

## **The EMS Chemical Pharmacy Program**

Over the past several years, Chemical Safety Software has worked with several of its customers to develop a complete program for managing chemical procurement, use and disposal in conjunction with regulatory compliance and reporting. Researchers have immediate access to the chemicals and compounds they need, while inventories of hazardous and regulated materials are monitored, reduced and better controlled.

In many R&D organizations, research activities involve thousands of small quantity compounds that must be readily available. A pharmacy approach centralizes and streamlines the chemical distribution process, organizes chemicals by functional groups, allows for EH&S input and supports the goal of compliance with environmental health and safety permit and reporting requirements.

Chemical Safety Software's Environmental Management Systems (EMS) has successfully implemented Pharmacy Programs in R&D facilities with resounding success by controlling and dynamically sharing critical information throughout the supply chain.

Receipt of chemicals is recorded in EMS by way of an electronic link into companies' Purchasing/Receiving systems, and container labels with individual bar codes are created. As chemists need specific materials for research, they log into Chemical Safety's Intranet chemical request web-site where they can check availability of the required substances. If a chemical was ever ordered by one researcher, but not completely used up, it can be requested by another chemist using an online form.

Researchers may then pick up their orders immediately or have them delivered to a nearby lab staging area within hours. When chemicals are checked out of the pharmacy, container labels are scanned, as are bar-codes for the requesting lab, and the materials are moved to the new location. In this way materials are tracked throughout the research facility and inventory records are kept accurate. Unused amounts of chemicals are returned to the pharmacy's storage bunkers, where they are scanned and recorded as available inventory in EMS.

The entire system is run over a secure network and chemists are given access rights to those substances necessary for their research. If a chemical is not available in the pharmacy, a chemist may order it directly from a pre-approved supplier whose catalog is available on the pharmacy web-site. Materials receipt information can be input to EMS through the Purchasing system link, or directly by one of the preferred chemical suppliers who have interfaced for this purpose.

All other functionality of EMS works in conjunction with this program. Inventory is cross-referenced to MSDS and chemical databases. Federal, state and local

compliance reports as well as user-specified management reports can be generated easily. Users can search for information based on name, synonym, CAS#, ingredient, manufacturer, formula, location and hazard type. MSDS's and chemical inventory levels can be viewed and reports can be created and printed by any authorized employee in the plant. Hazardous materials and waste can be tracked cradle-to-grave, and chemical usage, along with related costs, can be calculated by location, lab and chemist.

The program has resulted in lower costs on a number of fronts. Purchasing and disposal costs have gone down due to the simplified sharing of materials and information. Insurance fees were also reduced because stocks of potentially dangerous materials were lowered.

For more information, visit [www.chemicalsafety.com](http://www.chemicalsafety.com)

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About the Author:

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