Detailed Lean Improvement Project Report

Agency name:
Department of Ecology

Improvement project title:
Lab Accreditation Automation

Date improvement project initiated:
01/01/08

Summary:
The Department of Ecology improved the Lab Accreditation process, resulting in the ability to reduce the amount of time staff needed to do the work by one half-time position.

Details:

Description of the problem: In 2008, the economic downturn placed severe stress on the state budget, especially state general funds, which support the lab accreditation program. We needed to find a way to continue the lab accreditation program more efficiently and with less money.

Description of the improvement: In 2008, Ecology decided to improve several key processes. This led to the purchase of Automated Audit System (AAS) software, which automated:

- Tracking Proficiency Testing (PT) for renewing lab accreditations – instead of tracking and summarizing PT results manually, using multi-page paper PT reports combined with multi-page paper tracking sheets, the software automatically tracks and summarizes PT results electronically.

- On-site Audits of Labs – instead of using paper checklists, auditors can use their tablet PC to enter into electronic checklists their Audit findings, recommendations, and observations. The data is automatically tabulated in an Excel spreadsheet, instead of typing them into a Word document. The spreadsheet is emailed to the audited lab; the lab enters responses, and emails it back to the lead auditor. The lab responses are tracked in the AAS database, so follow up is ensured.

The AAS software could not accommodate all ideas for automating the steps in the process so lab accreditation staff found other ways to automate the following:

- Notifying labs of their need to renew their accreditation by email – the notification process for approved applications is still done manually; but we are now using email instead of the US Postal Service.

- Calculating the annual fee and generating the invoice, resulting in error-free invoices. A manual email process is used to send the invoices to the labs, instead of mailing paper invoices.

- Drinking water status notifications to Department of Health. Before it took 15 minutes for each notification. Now the notifications are instantaneous and

automatic in the background; we don't need to do anything (or remember to do it, which was a problem before).

Other efficiencies include:

- A more robust tool for people looking for accredited labs called "LabSearch." Now anyone can find an accredited lab to test for a specific contaminant in a specific matrix. Searches can be done by lab name, matrix, analyte, method, city, county, state, and public/commercial. Before searches were limited to the lab name only.

- Before the improvements all records were in hard copy files. Now our records are electronic. This improves how we manage and research our lab accreditation records.

- Tracking applications to ensure every lab receives an annual renewal application, that each renewal is completed, invoiced, and payment received. This results in improved fee collection and on-time renewals.

Specific results achieved: $50,000 in salary saved, per year, by reducing the amount of time staff needed to do the work under the old process from the equivalent of one full time position to a half time position.

- About $1,500 saved, per year, in postage and meter lease fees by switching to email notifications.

- About 1000 hours of staff time saved, per year, by automating the tracking of Proficiency Testing results.

- About 250 hours of staff time saved, per year, by automating the renewal notification process.

- About 150 hours of staff time saved, per year, by auto calculating annual fees and auto generating invoices.

- About 15 hours of staff time saved, per year, by automating drinking water status notifications to Department of Health.

- The automation and electronic processes save many reams of paper, envelopes, and printing costs. The savings benefit us, each of our 490 accredited labs, and each Proficiency Testing provider.

How we involved customers or stakeholders in this effort: Internal customers and end-user customers had input on the design and output of our Lab Search database and drinking water accreditation status notifications. End-user customers had requested electronic renewal applications.

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