



210 Shafor Water Plant

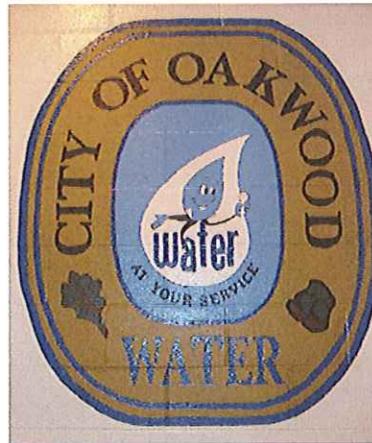


120 Springhouse Water Plant

2010

WATER PRODUCTION

REPORT



February 10, 2011

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I. INTRODUCTION/BRIEF HISTORY

This report provides a summary of the operations of the city of Oakwood water system for the year 2010. It includes the following items:

- Water Pumpage Statistics
- Water Monitoring and Testing (OEPA Compliance)
- Water System Maintenance
- Budget Summary

Brief History

Prior to 1954 the city of Oakwood purchased all of its water from outside sources, primarily the city of Dayton. At that time the Ohio Department of Health regulated public water systems and the rules and regulations were fairly limited, thus the price of water was relatively low. In 1954 Oakwood drilled two wells at 120 Springhouse Road. This site became known as the "Springhouse Wellfield." This was the beginning of Oakwood's quest to become water independent.

From 1954 to 1965 water was pumped from these two wells. This proved so successful that three new wells (Wells #1, 2 & 3) were drilled to a greater depth so as to sustain heavier pumping. The original two wells were abandoned. This increased water production and decreased Oakwood's reliance on Dayton water. The water was chlorinated to ensure that it was free from bacteria.

In 1978 a second well field was developed at the south end of Firwood Drive off Irving Avenue in Dayton. It was referred to as the "Firwood Wellfield." Between 1978 and 1988 three production wells (Wells #4, 5 & 6) were drilled at this location. The groundwater resources in this area proved to be abundant. In 1985 Oakwood purchased land on the north side of Irving Avenue to build a soccer field. In 1986 Well #7 was drilled adjacent to the soccer field. This site became known as the "Soccer Field Wellfield".

Prior to using water from the Firwood Wellfield, the Ohio EPA required the City to construct an Iron and Manganese Removal Plant due to elevated levels of iron and manganese in Well #5. The plant was constructed in 1980 at the 210 Shafor Boulevard Service Yard. This plant also housed the chlorination system for Wells #4, 5, 6 & 7.

In 1987 Oakwood decided to explore the possibility of softening the City water. In 1988 plans were completed for the plant at 210 Shafor. The plant was constructed in 1989. In 1991 plans were completed for the plant at 120 Springhouse and the plant was built in 1992. Both water softening plants use the "Ion Exchange" softening process. This is the same process used in most private home water softening units. The softening system removes hardness, primarily calcium and magnesium. Periodically the softening units require backwashing and regenerating of the resin bed filters.

In 2004 Well #8 was drilled in the Firwood Wellfield and placed into service. This well was needed to further enhance Oakwood's water independence.

Water Pumpage Statistics

The enclosed reports and tables (Sections II & III) provide monthly and yearly totals of the city of Oakwood's 2010 water pumpage. It includes monthly and yearly totals for all wells, the Shafor plant, Springhouse plant and water purchased from outside sources (i.e., city of Dayton and Montgomery County). In 2010 575,000 gallons of water was purchased from Dayton as a result of an electrical problem with Well #6 on a hot day in August. No fire responses in Oakwood required the purchase of Dayton or County water in 2010.

II. Water Monitoring and Testing (OEPA Compliance)

The following samples were collected at the entry points of the water system at 120 Springhouse and 210 Shafor Water Treatment Plants as required by the Ohio EPA in 2010:

- Nitrates, collected June 2, 2010

The following samples were collected in the distribution system at 20 different residences as required by the Ohio EPA in 2010. The results are summarized on the next page in Table 1:

- Lead, collected July 18 – August 10, 2010
- Copper, collected July 18 – August 10, 2010

All samples tested under the 2010 Ohio EPA Chemical Monitoring schedule were in compliance of the Safe Drinking Water Act. Table 1 on page 5 lists the results of the lead and copper sampling program. Table 2 on pages 6 - 8 compares Oakwood's water with EPA standards. All results are from the most recent sample taken. The monthly routine sampling consists of the following tests:

- **10 bacteriological samples per month from Distribution System**
- **2 sodium samples per month from Distribution System**
- **1 sodium sample per month from each Plant**
- **1 iron and manganese sample per week from each Plant**
- **Hardness samples daily from each Plant and Distribution System**
- **free and total chlorine samples daily from each Plant as well as from the Distribution System.**
- **1 chloride and pH sample per month from each Plant (NPDES Stormwater Permit requirement)**

General test results include:

- All 120 bacteriological samples tested negative for coliform bacteria.
- Raw water sodium averaged 82 mg/L at 210 Shafor, up from 77 mg/L in 2009; and 116 mg/L at 120 Springhouse, the same as in 2009.
- System water sodium averaged 252 mg/L, up from 240 mg/L in 2009.
- Iron at both plant effluents averaged <0.1 mg/L.
- Manganese at both plant effluents averaged <0.01 mg/L.

**TABLE 1
CITY OF OAKWOOD 2010 LEAD & COPPER TESTING RESULTS**

EPA Copper Action Level (ug/L)		1,350
LAST NAME	ADDRESS	COPPER RESULTS (ug/L)
Ingraham	36 Spirea Dr.	15
Higgins	241 Harman Blvd.	17.3
Goecke	217 Oakwood Ave.	50.1
Check	351 Telford Ave.	57.9
Peters	53 W. Peach Orchard Rd.	69.9
Jordan	346 Wiltshire Blvd.	79.7
Baumgartner	433 Wiltshire Blvd.	92.8
King	916 Acorn Dr.	97.5
Allan	575 Acorn Dr.	114
Riffle	450 Forrer Blvd.	121
Greenwald	110 Lookout Dr.	141
Philo	323 Claranna Ave.	142
Munn	31 Hadley Ave	174
Laidler	208 Forrer Blvd.	242
Taylor	800 Shafor Blvd.	293
Hutton	718 Farhills Ave.	313
Kizirrus	231 Triangle Ave.	386
Thomas	327 East Dr.	486
James	55 Harman Terrace	737
Allen	21 Collingwood Ave.	861

EPA Lead Action Level (ug/L)		15.5
LAST NAME	ADDRESS	LEAD RESULTS (ug/L)
Check	351 Telford Ave.	<2.00
Goecke	217 Oakwood Ave.	<2.00
Munn	31 Hadley Ave.	<2.00
Thomas	327 East Dr..	<2.00
Ingraham	36 Spirea Dr.	<2.00
Peters	53 W. Peach Orchard Rd.	<2.00
Greenwald	110 Lookout Dr.	<2.00
Philo	323 Claranna Ave.	<2.00
Higgins	241 Harman Blvd..	<2.00
Riffle	450 Forrer Blvd.	2.03
King	916 Acorn Dr.	2.23
Laidler	208 Forrer Blvd.	2.45
Baumgartner	433 Wiltshire Blvd..	2.77
Allan	575 Acorn Dr.	3.15
Hutton	718 Farhills Ave.	3.37
Kizirrus	231 Triangle Ave.	3.57
Jordan	346 Wiltshire Blvd.	3.76
Taylor	800 Shafor Blvd..	3.79
James	55 Harman Terrace	5.82
Allen	21 Collingwood Ave.	15.3

To be in compliance with the OEPA Lead & Copper Rule, sample results must be below the set action level for lead and copper, as listed in the table above, at the 90th percentile.

The 90th percentile for the City of Oakwood is highlighted in light blue.
No sample was above the Action Level in 2010.

Table 2

CONTAMINANT	OAKWOOD'S WATER		OEPA MCL	DATE COLLECTED
	Shafor	Springhouse		
VOLATILE ORGANIC COMPOUNDS	Ug/L	ug/L	ug/L	
Benzene	<0.5	<0.5	5.0	6/10/09
Carbon tetrachloride	<0.5	<0.5	5.0	6/10/09
1,1-Dichloroethane	<0.5	<0.5	7.0	6/10/09
1,2-Dichloroethane	<0.5	<0.5	5.0	6/10/09
cis-1,2-Dichloroethene	<0.5	<0.5	70.0	6/10/09
Dichloromethane	<0.5	<0.5	5.0	6/10/09
1,2-Dichloropropane	<0.5	<0.5	5.0	6/10/09
Ethylbenzene	<0.5	<0.5	700.0	6/10/09
Styrene	<0.5	<0.5	100.0	6/10/09
Toluene	<0.5	<0.5	1000.0	6/10/09
1,1,1-Trichloroethane	<0.5	<0.5	200.0	6/10/09
Tetrachloroethene	<0.5	<0.5	5.0	6/10/09
1,2,4-Trichlorobenzene	<0.5	<0.5	70.0	6/10/09
Trichloroethene	<0.5	<0.5	5.0	6/10/09
1,1,2-Trichloroethane	<0.5	<0.5	5.0	6/10/09
Vinyl chloride	<0.5	<0.5	2.0	6/10/09
Xylenes, Total	<0.5	<0.5	10000.0	6/10/09
Bromodichloromethane	<0.5	<0.5	TTHM*	6/10/09
Bromoform	<0.5	0.72	TTHM	6/10/09
Chloroform	0.58	<0.5	TTHM	6/10/09
Dibromochloromethane	<0.5	0.76	TTHM	6/10/09
Bromobenzene	<0.5	<0.5	NR**	6/10/09
Bromochloromethane	<0.5	<0.5	NR	6/10/09
Bromomethane	<0.5	<0.5	NR	6/10/09
n-Butylbenzene	<0.5	<0.5	NR	6/10/09
sec-Butylbenzene	<0.5	<0.5	NR	6/10/09
tert-Butylbenzene	<0.5	<0.5	NR	6/10/09
Chlorobenzene	<0.5	<0.5	NR	6/10/09
Chloroethane	<0.5	<0.5	NR	6/10/09
Chloromethane	<0.5	<0.5	NR	6/10/09
2-Chlorotoluene	<0.5	<0.5	NR	6/10/09
4-Chlorotoluene	<0.5	<0.5	NR	6/10/09
Dibromomethane	<0.5	<0.5	NR	6/10/09
1,2-Dichlorobenzene	<0.5	<0.5	NR	6/10/09
1,3-Dichlorobenzene	<0.5	<0.5	NR	6/10/09
1,4-Dichlorobenzene	<0.5	<0.5	NR	6/10/09
Dichlorodifluoromethane	<0.5	<0.5	NR	6/10/09
1,1-Dichloroethene	<0.5	<0.5	NR	6/10/09
trans-1,2-Dichloroethene	<0.5	<0.5	NR	6/10/09
1,3-Dichloropropane	<0.5	<0.5	NR	6/10/09
2,2-Dichloropropane	<0.5	<0.5	NR	6/10/09
1,1-Dichloropropene	<0.5	<0.5	NR	6/10/09
1,3-Dichloropropene	<0.5	<0.5	NR	6/10/09
Hexachlorobutadiene	<0.5	<0.5	NR	6/10/09
Isopropylbenzene	<0.5	<0.5	NR	6/10/09
Naphthalene	<0.5	<0.5	NR	6/10/09

* TTHM: Trihalomethanes regulated separately as Disinfection Byproducts

** NR: Not Regulated

Table 2 (cont.)

CONTAMINANT	OAKWOOD'S WATER		OEPA MCL	DATE COLLECTED
	Shafor	Springhouse		
SYNTHETIC ORGANIC CHEMICALS	ug/L	ug/L	ug/L	
Alachlor	<0.2	<0.2	2.0	6/18/08
Aldicarb	<0.5	<0.5	7.0	8/17/05
Aldicarb sulfone	<0.5	<0.5	7.0	8/17/05
Aldicarb Sulfoxide	<0.5	<0.5	7.0	8/17/05
Atrazine	<0.3	<0.3	3.0	6/18/08
Benzo(a)pyrene	<0.05	<0.05	0.2	8/17/05
Carbofuran	<4	<4	40.0	8/17/05
Chlordane (total)	<0.4	<0.4	2.0	8/17/05
Dalapon	<20	<20	200.0	8/17/05
Dibromochloropropane	<0.05	<0.05	0.2	8/17/05
2,4-D	<7.0	<7.0	70.0	8/17/05
Dinoseb	<1.0	<1.0	7.0	8/17/05
Diquat	<2.0	<2.0	20.0	8/17/05
Endothall	<20	<20	100.0	8/17/05
Endrin	<0.2	<0.2	2.0	8/17/05
Ethylene Dibromide	<0.02	<0.02	0.05	8/17/05
Glyphosate	<70	<70	700.0	8/17/05
Heptachlor	<0.1	<0.1	0.4	8/17/05
Heptachlor Epoxide	<0.05	<0.05	0.2	8/17/05
Hexachlorobenzene	<0.25	<0.25	1.0	8/17/05
Hexachlorocyclopentadiene	<5	<5	50.0	8/17/05
Lindane	<0.04	<0.04	0.2	8/17/05
Methoxychlor	<4	<4	40.0	8/17/05
Oxamyl (Vydate)	<20	<20	200.0	8/17/05
Pentachlorophenol	<0.2	<0.2	1.0	8/17/05
Picloram	<50	<50	500.0	8/17/05
PCB's (total)	<0.1	<0.1	0.5	8/17/05
Simazine	<0.4	<0.4	4.0	6/18/08
Toxaphene	<1	<1	3.0	8/17/05
2,4,5-TP (Silvex)	<5.0	<5.0	50.0	8/17/05
Aldrin	<30	<30	NR**	8/17/05
Butachlor	<5	<5	NR	8/17/05
Carbaryl	<10	<10	NR	8/17/05
Dicamba	<10	<10	NR	8/17/05
Dieldrin	<20	<20	NR	8/17/05
Di(2-ethylhexyl) adipate	<40	<40	NR	8/17/05
Di(2-ethylhexyl) phthalate	<1	<1	NR	8/17/05
3-Hydrooxycarbofuran	<10	<10	NR	8/17/05
Methomyl	<50	<50	NR	8/17/05
Metolachlor	<5	<5	NR	8/17/05
Metribuzin	<2	<2	NR	8/17/05
Propachlor	<5	<5	NR	8/17/05

** NR: Not Regulated

Table 2 (cont.)

CONTAMINANT	OAKWOOD'S WATER		OEPA MCL	DATE COLLECTED
	Shafor	Springhouse		
INORGANIC CONTAMINENTS	ug/L	ug/L	ug/L	
Antimony, total	<4.0	<4.0	6.0	6/10/09
Barium, total	<300	<300	2.0	6/10/09
Beryllium, total	<1.0	<1.0	4.0	6/10/09
Cadmium, total	<1.0	<1.0	5.0	6/10/09
Chromium, total	<10.0	<10.0	100.0	6/10/09
Cyanide, total	<5.0	<5.0	200.0	6/10/09
Fluoride, total	0.21	<0.20	4.0	6/10/09
Mercury, total	<0.5	<0.5	2.0	6/10/09
Nickel, total	<20.0	<20.0		6/10/09
Selenium, total	<5.0	<5.0	50.0	6/10/09
Thallium, total	<1.5	<1.5	2.0	6/10/09

CONTAMINANT	OAKWOOD'S WATER		OEPA MCL	DATE COLLECTED
	Far Hills	Ridgeway		
TOTAL TRIHALOMETHANES	ug/L	ug/L	ug/L	
Chloroform	0.66	0.55		7/15/09
Bromoform	0.82	0.77		7/15/09
Bromodichloromethane	0.76	0.67		7/15/09
Dibromochloromethane	1.71	1.57		7/15/09
Total TTHM's	3.95	3.56	80.0	

CONTAMINANT	OAKWOOD'S WATER		OEPA MCL	DATE COLLECTED
	Far Hills	Ridgeway		
FIVE HALOACETIC ACIDS	ug/L	ug/L	ug/L	
Dibromoacetic Acid	1.542	<1.00		7/15/09
Dichloroacetic Acid	<1.00	<1.00		7/15/09
Monobromoacetic Acid	<1.00	<1.00		7/15/09
Monochloroacetic Acid	<2.00	<2.00		7/15/09
Trichloroacetic Acid	<1.00	<1.00		7/15/09
Total HAA5's	1.61	<1.00	60.00	

CONTAMINANT	OAKWOOD'S WATER		OEPA MCL	DATE COLLECTED
	Shafor	Springhouse		
MISCELLANEOUS	Mg/L	mg/L	mg/L	
Arsenic	<0.003	<0.003	0.01	6/10/09
Nitrate	1.11	1.09	10	6/2/10
Sulfate	52	63	250	7/12/95
Asbestos	<0.0002	<0.0002		7/5/94

CONTAMINANT	OAKWOOD'S WATER		OEPA MCL	DATE COLLECTED
	Shafor	Springhouse		
RADIOLOGICAL	Pci/L	pci/L	pci/L	
Alpha, total	<3	<3	15	6/10/09
Radium-228	<1.0	1.21	5	6/10/09
Beta, total	<4.0	<4.0	4	8/14/03

- System water hardness at 210 Shafor averaged 195 mg/L, down from 200 mg/L in 2009; and 179 mg/L at 120 Springhouse, down from 195 mg/L in 2009.

Oakwood's water plants reduced the hardness level by 62.3% on the average while the sodium content of the water increased by 254% on the average during 2010. Both of these percentages are within normal operating ranges.

III. WELL PUMPAGE REPORT AND CHARTS

The eight production wells produced 486,369,000 gallons of water in 2010, which is an average of 1,333,000 gallons per day. In 2009, the eight production wells produced 444,274,000 gallons of water. This represents a 9.5% increase in raw water produced in 2010. The 2010 maximum day well production was on September 1 at 2,447,000 gallons. It is common that our highest usage occurs during the summer months when many property owners irrigate their lawns. The 2010 minimum day well production was on February 15 at 857,000 gallons. The minimum day production normally occurs in the middle of winter.

Out of the 486,369,000 gallons pumped in 2010, 36,931,000 gallons were used to either backwash filters or regenerate the softening units at 210 Shafor and 120 Springhouse. This represents 7.6% of the total water pumped for the year, a 0.1% decrease from 2009.

Chart 1 below and Chart 2 on the next page show the 2010 water table draw downs compared to 2007, 2008 and 2009.

CHART 1

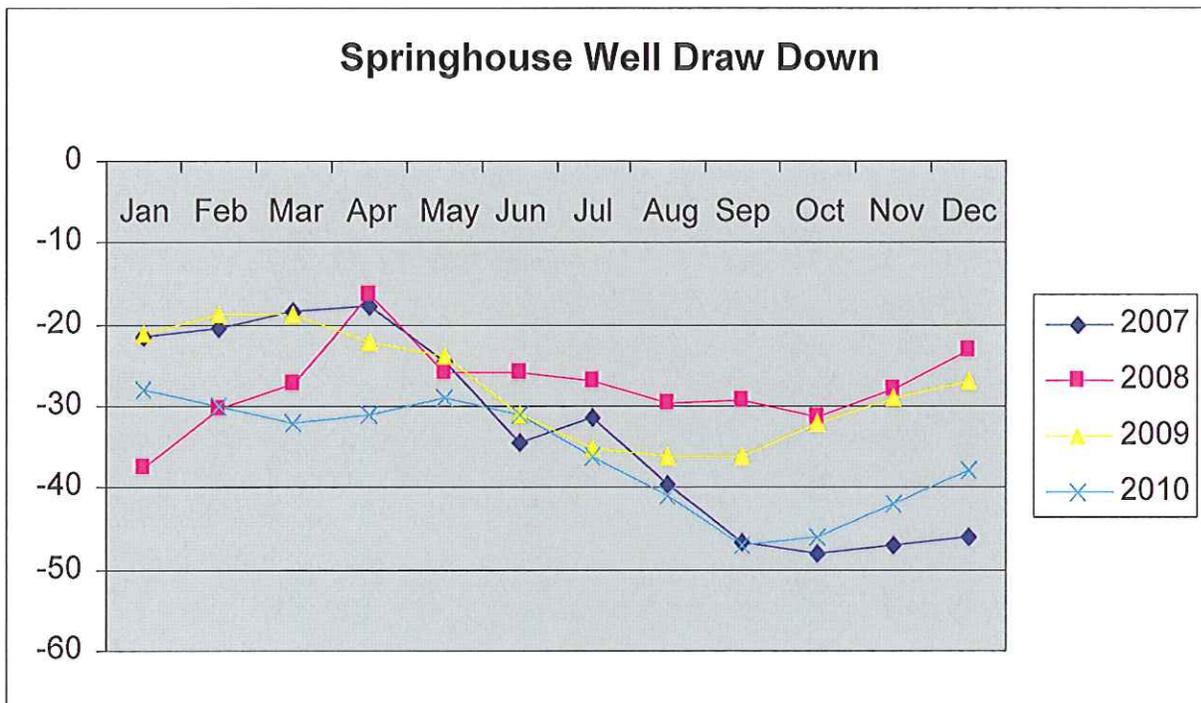
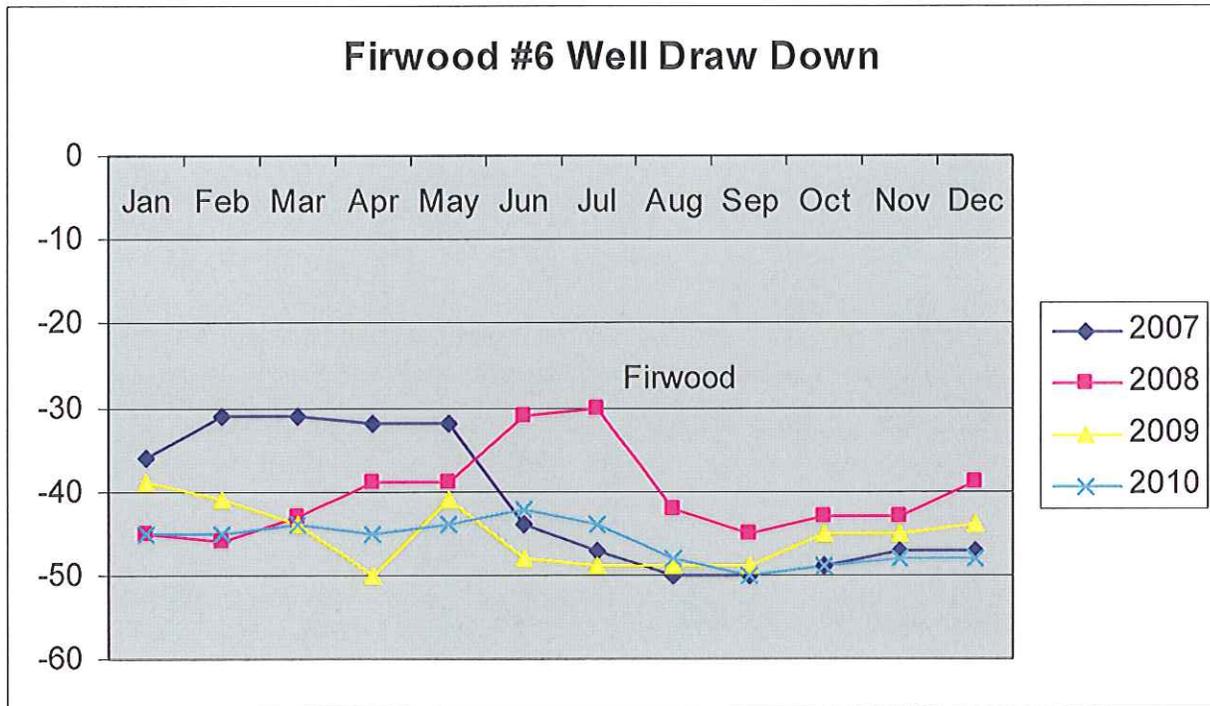


CHART 2



The aquifer water levels in the wells were heavily stressed in 2010 just like they were in 2007 due to the extreme hot and dry weather. The rest of the wells at Firwood (Wells #4, #7 and #8) had similar results to #6 well.

Table 3 on the next page shows a comparison of total production in gallons per well per month for 2009 and 2010.

IV. TOTAL PUMPAGE TO SYSTEM REPORT AND CHARTS

The City was able to produce 99.87% of its total water demand of 449,438,000 gallons (1,231,000 avg/day). The maximum day system usage was on August 30 at 2,297,000 gallons and the minimum day system usage was on February 15 at 792,000 gallons. No fire events (i.e., extra demand) occurred in 2010 that required city of Dayton water.



**CITY OF OAKWOOD WATER DEPARTMENT
MONTHLY WELL PUMPAGE RECORD**

TABLE 3

YEAR: 2010
MONTH: December

MONTH	WELL #1		WELL #2		WELL #3		WELL #4		WELL #5		WELL #6		WELL #7		WELL #8		MONTHLY TOTAL		ANNUAL TOTAL	
	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010
JANUARY	9.095	14.423	0.681	0.000	1.128	1.152	10.235	0.291	0.000	0.000	4.439	15.262	3.418	1.691	1.900	0.000	30.896	32.819	30.896	32.819
FEBRUARY	4.794	14.213	0.000	0.002	0.000	1.041	16.246	0.196	0.000	0.000	0.504	13.994	4.668	1.240	1.580	0.005	27.792	30.691	58.668	63.510
MARCH	8.951	16.380	0.000	0.000	0.028	1.499	15.932	0.257	0.000	0.000	3.327	15.053	1.899	1.327	1.305	0.000	31.442	34.516	90.130	98.026
APRIL	16.289	14.898	0.028	0.024	1.546	2.187	11.490	0.535	0.000	0.000	0.023	14.649	2.622	2.361	1.160	0.052	33.158	34.706	123.288	132.732
MAY	15.956	15.296	0.114	0.000	3.658	1.271	14.380	0.211	0.000	0.000	5.649	5.817	2.158	3.650	2.409	13.119	44.324	39.364	167.612	172.096
JUNE	18.153	18.125	0.221	0.039	3.938	1.032	8.645	0.135	0.000	0.000	14.000	1.721	0.696	4.084	2.785	15.798	48.438	40.934	216.050	213.030
JULY	19.089	19.291	0.043	0.061	3.878	4.440	8.131	11.752	0.000	0.000	1.991	7.093	0.628	6.156	15.585	6.589	49.345	55.382	265.395	268.412
AUGUST	18.876	18.292	0.034	1.221	2.910	5.904	6.955	15.527	0.000	0.000	1.200	7.800	0.196	6.878	15.374	4.536	45.545	60.158	310.940	328.570
SEPTEMBER	16.651	17.623	0.000	3.240	2.039	3.239	4.690	10.759	0.000	0.000	0.631	0.804	0.405	2.797	15.317	14.251	39.733	52.713	350.673	381.283
OCTOBER	13.803	18.126	0.004	1.523	1.073	0.032	0.034	4.619	0.000	0.000	5.990	0.060	1.178	0.631	10.129	14.732	32.211	39.723	382.884	421.006
NOVEMBER	12.413	13.491	0.000	1.162	1.124	0.044	0.104	0.763	0.000	0.000	14.762	0.050	1.217	1.652	0.015	15.661	29.635	32.823	412.519	453.829
DECEMBER	12.982	14.446	0.136	0.560	0.756	0.000	1.278	2.795	0.000	0.000	14.877	9.726	1.716	1.855	0.010	3.158	31.755	32.540	444.274	486.369
ANNUAL	167.052	194.604	1.261	7.832	22.078	21.841	98.120	47.840	0.000	0.000	67.393	92.029	20.801	34.322	67.569	87.901	444.274	486.369	444.274	486.369
TOTALS	37.60%	40.01%	0.28%	1.61%	4.97%	4.49%	22.09%	9.84%	0.00%	0.00%	15.17%	18.92%	4.68%	7.06%	15.21%	18.07%	100.00%	100.00%		

AVG. DAY (2009 YTD): 1.217 M.G.D. 2009 Springhouse wells 190.391 MGD 42.85% 2010 Springhouse wells 224.277 MGD 46.11%
 AVG. DAY (2010 YTD): 1.333 M.G.D. Finwood wells 253.883 MGD 57.15% Finwood wells 262.092 MGD 53.89%

Table 4 below shows a comparison of the water resources needed to meet the City's demands in 2009 and 2010.

TABLE 4

Location	2009 Gallons	2009%	2010 Gallons	2010%
Oakwood Wells	410,075,000	99.9993%	448,863,000	99.8721%
Dayton/Shroyer	3,000	0.0007%	1,000	0.0002%
Dayton/Springhouse	0	0%	574,000	0.1277%
County/Fairmont	0	0%	0	0%
TOTALS:	410,078,000	100%	449,438,000	100%

There was an increase in demand of 38,788,000 gallons of water in 2010 compared to 2009 (9.5%). Table 5 on the next page shows the comparison in total gallons pumped to the system per month for 2009 and 2010.

V. MAINTENANCE

The following is a summary of the larger maintenance projects that took place in 2010.

- January: Replaced fan motor in heater at 210 softening plant
- February: Rebuilt all six valves on #2 softening unit at 210 Shafor
- March: Rebuilt all six valves on #1 softening unit at 210 Shafor
Rebuilt all six valves on #3 softening unit at 210 Shafor
Rebuilt all six valves on #4 softening unit at 210 Shafor
Rebuilt #1 booster pump at water tower pump station
- April: Cleaned salt storage tanks at 210 Shafor
Rebuilt brine bypass and recirculation valves at 210 Shafor
Repaired all areas of the well field fence
- May: Cleaned salt storage tanks at 120 Springhouse
Rebuilt flow cells at 210 Shafor
Replace cooling line on #2 high service pump at Springhouse
- June: Rebuilt heaters at #5 Well, Shroyer pump station and water tower pump station.
Rebuilt #5 well motor
- July: Replaced brine float switch at 210 Shafor
Rebuilt ball checks on chlorine pump at 210 Shafor
- August: Replaced #6 well motor starter
- September: Replace chlorine feed line at 210 Shafor
Replaced 9 outside security lights at 120 Springhouse
- October: Replaced water heater at 210 Shafor
Replaced water heater at 120 Springhouse
- November: Rebuilt chlorine pump at 120 Springhouse
- December: Replace stager on #2 softening unit at 120 Springhouse

All preventive maintenance was preformed on schedule and all day-to-day repairs were performed as needed. All parts inventories are up-to-date in case of emergencies.



TABLE 5

CITY OF OAKWOOD WATER DEPARTMENT
MONTHLY PUMPAGE TO SYSTEM RECORD

YEAR: 2010
MONTH: December

MONTH	SPRINGHOUSE		FIRWOOD		DAYTON/SHROYER		FAIRMONT		DAYTON/SPRING.		MONTHLY TOTAL		ANNUAL TOTAL	
	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010
JANUARY	10.564	14.849	18.190	15.626	0.000	0.000	0.000	0.000	0.000	0.000	28.754	30.475	28.754	30.475
FEBRUARY	4.586	14.620	20.800	13.875	0.000	0.000	0.000	0.000	0.000	0.000	25.386	28.495	54.140	58.970
MARCH	8.620	17.216	19.955	14.982	0.000	0.000	0.000	0.000	0.000	0.000	28.575	32.198	82.715	91.168
APRIL	17.057	16.562	13.911	16.161	0.001	0.001	0.000	0.000	0.000	0.000	30.969	32.724	113.684	123.892
MAY	19.095	16.048	21.759	20.824	0.000	0.000	0.000	0.000	0.000	0.000	40.854	36.872	154.538	160.764
JUNE	21.593	18.611	23.059	19.670	0.000	0.000	0.000	0.000	0.000	0.000	44.652	38.281	199.190	199.045
JULY	22.296	23.093	22.922	28.530	0.000	0.000	0.000	0.000	0.000	0.000	45.218	51.623	244.408	250.668
AUGUST	21.115	24.711	20.423	30.652	0.000	0.000	0.000	0.000	0.000	0.357	41.538	55.720	285.946	306.388
SEPTEMBER	17.910	23.500	18.219	24.566	0.001	0.000	0.000	0.000	0.001	0.217	36.131	48.283	322.077	354.671
OCTOBER	14.272	18.921	15.223	17.107	0.000	0.000	0.000	0.000	0.000	0.000	29.495	36.028	351.572	390.699
NOVEMBER	12.923	14.187	14.852	15.833	0.000	0.000	0.000	0.000	0.000	0.000	27.775	30.020	379.347	420.719
DECEMBER	14.322	13.199	16.409	15.520	0.000	0.000	0.000	0.000	0.000	0.000	30.731	28.719	410.078	449.438
ANNUAL	184.353	215.517	225.722	233.346	0.002	0.001	0.000	0.000	0.001	0.574	410.078	449.438	410.078	449.438
TOTALS	44.96%	47.95%	55.04%	51.92%	0.00%	0.00%	0.00%	0.00%	0.00%	0.13%	100.00%	100.00%	100.00%	100.00%

2009 Summary	
	M.G.
Oakwood:	410.075
Dayton:	0.003
County:	0.000
TOTAL:	410.078

2009 Avg. per day 1.124 MGD

2010 Summary	
	M.G.
Oakwood:	448.863
Dayton:	0.575
County:	0.000
TOTAL:	449.438

2010 Avg. per day: 1.231 MGD

VI. BUDGET

In 2010, the Oakwood Water Production Unit was allocated \$544,695.00 toward the production of the City's drinking water. The 2009 allocation was \$549,613.00. This computes to an average cost of \$927.50 per million gallons treated in 2010, down from \$1,031.35 per million gallons in 2009. The cost per million gallons will fluctuate up or down depending on the total water demand for the year. Our total water demand has decreased for the second year in a row. We are striving to bring down the cost of water by optimizing our treatment process.

The water production unit budget consists of five main categories: personnel, utilities, chemicals, maintenance and miscellaneous. The following charts show what percentage of the budget goes to each of these categories and shows a comparison from the year before.

CHART 3

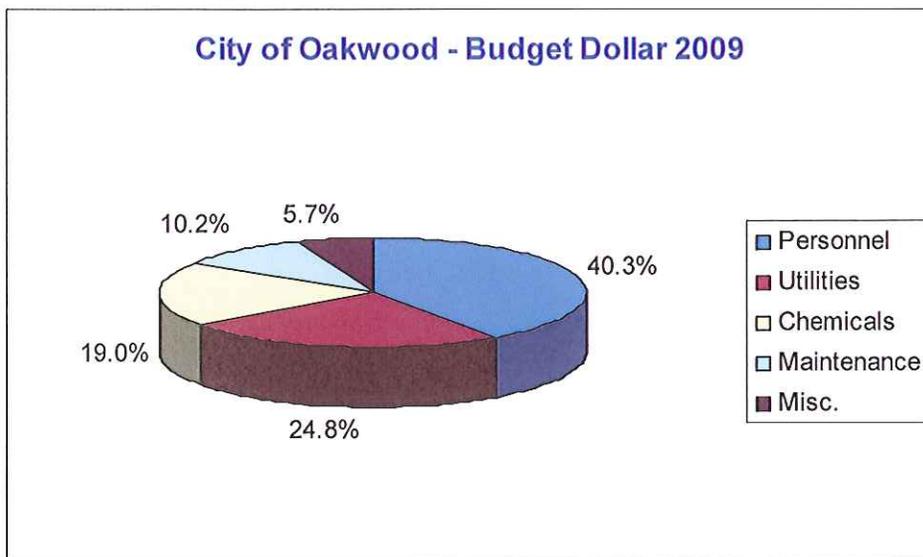
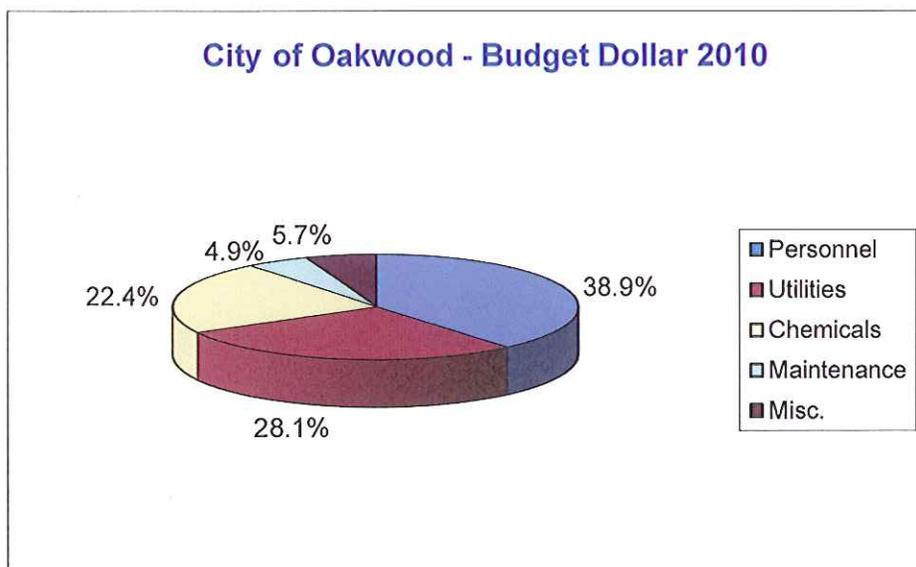


CHART 4



Personnel costs were \$175,878.76 for the year representing a 3.3% increase from 2009. Utility costs were \$126,372.55 which includes electric and natural gas representing a 20.6 % increase over 2009. Chemical costs were \$101,235.97 representing a 25.7% increase over 2009. 1,050 tons of salt compared to 875 tons in 2009 and 2,835 gallons of sodium hypochlorite compared to 2,800 gallons in 2009 were used to treat the water.

Maintenance costs were \$21,962.00 representing a 50.7% decrease compared to 2009.

VII. CONCLUSION

In reviewing our water system, 2010 was a very successful year. All monthly and annual reports to the Ohio EPA and Ohio Department of Natural Resources were submitted on time. All lab testing was completed as required.

Over the past three years we have been looking at ways to optimize our treatment process in order to maintain high water quality at the lowest cost. Some of the things we have accomplished to date are changing out faulty micro-switches, rebuilding process valves, adjusting treatment sequences and monitoring regeneration cycles on the softeners more closely.

The best way to measure the results of these efforts was to track salt usage, the largest cost item in the treatment process. We have dropped the salt usage from 2.817 tons per million gallons in 2007 to 2.158 tons per million gallons in 2010. The hardness of the water was not jeopardized by cutting down the amount of salt being used, in fact it has improved slightly. System water hardness at 210 Shafor averaged 195 mg/L, down from 200 mg/L in 2009; and 179 mg/L at 120 Springhouse, down from 195 mg/L in 2009.

In looking forward to 2011 and beyond, we will continue to seek ways to operate the water plants in the most efficient manner possible.

Respectfully submitted,
Gary L. Dursch Sr.
Water Plant Superintendent