

2009 Water & Wastewater Chemical Usage - 11/23/09					
	Chemical	Usage to Date	Usage	Cost to Date	General Purpose of the Chemical
Kaw Water Treatment Plant					
	Sodium Hypochlorite	46,925 gals	Even	\$54,936	Disinfection
	Lime	1,165 tons	Down	\$151,386	Alkalinity addition and pH control
	Sodium Bisulfate	560 gals	Down	\$1,701	Binds residual Sodium Hypochlorite before discharge to receiving stream
	Sodium Silicofluoride	11,932 lbs	Down	\$4,844	Dental Health
	Aqua Ammonia	78,285 lbs	Down	\$13,896	Binds with Sodium Hypochlorite as a longer lasting disinfection agent
	Polymer	26,888 lbs	Down	\$16,402	Binds Floc
	Powder Activated Carbon	177,946 lbs	Up	\$103,209	Taste & odor control, reduce TTHM & HAA's
	Carbon Dioxide	578,517 lbs	Down	\$25,455	pH Control
	Aluminum Sulfate	191,509 lbs	Down	\$50,175	Flocculent
	Phosphate	11,564 lbs	Down	\$12,264	Rust Preventative
	Soda Ash	97,422 lbs	Up	\$16,187	Alkalinity Control - Lead and Copper Rule
	Chlorine Gas	22,790 lbs	Not in use	\$5,919	Disinfection
Clinton Water Treatment Plant					
	Sodium Hypochlorite	77,431 gals	Down	\$90,650	Disinfection
	Lime	220 tons	Down	\$26,602	Alkalinity addition and pH control
	Sodium Bisulfate	1,699 gals	Down	\$5,159	Binds residual Sodium Hypochlorite before discharge to receiving stream
	Sodium Silicofluoride	10,881 lbs	Down	\$4,418	Dental Health
	Aqua Ammonia	81,811 lbs	Down	\$14,521	Binds with Sodium Hypochlorite as a longer lasting disinfection agent
	Polymer	120,967 lbs	Down	\$6,087	Binds Floc
	Calgon Carbon + PAC	180,226 lbs	Up	\$152,291	Taste & odor control - and to reduce TTHM, HAA's
	Sodium Hexametaphosphate	14,075 lbs	Down	\$21,535	Rust Preventative
	Ferric Chloride	5,288 gals	Up New chem	\$7,576	Flocculent
Wastewater Treatment Plant					
	Sodium Hypochlorite	131,148 gals	Up	\$136,015	Disinfectant
	Lime	304 tons	Up	\$36,797	Alkalinity addition and pH control
	Sodium Bisulfate	19,833 gals	Up	\$51,765	Binds residual Sodium Hypochlorite before discharge to receiving stream
	Clair floc (CE-617)	55,200 lbs	Even	\$62,928	Bio-Solids conditioning process polymer
	Ferrous Chloride	24,000 gals	Even	\$35,361	Oder control sewer lift stations and sewer lines
	Potassium Permanganate	7,934 lbs	Even	\$21,661	Oder control Bio-Solids process
	Ferric Chloride	32,427 gals	Up	\$45,661	Actiflo flocculent
	Magnafloc 110L	14,035 lbs	Up	\$33,264	Actiflo Treatment Process Polymer
	Tramfloc 1110	6,600 lbs	Even	\$13,530	Actiflo defoamer
	Silica Sand	16,800 lbs	Up	\$1,848	Actiflo ballast