

**EVALUATION OF THE  
STORAGE TANK  
COMPLIANCE INSPECTION  
PROCESS**



# TEAM CHARTER

<b>CHAMPION:</b>	<b>MARYANN NUSOM- HAVERSTOCK</b>
<b>TEAM LEADER:</b>	<b>GEORGE PURPLE</b>
<b>PROBLEM STATEMENT:</b>	<b>WITH LIMITED RESOURCES THE STORAGE TANK AND PCB ENFORCEMENT UNIT MUST INSPECT 4,000 FACILITIES AT LEAST ONCE EVERY 3 YEARS, RETURN FACILITIES IN VIOLATION TO COMPLIANCE AND IMPROVE ON FACILITY COMPLIANCE RATES.</b>

<b>PROJECT SCOPE / OBJECTIVES:</b>	<b>THE TEAM'S OBJECTIVES INCLUDE THE FOLLOWING: 1) 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); 2) IDENTIFY WASTES AND NON-VALUE ADDED ACTIVITIES AND; 3) ESTABLISH BASELINE MEASURES FOR THE INSPECTION PROCESS.</b>
<b>KEY TEAM MEMBERS:</b>	<b>LORI SALIBY, (SUPERVISOR); PHIL WILDE, GEORGE PURPLE, ROBERT SHULER, OMAR TYSON (STAFF); MARSHALL HOOVER (WPED), BOB GIRARD (AIR BUREAU), AND DAVE HOLMES (OIM)</b>
<b>GOALS:</b>	<b>THE TEAM'S GOALS INCLUDE THE FOLLOWING: 1) ELIMINATE WASTES AND/OR NON-VALUE ADDED STEPS (INSPECTION PREPARATION, ON-SITE INSPECTION, AND POST-INSPECTION DOCUMENTATION ACTIVITIES) 2) PRODUCE WRITTEN DOCUMENTATION OF THE PROCESS AND WRITTEN SOP'S. KEY PERFORMANCE INDICATORS: 1) OPERATIONAL COMPLIANCE INSPECTIONS - INCREASE THE AVERAGE NUMBER OF INSPECTIONS PERFORMED BY PERMANENT STAFF BY 20% ; 2) REDUCE TIME NEEDED IN THE OFFICE FOR PRE AND POST INSPECTION WORK TO 1 DAY/WEEK; 3) REDUCE TIME TO ISSUE NOV'S BY 40%.</b>

# **INSPECTION CURRENT STATE**

- **4000 INSPECTIONS / 3 YEARS**
- **1000 INSPECTIONS/YR. - 5 PERMANENT STAFF**
- **= 17 INSPECTIONS/MO.**
- **500 SURVEYS/YR. - 5 SEASONALS**



# Benchmarking & Networking

With EPA's  
Bill Torrey &  
Andrea Beland



# INSPECTION STATUS

## Feedback From EPA Invited Guests

- **FORMER REALITY–**  
**INSPECT EACH SITE EVERY 15–20 YRS.**
- **ENERGY ACT OF 2005–**  
**INSPECT EACH SITE EVERY 3 YRS.**
- **NEW HAMPSHIRE-**  
**CROSS-TRAINED AIR & UST INSPECTORS**
- **N.H., R.I., MA.-**  
**ALREADY HAVE TABLETS & FIELD NOV<sub>s</sub>**
- **EPA UTILIZES FIELD CITATION-**  
**WHICH IS A FIELD PENALTY ORDER**
- **BETTER CREDENTIALS-**  
**NEEDED TO ESTABLISH AUTHORITY**

# CURRENT STATE

# **ENFORCEMENT CURRENT STATE**

- **1500 INSPECTIONS/SURVEYS**
- **SITES WITH 100% COMPLIANCE= 10**
- **1490 SITES WITH A COMPLIANCE ISSUE**
- **34 ENFORCEMENT ACTIONS ISSUED (FORMAL & NOVS)**
- **SITES IN COMPLETE SOC ~ 60%**

## Pre-Inspection

### CURRENT STATE

19 Steps = 25 min./site

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## Inspection

### CURRENT STATE

34 Steps = 85 min./site

(Without Travel Time)

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## Post - Inspection

### CURRENT STATE

18 Steps = 48 min. process time & 45 days wait  
time seeking voluntary compliance

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## Total

71 Steps = 158 min. + 45 days wait

20 Steps value-added = 48 min. = 36% (not counting 45 days wait)

# **NOV Process**

## **CURRENT STATE**

**41 Steps = 131 min. process**

**36 days wait time**

**2 value-added step = 10 sec. = 5%**





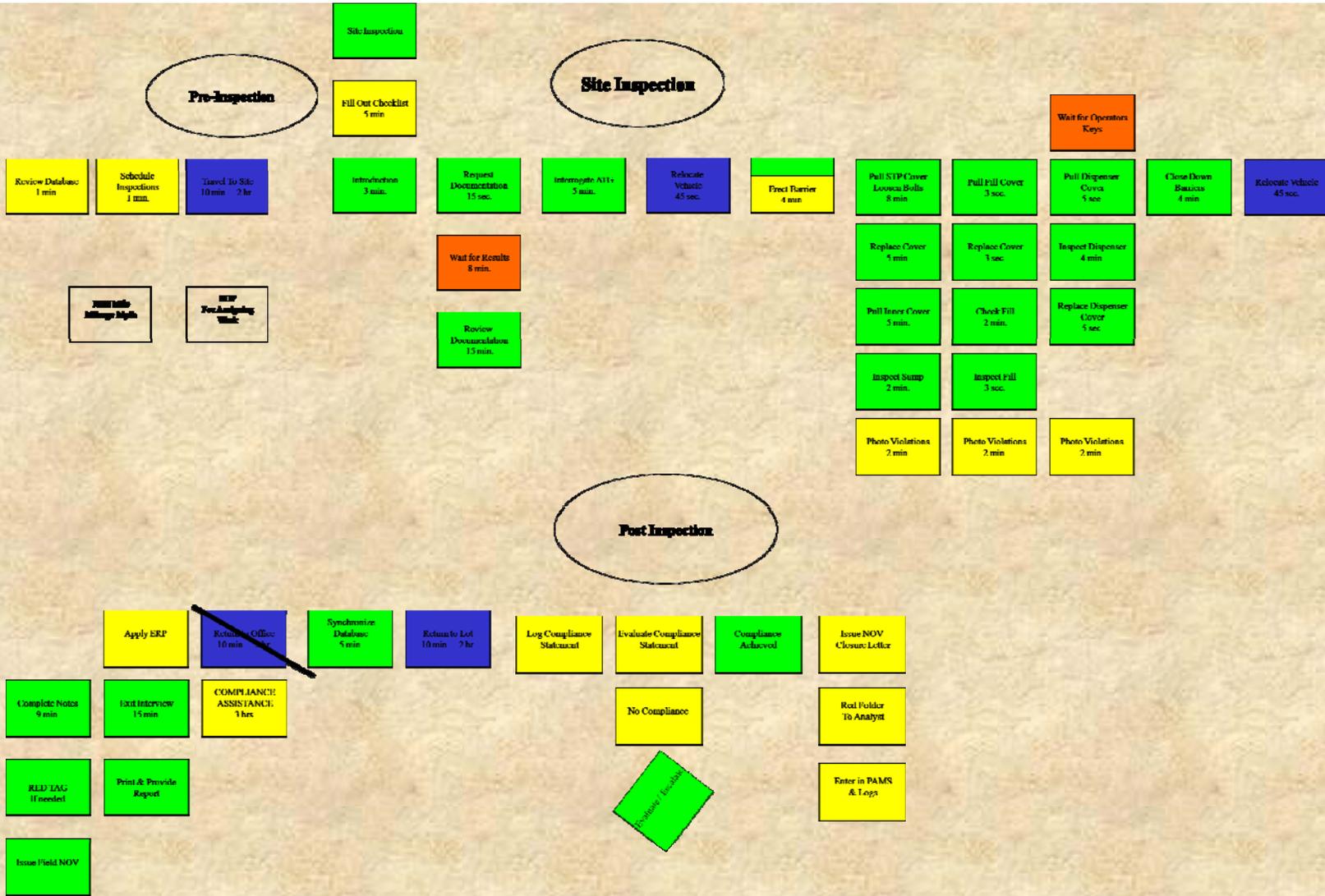


FUTURE STATE

**Pre-Inspection**

**Site Inspection**

**Post Inspection**



## Pre-Inspection

### FUTURE STATE

2 Steps = 2 min./site

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## Inspection

### FUTURE STATE

35 Steps = 80 min./site

(Without Travel Time)

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## Post - Inspection

### FUTURE STATE

1 Steps = 5 min. process time & 0 days wait  
time seeking voluntary compliance

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## Total

38 Steps = 87 min. + 0 days wait

Steps value-added 18 = 80 min. = 48%

# **NOV Process**

## **FUTURE STATE**

**8 Steps = 30 min. process**

**15 days wait time**

**2 value-added step = 10 min. = 25%**



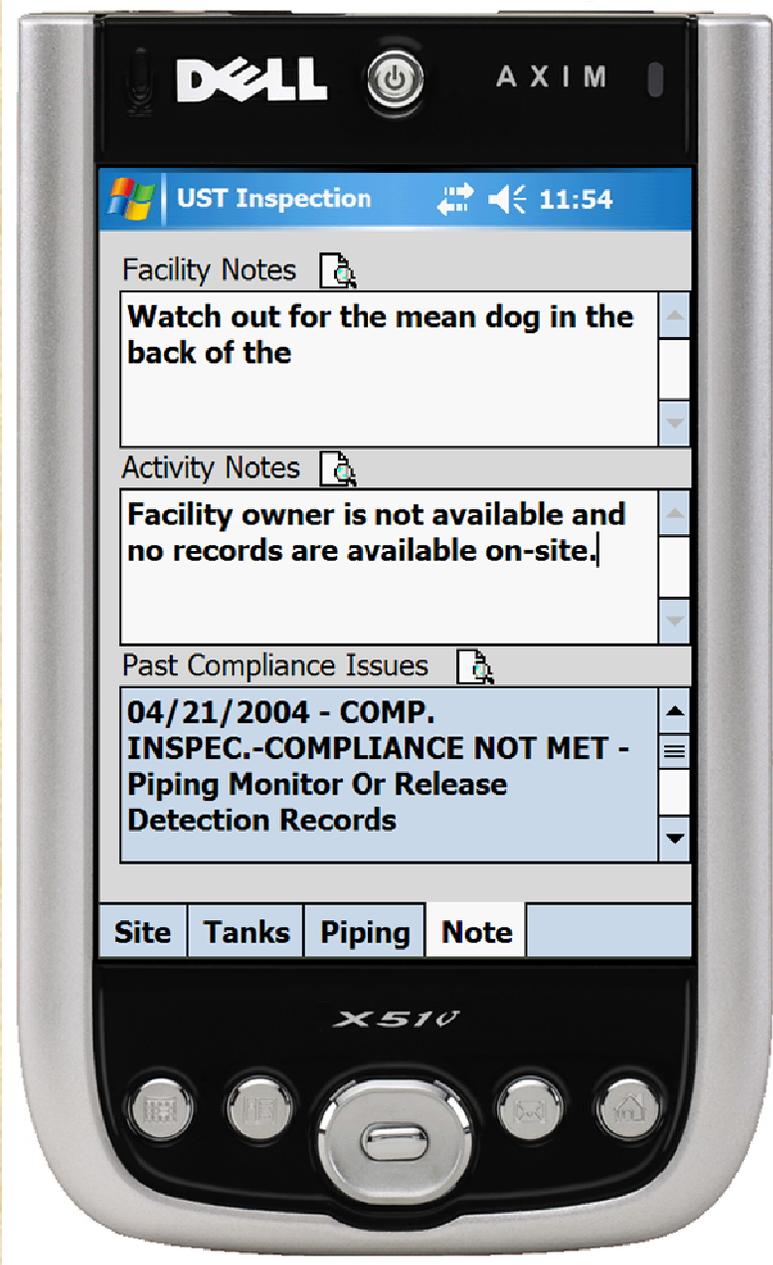
# Paperless Inspection



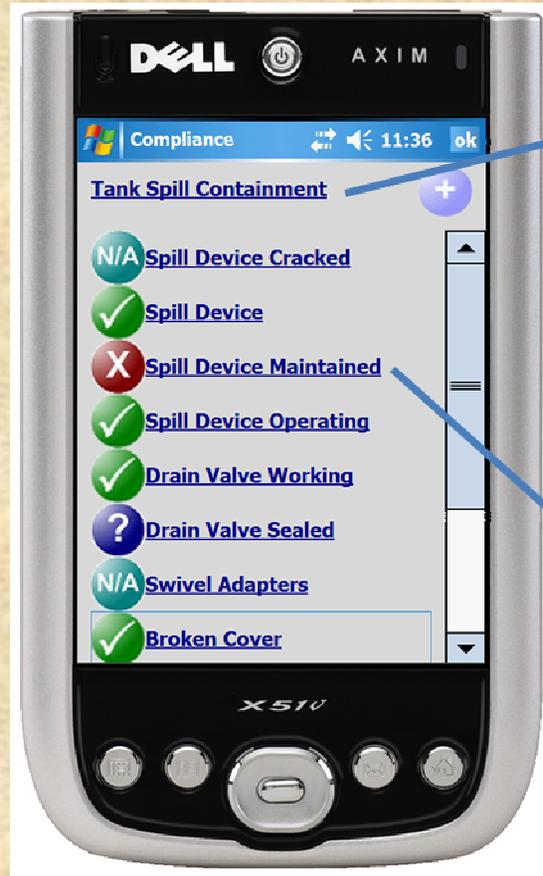
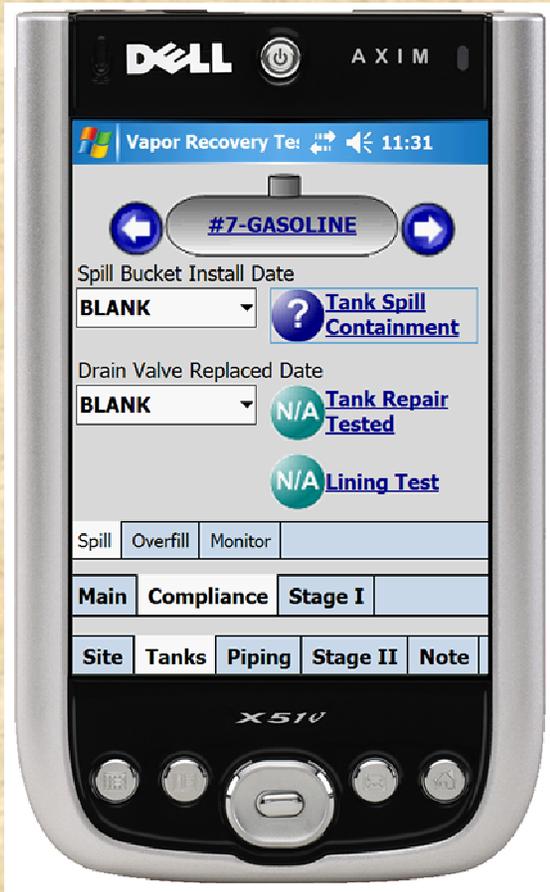
Benchmarking &  
Networking

With Dan Blake  
of Mobile Wright

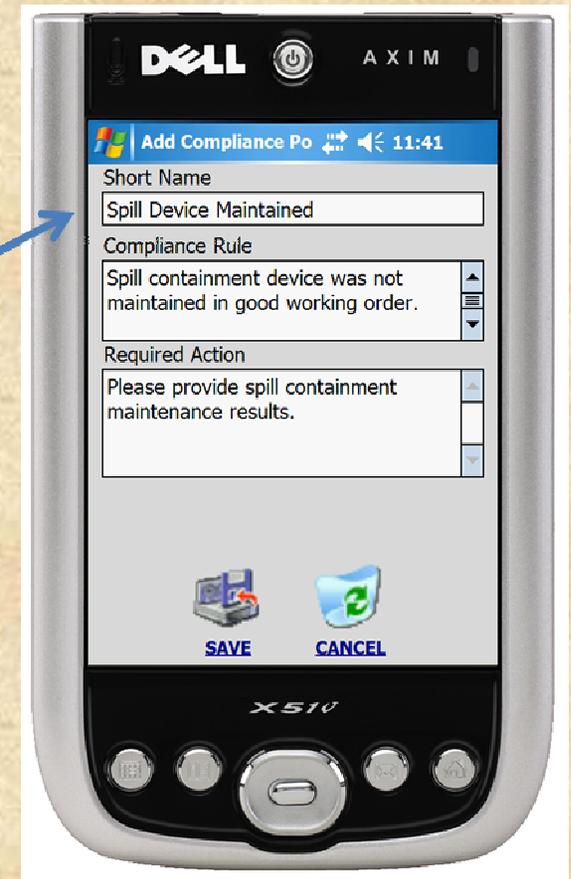
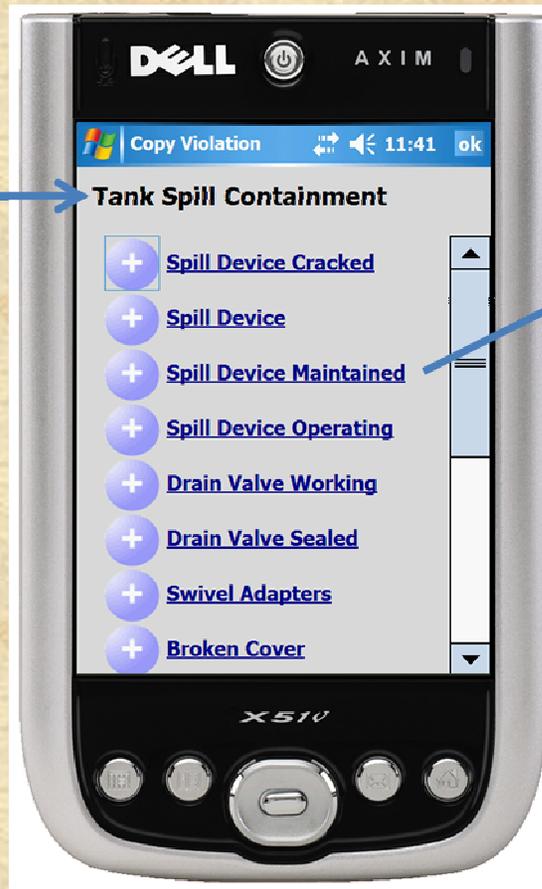
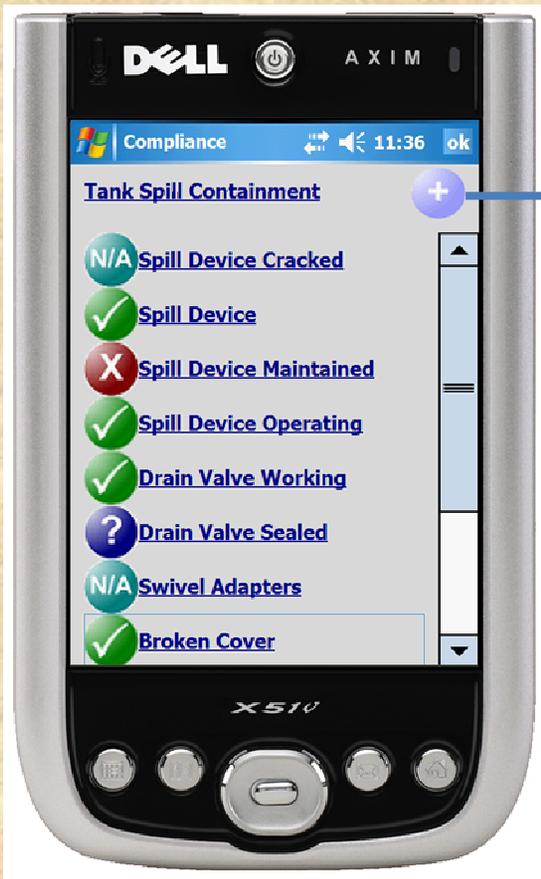
# Download Site/Tank Details and Past Compliance

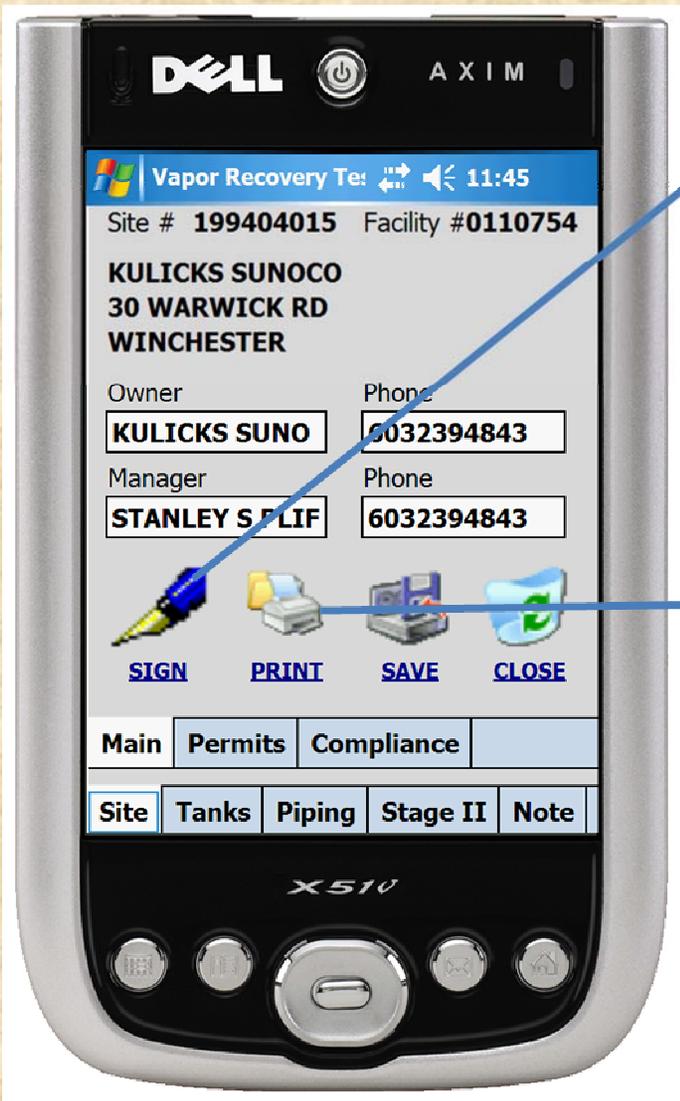


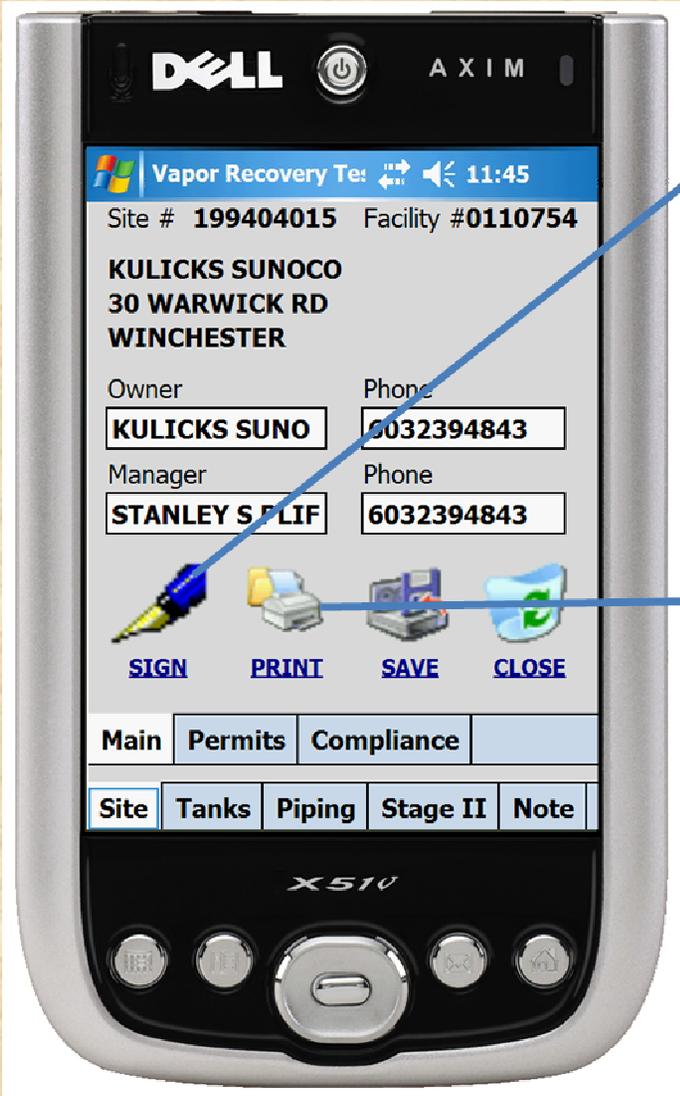
# Standardize NOV Text



# Allow for Inspector Customization







# SIMS – Staff may track the status of UST Enforcement Actions through a Schedule (Customizable)

State of Connecticut Department of Environmental Protection  
SIMS - Enforcement Actions

Assignment List | Environmental Interest | Reports | Administration

detail | clients | sites | fees | **schedule** | history | environmental interests

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**Enforcement Action**

**Environmental Interest:** Field Notice of Violation (NOWVSUST 08-017)

**Client(s):** DRAKE PETROLEUM COMPANY, INC. (Owner)

**Site(s):** Westbrook Mobile (Westbrook , CT)

**Status:** **Action Date:** 9/26/2008

**Enf Action Description:** Failed to comply with sections 22a-449(d)-104 (e)(1)(G) Failed to comply with sections 22a-449(d)-105(a) Failed to comply with sections 22a-449(d)-106(b)(1)

| **Add Document**

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**Schedule Maintenance** **Add New Task**

**Schedule Process:** NOV - UST

**Start Date:** 9/26/2008

<b>Task:</b> Waiting for Response	<b>Task Duration:</b> 30	<input type="button" value="Edit"/>
<b>Target End Date:</b> 10/26/2008	<b>Actual End Date:</b> 10/9/2008	<input type="button" value="Remove"/>
<b>Comment:</b>		
<b>Task:</b> Evaluate Compliance Statement	<b>Task Duration:</b> 10	<input type="button" value="Edit"/>
<b>Target End Date:</b> 10/19/2008	<b>Actual End Date:</b>	<input type="button" value="Remove"/>
<b>Comment:</b>		<input type="button" value="Hold"/>
<b>Task:</b> Final Decision	<b>Task Duration:</b> 1	<input type="button" value="Edit"/>
<b>Target End Date:</b>	<b>Actual End Date:</b>	<input type="button" value="Remove"/>
<b>Comment:</b>		

WOW!

# Staff may view the actual NOV document by clicking on the document ICON

**Enforcement Action**

**Environmental Interest:** Field Notice of Violation (NOWWSUST 08-017) 

**Client(s):** DRAKE PETROLEUM COMPANY, INC. (Owner)  
**Site(s):** Westbrook Mobile (Westbrook, CT)  
**Status:**  
**Action Date:** 9/26/2008

**Enf Action Description:** Failed to comply with sections 22a-449(d)-104 (e)(1)(G) Failed to comply with sections 22a-449(d)-105(a)  
Failed to comply with sections 22a-449(d)-106(b)(1)

**Find**

**Add Document**

**Program:** STEU - Sto  
Materials M  
Emergency

**Enforcement Action ID:** NOWWSUS

**Assigned Staff:** Leclerc Ker

**Environmental Benefit:**

**Number of Violations:** 3

**Category:** Gasoline D

**SEP Environmental Benefit:**

**Total Penalty Assessed:** \$0.00

**SEP Description:**

**SEP Penalty Amount:** \$0.00

**NAICS Code:**

ViewerContent (Read-Only) [Compatibility Mode] - Microsoft Word

Home Insert Page Layout References Mailings Review View

Paste Clipboard

Times New Roman 12

**B** **I** **U** **abc** **x<sub>2</sub>** **x<sup>2</sup>** **Aa** **ab** **A**

Paragraph

AaBbCcI **AaBbCcI** AaBbCcI

Normal **Title** No Spaci...

**NOTICE OF VIOLATION**

Mr. David M. Preble  
President  
Drake Petroleum Co., Inc.  
P.O. Box 866  
North Grosvenordale, CT  
06255

The purpose of this Notice of Violation ("Notice") is to inform you that personnel of the Department of Environmental Protection ("DEP") have made observations or otherwise

Within SIMS, staff may view outstanding fees associated with the NOV or they may view all outstanding fees associated to the client (Drake Petroleum)

State of Connecticut Department of Environmental Protection  
SIMS - Enforcement Actions

Assignment List | Environmental Interest | Reports | Administration

detail | clients | sites | **fees** | schedule | history | environmental interests

### Enforcement Action

**Environmental Interest:** Field Notice of Violation (NOVWSUST 08-017)

**Client(s):** DRAKE PETROLEUM COMPANY, INC. (Owner)

**Site(s):** Westbrook Mobile (Westbrook , CT)

**Status:**

**Enf Action Description:** Failed to comply with sections 22a-449(d)-104 (e)(1)(G) Failed to comply with sections 22a-449(d)-105(a) Failed to comply with sections 22a-449(d)-106(b)(1)

**Action Date:** 9/26/2008

| **Add Document**

**Receivables** **Add New**

**Client:** 996065 - DRAKE PETROLEUM CO. INC.

**Revenue ID:** 348 - Registration fee for Residential Underground Storage Tank Removal Contractors

**Receivable Type:** Charge

**Status:** Approved

**Invoice #:**

**Invoice Date:**

**Outstanding Balance:** \$100.00

# SIMS Reporting – Staff may query SIMS Enf Actions by several parameters.



STATE OF CONNECTICUT  
 DEPARTMENT OF ENVIRONMENTAL PROTECTION  
 79 Elm Street  
 Hartford, CT 06106-5127  
 www.ct.gov/dep

## Enforcement Actions Report

**Report Parameters:**

**Bureau:** Materials Management & Compliance Assurance  
**Division:** Emergency Response and Spill Prevention (MMCA-ESRP)  
**Program:** All Programs  
**Env Int Type:** All Environmental Interest Types

**DEP Staff:** All DEP Staff  
**Site Town:** All Site Towns  
**Client:** All Clients  
**Status:** Both

**Action Date From:** 1/01/2007 To 10/09/2008  
**Resolve Date From:** None Selected

Client	Enf Action ID	Site Town	Description	Actions Date	Resolved Date	Resolution
<b>Materials Management &amp; Compliance Assurance</b>				<b>Bureau Total:13</b>		
<b>Storage Tank Enforcement Unit-USTEP</b>				<b>Program Total: 13</b>		
85 BISHOP LANE CORP	COWSUST 06-015			1/31/2007	3/23/2007	Closed
ANDREWS OIL	COWSUST 06-006	SOUTH WINDSOR	PAMS Penalty Amount: \$750.00	5/21/2007		Active
BISHOP LANE CORP	COWSUST06-015	HARTFORD	PAMS Penalty Amount: \$12000.00	1/31/2007		Active
CITY OF MILFORD	NOVWSUST07001	MILFORD		8/01/2007		Active
HULL FOREST PRODUCTS, INC.	RED TAG			11/26/2007		Active
HULL FOREST PRODUCTS, INC.	AOWSUST 07-001	POMFRET		11/26/2007	12/20/2007	Closed
MAYFAIR GARAGE	AOWSUST 08-003			3/05/2008	3/06/2008	Closed

# **INSPECTION CURRENT STATE**

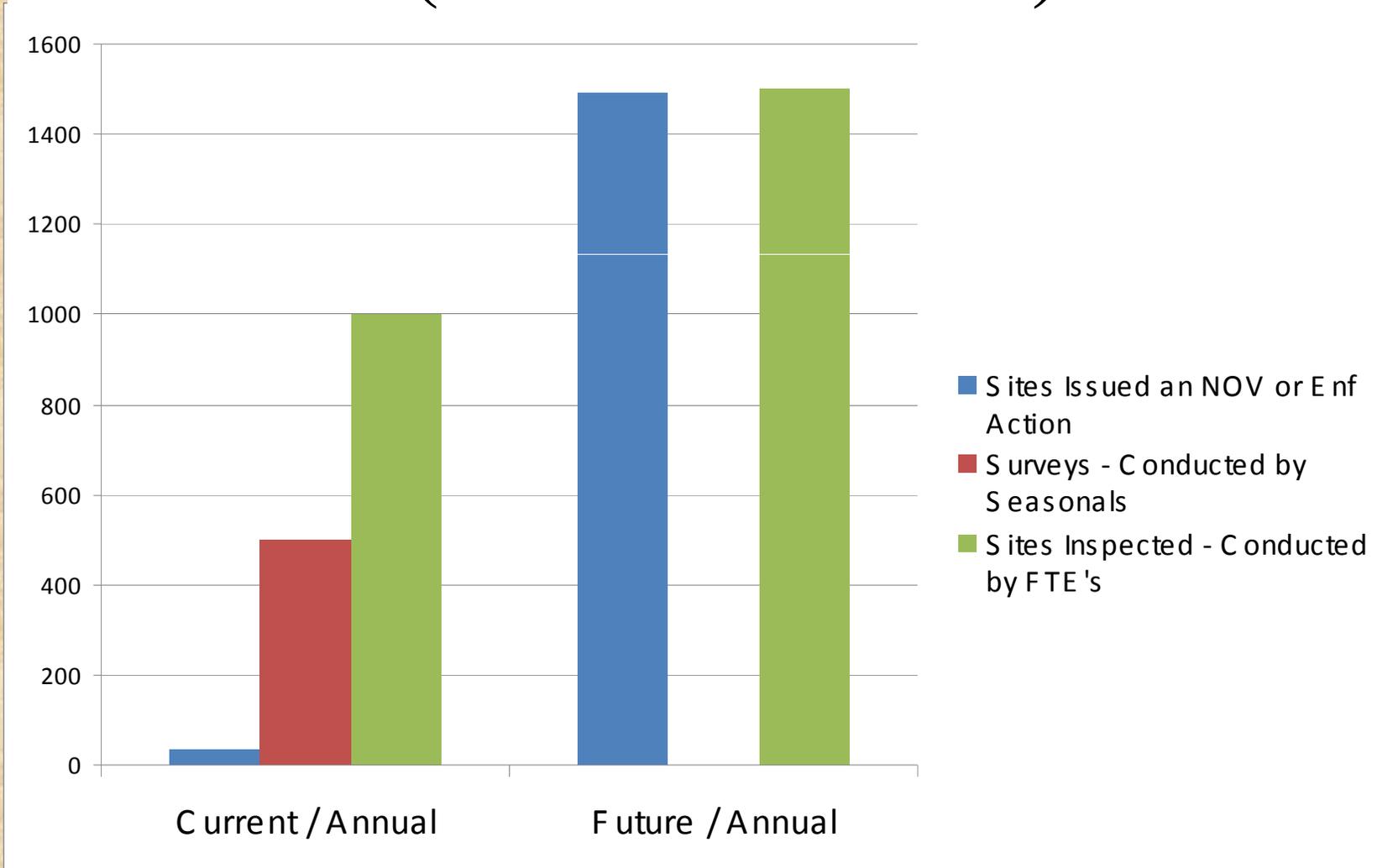
- **1500 INSPECTIONS/SURVEYS (5 SEASONALS)**
- **1490 SITES WITH A COMPLIANCE ISSUE**
- **34 ENFORCEMENT ACTIONS ISSUED  
(FORMAL & NOVS)**
- **SITES IN COMPLETE SOC ~ 60%**

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# **INSPECTION FUTURE STATE**

- **1500/YR. INSPECTIONS (5 PERMANENT STAFF)**
- **37/MO. 3 COMPLIANCE SPECIALISTS**
- **14/MO. 2 ENFORCEMENT STAFF**
- **40% INCREASE FORMAL ENFORCEMENT**

# LEAN Enforcement (WithOut Waste)



# **ENFORCEMENT CURRENT STATE**

- 1500 INSPECTIONS
- SITES WITH 100% COMPLIANCE = 10
- 1490 SITES WITH A COMPLIANCE ISSUE
- 34 ENFORCEMENT ACTIONS ISSUED  
(FORMAL & NOVS)

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# **ENFORCEMENT FUTURE STATE**

- INCREASE FORMAL ACTIONS BY 40%
- 100+ SITES ISSUED FIELD NOVS

## Pre-Inspection

- CURRENT STATE
  - 19 Steps
  - FUTURE STATE
  - 3 Steps
- 

## Inspection

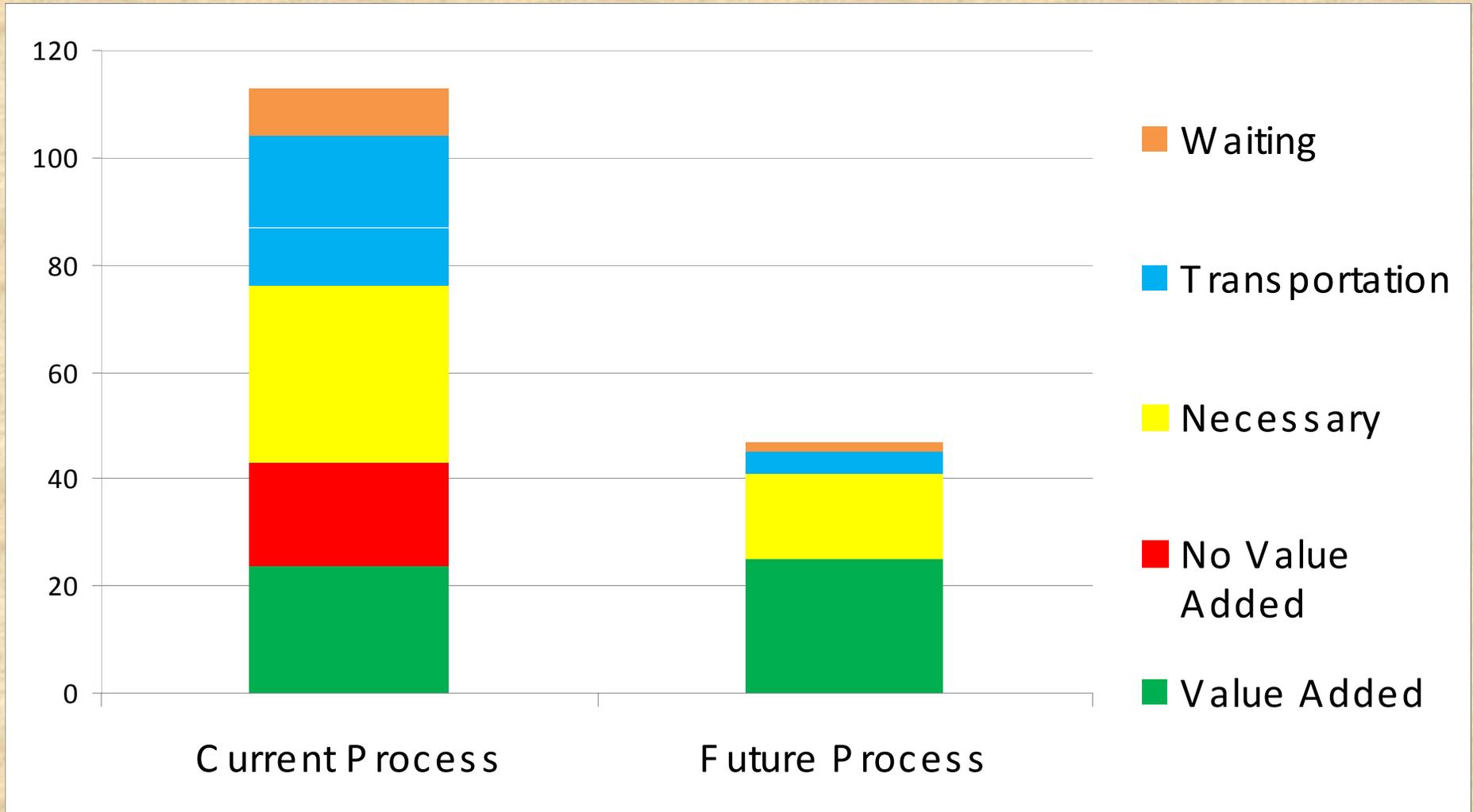
- CURRENT STATE
  - 34 Steps
  - FUTURE STATE
  - 35 Steps
- 

## Post - Inspection

- CURRENT STATE
  - 65 Steps
  - FUTURE STATE
  - 9 Steps
  - Total = 118
  - Total = 47
-

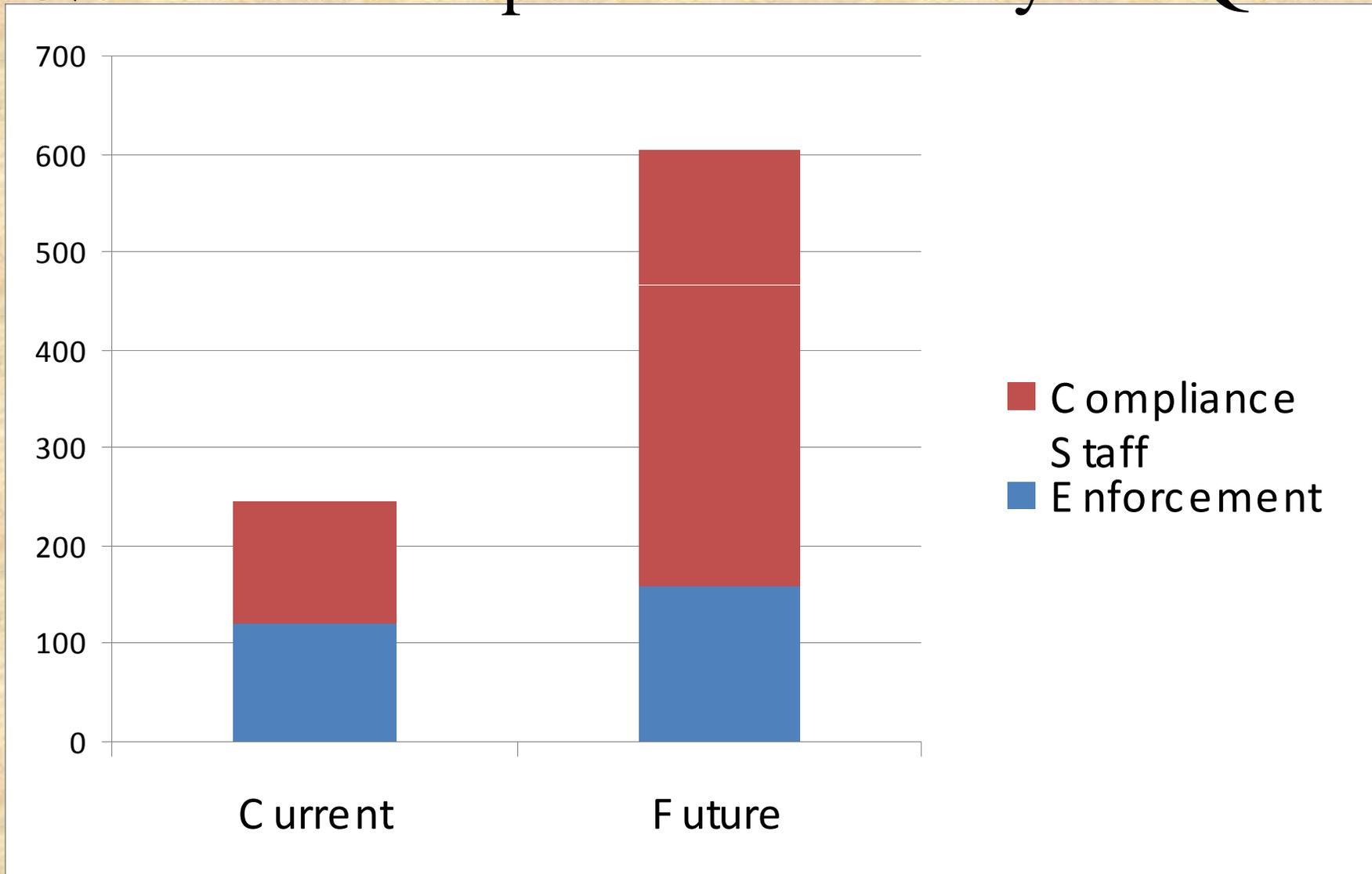
# VSM – LEAN, MEAN, & GREEN

## 32% Increase Value-added



# Key Performance Indicator (KPI)

## 40% Increase Inspection Efficiency and Quality



# 2 MONTH PROJECT PLAN

## Two-Month Goals

TASK/ACTIVITY	TASK OWNER(S)	PARTICIPANTS	EXPECTED RESULTS
Access Stage II Database	Bob Girard		Improve quality of UST owner/operator information
Delegate NOV Authority <i>Develop SOP</i>	Mark DeCaprio Lori Saliby	Enforcement Staff	Increase NOV Issuance by 40% Maintain Consistency/Standardize NOV Issuance
Institute Use of Tablets for Inspections  <i>Eliminate Use of Seasonal</i>	Dan Blake/Bernie Evans	UST Staff/IT/UST Support	Streamline Inspection, Reporting, & NOV Process and paper logs and to increase efficiency by 40%
Confirm 1,000 Mile Myth	Bob Girard	Business Office	To allow the most efficient use of fuel and inspector time
Develop Schedule SOP <i>Invite Air Supervisor to Discuss</i>	Omar Tyson	UST Staff	Increase the travel efficiency of the unit
Develop Inspection SOP	Dave Keating	George Purple & Staff	Assure Consistency in the field by inspection staff
Evaluate Staff Equipment	George Purple		Evaluate opportunities to increase inspection efficiency
Eliminate Compliance Specialist Phone Days	Lori Saliby		Increase inspection outputs by CS staff

**Department of Environmental Protection  
Emergency Response and Spill Prevention Division  
Storage Tank Enforcement Unit**

**Name of Procedure:**     **STEU Field Enforcement - Field Issued NOVs and/or Warning Notices**

**Effective Date:**         October 9, 2008

**I. Purpose**

To establish a procedure for issuing and tracking Field NOVs and/or Warning Notices.

**II. Policies**

It is the policy of the Department that enforcement tools be utilized in accordance with the Draft Proposed Plan for Implementation of the Use of Field NOVs and/or Warning Notices (attachment 1) Enforcement Response Policy (appendix A) and the applicable delegations of authority (attachment 2).

**III. Procedures**

A. All STEU staff shall utilize the following criteria for issuing NOVs and/or Warning Notices in the field:

- 1) During the course of an inspection, if staff become aware of the existence of a violation or potential violation which appears on the pre-printed, or electronically generated, Field NOV and/or Warning Notice, staff will complete the form and provide a copy, along with the Advice to Recipients, and blank Compliance Statement to the person in charge at the facility at the time of the inspection;
- 2) ~~Upon returning to the office, the issuing staff shall mail a copy of the NOV or Warning Notice by certified mail to the owner/operator of the facility ;~~
- 3) ~~Staff shall provide STEU clerical staff with the Department's copy of the Notice along with a PAMS form so that the action can be first entered into the PAMS system and then filed in the public inspection file;~~

4) ~~The issuing staff shall log the Notice in the NOV log with a copy filed in the STEU NOV central file;~~

B. STEU enforcement staff ~~issuing a Field NOV and/or Warning Notice~~ shall be responsible for tracking compliance as follows:

1) Receive ~~Set up~~ a reminder in Outlook for 15 days from the date of issuance;

2) Upon receipt of the completed Compliance Statement clerical will log and distribute to enforcement staff to determine whether the information provided is adequate to confirm compliance, or whether a follow-up inspection is needed;

3) If enforcement staff determines it is adequate, they shall prepare an NOV closure letter for signature by the enforcement lead or supervisor ~~STEU~~, along with the Compliance Statement and supporting documentation, for supervisory concurrence;

4) ~~Staff shall discuss the case at the next enforcement meeting after the issuance of the Notice in order to find out whether the case merits further enforcement response.~~

4) Log closure letter in appropriate logs •



# KPI - Increase Enforcement

