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During our Pool Renovation in 2007 we installed separate gas, electric, and water meters to our pools utility feed system. These meters monitor only the pool usage. We have done a number of different energy upgrade to our pool since this project took place. With the help of the meter usage we can identify the savings of each upgrade performed.

We reopened the pool from the renovation in May of 2007. During the first year of the pool being opened, ending June of 2008 we spent \$94,147.50. This includes the gas, electricity, water, budget, and labor of daily routines.

During the 2008-2009 school year we installed a 2 blue bubble pool covers in March of 2009. This increased the labor of the maintenance crew. It takes 2 people to remove the pool cover daily. With the cost of the pool cover and the labor increase we spent \$92,399.17. Minor savings.

The next step in energy savings, we turned the temperature of the pool water from 88 degrees down to 80 degrees. This saving was our biggest savings to date. We are still continuing to put the pool cover on daily at night when the guards leave for the day. Our savings for the 2009-2010 school year was \$72,624.18.

During April of the 2010-2011 school year we started using a product from Natural Chemistry call Cover Free. We spent \$67,837.83 that year on the pool. We are installing the product manually. Based off the instruction formula on the bottle, the first time we added the product to the pool we put in 1 ½ bottles in the pool. We have 170,000 gallons of water in our pool. We back wash the pool once a week and we would add ½ bottle of Cover Free to the pool. The labor cost have decreased significantly. Our cost to operate the pool for the first 6 months of 2011-2012 was \$36,727.64. Our daily cost average to operate the pool is \$137.42 based on a 30 day month average. This number is what we base our cost to outside customers to use the pool.

Brian Gross  
Chesaning Union Schools  
Director of Buildings and Ground/Energy Manager

# Pool Expenses

**2007-2008** Pool opened May 2007

Gas	\$29,918.22	
Electricity	\$34,832.24	
Water/Sewer	\$5,725.19	
Supply Budget	\$15,000.00	
Personnel (11/2 hr day)	\$8,671.85	
		\$94,147.50

**2008-2009** Installed pool cover in March

Gas	\$45,023.84	
Electricity	\$15,635.86	
Water/Sewer	\$3,731.69	
Supply Budget	\$15,000.00	
Personnel (11/2 hr day)	\$13,007.78	
		\$92,399.17

**2009-2010** Turned pool temperature down to 80 degrees

Gas	\$14,847.59	
Electricity	\$32,159.33	
Water/Sewer	\$6,152.41	
Supply Budget	\$7,911.81	
Personnel (11/2 hr day)	\$11,553.04	
		\$72,624.18

**2010-2011** Started using a liquid pool cover in April

Gas	\$2,976.95	
Electricity	\$38,588.45	
Water/Sewer	\$2,831.17	
Supply Budget	\$12,000.00	
Personnel (11/2 hr day)	\$11,441.26	
		\$67,837.83

**2011-2012 - 6 months**

Gas	\$643.53	
Electricity	\$23,663.56	
Water/Sewer	\$2462.49	
Supply Budget	\$5,887.64	
Personnel (1hr day)	\$4,070.42	
		\$36,727.64

**Daily Cost Average**

Gas	\$3.57
Electricity	\$65.73
Water/Sewer	\$6.84
Supply Budget	\$16.35
Personnel	\$11.31
	<u>\$33.62</u>
	<b>\$137.42 (avg. 30 day month)</b>