

CTDEP Lean Journey: Lean II Project Team (October 2008 Kaizen Event) Summary, Quarterly Status Report - January 22, 2009
Evaluation of the Storage Tank Compliance Inspection Process

Project / Bureau: Evaluation of the Storage Tank Compliance Inspection Process	
Bureau of Materials Management & Compliance Assurance (MMCA)/Emergency Response and Spill Prevention Division (ERSPD)	
Team: Total number of team members = 9 (6 staff within Division/3 staff outside Division)	
Team Sponsors:	Peter Zack, Assistant Director/ERSPD
Team Leaders:	George Purple, ECS 3/ERSPD
Team Members:	Lori Saliby, Supervising EA/ERSPD, Phil Wilde, EA3/ERSPD, Robert Shuler, ECS 2/ERSPD, Omar Tyson, San Eng 1/ERSPD, Marshal Hoover, EA2/WPED, Bob Girard, Assistant Director/ BAM, and Dave Holmes, DP Tech Analyst 4/OIM
Team Champion:	Maryann Haverstock, Supervising EA
Opportunity Statement: With limited resources, the Storage Tank and PCB Enforcement Unit must inspect 4,000 facilities at least once every three years, return those facilities in violation to compliance, and improve on facility compliance rates. Need to increase the efficiency of NOV issuance and enforcement.	
Objective: Conduct value stream mapping of the UST Inspection Process including: Pre-inspection preparation, On-site inspection methods and Post inspection follow-up (including NOV issuance and closeout); identify wastes and non-value added activities; and establish baseline measures for the inspection process.	
Goals/Key Performance Indicators:	
Pre-Kaizen Event Goals - October 2008	Post Kaizen Event Results/Key Performance Indicators – status: January 2009
Eliminate wastes and/or non-value added steps (Inspection Preparation, On-site Inspection, and Post-Inspection documentation activities, thru NOV closure)	Value stream mapping enabled the team to reduce the steps Currently used (118) to what will be used (47)
Produce written documentation of the processes and written SOPs.	Completed
Operational Compliance Inspections: a) Increase the average number of inspections performed by permanent staff by 20%. b) Reduce the time needed in the Office for Pre- and Post – Inspection work to one day/week. c) Reduce time to issue NOVs by 40%	Ongoing: a) Software generation for new laptops and SIMS coordination. Should be ready by the end of January. Inspections will be increased by 125%. b) In office pre and post inspection work will be eliminated. c) Once delegation of NOV issuance is established the NOV's will be issued in the field, reducing the time to write the NOV by 100%. Software written to automatically issue with report. Only compliance letter will need to be tracked in the office.

Spaghetti Diagram showing distance traveled for the enforcement process under review during the *Pre-Kaizen phase: Not Applicable*

Value Stream Mapping: The activities and steps, both value and non-value added, as shown in the Pre-Kaizen state versus Post-Kaizen desired state.		
Type of Process	Pre-Kaizen – # of Processes	Post Kaizen – # of Processes
Valued Added	25	26
No Value Added but Necessary	33	13
No Value Added	19	0
Waiting	9	2
Transport	32	6
Total	118	47
Percent Reduction in the Number of Total Steps = 60% Reduction		

The Post-Kaizen desired state has resulted in a number of improved program efficiencies, and include the following:

- It is anticipated that there will be a 40% increase in the number of formal enforcement actions.
- It is anticipated that the time involved to issue an NOV will be decreased by 100%, since it will be automatically generated by the newly implemented inspection software.
- It is anticipated that the number of inspections conducted by full-time staff will increase by more than 100%, while reliance on seasonal staff for field work will virtually be eliminated.

Highlights of the Project Plan and Implementation (2, 6 and 12 month deadlines)

- **Two month goals** - Develop Standard Operating Procedure for field NOV; Confirm 1,000 mile myth; Develop Standard Operating Procedure for scheduling inspections; Develop Standard Operating Procedure for inspections; Evaluate staff equipment. **(Status for two month goals- completed)** Note: Attain access to Stage II database; Delegate NOV authority; and Eliminate phone days for Compliance Specialist have been pushed to six month goals.
- **Six month goals** – Attain access to Stage II database; Delegate NOV authority; and Eliminate phone days for Compliance Specialist; Institute use of tablets for inspections; Evaluate air/ust inspection opportunities; Order scanners; printers, and inverters; Staff training on new data gathering system. **(Status for six month goals- on target).**
- **Twelve month goals** – Revise fee/notification Statutes; Tie annual registration to annual fee; Eliminate per tank inspection fee. Eliminate use of seasonal staff doing inspections. **(Status of one year goals- on target)**

Additional Comments/Observations/WOWS/Innovations from the Team:

- *Changes being created by the staff will increase the amount of buy in to the changes.*
- *There is a need to balance the need for lean implementation and everyday enforcement program demands.*
- *Make sure the KPIs are prominently displayed so everyone can see progress.*
- *Be sure to include administrative support personnel in plan creation.*
- *Management support is necessary to clear any roadblocks in the way of implementation.*
- *It was beneficial having IT personnel on the team.*
- *Need to encourage management to delegate some authorities (ie. Field NOV).*
- *Remember to use plan-do-check-act (PDCA) when implementing your plan.*
- *Increase formal enforcement by 40%.*
- *Terrific team building exercise.*
- *Reduce reliance on seasonal staff.*