

Is Your Inventory Controlling You?

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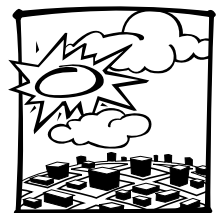
Inventory or stock represent a large portion of the business investment and must be well managed to maximize profits. The most common problems with inventory are that they are uncontrolled, inefficient, costly, and unreliable. Companies usually lean towards keeping inventory levels on the high side to insure stock is available when needed. However, this is a high investment which yields a lower return on the dollar invested.

If workers have more materials to use, they generally use more—companies that adopt material checkout or tracking programs usually experience significant reductions in material use immediately. All inventories should be managed closely to prevent misuse or excess use of supplies. The following practices are recommended to reduce waste and excessive raw material use:

- Do an initial inventory check of on-site materials and quantities, and establish an inventory database to track and manage all inventory and costs.
- Reduce and optimize inventory and safety stock levels.
- Test all outdated materials before disposing. Many materials are still useful well past their expiration dates, if they have been stored properly.
- Establish a material safety data sheet (MSDS) approval system for all materials ordered. Make sure all new materials have been approved by the health and environmental person or someone

with similar knowledge before its brought on site. MSDS approval procedures will eliminate uncontrolled on-site and off-site purchases that may increase regulatory responsibilities or involvement.

- Consolidate product use, or use multi-task products to avoid stocking multiple products for the same job. This will reduce management requirements and promote bulk ordering/pricing opportunities.
- Use just-in-time (JIT) inventory management, to improve operations and minimize wastes.
- Use a first-in/first-out material rotation policy to prevent out-of-date inventory.
- Track material usage to spot specific users or processes accountable for an excessive amount of material use.
- Keep your inventory under lock and key, and establish a material checkout sheet; designate an “inventory management” person to handle material needs after normal hours instead of allowing free access to inventory.
- Standardize material usage by process or job and limit material use accordingly; if more material is needed, require a written statement stating why the excess material is needed. If employees are responsible for all the materials they use, they usually find ways to use less to get the job done.
- Establish and maintain a clear policy of using raw materials only for their intended purpose. This is



especially important with cleaning solvents.

- Train employees in proper raw material and hazardous waste storage and handling procedures.
- Maintain legible labels and receiving dates on all containers.
- Inventory areas should be covered and secure. Uncovered storage areas allow rainwater to contaminate raw materials and may create unnecessary stormwater issues and liabilities. Heat and sunlight can degrade products and increase pressure inside closed containers, creating potentially dangerous situations.
- Order in bulk, reusable containers where feasible.
- Inspect all incoming materials, and reject unusable or questionable products.
- Accept vendor samples only with a guaranteed take-back agreement.

Spills and poor material handling practices result in more hazards to the employee, increased cleanup costs, and record keeping requirements if the spill impacts the environment. Companies should establish procedures to manage these losses. The following practices eliminate or reduce material wastes from spills:

- Use proper dispensing devices to reduce spills—never pour from a large container into a smaller one; use spigots or pumps to transfer materials.
- Track wastes due to spills during raw material transfer, waste handling or storage, or during repairs. Some spills will occur. Hang a clipboard in a handy spot and keep a record of larger spills (when they occur and why).
- Install a curb or dike, or use secondary containment in storage areas to reduce impacts and product losses from spills, and promote easier cleanup with less material usage/loss.
- Segregate materials according to chemical compatibility. Store incompatible materials in separate storage areas if possible, or in secondary containment vessels to prevent contact of incompatibles.

- Inspect storage areas routinely to spot spills or leaking containers.
- Store hazardous materials separately from non-hazardous materials.
- If possible, store flammable materials in an outdoor, covered, and secured building to reduce liability from fire.

Inventory Control Case Study

As Custom Print started looking for ways to reduce its waste, a team of employees took stock of the number of chemicals the company used. Inventory and purchasing records showed over 80 different chemicals on site. Often, the less frequently used products would expire. The money spent on them was wasted, and by law they had to be properly disposed of—another expense. Many more were product samples, often used once and left to clutter the stockroom until they too passed their expiration dates. In addition, the large inventory created extra labor costs. Employees had to order and track each chemical, and ensure compliance with government regulations.

To address these problems, Custom Print assembled a team of press operators, purchasing staff, and maintenance personnel. The team recommended several ways to reduce their excess inventory by using multi-task chemicals, eliminating duplication (in some cases two or three different chemicals were being purchased for the same task), and working with vendors to pick up their unused or partly used samples each time they dropped off new ones. Custom Print continued testing new, promising products, while getting rid of half-used bottles and cans.

These changes reduced the number of chemicals on site from over 80 to just 24—a 70% decrease. Their new inventory program reduced waste by reducing the amount of expired chemicals, potential liability, inventory overhead costs, and other related costs, resulting in an estimated \$5,000 savings per year.



The Small Business Environmental Assistance Program's (SBEAP) mission is to help Kansas small businesses comply with environmental regulations and identify pollution prevention opportunities. SBEAP is funded through a contract with the Kansas Department of Health and Environment. SBEAP services are free and confidential. For more information, call 800/578-8898, send an e-mail to SBEAP@ksu.edu, or visit our web site at <http://www.sbeap.org>. Kansas State University is an EEO/AA provider.