

## Ohio Hazardous Waste

# Notifier

A Publication of Ohio EPA, Division of Hazardous Waste Management

## Saving Money Through Inventory Control and Material Handling

by Helen Miller

*Does your company pay to dispose of materials that have expired, but have never been used?*

*Does your company maintain a lot of infrequently or only partially used product containers?*

If you answered yes to either question, you might want to consider implementing an inventory control program. The objective of inventory control is to minimize material losses and prevent unnecessary hazardous waste generation through routine procedures.

### P2 Success Story

Custom Print, Inc. a 30-employee printer in Arlington, Va inventoried their chemicals and reduced the number of on-site chemicals by 70 percent - from over 80 to 24. To achieve this, the company:

- 1) eliminated different chemicals that were being purchased for the same task,
- 2) identified chemicals that could perform multiple tasks, and
- 3) asked vendors to pick up unused samples each time new ones were dropped off (eliminating the half-used bottles).

These measures saved the company \$5,000 per year.

An Inventory control program saves money by:

- reducing disposal costs of unused materials;
- avoiding analytical tests for "unknowns" in containers; and
- eliminating maintenance of unused inventory.

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Saving Money Through Inventory Control and Material Handling

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## **Saving Money Through Inventory Control** *continued from page 1*

The basics of an inventory control program are:

### **Track your materials.**

- Inspect your deliveries and return any unacceptable materials to the supplier.
- Label and date new materials as they are received.
- Keep records of material usage.
- Inventory materials at least once per year.
- Use the oldest stock first (first-in, first-out policy) to keep materials from expiring.
- Consider using a computer software program to track your inventory.

### **Minimize your inventory.**

- Buy only what you need, remember that disposing of the unused material can cost much more than the the initial investment.
- Implement a “Just-in-Time” system, where inventory immediately moves from receiving to use.
- Order smaller containers of occasionally used materials to reduce disposal of unused material.
- Purchase materials in reusable/recyclable containers.

### **Maintain storage conditions.**

- Maintain proper temperature and humidity.
- Cover and secure storage areas. Uncovered areas allow rainwater to contaminate materials. Heat and sunlight can degrade materials and increase container pressure in a closed container.
- Maintain legible labels on all containers.
- Segregate materials by chemical compatibility. Store incompatible materials in separate storage areas.
- Inspect storage areas routinely for spills and leaks.

### **Set inventory limits.**

- The larger your hazardous material inventory, the greater your chance for spills, fires and exposures. Make sure your emergency personnel and equipment can handle your inventory in the event of a spill or emergency.

### **Reduce the number of similar products used.**

- If you use several types of solvents, consider whether you could use fewer and still get the job done?

### **Substitute non-hazardous materials where possible.**

### **Additional Tips:**

Contact the material manufacturer or supplier to find out if the product can be used past the expiration date. Some products can be, with no noticeable performance reduction. Work with suppliers to take back excess, off-specification or expired products, keeping in mind that this activity may be regulated. To help you determine if the activity is regulated, read our online guidance document, *Product Return Systems Under Ohio Hazardous Waste Rules*.

Use waste exchanges for overstock or unwanted materials. The Ohio Materials Exchange (*OMEx*) maintains and distributes listings of materials available and materials wanted from participants and businesses. There is no charge for this service.

If you have more questions regarding hazardous waste, please contact your *district office* hazardous waste inspector. Our inspectors offer technical assistance to businesses and help them identify ways to generate less waste. Ohio EPA's Office of Compliance Assistance and Pollution Prevention (*OCAPP*) also can answer any questions you have about pollution prevention (P2).

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## References/Resources

P2 Good Housekeeping Techniques fact sheet, Arizona Department of Environmental Quality, [www.azdeq.gov/environ/waste/p2/download/goodweb.pdf](http://www.azdeq.gov/environ/waste/p2/download/goodweb.pdf)

Pollution Prevention Institute, Kansas State University, Publication Integrating P2 Into Inspection, Permitting and Enforcement Processes, Inventory Control Checklist at: [www.sbeap.org/ppi/publications/inventory\\_control\\_checklist\\_replace.PDF](http://www.sbeap.org/ppi/publications/inventory_control_checklist_replace.PDF)

Case Study: [www.customprint.com/casestudy.html](http://www.customprint.com/casestudy.html)



## When Disposal is Unavoidable: What to do with Expired Chemicals

by Rose McLean

Many businesses retain products that they rarely use or samples that they never use. And before they know it, the product or sample expires. Or, it is forgotten about, misplaced or only half-used. Whatever reason you have for not using a product before it expires, you're stuck with the same problem - what do you do with it now?

The [inventory control](#) article in this newsletter gives suggestions that businesses can implement to prevent products from expiring before you are able to use them. When products do expire, there may be a way to reuse and recycle them. However, if you are unable to recycle them, how do you ensure that you dispose of them properly?

If you plan to dispose of the expired chemicals, they become waste subject to hazardous waste evaluation. All wastes generated by a business must be evaluated in accordance with Ohio Administrative Code (OAC) rule [3745-52-11](#) to determine if they are hazardous waste. For a waste to be considered a hazardous waste, it is either listed or characteristic. Listed hazardous waste means that it is listed on one of four lists in the OAC rules, specifically OAC rules [3745-51-30 through 3745-51-33](#). Expired chemicals may be a P or U listed waste. If your waste is not on one of these lists, it could still be hazardous if it displays one of the four characteristics of hazardous waste; ignitability, corrosivity, reactivity or toxicity. Hazardous waste characteristics are identified in OAC rules [3745-51-21 to 3745-51-24](#). You can determine if your waste exhibits a characteristic of a hazardous waste by using [knowledge](#) of the hazardous waste or analyzing a representative sample of the waste. When you choose to analyze the waste, the analysis must be done according to the methods found in OAC rules 3745-51-20 to 3745-51-24.

If the expired chemicals are deemed to be hazardous wastes, you would be considered a hazardous waste [generator](#). Depending on your generator category, there are different [management requirements](#). All hazardous waste must be managed in accordance with the applicable hazardous waste rules for your generator category, some of which include manifesting, storing and transporting. The rules for hazardous waste generators are found in OAC Chapter [3745-52](#). Be aware that the waste must be managed as hazardous waste from the point of generation.

Ohio EPA's Division of Hazardous Waste Management (DHWM) maintains a list of [commercial facilities](#) that accept hazardous waste. Please contact one or more of these facilities to locate an appropriate disposal site for your waste.

If you have questions about hazardous waste evaluation, or about recycling and disposal options, please contact your [district office](#) hazardous waste inspector - or a member of [DHWM's](#) Central Office Regulatory Services Unit.



# How To Properly Manage Your Photo and X-Ray Chemicals

by Dan Sowry

Ohio EPA is often asked by photo and x-ray developers how to properly manage their used and unused chemicals. We encourage you to recycle these chemicals rather than throwing them away. One way to recycle photo and x-ray chemicals is by sending them to another business that can use them. If any *unused* chemicals are sent to another business where they are continued to be used for their intended purpose then they remain products and are not subject to Ohio's hazardous waste rules. You can post your *unused* leftover chemicals online on [Ohio's Materials Exchange](#). If your chemicals have been *used* and can continue to be used without reclamation, and you send them to a business where they are used for their intended purpose, they also remain products and are not subject to Ohio's hazardous waste rules.



If you are unable to use a chemical for its intended purpose and you plan to throw it away, it is a waste. Under Ohio's hazardous waste rules, any business that generates a waste that will be disposed (including developing chemicals) must evaluate the waste to determine if it is hazardous. Developing chemicals can be hazardous for *characteristics* such as ignitability, corrosivity and toxicity (heavy metals such as silver) and/or they can be *listed hazardous wastes*. For more information on waste evaluation and your requirements as they apply to hazardous waste generation, see our online guidance document the [Generator Handbook](#).

Some of the wastes you generate may include silver-contaminated fixers, films and negatives or other wastes that are hazardous. You may be able to recover some of this waste in an on or off-site silver recovery unit. You also may be able to discharge silver recovery chemicals to your publicly owned treatment works (*POTW*). You must have permission from your POTW to do this (as discussed later in this article). If you do either of these things, you can avoid some of the hazardous waste rules. If you don't, then you must send your hazardous waste to a permitted hazardous waste treatment, storage and disposal facility.

Under Ohio's hazardous waste rules, there are reduced requirements for wastes sent off-site for silver recovery and for silver-contaminated wastes that are managed in an on-site recovery unit (see Ohio Administrative Code (OAC) rule [3745-266-70](#)). Under this rule, you are subject to *notification* and *manifesting* requirements (see the rule for details). However, if these wastes are speculatively accumulated [as defined in OAC rule [3745-51-01\(C\)\(8\)](#)], then they are subject to all applicable hazardous waste rules.

If you use an on-site silver recovery unit to recover silver from your waste streams, you are not required to have a hazardous waste permit to operate the unit. But if you store your silver-containing hazardous waste prior to putting it through your on-site silver recovery unit, you must comply with the generator requirements in OAC rule [3745-266-70\(B\)](#). If you send silver-concentrated sludge from the recovery unit off-site for recycling, it is not hazardous waste. Any chemicals generated from the silver recovery unit, however, must be evaluated to determine if they are hazardous and managed accordingly. Ohio EPA maintains a [list of companies](#) that provide silver and film recycling services as well as those that sell recovery equipment.

Rather than sending chemicals generated from your silver recovery unit off-site for disposal, you may be able to discharge them to your POTW. In some cases, wastes are excluded from hazardous waste regulation when properly discharged to a sewer system and mixed with domestic sewage that will be treated in a POTW (see OAC rule [3745-51-04\(A\)](#)). According to OAC rule [3745-3-04\(B\)](#), however, certain waste streams cannot be introduced to a POTW under any circumstances. If your POTW grants you permission to pour your chemicals (including the leftover silver recovery chemicals) down the drain and they are not specifically prohibited from discharge to a wastewater treatment system [as specified in OAC rule [3745-3-04\(B\)](#)], then such chemicals would not be subject to Ohio's hazardous waste rules.

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It is important to note that many POTWs have adopted rules that control the amount of silver discharged to them. In some cases, this requires you to use a silver recovery unit to remove the silver from the wastewater before discharging it. Other activities such as wastewater monitoring and record keeping may also be required by the POTW. **Therefore, it is very important that you contact your local POTW before discharging any process related wastewater to them.** You can contact your Ohio EPA *district office's* Division of Surface Water or *local pretreatment coordinator* for more information on the wastewater discharge and permitting requirements. If you are unsure who your local POTW contact is, you can also contact Ohio EPA's Central Office *Division of Surface Water* for assistance.

Hazardous wastes that do not contain silver or that are not able to be properly discharged and subsequently treated by your POTW must be sent to a permitted hazardous waste treatment, storage and disposal (TSD) facility. Ohio EPA maintains an online listing of *commercial facilities that accept hazardous waste*.

For more information on the proper management of your photo and x-ray developing chemicals, refer to the *online documents* posted on Ohio EPA's Office of Compliance Assistance and Pollution Prevention Web site. 

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## Updating U.S. EPA ID Information

by Paula Canter

Generators must obtain a U.S. EPA identification number before shipping hazardous waste off-site. They do so by submitting a notification of regulated waste activity using *Ohio EPA Form 9029, RCRA Subtitle C Site Identification*, commonly referred to as the Site ID form. The Site ID form also is used as part of the *annual hazardous waste report* (Annual Report), which is submitted no later than March 1 each year by large quantity generators (LQG) and treatment, storage, or disposal facilities (TSDs). However, unless a site changes ownership, there is no rule which specifically requires re-notification. If the site hasn't changed ownership or filed a recent Annual Report then the information DHWM has may be outdated.

Updating your site's information is important for many reasons, with the most critical listed below.

- *Program planning* - DHWM and U.S. EPA would like to use Site ID information to determine how many sites we regulate and at what level. Unfortunately, many generators have gone out of business or changed their regulatory status and never informed us. As a result, there are more LQGs in the database than actually file Annual Reports. Accurate database information helps Ohio EPA determine potential impacts of proposed rule changes.
- *Public access* - U.S. EPA ID information and site-based event tracking for the RCRA program are stored in a database owned by U.S. EPA and jointly shared with the states. U.S. EPA extracts data and supplies it to the public on its Web site, with the most well known access point being the Envirofacts Data Warehouse [www.epa.gov/enviro](http://www.epa.gov/enviro). Anyone who wishes to view certain information on sites that are regulated by U.S. EPA and the states can do so. It is in the regulated community's best interest to ensure that the data is accurate.
- *Requests for information* - DHWM is often asked to supply information on the history and compliance status of specific sites. If the site was never inspected, the only information available may be from the initial Site ID form. Since U.S. EPA ID numbers are site-specific, site activity can be tracked over time. RCRA is based on tracking wastes from cradle to grave, so knowing what wastes were generated at a specific site can help explain possible sources of contamination. Consultants and Agency staff routinely do site assessments using RCRA data.

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## When should you re-notify?

If a site changes ownership, the new owner, who is now the generator, is required to re-notify Ohio EPA using the Site ID form.

If the site changes its company name, regulated activities (for example, generator status), or goes out of business, a subsequent notification is highly recommended. To deactivate a U.S. EPA ID number, send a written request to DHWM and list the U.S. EPA ID number. All other updates require use of the Site ID form.

The Site ID form and the notification of regulated waste activity *instruction booklet* is available in Adobe Acrobat format.

For more information, contact **Tammy McConnell** at (614) 644-2922.

The submittal of an Annual Report can also be a subsequent notification if the Site ID form includes waste codes. The information collected on Annual Report Site ID forms is forwarded to U.S. EPA and stored with the notification data. If a site was an LQG in any one month during the calendar year, the Annual Report is required. For more information, visit the *Annual Report* Web page or contact **Tammy Heffelfinger** at (614) 644-2954.

<p><b>MAIL THE COMPLETED FORM TO:</b> Ohio EPA, DHWM, P.O. Box 1049, Columbus, OH 43216-1049</p>	<p>Ohio Environmental Protection Agency <b>RCRA SUBTITLE C SITE IDENTIFICATION</b></p>	<p>For Ohio EPA Use Only</p>	
1. Reason for Submittal	<p><b>Reason for Submittal:</b></p> <ul style="list-style-type: none"> <li>* To provide initial notification (to obtain an EPA ID Number for hazardous waste, universal waste, or used oil activities).</li> <li>* To provide subsequent notification (to update site identification information).</li> <li>* As a component of a First RCRA Hazardous Waste Part A Permit Application.</li> <li>* As a component of a Revised RCRA Hazardous Waste Part A Permit Application (Amendment # _____)</li> <li>* As a component of the Hazardous Waste Report for the year _____.</li> </ul>		
2. Site EPA ID No.	EPA ID Number:		
3. Site Name	Name:		
4. Site Location Information	Street Address:		
	City, Town, or Village:	State: OH	
	County Name:	Zip Code:	
5. Site Land Type	Site Land Type: * Private * County * District * Federal * Indian * Municipal * State * Other		
6. North American Industry Class, System (NAICS) Code(s) for the Site	A.	B.	
	C.	D.	
	7. Site Contact Person:		
	<p>First Name: _____ MI: _____ Last Name: _____</p> <p>Phone Number: _____ Phone Number Extension: _____</p> <p>E-Mail Address: _____</p> <p>Fax Number: _____ Fax Number Extension: _____</p> <p>Street or P.O. Box: _____</p> <p>City, Town or Village: _____</p> <p>State: _____ Country: _____ Zip Code: _____</p>		
8. Legal Owner and Operator of the Site List Additional Owners and/or Operators in the Comment Section or on another copy of this form page.	A. Name of Site's Legal Owner:		Date Became Owner (mm/dd/yyyy):
	Owner Type: * Private * County * District * Federal * Indian * Municipal * State * Other		
	Street or P.O. Box:		
	City, Town, or Village:		Owner Phone #:
	State:	Country:	Zip Code:
	B. Name of Site's Operator:		Date Became Operator (mm/dd/yyyy):
	Operator Type: * Private * County * District * Federal * Indian * Municipal * State * Other		
	Street or P.O. Box:		
	City, Town, or Village:		Operator Phone #:
	State:	Country:	Zip Code:

EPA 9029 (Revised 12/03)



# Ohio EPA's New Answer Place

by Pam Allen

In December 2005, Ohio EPA launched a frequently asked questions Web tool known as the Answer Place. The Answer Place provides quick, easy access to information and allows you to pose questions directly to Agency staff. The development of this site is one of the ways Ohio EPA is working toward achieving Director Koncelik's goal of improving the Agency's compliance assistance efforts.

You can access the Answer Place by clicking on the logo from *Ohio EPA's* main Web page. Once you arrive at the site, you will notice that there are many questions and answers already in the system, searchable by keyword. If you cannot find the information you are looking for in the existing data, you can use the "Ask a Question" feature to pose a question. When you submit your question, it is forwarded to the appropriate Ohio EPA staff for a response. Another feature of the Answer Place is the ability to create a personal login, which allows customers to track questions they've viewed or submitted and to get automatic e-mail updates if a particular question/issue of interest is updated.

Ohio EPA will keep updating the Answer Place with new information as we get frequent questions from our customers. If you have questions about environmental requirements, we encourage you to stop by the Answer Place. 



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## Solvent Contaminated Rags and Wipers

by Harry Sarvis

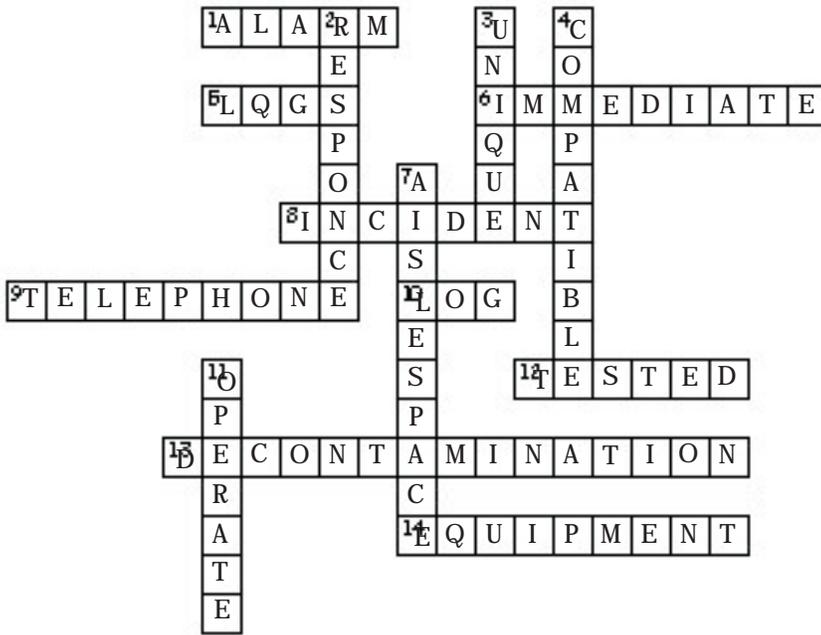
Over the past several years, the Division of Hazardous Waste Management has had a written policy on the management of solvent-contaminated rags and wipers. In the policy, we indicated that rags or wipers that are contaminated with a solvent constituent that is a listed hazardous waste solvent (F001 through F005) must be regulated as a listed hazardous waste when disposed of regardless of how the solvent got on the rag or wiper.

As part of our periodic policy review as required by state law, we recently reviewed this policy and concluded that rags and wipers contaminated with a listed solvent constituent do not fall within the listing description for spent solvents. As a result, we have rescinded the policy. Solvent-contaminated rags and wipers which are contaminated with listed solvent constituents are not considered listed hazardous waste except in situations where the rag or wiper is used to clean up a spill of a used solvent that is a listed hazardous waste; those rags or wipers become a listed hazardous waste.

Even though the Division of Hazardous Waste Management no longer considers solvent-contaminated rags and wipers as being listed hazardous waste, if you generate solvent-contaminated rags or wipers, and do not have them laundered, you will still need to evaluate this waste stream to determine whether they would be a characteristic hazardous waste for purposes of storage, transportation, and disposal.

If you have the rags or wipers laundered, they would not be regulated. The rags or wipers cannot contain free liquids and they must be sent to a commercial laundry which is subject to regulation under the Clean Water Act or a dry cleaner for cleaning and reuse.

If you have any questions, please feel free to contact our staff in the regulatory services unit at (614) 644-2917. 



Ohio Hazardous Waste

## Notifier

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