has a local store (Henderson)

This is not a response to employee problems, but will allow us to have a better handle on our supply of these items without increasing our man hours or paperwork. Reports from other facilities using these units, with no employee restrictions, have shown costs reductions of as much as 30% simply because employees become more conscious of their usage.

Our cost to use this system is \$300 per keypad unit per year. Based upon the configuration, we should be able to have one coil-style machine and at least one locker unit on a single keypad.

Habitat for Humanity

Just a note for your information: In accordance with our established policy, we waived tap fees for a new build (Habitat's 52nd) at 808 Meadow Street.

Policy and Procedure Manual

Henderson Water Utility

Subject <i>Water/Wastewater Operators – Special Requirements</i>	Number <i>D-860</i>
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Effective Date <i>17 February 2014</i>	Revision No. <i>01</i>	Revision Date 19 May 2014
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1.0 POLICY STATEMENT: Special requirements apply to HWU Water and Wastewater Operators, due to the need to cover the plants continuously. These employees are required to work 12-hour shifts. This policy sets out standards for time-keeping and procedures for recording time and calculating hours worked for these employees.

2.0 PROCEDURES:

2.1 Shifts

HWU Water and Wastewater Operators normally work seven (7), 12-hour shifts in a two week period. This equals 84 hours in a normal 80 hour period. This is split into 36 hours one week and 48 hours the other week of every pay period, The 8 hours of the 48-hour week, and the last 4 hours worked are paid as overtime at a rate of 1-1/2 times the normal hourly wage, subject to the requirement that overtime is only paid on the basis of actual physical hours worked (sick leave, vacation and personal time do not count as physical hours worked).

Time is kept and recorded as outlined in Policy D-820.

2.2 Holidays

HWU Water and Wastewater Operators are exempt from taking normal City holidays, but are paid for eight (8) hours of holiday time for each holiday, in addition to hours worked. This time does not impact the calculation of actual physical hours worked.

2.3 Reporting for Work

Due to the need to cover the water and wastewater plants continuously, Water and Wastewater Operators are required to give 2 hours notice of absence, prior to the beginning time for their shift, unless emergency dictates otherwise. (See City Employee Manual, Article 230 (k)).

Policy Number	Revision No.	Page	of
D-860	<u>01</u>	2	2

2.4 Lunch/Breaks

Due to the need for continuous, 24-hour manning and monitoring of the Treatment Plants, Plant Operators working a 12 hour shift are expected to take a ½ hour lunch break during their shift, and will be paid for that time.

3.0 RESPONSIBILITY: Plant operators are responsible for accurately recording their shift start and end times on timecards. Supervisors and timekeepers are responsible for calculating hours worked and recording that information on timecards in accordance with the above standards. Department heads are responsible for ensuring that work hours are properly reported and recorded for the payment of appropriate regular and overtime compensation; and for ensuring overall compliance with the provisions of this policy.

APPROVED:

Tom Williams, P.E.
General Manager

Policy and Procedure Manual

Henderson Water Utility

Subject <i>Adjustments to Bills for Water Leaks</i>	Number <i>E-200</i>
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Effective Date <i>16 December 2013</i>	Revision No. <i><u>01</u></i>	Revision Date <i><u>19 May 2014</u></i>
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1.0 POLICY STATEMENT:

Adjustment of monthly bills for leaks will be considered only for underground, hidden leaks or leaks into crawl spaces. A leak qualified for adjustment is defined as an underground corruption in the water service line that occurs between the meter pit and the applicable building or structure, or into a crawl space, that would normally be hidden from view or undetectable. All other losses of water are subject to regular water and sewer charges.

Leaks in the interior of a building or structure, leaks due to defective plumbing fixtures, leaks associated with irrigation meters, or leaks resulting from vandalism or neglect will not be considered for adjustment.

This policy applies to all residential and commercial customers.

2.0 PROCEDURES:

Upon approval by the HWU Chief Financial Officer, the City Customer Service/Billing Office will adjust the bill as specified below.

The customer must submit a signed statement or a bill from a plumber, noting that there was a leak and that it has been repaired. Adjustments are processed at the Customer Service office in the City Building.

Adjustment for underground leaks or leaks into crawl spaces may be made to the residential consumer for one-half the water used in excess of the previous 12 month's monthly average, and for one-half of the sewer charges for water used in excess of the previous 12 month's monthly average. Commercial customers (including owners of rental property) are only reimbursed for one-half the sewer portion described above. If there are significant variations in water use from month to month, the timeframe for adjustment may be modified at the discretion of the CFO (e.g., where there are high seasonal variations evidenced in the billing records).

Policy Number	Revision No.	Page	of
<i>E-200</i>	<u>01</u>	2	2

A maximum of two adjustments will be made for the same leak, if it extends over multiple billing cycles. A maximum of two such adjustments shall be granted to any customer at one address during any consecutive twenty-four month period, regardless of the number of leaks.

3.0 RESPONSIBILITY: The Chief Financial Officer shall be responsible for the overall coordination for this process. Other employees noted herein are responsible for following the procedures as outlined. Exceptions to this policy must be approved by the General Manager.

APPROVED:

Tom Williams, P.E.
General Manager

BUSINESS

- 2014-2015 Budget Review & Approval
- Action Report #2014-17 – SOC and NWTP Paving
- Resolution #2014-18 – Revisions to the Sewer Use Ordinance
- Action Report #2014-19 – Pad-Mounted Transformers

**Budget Review and Approval
(Budget was distributed earlier)**

Henderson Water Utility Action Report #2014-17

To: Henderson Water & Sewer Commission
From: Rodney Michael, Director of Utility Operations
Subject: SOC and NWTP Paving
Date: 19 May 2014

Background:

- The back yard of the SOC and of the North Water Treatment Plant is gravel in some places and needs to be paved to keep down the dust on our vehicles and the buildings. There is a lot of traffic at both locations with deliveries at the NWTP and with constant truck traffic at the SOC.
- As a part of the Spring Cleaning we are cleaning siding, painting and sprucing up things and to keep it that way we want to eliminate this dust storm that occurs daily.
- We received quotes from the vendor that is on the City Paving Contract and the results are listed below.

Budget/Financial Considerations:

<i>Proposed Shop Addition Budget</i>	
SOC Paving	\$19,500
NWTP Paving	\$16,250
Preperation Cost (by our crews)	\$4,000
<i>10% contingency</i>	\$3975
<i>Total Project Budget</i>	<i>\$43,725</i>

- We will set up a new capital project identified as "SOC and NWTP Paving", in the amount of \$ 43,750. This will be appropriated from the "Unidentified Capital Projects" line item in the 2013-2014 Budget.

Legal Considerations:

- Procurements necessary for the completion of these services have and will follow the Kentucky Model Procurement Code.

Recommendations & Approvals:

- Board approval authorizes all work necessary to complete the scope of work for this project, including issuance of any additional bids, purchase orders, engineering services, change orders, or other authorizations required to complete the work without unnecessary delays.

Respectfully Submitted:

Approved for Submittal:

Rodney Michael
Director of Utility Operations

Tom Williams, P.E
General Manager

Commission Action – 19 May 2014

PASSED: _____ FAILED: _____ TABLED: _____

**HENDERSON WATER AND SEWER COMMISSION
RESOLUTION OF THE BOARD OF COMMISSIONERS**

Resolution No. 2014-18

The following Resolution was duly adopted by the Board of Commissioners of the Henderson Water & Sewer Commission at a regular meeting held on Monday, 19 May 2014, at which meeting a quorum was present.

BE IT RESOLVED, that the Henderson Water and Sewer Commission by and through its Board of Commissioners under the authority granted to the Board of Commissioners under Chapter 23 Article II Division 3 Sections 23-36 through 23-45.1 of the City Code of Ordinances hereby recommends to the Board of Commissioners of the City of Henderson, Kentucky, that the City of Henderson enact and adopt revisions to portions of Article II of Chapter 23 of the City Code of Ordinances, commonly referred to as the "Sewer Use Ordinance", incorporating changes to Use of Public Sewers, pH Limitations, Maintenance of Stormwater Drainage Systems and Control Devices, Building Sewers, Local Limits, and Pretreatment Program Administration, as well as minor semantic and grammatical changes as recommended by the staff of the Water and Sewer Commission, and herewith transmitted to the City by attachment to this resolution.

These changes will become effective upon the date of adoption by the Board of Commissioners of the City of Henderson, Kentucky.

The General Manager is hereby authorized to deliver this Resolution to the City of Henderson.

IN WITNESS WHEREOF, having come before the Board of Commissioners on Monday, 19
May 2014, and upon Motion made by Commissioner _____, and seconded by
Commissioner _____, the Board of Commissioners voted as follows:

	<u>AYE</u>	<u>NAY</u>
Commissioner, Paul Bird	_____	_____
Commissioner, George Jones	_____	_____
Commissioner, John Henderson	_____	_____
Commissioner, Gary Jennings	_____	_____
Commissioner, Julie Wischer	_____	_____

Tom Williams, P.E.
General Manager
Henderson Water Utility

ARTICLE II. WATER AND SEWER SERVICE

DIVISION 2. SEWER USE REGULATIONS – Only those portions that are changed are reprinted here. All other sections of Division 2 remain in force as adopted.

In Section 23-26, General Provisions; definitions, subsection (b) Definitions, add the following definition:

Sec. 23-26. General provisions; definitions.

North American Industry Classification System (NAICS). A system developed by the U.S. Office of Management and Budget that is used to classify business establishments based on the type of industry or process at a facility.

And delete this definition:

~~*Standard industrial classification (SIC). A classification scheme based on the type of industry or process at a facility.*~~

In Section 23-26, General Provisions; definitions, subsection (c) Abbreviations, make the following corrections:

(c) Abbreviations. The following abbreviations shall have the designated meaning:

ASTM--American Society for Testing and Materials

AWWA – American Water Works Association

BMP--Best management practices

BOD--Biochemical oxygen demand

CFR--Code of Federal Regulations

CIU--Categorical industrial user

COD--Chemical oxygen demand

CWA--Clean Water Act (33 USC 1251 et seq.)

CWF--Combined wastestream formula

EPA--Environmental Protection Agency

ERP--Enforcement response plan

FWA--Flow weighted average

FR--*Federal Register*

gpd--gallons per day

HWSC--Henderson Water and Sewer Commission
HWU--Henderson Water Utility
IU--Industrial user
l--Liter
mg--Milligrams
mg/l--Milligrams per liter
MS4--Municipal Separate Storm Sewer System
NPDES--National pollutant discharge elimination system
KPDES--Kentucky pollutant discharge elimination system
KRS – Kentucky Revised Statutes
NAICS – North American Industry Classification System
POTW--Publicly owned treatment works
PPM – Part per million
QA--Quality assurance
QC--Quality control
RCRA--Resource Conservation and Recovery Act
~~SIC--Standard industrial classification~~
SIU--Significant industrial user
SWDA--Solid Waste Disposal Act, 42 U.S.C. 6901, et seq.
SWPPP--Stormwater pollution prevention plan
TSS--Total suspended solids
TTO--Total toxic organics
USC--United States Code

(Ord. No. 06-11, 3-22-11; Ord. No. 33-12, 12-11-2012)

In Sec. 23-27, Use of public sewers, subsection (a) Mandatory sewer connections, make the following corrections:

Sec. 23-27. Use of public sewers.

(a) *Mandatory sewer connections.*

(1) The owner(s) of all houses, buildings, or properties used for human occupancy, employment, recreation, or other purposes, situated within the city and abutting on any street, alley, or right-of-way in which there is now located or may in the future be located a public sanitary sewer of the city, is hereby required at the owner's expense to install suitable toilet facilities therein, and to connect such facilities directly with the proper sewer in

accordance with the provisions of this division, within ninety (90) days after date of official notice to do so, provided that said public sewer is within one hundred (100) feet of the property line measured along the most feasible route of connection to the public sewer, except when the following conditions are present:

- a. The lot is a minimum of five (5) acres in size; and
- b. The toilet facilities of the current or proposed structure on the property, as measured from the ground floor elevation, cannot gravity flow to the existing public sewer and must be mechanically assisted by way of a private sewer pump or lift station.

When both conditions delineated in subsections a. and b. of (a)(1) above are present, an on-site sewage disposal system (private wastewater disposal system) complying with all governmental regulations may be constructed and used until such time that (i) the lot is subdivided into two (2) or more lots, irrespective of the size of the subdivided lots, or (ii) until such time that a public sewer system, located within one hundred (100) feet of the property line as measured from the ground floor elevation of the structure permits the toilet facilities, to gravity flow to the public sewer system without a mechanical assist from a private sewer pump or lift station. Upon the occurrence of (i) or (ii) above, the structure shall be connected to the public sewer system and the on-site sewage disposal system shall be taken out of service and cleaned or removed as provided in subsection (3) below.

(2) It shall be unlawful to construct or maintain any privy, privy vault, septic tank, cesspool, on-site sewage disposal facility, or other facility intended or used for the disposal of wastewater, except as provided in subsection (a)(1) above and in the private wastewater disposal section (23-28).

(3) Except for the limited exception permitted in subsection (a)(1) above, when a public sewer is located within one hundred feet (100) of the property line as measured along the most feasible route of connection to the public sewer of property served by an on-site sewage disposal system, a direct connection shall be made to the public sewer system within ~~sixty ninety (6090)~~ sixty ninety (6090) days of official notice to do so in compliance with this division, and any septic tanks, cesspools and similar private wastewater disposal facilities shall be cleaned of sludge and filled with suitable material or salvaged and removed.

(4) No unauthorized person(s) shall remove any sanitary sewer manhole covers in the City's sanitary sewer collection system unless written permission is first obtained from the General Manager or his/her designee. Any violation of the above provision shall be subject to any and all civil and criminal penalties as outlined under section 23-34 and the penalty provisions outlined in section 23-35.

In Sec. 23-27, Use of public sewers, subsection (b) Illegal discharge to storm sewers or natural outlets, make the following correction:

(b) *Illegal discharge to storm sewers or natural outlets.*

(1) No user shall discharge or cause to be discharged into the municipal storm drain system or watercourses any materials, including but not limited to pollutants or waters containing any pollutants that cause or contribute to a violation of applicable water quality standards, other than storm water.

(2) The commencement, conduct or continuance of any illegal discharge to the storm drain system is prohibited except as described as follows:

(a) Allowable Non-Stormwater Discharges. The following discharges are permissible under this chapter:

- i. Landscape irrigation;
- ii. Discharges from unmodified potable water sources, including discharge from fire fighting activities, and water line flushing;
- iii. Diverted stream flows;
- iv. Ground water infiltration to separate storm sewers;
- v. Springs, or flows from riparian habitats and wetlands;
- vi. Foundation and footing drains;
- vii. Air conditioning condensation;
- viii. Sump pump discharges;
- ix. Draining of swimming pools (if de-chlorinated to less than 2 PPM chlorine);
- x. Non-commercial car washing;
- xi. Street wash waters, not including dumping of street sweeper wastes;
- xii. Discharges associated with emergency removal and treatment activities for hazardous materials, authorized by the federal, state, or local government on-scene coordinator;
- xiii. Flushing and cleaning of storm water conveyances with unmodified potable water; and
- xiv. Wash water from the cleaning of the exterior of buildings, including gutters provided that the discharge does not pose an environmental or health threat.

(b) Discharges specified in writing by the authorized enforcement agency as being necessary to protect public health and safety.

- (c) Dye testing is an allowable discharge, but requires a verbal notification to the Henderson Water Utility prior to the test.
- (d) If any of the above non-stormwater exceptions are found to be polluted and thus cause a negative impact on the quality of the Waters of the State, that occurrence shall be deemed a violation of this chapter and discharge to the MS4 shall not be allowed. Such situations or occurrences shall be considered an illicit connection or illegal disposal as defined in this chapter.
- (e) If a valid KPDES Stormwater Discharge Permit has been approved and issued by the Kentucky Division of Water, additional Stormwater Discharge Permits from HWU are not required in order to discharge into the MS4, provided that the discharge is in compliance with the terms of the KPDES Permit.

In Sec. 23-27, Use of public sewers, subsection (e) Prohibited discharges into sanitary sewer and combined sewer, make the following correction:

(e) *Prohibited discharges into sanitary sewer and combined sewer.* No user shall contribute or cause to be contributed, directly or indirectly, any pollutant or wastewater which will interfere with performance of the POTW. These general prohibitions apply to all such users of a POTW whether or not the user is subject to national categorical pretreatment standards or any other national, state, or local pretreatment standards or requirements. A user shall not contribute the following substances to the POTW:

- (1) Any liquids, solids or gases which by reason of their nature or quantity are, or may be, sufficient either alone or by interaction with other substances to cause fire or explosion or be injurious in any other way to the POTW or to the operation of the POTW. At no time shall the wastewater exhibit a closed cup flashpoint of less than one hundred forty (140) degrees Fahrenheit or sixty (60) degrees Centigrade using the test methods specified in 40 CFR 261.21.
- (2) Any waters or wastes having a pH lower than 5.5 or higher than 9.11.0 or having any other corrosive property capable of causing damage or hazard to structures, equipment, and personnel of the POTW.
- (3) Any slug load of pollutants, including oxygen demanding pollutants (BOD, etc.), released at a flow rate and/or concentration that will cause interference with the normal operation of the POTW.
- (4) Solid or viscous substances in quantities or of such size capable of causing obstruction to the flow in sewers, or other interference with the proper operation of the wastewater facilities such as, but not limited to, ashes, cinders, sand, rocks, mud, straw, shavings, metal, glass, rags, feathers, tar, plastics, wood, unshredded garbage, whole blood, paunch manure, hair and flesh, entrails, paper products such as cups, dishes, napkins, and milk containers, etc.

- (5) Any wastewater having a temperature which will inhibit biological activity in the sewage treatment plant resulting in interference, but in no case wastewater with a temperature at the introduction into the POTW that will result in a treatment plant influent temperature which exceeds forty (40) degrees Centigrade (one hundred four (104) degrees Fahrenheit).
- (6) Any pollutant(s) which result in the presence of toxic gases, vapors or fumes within the POTW in a quantity that may cause acute worker health and safety problems.
- (7) Any substance which may cause the POTW's effluent or any other product of the POTW such as residues, sludges, or scum, to be unsuitable for reclamation and reuse or to interfere with the reclamation process where the POTW is pursuing a reuse and reclamation program. In no case shall a substance discharged to the POTW cause the POTW to be in non-compliance with sludge use or disposal criteria, guidelines or regulations developed under Section 405 of the Act; any criteria, guidelines, or regulations affecting sludge use or disposal developed pursuant to the Solid Waste Disposal Act, the Clean Air Act, the Toxic Substances Control Act, or state criteria applicable to the sludge management method being used.
- (8) Any substance which will cause the POTW to violate its NPDES/KPDES permit and/or sludge disposal system permit.
- (9) Any trucked or hauled pollutants except at discharge points designated by the General Manager.

(Ord. No. 06-11, 3-22-11)

In Sec. 23-27.5, Maintenance of Stormwater Drainage Systems and Control Devices, make the following corrections:

Sec. 23-27.5 Maintenance of Stormwater Drainage Systems and Control Devices.

- (a) Where a public drainage easement for a public stormwater drainage system exists, the private property owner is responsible for non-structural maintenance of any ditch, channel, detention/retention basin, or any other stormwater conveyance, treatment or control device located on the owner's property, including but not limited to mowing the area (including any embankment or slope), removing small debris that accumulates in the basin system including litter and yard waste, sodding or seeding bare areas, (including any embankment or slope), and maintenance of landscape items, such as trees and shrubs.
- (b) Where a public drainage easement for a public stormwater drainage system exists, and public stormwater system components have been accepted for maintenance by the City, the City is responsible for: all structural repairs; maintaining the integrity of any embankment and the structural items in the easement, including concrete, pipe, gabions, stone, spillways, headwalls;

repairing eroded areas in the easement that threaten the stability of an embankment; repairing paved ditches and inlet structures in the easement; removing excess silt that affects the functionality of the stormwater drainage system; and removing trees, brush, or large debris that obstructs any outlet pipes, spillways or drainageways or any portion of the stormwater drainage system.

- (c) Where no public easement exists, the property owner is responsible for maintenance of any ditch, channel, detention/retention basin, or any other stormwater conveyance, treatment or control device located on the owner's property, including but not limited to: mowing the area (including any embankment or slope); removing debris that accumulates in the basin-system including litter and yard waste; sodding or seeding bare areas (including any embankment or slope); maintaining any landscaped areas such as trees and shrubs; all structural repairs; maintaining the integrity of any embankment and structural items including concrete, pipe, gabions, stone, spillways and headwalls; repairing eroded areas on the embankment that threaten the stability of the embankment; repairing paved ditches and inlet structures in the basin, removing excess silt that affects the functionality of the stormwater control device as directed by the City, and removing large debris that obstructs any drainageway.
- (d) No trees shall be planted on any dam, berm or levee associated with a public stormwater drainage system.
- (e) No structures or equipment including but not limited to, fences, gazebos, swimming pools or buildings shall be placed in a public drainage easement, except as allowed by permit issued by the City.
- (f) No fill dirt shall be placed in a public drainage easement without prior approval by the City.
- (g) The owner of any property shall ensure that no equipment, structure, material, or substances are located in the easement that may adversely affect the performance of a stormwater drainage system in controlling stormwater quantity or that adversely affect water quality.
- (h) Nothing herein shall preclude the City from assuming responsibility to maintain any stormwater drainage system pursuant to contract, easement, or other legal arrangement.
- (i) Maintenance and repair of detention/retention basins and other stormwater conveyance, treatment or control devices located on private property is the responsibility of the property owner who shall ensure the facilities are operating as intended. Property owners shall address requirements for continuing maintenance and repair of stormwater treatment or control devices through the filing of a certificate of land use restriction, recorded in the office of the county court clerk at the expense of the property owner~~in any lease or transfer of property where such devices exist.~~
- (j) The owner of any property may be notified in writing by the City of any problems or maintenance or repairs that must be addressed or corrected in stormwater conveyance, treatment or control devices, or in stormwater

basins, such as removing debris from a basin, repairing eroded areas on the embankment, replacing a crushed pipe, repairing or replacing a stormwater BMP, or improving embankment stability. Such notification shall include a time limit for correction of deficiencies, after which time enforcement shall be initiated. The scale of enforcement actions will be as detailed in the appropriate HWU Enforcement Response Plan.

(Ord. No. 06-11, 3-22-11; Ord. No. 33-12, 12-11-2012)

In Section 23-29, Building sewers and connections to sanitary sewers, subsection (b) Prohibited Connections, subparagraph (2), make the following correction:

Sec. 23-29. Building sewers and connections to sanitary sewers.

(b) *Prohibited connections.*

(2) Floor, basement, or crawl space drains which are lower than ground surfaces surrounding the building shall not be connected to the building sanitary sewer. Any sanitary fixture or drain which has an overflow rim less than two feet above the elevation of the next upstream manhole rim shall be protected by an approved backflow prevention device. No sanitary inlet which is lower than six (6) inches above the top of the lowest of the two adjacent public sanitary sewer manholes shall be connected by direct drainage to the building sanitary sewer.

In Section 23-29, Building sewers and connections to sanitary sewers, subsection (c) Design and installations, subparagraph (15), make the following deletion:

(c) *Design and installations.*

(15) Repairs to existing sewer lines, whether performed by HWU or by the property owner, shall include the addition of a 6" dia. cleanout where none existed before or where a 4" dia. cleanout existed before.

~~a. If the existing sewer tap is 4" dia., HWU will upgrade the sewer tap to 6" dia. at no cost to the customer.~~

~~b. If the existing lateral contains a 4" dia. cleanout, the cleanout must be replaced with a 6" dia. cleanout that is readily accessible for sewer maintenance.~~

(Ord. No. 06-11, 3-22-11)

In Section 23-30, Pollutant Discharge Limits, subsection (a) General Conditions, and subsection (b) Restricted discharges, make the following corrections, including changes to Tables 1, 2 & 3:

Sec. 23-30. Pollutant discharge limits.

(a) *General conditions.* The following described substances, materials, waters or wastes shall be limited in discharges to the Henderson sanitary sewer

system to concentrations or quantities which: (i) will not harm either the sewers, wastewater treatment processes or equipment, (ii) will maintain and protect water quality in the receiving stream, and (iii) will not otherwise endanger lives, limb, public property, or constitute a nuisance. The General Manager or his designee may set additional limitations or limitations more stringent than those established in the provisions ~~below of this ordinance,~~ if in his opinion more severe limitations are necessary to meet the above objectives. In forming his opinion as to the acceptability of a discharge, the General Manager or his designee shall give consideration to such factors as the quantity of subject waste in relation to flows and velocities in the sewers, materials of construction of the sewers, the wastewater treatment process employed, capacity of the wastewater treatment plant, and other pertinent factors.

(b) *Restricted discharges.*

(1) Wastewater containing more than fifty (50) milligrams per liter of petroleum oil, nonbiodegradable cutting oils, or products of mineral oil origin.

(2) Wastewater containing floatable oils, fat, or grease, whether emulsified or not, in excess of one hundred fifty (150) milligrams per liter (mg/l) or containing substances which may solidify or become viscous at temperatures between 32°--150°F (0°--65°C).

(3) Any garbage that has not been properly shredded. Garbage grinders may be connected to sanitary sewers from homes, motels, institutions, restaurants, hospitals, catering establishments, or similar places where garbage originates from the preparation of food in kitchens for the purpose of consumption on the premises or when served by caterers. Ground paper products such as cups, dishes, napkins, and milk containers shall not be discharged to the sewer system.

(4) Any wastewater containing toxic pollutants in sufficient quantity or quantities, either singly or by interaction with other pollutants which injure or interfere with any wastewater treatment processes, constitute a hazard to humans or animals, causes the City to violate the terms of its KPDES permit, prevents the use of acceptable sludge disposal methods, or exceed a limitation set forth in a Categorical Pretreatment Standard.

(5) Any radioactive wastes or isotopes of such half-life or concentration as may exceed limits established by the City in compliance with applicable State or Federal regulations.

(6) Any water or wastes which by interaction with other water or wastes in the public sewer system, release noxious gases, form suspended solids which interfere with the collection system, or create a condition deleterious to structures and treatment processes.

(7) Any wastewater with objectionable color which cannot be removed to an acceptable level within the operation of the wastewater treatment process unless otherwise specifically noted in the Industrial User Permit (IUP).

(8) Waters or wastes containing substances which are not amenable to treatment or reduction by the wastewater treatment processes employed to the extent required by the City's NPDES/KPDES permit.

(9) Any waste(s) or wastewater(s) classified as a hazardous waste by the Resource Conservation and Recovery Act (RCRA) without a sixty (60) day prior notification of such discharge to the General Manager. This notification must include the name of the hazardous waste, the EPA hazardous waste number, type of discharge, volume/mass of discharge and time of occurrence(s). The General Manager may prohibit or condition the discharge(s) at any time.

(10) Any water or wastes which have characteristics based on a twenty-four-hour composite sample, grab or a shorter period composite sample, if more representative, that exceed the following normal maximum domestic wastewater parameter concentrations:

Table 1 Normal Maximum Domestic Wastewater Concentrations Henderson North & South POTW's City of Henderson, Kentucky	
Parameter	Maximum allowable concentration without surcharge fee assessment (mg/l)
BOD	400
COD	800
TSS	400
NH ₃ -N	50
Oil and grease (total)	150
Oil and grease (Hydrocarbons)	50

Any person discharging wastewater exceeding the allowable concentrations as noted in Table 1, will be subject to a surcharge fee for each pound loading over and above the allowable concentration. Any other amenable constituents requiring the addition of specific chemicals for proper treatment will also be subject to surcharge as noted on the industrial user permit. Exceedance of the effluent limits specified in Table 1 shall not be deemed to constitute a violation of a permit condition or this ordinance if the appropriate surcharge fee is paid and the discharge does not cause interference or pass through to the POTW.

(11) The discharge limitations as established in Tables 2 and 3 of this Ordinance are for characteristics of any wastewaters to be discharged into the municipal sewer system, to the North and South Wastewater Treatment Plants (POTW's), subject to any compliance schedule as must

comply with these limitations where they are more stringent than applicable state and/or federal regulations. Based upon the sampling program at the Henderson wastewater treatment plants, the discharge limitations given in Tables 2 and 3 may be adjusted to reflect the POTW's needs. The City shall give public notice when any change results in a limitation less stringent than currently exists.

Table 2	
Effluent Discharge Limitations	
Henderson North Wastewater Treatment Plant City of Henderson, Kentucky	
Parameter	Daily Maximum Discharge Limit (milligrams per liter)
Arsenic (As)	0.34 <u>0.34</u>
Cadmium (Cd)	0.15 <u>0.06</u>
Chromium, total (Cr)	1.71 <u>2.77</u>
Hexavalent Chromium (Cr VI)	0.59 <u>0.53</u>
Copper (Cu)	2.29 <u>1.43</u>
Cyanide, Amenable (Cn, <u>Amen</u>)	0.30 <u>0.26</u>
Lead (Pb)	0.43 <u>0.24</u>
Mercury (Hg)	0.01
Molybdenum (Mo)	0.40
Nickel (Ni)	0.86 <u>1.64</u>
Selenium (Se)	0.19 <u>0.14</u>
Silver (Ag)	0.39
Zinc (Zn)	1.31 <u>1.60</u>

Table 3	
Effluent Discharge Limitations	
Henderson South Wastewater Treatment Plant City of Henderson, Kentucky	
Parameter	Daily Maximum Discharge Limit (milligrams per liter)
Arsenic (As)	0.17
Cadmium (Cd)	0.24 <u>0.11</u>
Chromium, total (Cr)	2.77
Hexavalent Chromium (Cr VI)	1.55
Copper (Cu)	2.03
Cyanide, Amenable (Cn, <u>Amen</u>)	0.65
Lead (Pb)	0.69
Mercury (Hg)	0.005 <u>0.004</u>
Molybdenum (Mo)	0.76
Nickel (Ni)	0.85 <u>1.57</u>
Selenium (Se)	1.26 <u>0.38</u>
Silver (Ag)	0.24
Zinc (Zn)	1.48

(12) The City has received authority through the U.S. EPA and state statutes to enforce the requirements of 40 CFR Subchapter N and 40 CFR Part 403. All users shall comply with the requirements of these federal regulations.

(Ord. No. 06-11, 3-22-11)

In Section 23-31, Pretreatment program administration, subsection (b) Industrial user permits, make the following corrections:

Sec. 23-31. Pretreatment program administration.

(b) *Industrial user permits.*

(1) *General.* All significant industrial users proposing to connect to or to contribute to the POTW shall obtain an Industrial User Permit before connecting to or contributing to the POTW.

(2) *Permit application.* Users required to obtain an industrial user permit shall complete and file with the City, an application in the form

prescribed by the City, and accompanied by a permit fee. New users shall apply at least ninety (90) days prior to connecting to or contributing to the POTW. Existing permit holders shall apply no later than sixty (60) days prior to expiration of the permit. In support of the application, the user shall submit, in units and terms appropriate for evaluation, the following information:

- a. Name, address, and location if different from the address;
- b. SIC-NAICS number(s) according to the North American Industry Classification System~~Standard Industrial Classification~~ Manual, United States Bureau of the Budget, ~~1972~~, as amended;
- c. Wastewater constituents and characteristics as determined by an analytical laboratory acceptable to the City; sampling and analysis shall be performed in accordance with procedures established by the EPA pursuant to Section 304 (g) of the Act and contained in 40 CFR, Part 136, as amended;
- d. Time and duration of contribution;
- e. Average daily and thirty-minute peak wastewater flow rates, including daily, monthly and seasonal variation if any;
- f. Site plans, floor plans, mechanical and plumbing plans and details to show all sewers, sewer connections, and appurtenances by the size, location and elevation;
- g. Description of activities, facilities, and plant processes on the premises including all materials which are or could be discharged;
- h. Where known, the nature and concentration of any pollutants in the discharge which are limited by the City, State or Federal Pretreatment Standards, and a statement regarding whether or not the pretreatment standards are being met on a consistent basis and if not, whether additional pretreatment is required for the user to meet applicable Pretreatment Standards;
- i. If additional pretreatment will be required to meet the pretreatment standards, the shortest schedule by which the user will provide such additional pretreatment. The completion date in this schedule shall not be later than the compliance date established for the applicable Pretreatment Standard;

The following conditions shall apply to this schedule:

1. The schedule must be acceptable to the City.
2. The schedule shall contain increments of progress in the form of dates for the commencement and completion of major events leading to the construction and operation of additional pretreatment required for the user to meet the applicable Pretreatment Standard.
3. Not later than fourteen (14) days following each date in the schedule and the final date for compliance, the user

shall submit a progress report to the General Manager including, as a minimum, whether or not it complied with the increment of progress to be met on such date and, if not, the date on which it expects to comply with this increment of progress and the reason for delay, and the steps being taken by the user to return the construction to the schedule established.

- j. Each product produced by type, amount, process or processes, and the rate of production;
- k. Type and amount of raw materials processed (average and maximum per day);
- l. Number of employees, and hours of operation of plant and proposed or actual hours of operation of pretreatment system;
- m. Any other information as may be deemed by the City to be necessary to evaluate the permit application.
- n. A copy of the industry's written environmental control program, policy, or comparable document.

(3) *Issuance.* The City shall evaluate the data furnished by the user and may require additional information. After evaluation and acceptance of the data furnished and determination that adequate capacity exists at the sewage facilities to convey, treat and dispose of the wastewaters, the General Manager or his designee may issue an industrial user permit subject to terms and conditions provided therein. The Industrial User Permit must be issued prior to commencement of discharge. The General Manager may withhold or discontinue water service until the discharge permit is issued. All new source categorical industries shall be capable of achieving compliance with this ordinance upon commencement of discharge.

(4) *General discharge permits.* The Pretreatment Coordinator may issue a general discharge permit to any user who, in the opinion of the Pretreatment Coordinator, has a potential to cause harm to the POTW and/or endanger POTW personnel or the general public. Users required to obtain such a permit shall complete an application with the HWU in the form prescribed by the General Manager or his designee. At the discretion of the General Manager or his designee, the general discharge permit may contain discharge monitoring requirements and effluent discharge limitations. Users regulated by a general discharge permit are subject to all provision of this Ordinance.

In Section 23-31, Pretreatment program administration, subsection (f) permit duration, make the following corrections:

Sec. 23-31. Pretreatment program administration.

(f) *Permit duration.* Industrial user permits shall be issued for a specified time period, not to exceed five (5) years for a categorical user, and not to exceed three (3) years for a significant user. Temporary permits may be issued for any new categorical user to allow data gathering to determine strength and characteristics of the user's effluent quality. A permit may be issued for a period of less than one year or may be stated to expire on a specific date. The user shall apply for permit reissuance a minimum of sixty (60) days prior to the expiration of the user's existing permit. The terms and conditions of the permit may be subject to modification by the City during the term of the permit as limitations or requirements as identified in section 23-30 are modified or other just cause exists. The industrial user shall be informed of any proposed changes in its permit at least thirty (30) days prior to the effective date of change. Any changes or new conditions in the permit shall include a reasonable time schedule for compliance.

In Section 23-31, Pretreatment program administration, subsection (k) Monitoring, make the following correction:

(k) *Monitoring.*

(1) The City may require significant industrial users to provide and operate, at the user's own expense, monitoring facilities to allow inspection, sampling, and flow measurement of the building sewer and/or internal drainage system. The monitoring facility should normally be situated on the user's premises, but the City may, when such a location would be impractical or cause undue hardship on the user, allow the facility to be constructed in a public right-of-way. The General Manager shall review and approve the location, plans, and specifications for such monitoring facilities and may require them to be constructed to provide for the separate monitoring and sampling of industrial waste and sanitary sewage flows.

(2) There shall be ample room in or near such sampling manhole or facility to allow accurate sampling and preparation of samples for analysis. The facility shall be designed and maintained in a manner such that the safety of City and user personnel shall be foremost. The monitoring facility, sampling and measuring equipment shall be maintained at all times in a proper operating condition at the expense of the significant industrial user.

(3) Whether constructed on public or private property, the sampling and monitoring facilities shall be provided in accordance with the City's requirements and all applicable local construction standards and specifications. Construction shall be completed within ninety (90) days following approval of the location, plans and specifications.

(4) All sampling analyses done in accordance with approved federal EPA procedures by the industrial user during a reporting period shall be submitted to the Pretreatment Coordinator, regardless of whether or not the analyses were required by the significant industrial user's discharge permit. All users shall provide representative samples in their periodic monitoring reports. Wastewater monitoring and flow measurement facilities shall be properly operated, kept clean, and maintained in good working order at all times. The failure of a User to keep its monitoring facility in good working order shall not be grounds for the User to claim that sample results are unrepresentative of its discharge.

(5) A significant industrial user must receive the approval of the Pretreatment Coordinator before changing the sampling point and/or monitoring facilities to be used in all required sampling. Industrial users shall sample only at the sampling point. HWU may sample at other locations in order to establish compliance by the user.

(6) Samples collected to satisfy reporting requirements must be obtained through appropriate sampling and analysis, based on data that is representative of conditions occurring during the applicable reporting period.

a. Except as indicated in b. and c. below, the user shall collect wastewater samples using 24-hour flow-proportional composite sampling techniques, unless time-proportional composite or grab sampling is authorized by the Pretreatment Coordinator. Where time-proportional or grab sampling is authorized, the samples must be representative of the discharge. Using protocols (including appropriate preservation) in 40 CFR Part 136 and appropriate US EPA guidance, multiple grab samples collected during a 24-hour period may be composited prior to the analysis as follows: for cyanide, total phenols, and sulfides, the samples may be composited in the field or in the laboratory; for volatile organics, and oil and grease, the samples may be composited in the laboratory. Composite samples for other parameters unaffected by the compositing procedures as documented in approved EPA methodologies may be authorized as appropriate. In addition, grab samples may be required to show compliance with Instantaneous Limits.

b. Samples for oil and grease, temperature, pH, cyanide, total phenols, sulfides, and volatile organic compounds must be obtained using grab sampling techniques.

c. For samples required in support of baseline monitoring and 90-day compliance reports, a minimum of four (4) grab samples must be used for pH, cyanide, total phenols, oil and grease, sulfide and organic compounds. For facilities where historical sampling is available, the Pretreatment Coordinator may authorize a lower minimum. For the reports required by Section 23-31 (i), the user is required to collect the number of grab samples necessary to

assess and assure compliance with applicable Pretreatment Standards and Requirements.

(Ord. No. 06-11, 3-22-11; Ord. No. 41-11, Exh. A, 11-8-11)

Henderson Water Utility Action Report #2014-19

To: Henderson Water & Sewer Commission
From: Tom Williams, P.E., General Manager
Subject: Pad-Mounted Transformers
Date: 19 May 2014

Background:

- In the renovation of the Raw Water Intake in 2011, we installed two large pad-mounted transformers, which were purchased through HMPL's annual bid. We were required to furnish them because HMPL does not stock pad-mounts for large services. The pad mount we purchased for the North Fork pump station project in 2013 is the same size as the Intake transformers, for a total of three in this size (2000 KVA).
- While discussing the needs for new electrical services on the Janalee Drive pump station and the North WWTP (Headworks) projects, we determined that those two locations also will function better with pad-mounts. These are a smaller size (750 KVA).
- The pad-mounted transformers are more reliable and less subject to wind damage than a bank of pole-mounted units.
- With this standardization around two sizes of transformers, we now see a need to stock a replacement transformer in each size, as a way to mitigate the risk of having any one of these critical facilities out of service while a long-lead-time transformer is ordered and delivered.

Legal Considerations:

- Procurements necessary for the completion of this work have and will follow the Kentucky Model Procurement Code.

Recommendations & Approvals:

- Staff recommends purchase of one 2000 KVA transformer for use as a backup for the Intake and North Fork sites, and the purchase of three, 750 KVA transformers for use at Janalee Drive pump station, the North WWTP, along with a spare. The spare transformers will be stored on HMPL's yard until needed.
- This is an unbudgeted capital expense, not to exceed \$ 60,000, and will be appropriated from the "Special Projects" line item in the 2013-2014 FY Capital Budget, as we have recently done with other capital projects.
- Board approval authorizes all work necessary to complete this project, including issuance of any bids, purchase orders, engineering services, task orders, change orders, or other authorizations required.

Respectfully Submitted for Approval:

Tom Williams, P.E.
General Manager

Commission Action – 19 May 2014

PASSED: _____ FAILED: _____ TABLED: _____

EXECUTIVE SESSION

- None Requested