

3.1 Management and Employee Programs

Applicability

This BMP is intended as a supplemental BMP for the other Industrial BMPs and could apply to all industrial water users. The successful implementation of any of the Industrial BMPs requires the joint efforts of both management and employees. This BMP describes the process for involving both management and employees in accomplishing the water conservation efforts of the industrial water user. Once an industrial water user decides to adopt this BMP, the water user should follow the BMP process closely in order to achieve the maximum water efficiency benefit from this BMP.

Description

For any Industrial BMP to be successful, the employees should be involved in the development and implementation of the BMP. A joint management/employee committee should be formed to determine the water conservation BMPs that will be beneficial to the user and this committee should guide the implementation of the BMPs that are adopted.

1) Set Goals & Obtain Management Support

Goals should be established depending on the set of Industrial BMPs adopted by the industrial water user. Costs drive business decisions so cost savings are very important in the goal setting process and in obtaining strong management commitment for implementing the specific BMPs. For purposes of this BMP, the set of BMPs that the industrial water user has decided to adopt should be called the water conservation program (program).

As with many other aspects of business management, ownership of the program by a member of the management team and routine management review of the results achieved are absolutely critical to successful implementation. A water conservation program will generate cost savings but will require funding and a time commitment to make the program work. It is very important that the funding and commitment are in place before the program is initiated.

2) Employee Education & Participation

Employees can have a major effect on the success (or failure) of a water conservation program. Therefore, it is imperative that they be an integral part of all water conservation efforts and are kept informed about the program. The following steps can serve as guidelines for effectively enlisting employees' full support, keeping employees informed of the progress being made, and seeking their participation on an ongoing basis.

- a. Communication to all employees from a key management leader of the organization. The communication should announce the water conservation program, introduce the Water Conservation Manager on the leadership team, detail specific goals, ask for employee support, and invite feedback.

- b. Establish an employee water use education program. The education program should communicate information about
- the importance of and need for water conservation in Texas, the local region of the state, and the industry;
 - the overall aspects of the company's water conservation program, including specific goals and incentives;
 - the importance of each individual's contribution to the success of the water conservation goals of the entire organization and, if appropriate, the region of Texas;
 - how specific water-saving measures by individuals can reduce overall consumption;
 - how specific water-saving measures by employees working together as a team can result in major water use reductions; and
 - new procedures and water conservation equipment that should be implemented.
- c. Use a wide variety of communication media to help keep the water conservation message current and to reinforce the importance of the organization's water conservation efforts. Potential communication vehicles include
- company newsletter
 - internal website
 - memos
 - paycheck stuffers
 - email
 - posters and signs
 - water conservation "progress reports" and "score cards"
 - new and/or revised operating guides and manuals that describe changes made to implement water-saving measures
- d. Establish a schedule for regular communication with employees about the water conservation program. The initial excitement of a new program will begin to fade unless the importance of the program is regularly communicated. Ensure that employees are kept abreast of the specific water reduction measures as they are being implemented as well as the associated water, energy and cost savings generated by those measures. Information about water and cost savings are especially useful to help tie water conservation to business results.
- e. Get employees involved.
- Establish incentive programs to encourage and reward participation. One example could be offering employees a percentage of the first year's direct savings resulting from water and energy conservation;
 - Create a "Water Conservation Ideas" box where employees can submit suggestions on how the organization can save water;
 - Promote slogan and poster contests;

- Create friendly team competition between shifts, operating areas, divisions, and/or locations;
 - Reward employees with a pizza party or similar celebration when water conservation plan goals are met; and
 - Reward employees who spot leaks and other instances of water waste.
- f. Implement effective new ideas submitted by employees. Recognize and reward the contributions made by individual employees, groups, and the organization as a whole.

Benefits from implementing this BMP include lower utility costs, energy savings, reduced process costs and an enhanced public image.

Implementation

The industrial water user should follow these steps to implement this BMP:

- 1) Form a combined management/employee committee and determine which of the Industrial BMPs will be implemented.
- 2) Incorporate the selected BMPs into a water conservation program using the schedules and scope from the individual BMPs. The program should include a component to involve all employees in implementation of the program as described in Section B.

Schedule

If a water user chooses to implement this BMP, the following is a recommended schedule:

- 1) The employee conservation team should be completed in a timely manner, within approximately three (3) months of implementing this BMP.
- 2) The water conservation program should be implemented based on the timelines of the individual Industrial BMPs adopted and in the normal business cycle.

Scope

To accomplish this BMP, the industrial water user should do the following:

- 1) Organizations with one facility, or several facilities with the same or very similar industrial processes, should organize a management/employee conservation committee and implement the program following the schedule outlined in Section D.
- 2) For organizations with multiple facility sites, a progressive implementation schedule should be followed, implementing the BMP in successive facilities until all facilities have established employee conservation teams and implemented the water conservation program developed by the team.

- 3) Organizations with multiple facilities should consider organizing conservation teams to include representatives from all facilities where the tasks are similar and where such cross-facility teams are feasible.

Documentation

To track the progress of this BMP, the industrial water user gathers and maintains the following documentation and can utilize industry accepted practices:

- 1) List of members of employee conservation team and team minutes;
- 2) List of actions taken to educate all employees about the importance of water conservation and involve them in implementing the program;
- 3) Copy of the water conservation program;
- 4) Documentation of actual implementation of each item contained in the water conservation program; and
- 5) Estimated water savings and actual water savings for each item implemented and associated cost savings if appropriate.

Determination of Water Savings

The industrial water user should calculate water savings based on the calculation methodology appropriate to the identified water efficiency opportunities.

Cost-Effectiveness Considerations

It may be difficult to determine direct water savings and cost effectiveness of this BMP on its own. Costs that should be considered in this BMP include labor and staff costs, materials, and overhead. By implementing an employee water conservation program, the industrial water user will improve the efficiency of its overall water conservation efforts, ensure the success of other BMP efforts it may choose to undertake, enhance its public image, and increase employee goodwill. Some employee suggestions resulting from the program could be implemented with minimal cost impact. For suggestions with significant cost impacts, each industry should utilize its own criteria for making capital improvement decisions.

References for Additional Information

- 1) *A Water Conservation Guide for Commercial, Institutional and Industrial Water Users*. New Mexico Office of the State Engineer, July 1999.
<http://www.seo.state.nm.us/water-info/conservation/pdf-manuals/cii-users-guide.pdf>
- 2) *Handbook of Water Use and Conservation*, Amy Vickers, Waterplow Press, May 2001.
- 3) *Water Efficiency Guide for Business Managers and Facility Engineers*, State of California Department of Water Resources, October 1994.
- 4) *Waste Not, Want Not: The Potential for Urban Water Conservation in California*, Pacific Institute, November 2003.

- [http://www.pacinst.org/reports/urban_usage/waste not want not full report.pdf](http://www.pacinst.org/reports/urban_usage/waste_not_want_not_full_report.pdf)
- 5) *Commercial and Institutional End Uses of Water*, AWWA Research Foundation, Summer 2000.