



Lean Government

Region 1 Annual Facility Inventory Process

Lean Event Case Study

Summary

In January 2014, Region 1 held a value stream mapping event for its annual facility inventory process, which involves accounting for over 3000 pieces of equipment. Prior to the Lean event, staff members conducted the annual inventory by hand. This approach required scheduling time with staff who managed the equipment, visiting the equipment location, examining and tagging the equipment, and entering data to account for its status. The staff involved found this process cumbersome, stressful, and enormously time-consuming. Through a Lean event, Region 1 sought to develop an alternative process that would meet EPA inventory control guidelines while saving staff time and resources.

As a result of the Lean event, Region 1 developed an electronic inventory process that significantly reduces the time required to complete its annual equipment inventory.

Results

The Lean event identified an electronic method to perform the annual facility inventory process that reduced the overall lead time of the process by 75 percent.

| Metric | Old Process | New Process | Percent Change |
|-----------|-------------|-------------|----------------|
| Lead Time | 8 months | 2 months | ↓75% |

**Results are anticipated based on the new process design*



Figure 1: Lean Event Team: Chris Diehl, Jack Paar, Jim Keleher, Susan Dushinski, and team leader Nicole Checchi

Scope of the Lean Project

Project Scope: The annual facility inventory process that begins when equipment is identified by decals and ends with an annual submission of inventory data to EPA Headquarters.

Goals:

- Complete the inventory in the most efficient manner
- Review Headquarters' guidelines for property inventory
- Improve understanding of the current Region 1 process
- Develop streamlined procedures
- Develop a plan for the FY14 inventory submittal

Objectives:

- Reach 100% compliance with inventory requirements
- Reduce the amount of time and number of steps in the current process



Figure 2: Improvement Prioritization Matrix

Process Changes and Improvements

Participants in the Lean event mapped the current facility inventory process in Region 1 and streamlined procedures to achieve an improved future state. The analysis started with an evaluation of the inventory requirements set by EPA guidance. The team determined the requirements did not mandate a physical inspection of each piece of equipment in the inventory submission, and that an alternative approach – based on data collected on each piece of equipment - could be used to ensure accountability.

The event team identified the following process changes:

- Leverage existing IT data to inventory electronic equipment across the region for which data is available, eliminating the need for physical equipment inspections.
- For equipment not registered in the IT system, assign responsibility for inventory control to a new set of Property Custodial Officers who are familiar with equipment in their areas and can accomplish the inventory in a much more efficient and effective manner than facilities staff. (This system had been set up at one time, but was not being used).
- Use the National Property Management Database, an RTP developed system that transfers information into the Compass-Maximo database in bulk to update annual inventory. The Compass-Maximo Database is used by EPA Headquarters uses to collect the annual facility inventory data, but it only allows for one entry at a time. The National Property Management Database is available to all regions top enter the data in bulk, but only a few use it.

The changes eliminated the need for facility inventory staff to visit each work area, waiting time to set up appointments, and the likelihood for backlogs to arise, which will ultimately save a significant amount of staff time.



Figure 3: Current Process Map (top) and Future Process Map (bottom)

Implementation

Region 1 implemented the following process changes:

1. Evaluated EPA Headquarters' requirements for regional facility inventory to confirm that Region 1's new process remains in compliance with the requirements.
2. Trained staff to run the electronic facility inventory reports.
3. Developed standard operating procedures that improved consistency and efficiency, such as how to apply decals on equipment and assign equipment to Property Custodial Officers.
4. Adjusted the inventory process schedule to reach property custodial officers at the best times for their workload and schedules.
5. Obtained electronic information on existing Region 1 inventory.
6. Created an electronic form for new equipment inventory.
7. Use RTP's National Property Management Database to enter information into the Maximo Compass database for submission to HQ.
8. Meet with IT staff on an ongoing basis to refine the system.

For More Information:

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