

The Road to ISO Certification: One Year Later

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How It All Began

In August 2000, the Lowell (MA) Regional Wastewater Utility (the "Utility") found its way into the ISO 14000 Hall of Fame when it became the first municipal facility to certify ALL of its divisions to ISO 14001. The Utility, which employs about 50 people, treats wastewater from Lowell and four other municipalities in the Merrimack valley of Massachusetts. The Utility had been one of the participants of EPA's first pilot project for municipalities and the first of the pilot participants to have achieved the lofty goal of ISO certification for its entire operations through a mix of true Yankee grit and ingenuity, with a little help along the way. An anthology of the Utility's quest to ISO certification was chronicled in a series of five articles that appeared in *Safety Management*, a publication of the Bureau of Business Practice, between 1999 and 2000.

We re-visit these articles to give you a brief summary of the events leading up to the Utility's certification, and then bring you back to the present to provide you an insight into where the Utility is today and its plans for the future.

Early on in the Utility's participation in the EPA pilot program, Mark Young, the Executive Director of the Utility, Matt Donahue, the person responsible for bringing the Utility to EPA's attention, and the 10 original members of the Implementation Team (or ITeam as they like to be referred) had their program all mapped out and ready to go, but realized they needed additional firepower to get their craft off the ground. That's about when I came in to lend a hand in January 1999. Our relationship has blossomed since then and together we have been able to forge an alliance that has brought the Utility into the ISO record books. Getting to ISO may have been hard work, but we made it fun - brainstorming for weeks at weekly ISO meetings and hammering out ISO milestones one by one. These milestones

included rolling out the first set of procedures (solid waste recycling); how to develop the materials for each awareness training session following each set of procedures, and setting the ground rules for selecting a registrar when the time came.

The game plan we collectively agreed upon to roll out awareness training following each set of procedures written worked so well we decided to run with this formula through the remainder of the awareness training sessions. An added benefit of this approach for ITeam members was that each member's confidence level was increasing with each training session they devised and conducted for the other Utility employees. One team member, in particular, was able to share his previous eye-opening experience with aqua ammonia during his segment of the chemical handling awareness training session to bring home a key point about the benefits of using proper personal protective equipment (PPE) when handling chemicals. His piece was well received by the audience.

Stepping Into High Gear

Once the ITeam had gained considerable confidence in their understanding of the Utility's ISO procedures that dealt with their 5 significant aspects/impacts, it was time for them to proceed into auditing of their environmental management system (EMS). We began by launching mini EMS audits to get their feet wet, and as their comfort level in auditing increased, we decided that the Utility was now ready to experience its first audit to test the Utility's EMS. The first audit team consisted of Matt Donahue, Jim Smith, the former Assistant City Manager of Lowell, and myself. The team conducted a full audit of the Utility's EMS, and allowed the ITeam to observe the audit as it unfolded. This was a very valuable experience for the ITeam because this audit later served as a springboard for the ITeam's internal auditor training in preparation for the registration audit, scheduled for mid 2000.

The Registrar's Audit: It's ShowTime!

Jump forward to August 2000 and the registration audit, and the Utility employees feel ready and confident. The registration audit took two days. The auditor was very thorough and proved a challenge to the ITeam and their consultant, but when all was said and done, he had made a recommendation to have the Utility certified to ISO 14001. The cheers at the Utility could be heard clear across town, for this was truly a monumental task.

Beyond Certification: Excelsior

Since that time, the Utility has received a number of accolades from EPA, including various awards and official recognition from the USEPA for its achievements that far surpassed its obligations as part of EPA's Pilot Project. While that makes for good "atta boys" within various circles in the Utility's universe, what really impresses Mark Young, the Utility's Executive Director, is that the team continues to come up with great ideas to move the EMS momentum forward while constantly raising the bar to do more. Their main focus at the moment is continual improvement and they are poised to make great strides in this area on several fronts. Among noteworthy items, Steve Faxon, the Maintenance Superintendent, initiated a program to recycle various solid waste products, such as waste paper, cardboard, batteries, metal cans and plastics that generated considerable savings in 1999 and 2000. The success of this recycling program tied into the Utility's EMS has prompted the team to evaluate several additional solid waste streams for recycling including: scrap metal, industrial batteries, and the consideration of taking over a waste oil collection program for City residents. The City's contracted waste hauler had previously provided this service. The team is evaluating several options at this time. In addition, Mark Meehan, the Chief Electrician, implemented a light switch sensor program throughout the Utility as a means to cut down on kW usage and that program, too, has seen considerable reductions in kW usage - now if only the electric rates could go down!

What else is the ITeam evaluating? In another first, the Utility included language in its contract agreement with one of its outside

contractors that references the Utility's EMS and their certification to ISO 14001. The Utility is considering making such language boilerplate in contract agreements with other contractors.

Continual Improvement(s)

Another first for the Utility, ITeam members are concerned about the environmental impact of vehicles parked with their engines idling outside the Administration Building and other locations within the Utility confines. That topic is among additional items on their radar screen for discussion at a subsequent ITeam meeting later this year. Concerns such as this are evaluated under the general heading of the Utility's continual improvement process that is an on-going process throughout the Utility.

Further out on the radar screen for the Utility, and among its five area of consideration based on its significant impacts, is the development of an intermunicipal agreement with the City's Planning Department. The intent of this agreement is to facilitate the future implementation of a program to identify new users to the City's sewer system and coordinate their sewer hook-up and permitting process with the Utility. This would provide the Utility advance notice of the type and quantity of new industrial and domestic waste that would enter Lowell's sewer system to be treated by the Utility.

Being in the Spotlight

Being the first publicly owned treatment works (POTW) to have achieved this goal does not go unnoticed, and the Utility continues to have its moment in the spotlight. Earlier this year, Mark Young was invited to Pennsylvania DEP to discuss the Utility's EMS and all its components to a group of municipalities in Pennsylvania considering following in the Utility's footsteps. In September 2001, Mark and I were invited by EPA to discuss the Lowell success story in a one-day session to a group of municipalities interested in what the Utility had achieved, and what they could learn from the experience. That event was well received. What's next for the key players of the Lowell ISO 14001 story? Stay tuned! We will keep you posted.

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