

Bulk Chemical Management at Diablo Canyon Power Plant



Del Ritchie

Supply Chain Management

Annual CMS Workshop

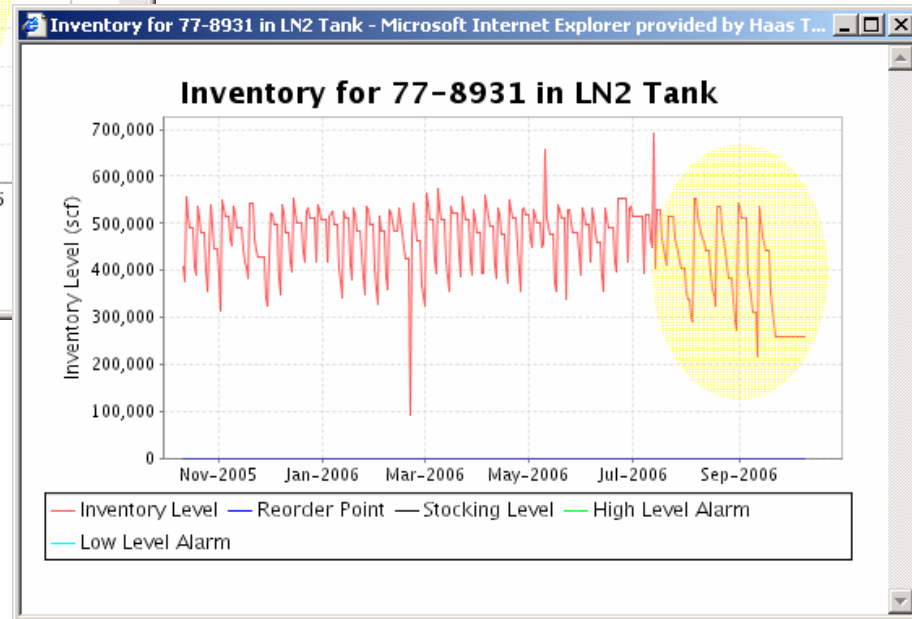
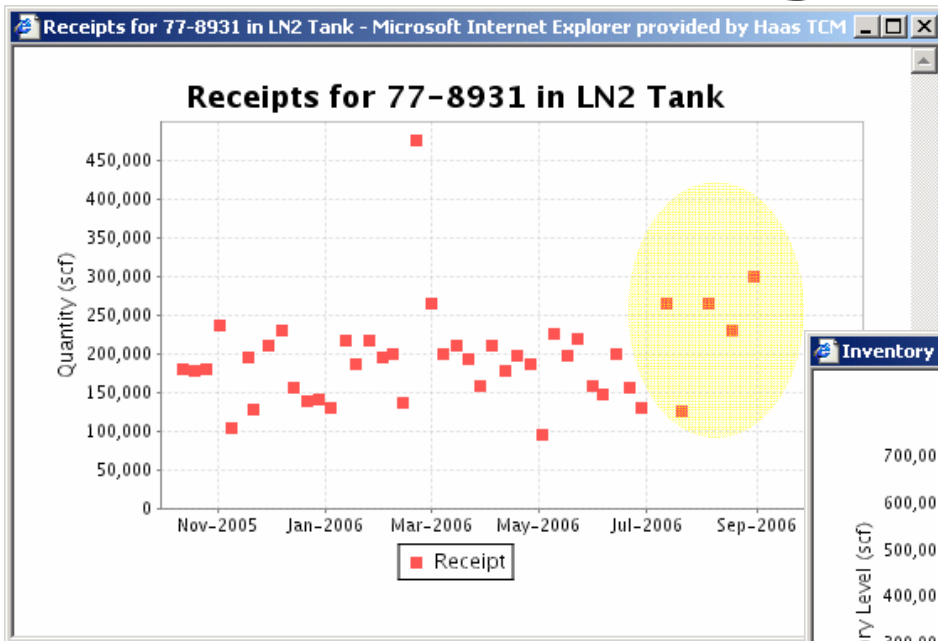
October 26, 2006

About DCP



- DCP is located in San Luis Obispo County, California
- Low cost, emission free electricity from two 1,100 megawatt units
- Chemical Management Services
 - 25 tanks and bulk containers, holding 12 bulk gases and chemicals, are managed for various plant processes.
 - Haas TCM's onsite staff manage the chemicals from identification of need through the final offload and receipt.
 - In addition the Chemical Management Team is involved in several improvement programs dealing with chemicals and chemical processes.

Streamlining the Supply Chain



Tank replenishment managed to ensure continual supply while reducing the number of deliveries

Security for Hazmat Deliveries

- **Part A. Personnel Security**
 - Primary Objective: Confirm the identity and credentials of applicants and employees
- **Part B. Unauthorized Access**
 - Primary Objective: Provide awareness of the area outside the protected space, so that early warning of possible unauthorized access is provided.
- **Part C. En Route Security**
 - Primary Objective: Employ technology to enhance en route security
- **Part D. Training**
 - Primary Objective: Provide instruction on company security objectives and specific security procedures

PG&E Action Requests

- Action Requests -- corrective actions:
 - Driver security for deliveries
 - Safety during hydrogen offloads
- Action Requests - process improvements:
 - Improving security for freight deliveries
 - Reducing the number of deliveries through improved inventory management

PG&E CMS Metrics - Aug 2006

<i>Metric</i>	<i>Goals</i>	<i>Jan YTD</i>	<i>Feb YTD</i>	<i>Mar YTD</i>	<i>Apr YTD</i>	<i>May YTD</i>	<i>Jun YTD</i>	<i>Jul YTD</i>	<i>Aug YTD</i>
Cost Management									
Process Improvements Proposed (Cumulative \$)	TBD	-	-	-	-	56,800	56,800	105,200	405,200
Commodity Cost Reduction (Cumulative Savings \$)	226,503	26,309	41,103	73,144	108,478	150,450	201,651	238,553	301,378
Commodity Spend (Cumulative \$)	1,802,777	224,549	388,433	594,120	744,397	935,036	1,137,702	1,294,410	1,501,398
Quality									
Acceptance Rate (%)	99%	100%	95%	100%	94%	100%	100%	100%	100%
Service									
On time Delivery (%)	99%	100%	95%	100%	100%	100%	100%	100%	100%
Stand By Time (Hrs/Delivery)	TBD	1.97	3.35	4.10	3.50	2.88	3.63	3.71	

Goals and Accomplishments for the DCCP Program

GOAL:

Provide Cradle to Grave “Total Chemical Management” Services

STRATEGIES:

Successful Transition at DCCP

Effective Work Processes & Operating Discipline

Continuous Improvement – DCCP Chemical Lifecycle

Expand CMS to all DCCP Chemicals

ACCOMPLISHMENTS:

“Zero” delayed shipments

On schedule

“Zero” LTA

Zero Surprises

20% Cost Reduction (YTD)

Seven Process Improvement Projects in Development

GOAL: MRO & Facility Chemicals

GOAL: Other “packaged” chemicals

