Are You Transporting Used Oil Off-Site to be Burned for Energy Recovery?

If your business generates and/or transports used oil off-site to be burned for energy recovery, you may be subject to the used oil regulations found in Ohio Administrative Code (OAC) Chapter 3745-279. How Ohio’s used oil regulations apply to generators, transporters, and burners of used oil that is going to be burned for energy recovery depends on whether or not the used oil meets the specifications found in OAC rule 3745-279-11 (see http://www.epa.state.oh.us/dhwm/dhwmrules/279-11.pdf).

Used oil that has been proven to meet these specifications and is burned for energy recovery is not subject to Ohio’s used oil requirements. However, the person making the claim that the used oil meets the specifications must keep records of the analysis that the used oil meets the specification and a record of all shipments. Used oil which does not meet the specifications is called “off-specification” used oil.

Off-specification used oil transported off-site to another business that burns it for energy recovery must be burned in a boiler or an industrial furnace as described in OAC rule 3745-279-61 (see http://www.epa.state.oh.us/dhwm/dhwmrules/27961.htm). Off-specification used oil transported off-site to another person’s business cannot be burned for energy recovery in a space heater.

Therefore it is important for used oil generators that self-transport their used oil to be burned for energy recovery off-site to know the energy recovery device(s) used to burn the used oil. However, you can burn off-specification used oil that you generate or that is generated by household do-it-yourselfers in a space heater that you own, provided that the space heater has a capacity of less than 0.5 million BTU per hour and you vent it to the outside air. You can also burn used oil that you generate at other businesses you own.

Additionally, you can transport amounts of 55 gallons or less without complying with the used oil transporter requirements. But if you transport more than 55 gallons at a time, you must comply with the used oil transporter requirements in OAC rules 3745-279-40 through 3745-279-47 (see http://www.epa.state.oh.us/dhwm/dhwmrules/index1.htm).

continued on page 2...
2.

Can Construction, Renovation or Demolition Debris be a Hazardous Waste?

Debris generated from construction, renovation or demolition of buildings (with a few exceptions) that is destined for disposal is a waste as defined in Ohio's hazardous waste rules. Anyone who generates a waste must evaluate that waste to determine if it is a hazardous waste. If the debris is generated from remodeling or demolition of a household, it is exempt from regulation as a hazardous waste and may be disposed of in a construction and demolition debris (C&DD) landfill.

In addition, wastes generated during the abatement of lead-based paint at households is exempt from regulation as a hazardous waste (please see our fact sheet on lead abatement wastes at http://www.epa.state.oh.us/dhwm/pdf/LeadAbatementFactsheet.pdf). You must evaluate non-household waste generated from demolition, renovation or construction before disposal. Your evaluation may include any knowledge you have concerning the materials that were used in construction of the building and analyses of representative samples of the waste.

If you would like more information about waste evaluation please see the Summer 2002 “Ask the Inspector” article at http://www.epa.state.oh.us/dhwm/pdf/Summer2002Notifier.pdf.

If you would like to know more about representative sampling of construction, demolition and renovation waste please refer to the following Web sites:


Lead-based paint is the most common contaminant found in buildings that could cause waste to be defined as hazardous. Other components that may also be hazardous and should be removed prior to demolition are fluorescent lamps and thermostats that contain mercury, another hazardous constituent. We suggest that you consider having both of these components recycled. Older fluorescent light fixtures may contain ballasts that contain PCBs. Steel structural components, lead pipes and electrical components may also be recycled as scrap metal without regulation under the hazardous waste rules. When you recycle these items you are subject to fewer regulations.

We have also recently become aware that a polymer marketed as TARTAN® by the 3M company contains mercury that can potentially be hazardous waste because of its mercury content. This polymer was used in the 1970s and 1980s for gymnasium floors and tracks. If you are demolishing a school or recreation center, you should take care to evaluate any gymnasium floors that are present.

Used Oil continued from page 1

If your business transports used oil off-site to a used oil burner or a used oil processor/rerefiner, you are a used oil transporter. As a used oil transporter, you must obtain a U.S. EPA identification number from Ohio EPA, determine if the used oil is on- or off-specification, comply with all Department of Transportation requirements, manage all residues from transporting, and retain all records of shipments and deliveries. It is possible, however, to transport used oil and not be subject to these requirements if you are transporting used oil on-site, or if you are the generator of the used oil and are transporting less than 55 gallons of used oil to a collection center or aggregation point.

If you transport or have someone else transport a shipment of off-specification used oil directly to a used oil burner, you are a used oil fuel marketer. Used oil fuel marketers must obtain a U.S. EPA identification number from Ohio EPA, must only initiate shipments to a used oil burner that has a U.S. EPA identification number, must only send shipments to a used oil burner who burns the used oil in an industrial furnace or boiler, and must keep records of each shipment of used oil to that burner.

For additional information on Ohio’s used oil regulations, please call (614) 644-2917 and ask to speak with someone in the regulatory and information services unit or visit our Web page to view our three used oil fact sheets at http://www.epa.state.oh.us/dhwm.
Electronic Records

In the past few years, many businesses have replaced paper record keeping with electronic record keeping. Recently, hazardous waste inspectors have been receiving some questions from waste handlers and facilities regarding electronic record keeping. Most questions have focused on the acceptability of storing compliance records electronically.

Background

Currently, Ohio EPA accepts Generator Annual Reports, Facility Annual Reports and Annual Ground Water Monitoring Reports electronically in a prescribed format. Some handlers continue to track and document compliance-related activities on paper, others use a mix of both paper and electronic record keeping. Some treatment, storage and disposal (TSD) facilities are using bar-coding systems that allow our inspectors to determine the location and disposition of a specific container within a regulated unit as required by the operating record rule.

According to hazardous waste field inspectors, some of the electronically-maintained records include:

- **waste analysis records** (waste profiles, analytical laboratory reports for TSD facilities)
- **waste evaluation records** (analytical laboratory reports, material safety data sheets (MSDS) for waste handlers)
- **waste inventory records** (logs for tracking the duration of wastes being stored, barcoding systems for tracking wastes managed at a TSD facility)
- **personnel training records** (dates of required annual training and list of attendees)
- **inspection records** (inspection of regulated units and required emergency equipment)
- **waste shipment records** (manifests, land disposal restriction (LDR) notifications, tolling agreements)
- **customer information** (type of industry, facility contacts, billing invoices for TSD facilities)
- **ground water monitoring data** (quarterly and annual report information)

Current Electronic Regulatory Initiatives

There are currently several regulatory initiatives addressing electronic record keeping that waste handlers, facilities and inspectors should keep updated on because they may impact how records are maintained in the future.

**Uniform Electronic Transactions Act (UETA)**

As of December 2002, 41 states have enacted UETA. UETA became effective in Ohio in 2000. The purpose of UETA is to provide for the regulation of electronic records and electronic signatures. It gives electronic signatures and records the same validity and enforceability as manual signatures and paper-based transactions if the requirements of the law are met. The Ohio Department of Administrative Services (DAS) promulgated OAC rule 123:3-01-1 to clarify the obligations of state agencies under the statute. The statute and rule together establish a security procedure which requires state agencies to report electronic transactions to DAS, conduct a security assessment of each set of proposed similar electronic transactions, use minimum technology standards and/or security procedures that are appropriate for the levels of security as determined by the security assessment, obtain DAS approval for its proposed procedures or seek a waiver, and establish and maintain documented security policies and procedures. UETA applies to many transactions between parties who agree to conduct their business electronically.

However, the rule applies only to electronic transactions involving a state agency which also: facilitate access to restricted information; purchase, sell or lease goods, services or construction; transfer funds; facilitate the submission of an electronic record or electronic signature required or accepted by a state agency; or create records upon which the state of Ohio or another person will reasonably rely including but not limited to formal communication, letters, notices, directives, policies, guidelines and any other record that is formally issued under a signature.

continued on page 4...
Electronic Records continued from page 1

**Cross-Media Electronic Reporting & Record Keeping Proposed Rule (CROMERR)**

This proposed rule would provide the legal framework for electronic reporting and record keeping under most of U.S. EPA's environmental regulations. The initial proposed rule comment period ended February 27, 2002. Under CROMERR, U.S. EPA will have to approve each state system for managing electronic reports, presenting each state with the potential of having to revise or even replace existing systems.

However, CROMERR will not create any new authority for U.S. EPA oversight of state programs. After analyzing initial comments on the proposed rule, U.S. EPA decided to separate the electronic reporting from the electronic record keeping. Currently, the states and U.S. EPA are focusing on developing guidance addressing the electronic reporting aspect.

After addressing the electronic reporting, they will move on to the electronic record keeping issues. May 2003 is the target date for promulgating the electronic reporting rule. Implementation guidance will be made available for review by state participants shortly after the final rule is published.

**Electronic Manifesting Proposed Rule**

On May 22, 2001, U.S. EPA proposed a rule giving waste handlers who are required to use the manifest form the option to complete, send, and store this information electronically. This rule also proposed changes to the manifest. U.S. EPA proposed these changes to reduce the paperwork burden related to the hazardous waste manifest provisions, and in response to many requests to streamline and update the hazardous waste tracking system. The public comment on this rule ended July 30, 2001.

Currently, the rule is being split into two parts. The first part, that addresses changes to the manifest is expected to be finalized in late 2003. The portion addressing electronic manifesting is undergoing more analysis and is expected to be finalized in late 2004 or early 2005.

It is important to note that once CROMERR is finalized, there may be discrepancies between UETA and CROMERR that will need to be resolved.

**Commonly Asked Questions**

1. **Can a waste handler/ TSD facility store compliance records electronically?**

   Yes, this is an acceptable format to demonstrate compliance with OAC requirements. However, the handler must be able to produce a hard copy of documents required to be kept upon the request of Ohio EPA, unless Ohio EPA has, prior to accepting the electronic record, had the transaction approved or waived by DAS.

2. **How should I handle enforcement and/or compliance e-mail correspondences?**

   Submittals regarding compliance or enforcement must be made on paper, and any e-mail exchanged regarding enforcement or compliance or contracting matters must be followed by hard copy.

   Paper copies are currently the most widely used format in which compliance-related information is supplied to our inspectors. Currently, file cabinets containing paper copies remain the primary data management system for the Agency.

   When the public completes a file review, hard copies of all documents should be in the file for review. It is anticipated that this will change over time with the implementation of Ohio EPA's electronic information management system.

   While Ohio EPA cannot dictate to a facility the manner in which it stores its business records, the Agency cannot engage in certain electronic transactions without complying with the DAS approval or waiver procedure.

   Any facility that requests “paperless” maintenance of its operating record, for example, needs to be informed that until Ohio EPA has obtained the appropriate DAS approval or waiver, the facility will still be required to submit a paper copy on request. Until the application of UETA and its rule are fully understood and implemented, our approach will continue to be to require submittals of paper copies in compliance or enforcement matters, and that any e-mail exchanged regarding enforcement, compliance or contracting matters be followed by hard copy.

   DHWM will continue to monitor the development of various federal and state initiatives and the impacts they may have on our current information management systems, as well as those planned for the future. As new rules and procedures are adopted we will keep you updated. Please contact Jeff Mayhugh or Helen Miller at (614)644-2917 or your inspector with any questions.
In 2000, the Division of Hazardous Waste Management (DHWM) and the Office of Pollution Prevention (OPP) conducted a Pollution Prevention (P2) Assessment at Mill’s Pride, a manufacturer of hardwood kitchen cabinets located in Waverly, Ohio. The assessment focused on the company’s coating application processes which generated large quantities of hazardous waste spent solvents and coatings, as well as spent rags and paint filters.

A recent followup call to the company revealed that several P2 projects were implemented in mid-2002 as a result of our assessment, and that the company will have realized a savings of approximately $472,000 in the first year after making improvements. These are summarized below.

Ohio EPA identified five suggestions for improving efficiency on several of Mill’s Pride’s coating lines by decreasing over spray on cabinet parts that were being coated. Based on these suggestions, Mill’s Pride chose to install new reciprocators on one of their coating lines.

The reciprocators are a component of the spray gun that has an electric eye which “reads” the edges of the boards, automatically shutting off the spray at the edge of the board. This decreases the amount of over spray that occurs on the coating line.

As a result, Mill’s Pride has increased the transfer efficiency of their coating process by an estimated 35 percent, resulting in a similar reduction in the volume of waste generated by the company, as well as decreasing the volume of raw materials the company has to purchase for coating and cleanup.

Mill’s Pride is now generating 33 fewer drums of hazardous waste solvents and coatings each month, for an estimated savings of $27,720 per year in hazardous waste disposal costs. The purchase of 35 percent less stain, top coat, and sealer amount to a savings of $432,000 per year. Total annual savings from waste disposal and raw materials as a result of installing new reciprocators is approximately $460,000 per year.

The estimated environmental benefit of reducing coating losses is a 30 percent reduction in total annual volatile organic compound (VOC) emissions, or an annual reduction of 137 tons of VOCs.

Ohio EPA also suggested that Mill’s Pride replace disposable filters used in two paint booths with reusable filters, and replace disposable rags used for cleanup with reusable rags.

Together, these two waste streams resulted in the generation and disposal of 14 drums of hazardous waste per month. The company found an industrial launderer who recovers spent solvent from rags.

Mill’s Pride also purchased plastic reusable filters for one manual paint booth although they found they were unable to apply reusable filters to the other booth due to the moisture content of their coatings. As a result of these changes in rag and filter use, and the increased life of the disposable filters due to decreased over spray, the company now manifests only five drums of hazardous paint filters per month, and has estimated that it saves $11,600 per year in purchase and disposal costs.

Mill’s Pride continues to evaluate alternative cleaning solvents. Alternative solvents could increase environmental benefits by decreasing air emissions, as well as decrease operating and disposal costs.

Also, based on recommendations made in the P2 assessment report, Mill’s Pride has formed a “continuous improvement” work team which meets once per week with the goal of looking at all production processes in order to reduce costs and waste. The team is actively working to identify further reductions in solvent losses, waste generation and other losses on the finish line.

Written by: Donna Goodman, DHWM-SEDO and Debbie Hannah, Mills Pride
Ask the Inspector:

**Q.** Will my facility be cited for potential violations if we have fire extinguishers but no water supply in our hazardous waste storage building?

Not necessarily. According to Ohio Administrative Code (OAC) rule 3745-65-31 (see [http://www.epa.state.oh.us/dhwm/dhwmrules/6531.htm](http://www.epa.state.oh.us/dhwm/dhwmrules/6531.htm)), all facilities must be maintained and operated in such a way to prevent releases of hazardous waste to the air, soil, or surface water which could threaten human health or the environment. OAC rule 3745-65-32 specifies required equipment including communication systems (alarms), phones or two-way radios, fire extinguishers, spill control equipment, and water spray systems unless none of the hazards posed by the hazardous waste handled at the facility require a particular kind of safety equipment (see [http://www.epa.state.oh.us/dhwm/dhwmrules/6532.htm](http://www.epa.state.oh.us/dhwm/dhwmrules/6532.htm)).

For instance, if your hazardous waste reacts violently with water, overhead water sprinklers would only worsen the situation. In this case, if fire extinguishers are to be used in lieu of water sprinklers but in conjunction with other equipment, the fire extinguishers must be compatible with the hazardous waste managed at your facility.

**Q.** Does the registered, independent Professional Engineer (PE) who is required to certify such items as hazardous waste tank assessments and closure certifications need to be registered in Ohio?

Yes, the engineer required to certify the construction, repair or operation of certain hazardous waste management units and the completion of closure must be registered with Ohio’s Engineers and Surveyors Board. According to Ohio law, “no person shall practice or offer to practice the profession of engineering . . .unless such person has been registered. . .under this chapter. . .”, (Ohio Revised Code (ORC) section 4733). Additionally, the definition of “professional engineer” provided in Ohio law includes the criteria that such a person be registered under ORC section 4733. It is important to note that the “practice of engineering” is a defined term under ORC 4733.01.

Furthermore, due to the passage of Ohio H.B. 337 (effective August 7, 2002 ), all public agencies in Ohio have the authority and responsibility to reject engineering plans not prepared by a PE. This provision of Ohio law can be found in ORC section 4733.23. For more information on PE requirements, please contact Ohio’s Engineers and Surveyors Board (614-466-3651, [www.ohiopeps.org/](http://www.ohiopeps.org/)).
Motor Vehicle Salvage Yard Initiative

Background

In July 2002, Central District Office’s (CDO) Division of Hazardous Waste Management (DHWM), in cooperation with Ohio EPA’s Small Business Assistance Office (SBAO) and the Ohio Auto and Truck Recyclers Association (OATRA), began a campaign to inspect and provide compliance assistance to owners and operators of vehicle salvage yards. Although facilities in this sector are rarely subject to hazardous waste inspections, they have significant potential for environmental harm if waste is poorly managed.

As a first step, SBAO tried to identify the universe of salvage yards, using resources such as the yellow pages on CD-ROM and DHWM inspection records. In addition, Ohio’s Bureau of Motor Vehicles (BMV) provided a mailing list from their database of licensed vehicle salvage yards (771 statewide, 69 in the Central Ohio area.)

During the development of the initiative, DHWM and SBAO staff met with OATRA leadership and toured three salvage yards. Information gathered from the initial site visits was used to create an in-house training session to help familiarize the inspection staff with the auto recycling industry. As part of this training, DHWM coordinated information sessions with program staff from the divisions of solid and infectious waste management (DSIWM), air pollution control (DAPC), and surface water (DSW). These sessions provided the DHWM inspectors with some basic cross-training to identify potential compliance issues related to scrap tires, air and storm water management.

DHWM developed a special checklist to help the inspectors gather data on various aspects of environmental compliance, including management of automotive fluids, batteries, tires, and wastewater. In addition, SBAO developed and published a compliance guide, “Environmental Compliance Guide for Motor Vehicle Salvage Yards” (October, 2001). Before any inspections were conducted, the SBAO did a mass mailing of the compliance guidebook to salvage yards statewide.

Finally, Ohio EPA’s Chris Cotton and SBAO’s Laurie Stevenson and Kirk Nozinger produced a video titled “Best Management Practices for the Auto Recycling Industry,” which was funded by a grant from the Ohio Environmental Education Fund. The video will be distributed directly to salvage yards statewide as another compliance tool.

It promotes simple, low-cost best management practices (BMPs) that can be used at salvage yards to achieve environmental compliance and stay profitable.

Table 1: Salvage Yard Statistics

<table>
<thead>
<tr>
<th>Material</th>
<th>Initiative Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Used Oil</td>
<td>60% had labeling violations; 12% had release violations and completed cleanup after the inspection; 48% do not remove and/or drain oil filters</td>
</tr>
<tr>
<td>Fuel</td>
<td>All facilities drained and reused fuel from vehicles</td>
</tr>
<tr>
<td>Mercury Switches</td>
<td>NO SALVAGE YARD COLLECTED MERCURY SWITCHES</td>
</tr>
<tr>
<td>Tires</td>
<td>52% resell or recycle all of their scrap tires; 20% resell some tires but shred the rest with the vehicles; 28% report shredding all incoming tires with the vehicles</td>
</tr>
<tr>
<td>Batteries</td>
<td>All facilities recycled batteries, however, there were some labeling/containment issues</td>
</tr>
<tr>
<td>Storm water Permits</td>
<td>Not enough information was collected to determine if sites had obtained requisite storm water permits</td>
</tr>
</tbody>
</table>
Inspection Results

Inspectors targeted 40 out of the 69 licensed salvage facilities for inspection. To date, DHWM inspectors have visited 33 vehicle salvage yards. Of these, 25 received full compliance evaluation inspections. The other facilities were closed or not operating active salvage facilities. Table 1 on page 7 presents a summary of the findings of DHWM’s inspections to date. Violations were found at 60 percent of the facilities inspected. The most common compliance issues included improper used oil container labeling and used oil releases to the environment.

SBAO’s mailing of the guidebook appeared to have some benefit in increasing awareness of the regulations. A number of salvage yard owners mentioned receiving it prior to their inspection and some had already taken steps to improve their compliance based on information in the guidebook.

However, CDO estimates that many of central Ohio’s salvage yards are not licensed through BMV. In addition, OATRA, which also provides environmental compliance information, represents only 20 percent of the industry, with approximately 120 members. It’s anticipated that salvage yards which are not licensed or affiliated with OATRA receive little or no environmental compliance information. DHWM expects their incidence of non-compliance with environmental rules would be higher.

One of the goals of the initiative was to identify where vehicle dismantling was occurring (indoors versus outdoors) and to promote vehicle dismantling inside buildings through discussions during the inspection. Inspectors found that 40 percent of the sites visited were already working inside.

Over half (56 percent) of the facilities inspected by CDO, however, conducted at least some portion of their dismantling/fluid drainage process outside in an uncovered area. Additionally, at least seven of these sites were conducting such activities over unpaved areas. The graph above provides information regarding the location of dismantling operations at these facilities.

One of the challenges that still remains is getting compliance-related information to those facilities which are currently not licensed and/or not affiliated with OATRA. These facilities may ultimately be identified through Ohio EPA’s complaint inspection process or discovered while inspectors are in the field. Once identified, our compliance resources can be made available to them.

Additional information about the initiative can be obtained from Lundy Adelsberger in DHWM/CDO at 614-728-3879. If you would like to receive copies of the compliance guide or video, contact SBAO at 614-728-8573 or 800-329-7518. OATRA’s Columbus, Ohio phone number is 614-469-0677.

<table>
<thead>
<tr>
<th>Inside, paved</th>
<th>Outside, covered, paved</th>
<th>Outside, uncovered, unpaved</th>
<th>Combination inside and outside uncovered</th>
<th>Total number with some portion outside uncovered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Facilities</td>
<td>14</td>
<td>12</td>
<td>10</td>
<td>8</td>
</tr>
</tbody>
</table>

Future Plans

Over the next several months, DHWM will be inspecting the remaining Central Ohio salvage yards. Inspectors will also be revisiting some salvage yards that were already inspected in an effort to determine the effectiveness and lasting impact of the initiative. DHWM hopes that in addition to correcting violations, many salvage yard owners have become more aware of the importance of environmental compliance and good fluid/waste management practices. As many are finding, compliance is not very costly and in reality it makes good business sense!
DHWM's Data Validation Process

The Division of Hazardous Waste Management (DHWM) has developed a data validation process to help inspectors evaluate analytical data submitted by laboratories used by the regulated community as well as the DHWM contracted lab. While this guidance is mainly intended for DHWM’s inspectors, you may find it valuable for your data collection activities. DHWM uses environmental data from a number of sources to support its decision-making processes. For example, DHWM often reviews waste evaluation data that will be used to make decisions on how to properly manage waste. Data generated by other activities that may require data validation include data from site closure activities and facilities undergoing corrective action.

Data validation may seem to require a great deal of chemistry knowledge. Actually, it is a process for reviewing data generated by a laboratory and accepting it, qualifying it or rejecting it on the basis of established criteria. The criteria used to assess data are based upon either Quality Control requirements defined by the laboratory or requirements defined by U.S. EPA. Data validation is therefore an important part of a Data Quality Objective process that is necessary to assure that data is generated and is acceptable for its intended purpose. In order to meet the needs of DHWM’s inspectors, DHWM developed a Tier I Data Validation Manual.

DHWM's guidance contemplates a three-tiered process for examining analyses of volatile and semi-volatile organic compounds and inorganic elements in waste, soil and water matrices. The Tier I evaluation examines environmental data for technical holding times and common Quality Assurance/Quality Control (QA/QC) parameters such as laboratory blank and matrix spike results. Of particular interest in this tier are sections on how to examine data generated from hazardous waste characteristic tests, such as the Toxicity Characteristic Leaching Procedure (TCLP).

A Tier II evaluation, currently in development, will consist of examining additional QA/QC information beyond the Tier I evaluation. The Tier II evaluation will review calibration and laboratory control sample information. Tier III will be required on an as need basis and is primarily intended for litigation support. The activities in this tier will consist of expert witness testimony.

The DHWM guidance currently available for review consists of a manual and appendixes that cover the first tier of the data validation process. A checklist is included in the appendixes that can aid a reviewer through the Tier I process. In the future, a Tier II checklist will be available for comment.

The guidance, Tier I Data Validation Manual is available by accessing DHWM’s Web page at http://www.epa.ohio.gov/dhwm. Inquiries concerning the availability of the document should be made to Angela Scott-Owens at 614-644-2944. Comments may be submitted to the attention of Erik Hagen, Ohio EPA, DHWM, 122 South Front Street, Columbus, Ohio, 43216-1049.