

Public Works Memo

To: Mayor Rick Davis
City Council Members

CC: Heather Dawson, City Administrator

From: Tom Hellen, Public Works Director/City Engineer

Date: 1/21/09

Re: Wastewater Treatment Plant Plan of Action

Attached to this memo are two summaries; of our meeting with DEQ on 1/13 and a telephone call with the EPA permit writer by our consulting engineer, Bill Benko of Carollo Engineers. As these can be confusing the following will set forth the tasks ahead of us and the possible timeframe associated with this work.

PLAN OF ACTION

Begin a sampling program both above and below our discharge point to quantify the current Big Wood River water quality. This will not likely have an impact on our permit renewal but could have long-term benefits. We have done this previously so it will not take much to reimplement.

As many of the assumptions in the Wastewater Master Plan are based upon population growth there will need to be a review of where we are and use lower growth estimates for the next few years in the plan. This will gain us some time before capital expenditures are needed to meet the new permit requirements.

Optimize plant operation with chemical additions to stay below new discharge limits. This is a low capital, increased O&M cost option. The re-estimation of growth projections noted above will affect this but we believe that at a minimum it will be six years before we bump up against the new discharge limits.

DEQ is scheduled to review the approved Total Maximum Daily Load (TMDL) study for the Big Wood River in 2011. While this will likely not affect the upcoming discharge permit it may allow for a longer implementation period from the EPA while this study is completed.

The time frame for selecting an engineering firm, design, voter approval or judicial confirmation, arranging financing, bidding and construction are being developed. This timeframe is expected to be at least five years. DEQ would perform the initial review and pass it on to the EPA for final review. This will be done in conjunction with the permit writing process with EPA.

To reach the waste load allocation in the approved TMDL, the City's NPDES permit limits are expected to reduce the allowable total suspended solids (TSS) discharge by 80% and the total phosphorus (TP) discharge by 65%. The wastewater treatment facility is currently operating at less than the design capacity, but it is approaching the mass loading limits defined in the TMDL. In order to reach the design capacity and projected growth in the service area, the wastewater treatment plant must be upgraded with new advanced filtration technologies. The City's objective will be to request an implementation plan that will allow for additional water quality assessment; growth and economic analysis; and financial planning for the first five year period, to coincide with the NPDES permit renewal. As noted, the implementation plan will be presented to Idaho DEQ, but must also be acceptable to EPA and the objectives of the Clean Water Act.

EPA CLARIFICATION

- Our EPA issued National Pollutant Discharge Elimination System (NPDES) discharge permit expired in June, 2006 and we applied for a new permit prior to that expiration. We received an extension of our existing permit and discharge limits until a new one was issued. We have since received word from EPA that our permit renewal process will begin at the end of 2009.
- Our current NPDES permit allows 94lbs/day of Total Suspended Solids (TSS) and 15 lbs/day of Total Phosphorus (TP). The likely revision of the permit would be from the TMDL and would limit TSS to 18 lbs/day and TP to 5.2 lbs/day. The Post-TMDL study would allow 44 lbs/day TSS and 8.6 lbs/day of TP.
- Requesting a phased approach to compliance is possible but the general compliance requirement is "as soon as possible".
- Entering into agreements with either Peregrine Ranch or Croy Canyon developments are not tipping points that would cost the City of Hailey \$12 million to upgrade the treatment plant. Capacity at the plant is not the issue; the issue is the stricter discharge limits likely to come from the EPA.
- The timeline for completing any expensive upgrades to the treatment plant will be dependent on both EPA requirements and growth in the city. By changing some wastewater treatment processes we believe we can meet even the stricter EPA permit requirements for six years or more.
- We are working with our consulting engineer to complete an implementation plan and timeline in anticipation of a future plant upgrade. That plan will be subject to public comment when it is fully drafted. We are also exploring other options such as reclaimed water reuse to lessen our discharge to the Big Wood River or requesting that discharge limits be reviewed and amended by DEQ and EPA.
- The Wastewater Treatment Plant operates extremely effectively remaining well below our current discharge limits.