



CITY COUNCIL AGENDA ITEM

To: Mayor Graham and City Council
From: Dennis Sullivan, Director of Public Works
Walter Denton, City Administrator
Date: August 3, 2009
Subject: MOTION – Chlorination Equipment at Wastewater Treatment Plant

List of committees that have reviewed: Public Works Committee

Background: The chlorination system at the wastewater treatment plant (WWTP) is currently manually operated and as such does not react automatically to variations in effluent flow. During normal shift hours variations can be anticipated by our operators, but after hours there is no control. As a result, the effluent from the treatment train does not always receive the proper amount of chlorination to kill fecal coliform in the discharge. This allows fecal material in the water discharged to Silver Creek to exceed our permit limitations. Additionally, when the amount of chlorine is increased or decreased the amount sulphur dioxide needs adjustment as well. The sulphur dioxide scrubs excess chlorine from the discharge stream to meet additional limitations. Bottom line is the WWTP needs a more sophisticated control system that operates automatically for the majority of hours it is in operation when no personnel are present. To that end, staff requested a proposal from Brooks & Associates through our consulting engineers (HMG of Carlyle, IL) for additional control valves and scales. For your information, we exceeded our IEPA limitation for fecal coliform four times during the month of June. The only other solution, besides personnel on site 24/7 is to run the chlorine at a high level to ensure fecal kill and then counteract the chlorine with sulphur dioxide at an equivalent level to ensure the chlorine is scrubbed from the discharge waters. Either of the last two options is far more expensive than the automatic controls proposed.

Legal Considerations, if any: None

Budget impact: The additional controls while not anticipated in this year's budget preparation can be accommodated in normal maintenance and repair funding at this time.

Staff recommendation: Staff recommends approval of the proposal by Brooks & Associates in the amount of \$10,725.00.