

City of Ketchum, Idaho

P.O. Box 2315 Ketchum, ID 83340 (208) 726-3841 Fax: (208) 726-8234



March 10, 2014

Mayor Jonas and City Councilors
City of Ketchum
Ketchum, Idaho

Mayor Jonas and City Councilors:

Wastewater Department Energy Efficiency Initiative

Introduction/History

Power is the largest single operational expense, besides labor, to operate the wastewater treatment facility. Many processes require energy intensive equipment, such as blowers and pumps. The City & SVWSD spends \$7,500 to \$15,800 per month on power at the WWTF.

Starting in January the City of Ketchum, along with ten other cities in Idaho, began participating in a program offered by Idaho Power called the *Wastewater Energy Efficiency Cohort*. The goal of the program is to help chart a course for long-term sustained energy savings. Energy monitoring equipment has been installed at the wastewater treatment plant and staff has been trained on energy-management software. With this energy management system operators will be able to identify how changes in operations and capital improvements affect energy usage. The Idaho Power program includes a series of five full-day workshops over a two-year period. During the workshops Idaho Power provides industry experts to speak about implementing best practices for wastewater treatment operations, as well as help prioritizing future capital improvements. Hands-on, small-group activities and peer-to-peer sharing of lessons learned from other wastewater treatment facility are shared during the workshops.

Current Report

As part of the Wastewater Energy Efficiency Cohort the Wastewater Department has been tasked with setting specific goals to reduce electrical usage. Over the next two years the Wastewater Department's "Energy Team" will evaluate and implement cost effective, both in operations and capital improvements, targeted to improve energy efficiency. The Energy Team developed the attached policy statement in order to define actions and goals. **The team has identified a goal to reduce overall electrical usage by 10% at the wastewater treatment facility over the calendar years 2014 and 2015.** The team is monitoring current electrical usage so that we can set a baseline which will be used to evaluate the effectiveness of operational changes and capital improvements.

Financial Requirement/Impact

A 10% reduction in electrical usage would save the City and SWWSD approximately \$10,000 to \$15,000 per year. The Wastewater Department is hopeful that additional savings will be captured in the long-term.

Other than staff time, the training operators receive through the Idaho Power program is free to the City. Operators receive Continuing Education Units for the training time which is a requirement to maintain their operator licenses'. Energy monitoring equipment has been installed at no charge to the City. Operational changes identified through this program will have no cost to the City. Capital improvements that are identified through this initiative will be evaluated based on their return on investment and may be included in the FY 2014-2015 Wastewater Capital Improvement Budget.

Recommendation

No recommendation.

Sincerely,



Robyn L. Mattison, P.E.
Public Works Director/City Engineer

Attachment- Wastewater Department 2014 Energy Efficiency Initiative

2014 ENERGY EFFICIENCY INITIATIVE

Policy Statement for City of Ketchum/Sun Valley

Water & Sewer District Wastewater Treatment Facility



Policy Statement

The City of Ketchum and Sun Valley Water & Sewer District is committed to implementing reliable and cost effective measures toward improving energy efficiency and conservation at the wastewater treatment facility (WWTF).

Actions

WWTF staff will make every feasible effort to carry out this policy in the following ways:

- Consider and implement energy efficiency in all aspects of process, design, maintenance, construction, operation and purchase of all wastewater equipment, practices and services
- Provide employees with the necessary training and tools to identify, communicate, correct and implement more energy saving ideas through improved policies, practices and procedures
- Routinely monitor, track and optimize energy conservation measures to achieve the most efficient operations
- Actively participate in training and incentive programs aimed at energy management
- Review and update energy plans, goals and objectives for energy efficiency and conservation on at least an annual basis
- Periodically communicate energy management efforts to staff and partners, including, but not limited to the Energy Team, City staff and officials, utility providers and associated trades organizations

Goals

The primary initial goals for our Wastewater Energy Conservation Initiative program are as follows:

1. Reduce overall electrical usage by 10% at the wastewater facilities over the calendar years 2014 and 2015, as compared to the approved baseline data
2. Continually monitor electrical energy consumption using the key performance indicators
3. Develop and utilize energy management plans, practices, policies and SOPs that provide and support greater energy efficiencies for our wastewater operations and maintenance activities
4. Replace two inefficient blowers with a new high efficiency turbo blowers
5. Implement various operational and maintenance improvements for improved efficiency gains
6. Operate and maintain all City-designed and constructed sustainability projects in the most prudent way possible to achieve the highest level of energy conservation

Officially adopted and approved by:

Robyn L. Mattison
Public Works Director

Date: March 10, 2014