

Bulk Chemical Management at Diablo Canyon Power Plant



Art Madson
Supply Chain Management

12th Annual CMS Conference
November 2008

About Diablo Canyon

- Diablo Canyon Power Plant is located in San Luis Obispo County, California.
- Nuclear Power Plant with two 1,100 megawatt units.
- Commercial operation of first unit in 1985.
- Chemical Management Services
 - Just completed our 3rd year in contract with a CMS Provider.
 - 25 bulk tanks and process containers, holding 12 chemicals and gases used for various plant processes.
 - CMS Provider has onsite staff managing the bulk products from identification of need through offload and final receipt.
 - We are involved with our CMS provider in several process improvement programs relating to chemicals and the chemical processes at Diablo Canyon.

DCPP's Journey Into CMS

- Prior to our present CMS program, managing our bulk chemicals and gases was costly, inefficient and problematic.
- Procurement was responsible for sourcing, site coordination, carrier arrangements, security clearances and other logistics involved in the supply chain process.
- We wanted to move toward an improved program and did research on CMS.
- From this we decided to pursue someone taking over the process for us.
- Early 2005 began the process of identifying our scope of service, a bid process, supplier selection and awarding a contract in the 3rd qrtr. of 2005.
- We initially started out with 12 bulk chemicals and gases in the program.
- Over the three years, there have been improvements in all sectors of our program.

The Starting Point

- We wanted to improve the support of bulk chemicals and gases to our internal clients, Plant Operations & Chemistry
- Reduce the total cost of this support
- Improve the process of sourcing, procuring, and managing bulk chemicals
- Reduce the burden to the plant staff
- Learn of industry best practices that could add value to our programs

Essential Criteria For Our Program

- Manage all supply chain activities
- Product Quality/Acceptance
- On Time Delivery
- Our specs were to be used
- In some cases, we specify the mfgr.
- Reduction in process/product costs

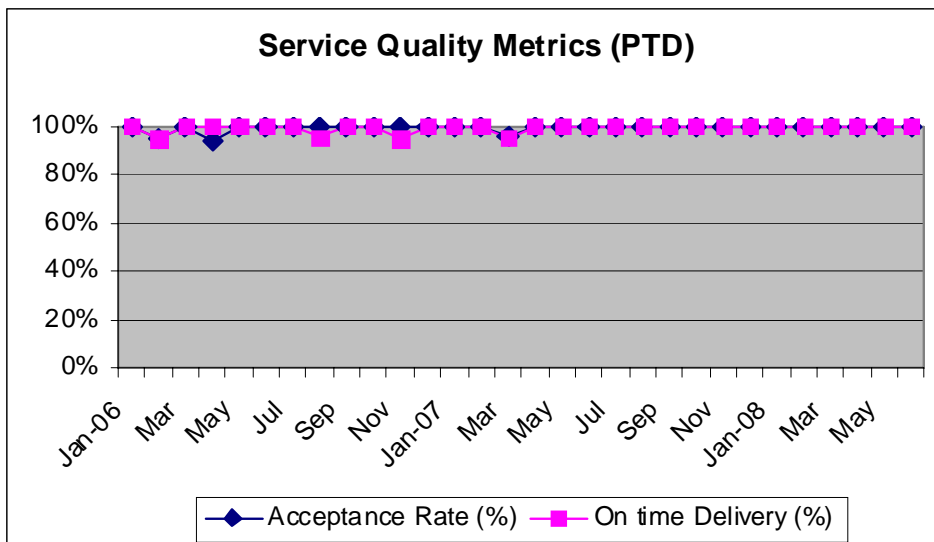
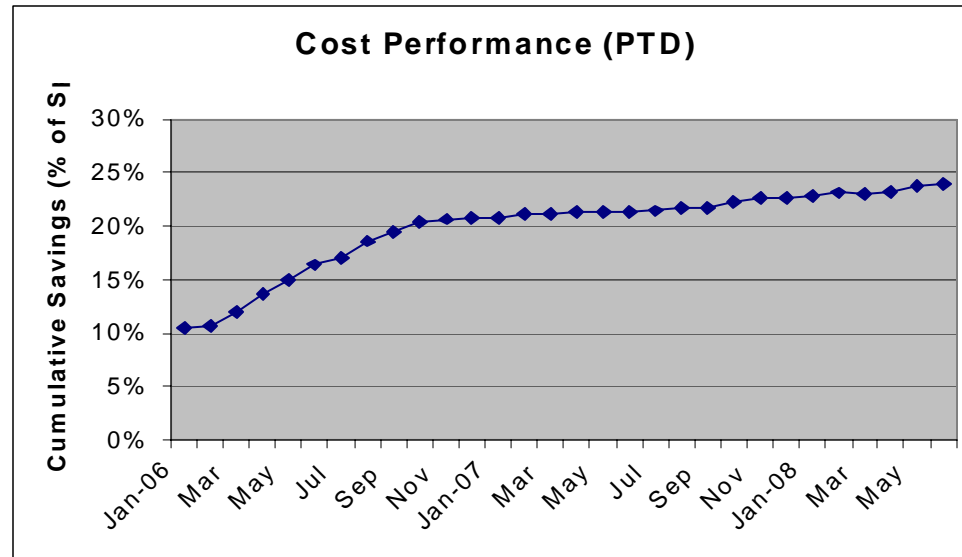
Primary Goals From CMS

- On time delivery of right product to the right location, meeting our Safety and Security requirements
- CMS Provider through their service and resources will procure chemicals and gases from more cost effective supply sources and propose ways for us to reduce our operational cost as it relates to bulk chemicals and gases

Key Participants

- Operations Director (Sponsor)
 - Chemistry reports to Operations
- Chemistry Manager
- Chemistry General Foreman
- Operations foreman
- Security Management
- Procurement Services
- Internal Auditing

Performance Metrics



Standby Time – Haas and DCPP have worked to reduce the time trucks are onsite. Each major excursion in time onsite is acted on in the DCPP Corrective Action Program.

Lessons Learned

- Understand what you want before you get started and ensure stakeholder agreement
- Understand the drivers behind the problems or issues you are having
- Understand your TCO or have a plan on how to get the data so you can understand it
- Gain an understanding of the depth/breadth of a chemical management provider.
- Do not underestimate the importance of the transition plan and start-up
- Don't overreact to 'bumps in the road'
- Understand your organizations flexibility and ability to change