

Workshop Draws Silicon Valley Companies Interested in Chemical Management Services

Workshop Overview Chemical Management Services: A Strategic Alliance to Optimize the Enterprise

November 15, 2000 8:30 am – 12:30 p.m.
AeA Offices -- Santa Clara, CA

Summary

The workshop launched a region-wide pilot program to introduce the chemical management services (CMS) model to manufacturing companies and other stakeholders in Silicon Valley. CMS is a market-based strategy to prevent pollution by cutting chemical use and waste. The short-term goal of the workshop was to recruit companies to engage in the pilot program to evaluate the opportunity to implement CMS at their facility. The long-term goal is to establish an environmentally superior method of chemical management in Silicon Valley and to reduce the use and release of toxic chemicals in the region.

A total of 33 representatives of Silicon Valley manufacturing companies and other stakeholders attended the half-day session in Santa Clara. One pilot is currently underway with Seagate Technologies and eight other companies are candidates for a pilot. Surveys of workshop participants (primarily representing EH&S and procurement interests) indicated that the workshop was very useful toward their understanding of CMS. Nine out of the 13 customers surveyed indicated that they would like to pursue a pilot program with CSP. The primary motivations for learning about CMS were to reduce costs, minimize waste and streamline the supply chain. Participants were also interested in EH&S concerns and reducing inventory.

The adoption of any new business practice must first and foremost satisfy the bottom line – CMS adoption is no exception to that rule. Any CMS program must start with a clear understanding of baseline costs. One participant summed up his thoughts on the value of investigating a CMS program: “Doing a quick analysis, we spend about \$5 million a year on chemicals, and probably around \$25 million managing them. We can save at least \$7 million – sounds good to me!”

Companies and Organizations in Attendance

Analog Devices, Chemical Safety Corp., ChemTracker, GW International, IBM, Incyte Genomics, PAI Systems, Integrated Science Solutions, LSA Anodic Technologies, LSI Logic, NASA Ames Research Center, Network Devices Inc., Nortel Networks, Northrup Grumman Corp., New United Motors, Pratt and Whitney Chemical Systems, URS Corp., Raytheon Company, San Jose State University, Sanmina Corp., Santa Clara Dept. of Environmental Health, Seagate Technologies, Sun Microsystems/EORM, Weiss Associates

Hosted by

Chemical Strategies Partnership (CSP), Silicon Valley Manufacturing Group (SVMG), Santa Clara County Pollution Prevention Program (P2 Program) with funding by the U.S. Environmental Protection Agency. The San Francisco Foundation and the American Electronics Association provided additional support.

Introductory Remarks

SVMG's Environmental Director, Justin Bradley broke the ice in a spirited opening by entreating participants to become agents of change – catalysts -- in their companies. Bradley likened a sustainable chemical use reduction program to a successful weight loss program, one that keeps the weight off. This simple analogy elicited some laughter, yet made the important point that chemical use reduction needs to be an ongoing part of a company's long-term strategy.

Introduction to CSP and the CMS Model

CSP's Executive Director, Jill Kauffman Johnson introduced CSP and its goal of reducing chemical use in manufacturing through CMS. CSP accomplishes this by engaging companies in pilot programs to evaluate their amount and patterns of chemical use and helping them eventually engage with a CMS provider. CMS is a strategic, long-term relationship in which a customer contracts with a service provider to supply and manage the customer's chemicals and related services.

Aligning the financial incentives of the chemical user and supplier to reduce lifecycle chemical costs and environmental impacts is the linch-pin to success. CMS achieves environmental benefits and cost savings primarily because it focuses on lifecycle costs instead of material costs, aligns financial incentives of the customer and supplier in a system-wide arrangement. So why isn't everyone using this great model of efficiency and environmental gain? The answer is well understood to all people with good ideas in big organizations. Change -- even positive change -- is difficult. CSP's objective is to work with the agents of change, like those in the room, to empower them to sell the concept internally, to help companies understand how their relationship with their chemical suppliers can be less antagonistic and be more of a partnership.

Panel: CMS Programs in Action

The centerpiece of the workshop was a panel discussion featuring CMS provider URS Corporation, CMS customer Raytheon Company and CMS provider GW International (who also spoke on behalf of its customer Toppan Electronics).

Moderator John Claussen asked each panelist to discuss why their companies were involved in CMS and to describe their programs. URS's Milton Owen began by explaining that their CMS program (Total Chemical Management, or TCM) brings in about \$25 million per year and has doubled since a year ago and should continue to grow vigorously. Their business model reflects the CSP approach, providing services through the whole lifecycle of the chemical. Raytheon's program is the flagship program of their TCM business and they strive to support Raytheon's operations and create efficiencies so that there is no interruption in service.

Lynne Mueller introduced her company, Raytheon, a \$20 billion company with 100,000 employees. Their pilot with CSP in Tucson encouraged them to expand throughout their domestic operations (about 60 facilities nationwide). Mueller's advice for anyone considering a CMS program is that they need to be cheerleaders and advocates in each area. At the time of implementation, Raytheon was dramatically reorganized from different units into one company and they sought to standardize what they bought and how. The first task with their chemical supply was to address the entire lifecycle of the chemical and to find

a “Tier 1” integrator to deal with it. Raytheon sought a provider who was flexible and then incentivized the provider in a gain sharing arrangement. To date, the program’s performance is impressive: operations are streamlined, the billing process is centralized, and volumes are leveraged to achieve cost savings. They have paid the program back in 6 months and have achieved a 30% savings of the entire chemical spend. They are approaching a 95% on-time delivery rate and are reducing waste.

GW International’s Tamie Mainero introduced her company’s CMS program though its genesis as a distribution and logistics enterprise. Customers began demanding for more services and GW has grown dramatically through its increased chemical management programs. Their services began in the electronics sector and have been developed largely through better information and administration activities. With their customer Toppan Electronics (a large printed wire circuit board facility), they implemented a program that saved \$1 million in their first year and have been reducing costs through inventory management and environmental improvement by 6% per year. By having GW employees on site, they streamline management and centralize the vendor relationships to ensure smooth operations. GW also reduces the costs of waste water treatment by more effectively pulling out the heavy metals and recycling virtually all of the water.

Questions from the moderator and participants ranged from creating process efficiency improvements to getting management support to make a change to CMS. Here is a sample of participants questions and comments.

Q How are CMS teams working with customers to create process efficiencies?

A With both on and off-site management, a customer’s goals become the supplier’s goals. Central data management allows for cross-functional analysis of where waste may be coming from. On site personnel can ensure production lines are running optimally.

Comment: the supplier and the customer are an integrated team – cooperation is the key for the CMS model to work.

Q Sometimes internal corporate culture or resistance to change can thwart the establishment of CMS. We are middle managers, how can we catalyze the change?

A At Raytheon, we had a team and CSP’s help to do the lifecycle analysis. The team presented management with the information on a company-wide scale. Some still want to sabotage and go around the process. It’s important to constantly sell the idea and get the metrics out there.

Q How can the supplier that is brought on board help “sell” the new way to antagonistic employees?

A. Raytheon pulled together an implementation team and brought the naysayers into the process. Our supplier (URS/Radian) came in to train everyone – they had face-to-face rapport.

A At Toppan, GW worked to select a site champion and they help drive what happens at a facility. Some facilities are begging to unload responsibilities, some are more protective of their “turf”. GW wants to improve on their process, not necessarily change the whole process.

Q What advice can you give about the first steps toward creating a CMS program?

A One thing: baseline your costs! (Raytheon).

A Understand total costs – the decision is strategic and visionary and needs to be treated as such (GW)

A I agree, especially about the baselining, upper management support is also required (Radian/URS).

Q What is the level of effort it takes to get a reasonable baseline to bring to management? How long will the baselining take?

A That depends. Is the project intended to cover one facility? Multi-facility? Corporate-wide? It also depends on the current chemical management system. Is there a crisis? Are you operating in emergency mode? First we have an interview with key people to get the data, follow-up, talk to finance. Then CSP crunches the data. It can take anywhere from one month to three or four months.

Designing Your CMS Program

CSP's Tom Votta provided an overview of how to being the evaluation of a facility's chemical footprint and outlined the methodology CSP employs to take pilot companies through the process. There are four steps in CSP's approach:

1. Planning – form an internal team and champion and choose a facility
2. Baseline chemical costs
3. Develop the scope of the program (RfP development, incentive and compensation options)
4. Engage a service provider

With good planning and a solid cost accounting to establish baseline costs, most of the work is done. It is important to understanding that chemical management costs are frequently hidden, underestimated, and, can far exceed the costs of chemical purchases. For every dollar of chemicals bought, the management can range from \$1 to \$10. When a manager sees all of the chemical management activities in one place, it is easier to analyze and determine where waste can be cut and savings maximized.

Silicon Valley Pilot

CSP's John Claussen wrapped up the workshop by outlining the next steps a company can take to understanding the costs of managing their chemicals. Through the Silicon Valley project funded by the US EPA, companies can get CSP consulting services free of charge. Scott Gordon, of Seagate Technologies provided a resounding (and unsolicited) endorsement for CSP's work: **“Two days with CSP and it is worth every dollar so far. The CSP cost model (provided in the CSP *Tools* manual) is amazing. It's worth the investment, it really is.”**

To participate in a CSP pilot, call John Claussen 415-421-3405 or e-mail John@ceaconsulting.com.

To view CMS case studies, for more information on the CMS model or CSP, or to order CSP's *Tools for Optimizing Chemical Management*, visit CSP on-line at www.chemicalstrategies.org.