

**Construction and Demolition Waste and Recycling  
Frequently Asked Questions**

**CONSTRUCTION AND DEMOLITION TOPICS**

Certain construction and demolition (C&D) waste management activities, including burning and burying the waste, are prohibited or restricted because C&D waste may contain lead paint, preservatives, mercury, asbestos or other toxic pollutants. When it is improperly managed it may affect the health of those in the area as well as the environment.

Following is a list of C&D waste questions that Michigan Department of Environmental Quality (MDEQ) staff regularly get asked. The focus of these frequently asked questions (FAQs) is on regulations overseen by the Waste and Hazardous Materials Division (WHMD) but other program information is provided when known. Hopefully these FAQs will help Michigan residents and companies properly handle C&D waste and more easily divert and recycle waste in compliance with environmental regulations. This document will be updated with new questions or when recycling opportunities change.

*Put your computer's cursor over the topic and then click to get information*

<b>HOUSEHOLD RELATED TOPICS</b>		<b>C&amp;D BUSINESS RELATED TOPICS</b>		
<a href="#"><u>BURNING ON-SITE</u></a>		<a href="#"><u>BURNING ON-SITE</u></a>		
<a href="#"><u>BURYING ON-SITE</u></a>		<a href="#"><u>BURYING ON-SITE</u></a>		
<a href="#"><u>LANDFILLING/ INCINERATING</u></a>		<a href="#"><u>LANDFILLING/ INCINERATING</u></a>		
Handling specific materials →	<a href="#"><u>ASBESTOS</u></a>	<a href="#"><u>RECYCLING OVERVIEW</u></a>		
	<a href="#"><u>CARPET AND PADDING</u></a>	<a href="#"><u>RECYCLING WITH PERMIT</u></a>		
	<a href="#"><u>CONCRETE, BRICK, AND PAVEMENT</u></a>	<a href="#"><u>RECYCLING WITHOUT A WHMD PERMIT</u></a>		
	<a href="#"><u>DRYWALL</u></a>	Recycling specific materials: →		<a href="#"><u>DRYWALL</u></a>
	<a href="#"><u>PAINTS AND LEAD</u></a>			<a href="#"><u>CONCRETE, BRICK, OR PAVEMENT</u></a>
	<a href="#"><u>SCRAP METAL</u></a>			<a href="#"><u>SCRAP METAL</u></a>
	<a href="#"><u>SHINGLES</u></a>		<a href="#"><u>SHINGLES</u></a>	
<a href="#"><u>WOOD</u></a>	<a href="#"><u>WOOD</u></a>			
		<a href="#"><u>TRANSPORTING C&amp;D WASTE</u></a>		
		<a href="#"><u>DEMOLISHING, DECONSTRUCTING, OR DECOMMISSIONING</u></a>		
		Removing or handling specific materials: →		<a href="#"><u>LIGHT BULBS AND BALLASTS</u></a>
				<a href="#"><u>ASBESTOS</u></a>
				<a href="#"><u>PAINTS AND LEAD</u></a>
<a href="#"><u>MOBILE HOME RECYCLING</u></a>				

[MISCELLANEOUS QUESTIONS](#)

[STAFF CONTACTS](#)



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### MISCELLANEOUS QUESTIONS LIST

- How do I file [complaints](#) about a burning or burying demolition waste?
- How can I [market my C&D recycling](#) business?
- What is MDEQ doing to [promote C&D](#) recycling efforts?
- What are [common violations](#) with handling solid waste?
- What are [internet links](#) to resources listed in FAQ?
- What are the [acronyms](#) used in this resource?
- Where can I find environmental [regulations](#)?
- What does [demolition, deconstruction, and decommissioning](#) mean?

[TOPICS](#)

### STAFF CONTACTS

There isn't a single comprehensive MDEQ permit that covers all C&D activities. Each person needs to evaluate their activities to determine what regulations apply. See the FAQs and if you have additional questions, contact any of the following or staff listed in FAQ:

- MDEQ Environmental Assistance Center at 800-662-9278 or [deq-ead-env-assist@michigan.gov](mailto:deq-ead-env-assist@michigan.gov) for referral to available staff to address your environmental questions.
- Maggie Fields, Environmental Science and Services Division, Pollution Prevention, at 517-335-6250 or [fieldsm@michigan.gov](mailto:fieldsm@michigan.gov) for assistance with recycling and green building, or go to [www.michigan.gov/deqconstruction](http://www.michigan.gov/deqconstruction).
- Judy Schaefer, Environmental Science and Services Division, Compliance Assistance Unit, at 517-373-0590 or [schaejf2@michigan.gov](mailto:schaejf2@michigan.gov) for questions on waste regulations and suggestions for FAQs.
- [MDEQ district office](#) for regulatory questions. Call the office that oversees the area where you live or where the business is based.
- MDEQ [Asbestos staff](#)
- Residents can check with their [local recycling coordinator](#) for what recycling options they have available.
- **Before beginning any C&D work, check if local authorities require a demolition or construction permit.**

There may be other MDEQ division regulations, local ordinances for business licenses and fencing requirements etc., and other state agency requirements including the Department of Labor and Economic Growth's [Michigan Occupational Health and Safety \(MIOSHA\)](#), [Asbestos Program](#), [Building Division](#), and [construction codes](#) that also need to be considered that are not addressed in these FAQs. Please contact those agencies to discuss their requirements.

This FAQ was compiled by the Environmental Science and Services Division in conjunction with the WHMD and Air Quality Division. Regulations are subject to change. Reliance on information from this document is not usable as a defense in any enforcement action or litigation. Refer to the regulations or discuss your requirements with the regulating agency.

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## **I. BURNING WASTE ONSITE**

See the MDEQ web site "[Open Burning Information](#)". It includes information about burn permits, concerns with burning waste, ordinances, and more.

**Q.I.1. Am I allowed to burn down a standing or demolished structure on my own property?  
Can I finish burning down a partially burnt building (house fire remnants)?  
Can I burn remodeling wastes?** *3/16/07*

A.I.1. No. A property owner or contractor may not destroy a standing structure such as a barn, house, garage, or abandoned building by open burning, even if it is to be conducted on their own property. You also can not burn down a demolished structure, renovation remnants or a building the wind blew down. All remaining materials and ashes must be disposed of at a licensed landfill.

**Q.I.2. Can the fire department burn down a building training purposes?** *3/16/07*

A.I.2. A fire department can only burn buildings for fire prevention training if they meet the Air Quality Division (AQD) and WHMD rules. This means that even fire departments are limited to burning down structures for training purposes only and have specific requirements that must be met. Select "[Fire Department Suppression Training](#)" on the Open Burning website for more information. If an owner wants to donate the building to the local fire department for fire training, he/she must first have an asbestos survey done and have all asbestos containing materials removed. All remaining materials and ashes must be disposed of at a licensed landfill. If the demolition material is in a pile it can not be burned for fire training.

A structure may not be intentionally burned down for any other purpose. If the "construction and demolition" waste can not be reused or recycled, it must be disposed in a licensed landfill in compliance with Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act (NREPA) or a licensed incinerator in compliance with Part 55, Air Pollution Control, of NREPA. See the [burying waste FAQ](#).

**Q.I.3. Are there asbestos requirements when a building burns down?** *3/16/07*

A.I.3. There can be. Be aware that residues from some burnt out buildings would also be subject to the asbestos requirements. See the [asbestos FAQ](#).

**Q.I.4. Can I burn scrap wood from construction or demolition projects?** *3/16/07*

A.I.4. You are not allowed to open burn scrap wood on your property. The solid waste statute defines "Scrap wood" as wood or wood product that is 1 or more of the following:

- (a) Plywood, pressed board, oriented strand board, or any other wood or wood product mixed with glue or filler.
- (b) Wood or wood product treated with creosote or pentachlorophenol.
- (c) Any other wood or wood product designated as scrap wood in rules promulgated by the Department.

See the [Scrap Wood Exemption](#) that was issued in 2006 that would allow this type of waste to be burned for energy recovery when certain conditions are met.

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### **Q.I.5. Is there any waste that I am allowed to burn on my own residential property?** 3/16/07

A.I.5. The MDEQ does not recommend anyone burn their household waste and in some situations it may be illegal or you may need a permit to burn household waste in the area where you live. For more information, see the brochure, "[Burning Household Waste](#)." The Open Burning web site at [www.michigan.gov/deqair](http://www.michigan.gov/deqair), "Open Burning Information" contains more information and a list of communities that have filed ordinances with MDEQ about burning grass and leaves.

**Businesses are not allowed to burn any waste without an Air Quality Division permit.**

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## **IIA. BURYING WASTE ON-SITE**

### **Q.IIA.1. Am I allowed to bury construction and demolition waste on my property?**

**My house burnt down, can I just bulldoze the debris into the old foundation?**

**Can I use old shingles covered by mulch to form a pathway in my garden to keep down the weeds?** 3/16/07

A.IIA.1. Only inert materials like concrete, brick, pavement etc that meet the conditions in R 299.4114 may be buried. See the [concrete FAQ](#). Other C&D waste can not be buried on site.

This means that other construction and demolition waste from the remodeling of a building, the new construction of a building, or the destruction (dismantling) of a building cannot be buried on site. The practice of digging a pit at a construction site, filling it with construction and/or demolition waste, burning and/or burying it, is prohibited. It must be taken to a licensed Type II or Type III landfill for proper disposal. This prohibition applies to contractors, excavators, carpenters, homebuilders, home improvement companies, remodelers, including do-it-yourselfers, etc. This restriction also applies to farmers. For example: a barn or any other building demolished on a farm is considered construction and demolition waste and must be taken to a Type II or Type III landfill. It cannot be burned or buried on the farmer's property.

Do not confuse C&D waste with other household waste that Section 11520(2) allows to be disposed of on their own land as long as the disposal does not create nuisance or hazard to health. This household waste does not include construction and demolition waste, commercial waste, or industrial waste per R 299.4103(k). It is not recommended that residential property owners bury any of their wastes, future liability and problems with future real estate transactions could result. The following solid wastes from an individual's own household or from the planting of privately owned farmland are specifically prohibited from being buried:

- (a) Asbestos waste. Be aware that residues and remaining structure from some burned out buildings may be subject to the asbestos requirements. See the [Asbestos FAQ](#).
- (b) A hazardous commercial product.
- (c) A used battery.
- (d) A pesticide container.
- (e) Waste from the demolition of a residence, except for components that are listed as inert material in R299.4114. (emphasis added)

**Business property owners are prohibited from burying any waste on site without a license from the WHMD.**

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## **IIB. LANDFILLING OR INCINERATING**

### **Q.IIB.1. Who licenses landfills and incinerators?** 5/21/07

A.IIB.1 The MDEQ issues [construction permits](#) and [operating licenses](#) for landfills and incinerators in Michigan. There are two types of landfills that can accept construction and demolition waste—Type II landfills are those that take residential and commercial waste along with construction and demolition waste and Type III construction and demolition waste landfills. These landfills may be owned and operated by private companies or by a governmental unit, usually by a county. A [map of landfills](#) is available online, but there is not a list of incinerators on the Internet. The state does not license solid waste haulers (See [Transportation FAQ](#)).

Since licensed disposal sites may have requirements beyond what is allowed in the regulations, it will be necessary to contact the landfill or incinerator operator to find out what wastes they will accept and if they have any special conditions for a particular type of waste. In Michigan, there are [banned wastes](#) that can not be disposed of in landfills.

[TOPICS](#)

## **III. RECYCLING OVERVIEW**

Recycling of C&D waste can vary greatly because of all the different kinds of materials and different processes that can be used depending on what is being recycled and how the company acquires it (e.g. presorted or needing to be sorted from other wastes, etc). These FAQs do not address all questions about the recycling process or the equipment used in the recycling processes. Direct questions to the [MDEQ District Office](#) or the Environmental Assistance Center at 800-662-9278 or email [deg-ead-env-assist@michigan.gov](mailto:deg-ead-env-assist@michigan.gov)

### ***IIIA RECYCLING WITH A WHMD PERMIT***

#### **Q.IIIA.1. Will I need an MDEQ permit or license to recycle C&D waste and further process it into marketable materials?** 3/20/07

A.IIIA.1. The specific requirements and permits/licenses vary depending on the material you are collecting, how you are managing it, and your site conditions. As a starting point, it is recommended you review the [MDEQ Permit Information Checklist and permit information](#). It is likely a permit will be needed if your recycling facility processes materials by shredding, washing, grinding or other means resulting in air emissions, water discharges, generating more than 10% waste from the material you are recycling, or is handling hazardous wastes. The most common permits/licenses for C&D recycling include an air permit from the Air Quality Division (AQD), industrial storm water permit from the Water Bureau (WB) and possibly solid waste processing construction permit and operating license from the WHMD (see [FAQ IIIB](#) when a solid waste processing permit is not required).

You may have operations that do not require a permit/license but would still need to meet other regulations. Two examples include:

- Any crushing, shredding, truck traffic, or other process at the site that could emit particulates into the air would require a fugitive dust management plan. See the AQD guidance [Managing Fugitive Dust: A Guide for Compliance with the Air Regulatory Requirements for Particulate Matter Generation](#) and the [WB Nonpoint Source Control Best Management Practice Dust Control](#). The plan should be in place PRIOR to beginning the recycling activity and capture/control particulate wherever possible (asbestos has to be captured). Contact the AQD district office.

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- Wastes generated from equipment maintenance would need to meet the liquid industrial and hazardous waste regulations. See guidance documents at [www.michigan.gov/deqwaste](http://www.michigan.gov/deqwaste) “Hazardous and Liquid Industrial Waste” “Hazardous and Liquid Industrial Waste Management.” Discuss your requirements with the WHMD district office or call the Environmental Assistance Center at 800-662-9278.

The first step is to determine if your operation would be allowed under the county’s solid waste plan. Contact the [Designated Planning Agency](#) for your county. There may be other local requirements for businesses (check with the local zoning and building offices, or county or city clerk office for more information).

If allowed locally, then you will need to obtain a solid waste construction permit (\$500 fee) before beginning any work at the site and obtain a solid waste processing plant operating license (\$500 fee) which is renewable every 5 years. Discuss your proposed operation with the MDEQ [District Offices](#) that oversees the area where the business will be based.

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### **IIIB RECYCLING WITHOUT A WHMD PERMIT**

#### **Q.IIIB.1. What are requirements to take C&D waste from contractors and sort it for marketable materials?** 3/16/07

A.IIIB.1. You will NOT need an MDEQ waste license or permit when you are:

- 1) Only salvaging out materials for resale such as architectural commodities, i.e., doors, stained glass windows, antique hardware or reusable fixtures
- 2) Collecting materials at the job site and then shipping sorted loads to market from the job site, without any processing. The following materials are considered to have viable recycling markets:
  - a. Metals
  - b. Many plastics
  - c. Clean wood
  - d. Glass
  - e. Textiles such as carpets
  - f. Waste being shipped as a fuel to a permitted industrial furnace or boiler
  - g. Old corrugated containers and other collected papers
  - h. Concrete

See the [Michigan Recycled Materials Market Directory](#) for companies who have notified MDEQ of their recycling activities. If you begin a recycling operation, you may want to consider listing your services. An application form is on the website. This information can also be found at [www.deq.state.mi.us/documents/deq-ess-p2-p2week-bldgrecyclingresources.doc](http://www.deq.state.mi.us/documents/deq-ess-p2-p2week-bldgrecyclingresources.doc)

- 3) Collecting specific materials at a job-site to be shipped to another facility for sorting AND
  - a. you are generating less than 10% of the total amount being stored as waste AND
  - b. you ship 75% off-site to recycling markets within one year, AND
  - c. you are not processing the sorted material to an extent that there are air emissions, water discharges or hazardous wastes generated.



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Although a permit is not required, you will need to meet certain operating conditions. Discuss your operation with WHMD District Office staff. Normally the conditions will include:

1. All materials must be stored in closed containers and/or inside a building
2. Records are kept to verify that at least 75% of each material was recycled each year and no more than 10% is solid waste
3. The incoming waste is C&D waste
4. No waste is stored on the ground
5. The recycling operation is be injurious to human health or the environment and does not create a nuisance during storage, processing or use
6. The waste generated is disposed of in accordance with solid waste management plans and disposal company requirements
7. The facility is available for MDEQ inspections at reasonable times to ensure that the Recycling Operations Plan developed by the company is being followed and that all the above conditions are met. Discuss with the district staff what should be in your plan based on your operations.

Also see the [FAQ IIIA](#) section for other potential permits.

NOTE 1: There may be certain conditions that must be met when recycling materials that are not commonly recycled. Please click on the following for more information: [drywall](#), [scrap wood](#)

NOTE 2: If you are placing collection containers at a job site, make sure workers are trained to use them properly. Signage for your containers must be clear and visible for workers. If the site is not fenced, illegal dumping may occur. It is important that you ensure the materials that are being collected are the ones you want. In addition to trash that could be placed in the containers, there are often materials used at job sites that could be hazardous or liquids. These could jeopardize your recycling status if you have to handle this material.

[TOPICS](#)

## IV HANDLING SPECIFIC MATERIALS

### IV.1 DRYWALL QUESTIONS- HOUSEHOLD

**Q.IV.1.a. I have some bits of drywall in my garage that I would like to recycle. Is this possible? If not, what's the best way to dispose of it?** 3/16/07

A.IV.1.a. Drywall recycling markets are very limited. Using up the drywall or giving it to someone who can use it may be the best alternative to disposing of it in your trash. Drywall scraps can be placed in the interior wall cavities during new construction. This will eliminate the disposal and transportation costs. For guidelines, see Appendix C in the National Association of Homebuilders *Residential Construction Waste Management: A Builder's Field Guide* which can be purchased at [www.nahb.com](http://www.nahb.com).

If you have full or half boards of clean, unpainted drywall, contact your local Habitat for Humanity Restore or similar organizations to see if they will take it for re-sale. If they do, this might qualify for a tax deduction. To find a Restore in your area, go to: [www.deq.state.mi.us/documents/deq-ess-p2-p2week-bldgreyclingresources.doc](http://www.deq.state.mi.us/documents/deq-ess-p2-p2week-bldgreyclingresources.doc)

**Q.IV.1.b. How do I dispose of drywall damaged by water leak?** 3/16/07

A.IV.1.b. Due to mold issues and repair costs, water damaged materials normally are disposed of as solid waste and taken to a licensed landfill or incinerator. Please do not take the materials out and illegally dump. Not only is it environmentally unfriendly, it costs you as a taxpayer, more money when these illegal dumps have to be cleaned up.

## Construction and Demolition Waste and Recycling Frequently Asked Questions

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### **Q.IV.1.c. Is asbestos a concern with removed drywall?** 3/27/07

A.IV.1.c Asbestos may be a concern with used drywall. Asbestos has been used in the past as an additive in plaster, joint compound, and some textured paint products. See the [asbestos](#) FAQ.

[TOPICS](#)

## **IV.2 DRYWALL QUESTIONS- C&D BUSINESS**

### **Q.IV.2.a Does Michigan allow ground gypsum wall board to be spread on agricultural land at specific concentrations? Is there a permitting process?** 3/16/07

A.IV.2.a. Although the WHMD has given authorization in 2003 to allow drywall in Michigan to be used as agricultural fertilizer or to be added to composting operations, there is no infrastructure in place at this time. See the Gypsum [Drywall Exemption](#) and [Drywall Recycling](#) information.

According to condition #3 of the exemption each person wanting to operate under the exemption must notify the MDEQ of their intent. No one has notified MDEQ of their intention of recycling drywall. You will find that Michigan does not need very much gypsum as a soil amendment so the agricultural use of drywall is not the answer for drywall recycling. Processing equipment costs also stop many people from getting into the drywall recycling market.

### **Q.IV.2.b. How do I dispose of drywall damaged by water leak?** 3/16/07

A.IV.2.b. Due to mold issues and repair costs, water damaged materials normally are disposed of as solid waste and taken to a licensed landfill or incinerator. Please do not take the materials out and illegally dump. Not only is it environmentally unfriendly, it costs you as a taxpayer more money when these illegal dumps have to be cleaned up.

### **Q.IV.2.c. Is asbestos a concern with removed drywall?** 3/27/07

A.IV.2.c. Asbestos may be a concern with used drywall. It was used as an additive in plaster, joint compound, and some textured paint products, in the past. See the [Asbestos FAQ](#).

[TOPICS](#)

## **IV.3 SHINGLES QUESTIONS- HOUSEHOLD**

### **Q.IV.3.a. How do I get rid of my used shingles?** 3/27/07

A.IV.3.a. Shingles are normally disposed of in licensed municipal solid waste landfills (Type II) or construction and demolition waste landfills (Type III landfills). Recycling options are not available at this time. If you are re-roofing, consider renting roll-off boxes from waste disposal or landfill companies. Ask the landfill company about their requirements for accepting the shingles if you will be hauling them yourself. See the [asbestos FAQ](#).

[TOPICS](#)

## **IV.4 SHINGLES QUESTIONS- C&D BUSINESS**

**Q.IV.4.a. Are there any locations in Michigan that recycle shingles? I am tearing down a home and as part of a larger effort, I am trying to prevent as many materials as possible from going to a landfill. I have already made arrangements for all of the wood (sheathing, studs, trim, etc), metal (ductwork, pipes, wiring, etc.), concrete, asphalt and brick to be salvaged or recycled. I would be very interested in recycling the asphalt roof shingles if that option were available.**

3/16/07

A.IV.4.a. No one in Michigan has authorization to take shingles removed during demolition or roofing jobs for recycling. MDEQ has authorized only one Michigan company to accept unused shingles to recycle into paving. Shingles are normally disposed in Type II or Type III landfills in Michigan.



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**Q.IV.4.b. I am considering recycling used shingles as a business. What do I need to do?** 3/27/07

A.IV.4.b. Used shingles could contain a variety of materials such as nails, wood, roofing fabric, etc. that would contaminate a recycling process. At this time, low disposal costs in Michigan make disposal a more economic option than trying to clean old shingles to a recyclable standard. However, since asphalt is petroleum based, as petroleum prices increase, it may be more cost effective to turn to asphalt waste for paving and other uses in the future.

The WHMD and Air Quality Division are evaluating regulations pertaining to recycling shingles (e.g. asbestos). Before starting an asphalt shingle recycling operation, discuss your plans with Duane Roskoskey, WHMD, at 517-335-4712.

**Q.IV.4.c. I am looking for data regarding the amount of asphalt shingles being generated and recycled in Michigan. Can you provide this?** 3/16/07

A.IV.4.c. The MDEQ does not currently collect data about how much specific waste stream is generated nor how much is recycled in the state.

**Q.IV.4.d. Other information resources about shingle recycling options or studies?** 3/16/07

A.IV.4.d. See information on websites including <http://www.shinglerecycling.org/> and <http://www.chelseacenter.org/pdfs/TechRept41asbestoshingle.pdf>

[TOPICS](#)

### **IV.5 WOOD**

**Q.IV.5.a. What materials are considered to be “wood” under the solid waste regulations if it is recycled?** 3/16/07

A.IV.5.a. Section 11503(13) says:

“Wood” means trees, branches, bark, lumber, wood pallets, or lumber or other wood product that has not been treated painted, mixed with glues or fillers, or otherwise been contaminated during manufacture or use. This would include wood chips, sawdust, and clean dimensional lumber (e.g. 2X4’s etc).

**Q.IV.5.b. Are there any approved uses for other types of wood?** 3/16/07

A.IV.5.b. The solid waste statute defines “Scrap wood” as wood or wood product that is 1 or more of the following:

- (a) Plywood, pressed board, oriented strand board, or any other wood or wood product mixed with glue or filler.
- (b) Wood or wood product treated with creosote or pentachlorophenol.
- (c) Any other wood or wood product designated as scrap wood in rules promulgated by the department.

An exemption was issued in 2006 that would allow his type of waste to be burned for energy recovery. The exemption can be found at <http://www.deq.state.mi.us/documents/deq-whmd-stsw-ScrapWoodExemption.pdf>

Clean dimensional lumber can be reused on site or sold or donated for reuse. See the listing of deconstruction material restores at [www.deq.state.mi.us/documents/deq-ess-p2-p2week-bldgrecyclingresources.doc](http://www.deq.state.mi.us/documents/deq-ess-p2-p2week-bldgrecyclingresources.doc)

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**Q.IV.5.c. Are there recycling opportunities for treated wood? Can I burn treated wood as recycling? Can I chip unwanted wood to reduce the volume to save on disposal costs?** 6/13/07 revision

A.IV.5.c. There are no technologies at this time that would allow for the recycling of chromated copper arsenate (CCA), ammoniacal copper quat (ACQ), or ammoniacal copper zinc arsenate (ACZA) treated materials.

Do not burn or chip treated wood at home or at your business. Treated wood waste should be disposed of in licensed landfills. See the EPA website at [www.epa.gov/oppad001/reregistration/cca/](http://www.epa.gov/oppad001/reregistration/cca/) regarding the restricted use of treated wood and the precautions for handling this treated lumber. From the EPA website "Consumer Awareness Program (CAP) for consumers and users of CCA-treated lumber: they instruct consumers that they "...should never burn CCA-treated wood or use it as compost or mulch."

If a business wants to chip wood to make it more compact so disposal costs can be reduced (e.g. fewer rollofs and trips to the disposal company), discuss with your [DEQ district office](#) to see if you would be subject to the [Air Quality Division fugitive dust management requirements](#) as required by Part 55 of Act 451, Section 324.5524(3)(v), if you may need a Water Bureau [industrial storm water permit](#), or if you would have any solid waste requirements overseen by the Waste and Hazardous Materials Division. Also contact the landfill or incinerator regarding their requirements.

**Q.IV.5.d. Can recycled chipped clean wood be used in playgrounds or on pathways? What about using chipped treated wood? Should treated wood be removed from playgrounds?** 6/13/07 revision

A.IV.5.d. The MDEQ does not oversee regulations for using chipped wood products or using treated wood in playgrounds. For building playgrounds, review the PLAYGROUND EQUIPMENT SAFETY ACT ([Act 16 of 1997 MCL 408.681 - 408.687](#)) which covers building and maintenance of public playgrounds.

Section 408.684 Public playground equipment; standards adopts the "handbook for public playground safety" from the U.S. consumer products safety commission. That document and related ones can be found at [www.cpsc.gov/cpsc/pub/pubs/playpubs.html](http://www.cpsc.gov/cpsc/pub/pubs/playpubs.html) and does contain information about recommended materials to use in playgrounds. It refers to "standard consumer safety performance specification for playground equipment for public use, ASTM F1487-01", which is published by the American society for testing and materials. Your local library may have these standards or can access them via interlibrary loan. Normally these standards must be purchased. See information at [www.astm.org](http://www.astm.org).

Regarding replacing treated wood at playgrounds and using sealants on the wood, see the EPA website at [www.epa.gov/oppad001/reregistration/cca/#guidance](http://www.epa.gov/oppad001/reregistration/cca/#guidance).

Regarding using wood chips from treated wood, EPA memorandum "Chromated Copper Arsenate (CCA): Wood Mulch Derived from Waste Lumber Preserved with Chromated Copper Arsenate (CCA)" they reference Consumer Awareness Program (CAP) for consumers and users of CCA-treated lumber: which instructs consumers that they "...should never burn CCA-treated wood or use it as compost or mulch."

**Q.IV.5.e. What is required to chip "clean" wood and make compost out of it to sell?** 3/21/07

A.IV.5.e. A solid waste processing permit may be necessary depending on what is being composted. The WHMD is developing rules pertaining to commercial composting operations. Discuss your operations with WHMD District Office staff. You will also need to meet the [Air Quality Division fugitive dust management requirements](#) as required by Part 55 of Act 451, Section 324.5524(3)(v) and may need a Water Bureau [industrial storm water permit](#).

Contact the Michigan Recycling Coalition at 517-371-7073 for compost operator training and certification program and other compost information. The MDEQ has not established quality standards for compost products. Standards pertaining to composting can be purchased at [www.astm.org](http://www.astm.org) (search for compost).

## Construction and Demolition Waste and Recycling Frequently Asked Questions

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### **Q.IV.5.f. Can clean lumber from a construction job site be chipped and used for mulch on-site or sold?** 3/27/07

A.IV.5.f. Probably, but contact WHMD District Office staff to discuss your plans. This allows staff to be aware of the operations in case they get complaint calls that you are illegal dumping. It is important that only clean wood is chipped and no other wastes. You will also need to meet the [Air Quality Division fugitive dust management requirements](#) as required by Part 55 of Act 451, Section 324.5524(3)(v) and may need a Water Bureau [industrial storm water permit](#).

MDEQ has not established quality standards for compost products. There is an ASTM WK7251 New Specification For Hydraulically Applied 100% Wood fiber Mulches. This specification covers the composition and physical requirements of hydraulically applied 100% wood fiber mulches for the purpose of revegetation, sediment and erosion control. There are also specifications regarding applications of wood fiber mulches. These standards can be purchased at [www.astm.org](http://www.astm.org) (search for wood mulch).

The Emerald Ash Borer (EAB) Quarantine limits the size of wood chips moving from Quarantine Level I areas to Level II areas. They must be from one to three inches. The quarantine requirements for mulch to be ground to one inch in two dimensions, remains in force for wood chips shipped to the Upper Peninsula or out of state. Information is available at [www.michigan.gov/eab](http://www.michigan.gov/eab)

For [marketing your services](#), you could list the company chipping services in the [Recycled Materials Market Directory](#) (RMMD) under the Pallets & Wood Category. The application form is on the website and you can also see what other competitors have notified the MDEQ of their service.

To market your finished product, it also recommended you list in the [California Integrated Waste Management Board Recycled-Content Product Directory](#) and you could also list in the [Michigan Recycled Products Directory](#). Contact Lucy Doroshko at 517-373-1322 for any questions about getting listed in either Michigan directory.

### **Q.IV.5.g. Can I bury trees, stumps or other land clearing debris at a construction site?** 3/21/07

A.IV.5.g. The conditions in R 299.4114(2)b) must be met to be able to bury these wood wastes onsite or at another location approved by the landowner.

- The burial can not be in a floodplain or wetland.
- The debris is buried not less than 4 feet above the groundwater level.
- The burial does not create a nuisance.
- The amount of debris is not more than 1 acre is size and not more than 20 feet in depth.

Although the waste rules allow burial you may want to reconsider this option as there have been situations over time where those wastes decomposed and created landscaping and other structural problems.

In addition, Land and Water Management Division (LWMD) of the MDEQ requires a permit for the placement of trees, stumps, and other land clearing debris in inland lakes, streams, floodplains, wetlands, sand dunes, high risk erosion areas, or below the ordinary high water mark of any of the Great Lakes. For a summary of applicable LWMD regulations, go to [www.deq.state.mi.us/documents/deq-glm-water-pcu-WaterandLandReqs.pdf](http://www.deq.state.mi.us/documents/deq-glm-water-pcu-WaterandLandReqs.pdf). A permit application is available at [www.michigan.gov/jointpermit](http://www.michigan.gov/jointpermit).

[TOPICS](#)

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### **IV.6 CONCRETE, BRICK, OR PAVEMENT QUESTIONS- HOUSEHOLD**

**Q.IV.6.a. How do I find a concrete recycler?** 3/21/07

A.IV.6.a. Contact your [local recycling coordinator](#) to find out what companies in your area recycle concrete.

**Q.IV.6.b. Can I bury an old foundation?** 3/28/07

A.IV.6.b. See the [FAQ](#) on using concrete as fill or burying it.

[TOPICS](#)

### **IV.7. CONCRETE, BRICK, OR PAVEMENT QUESTIONS- C&D BUSINESS**

**Q.IV.7.a. How do I find a concrete recycler?** 3/21/07

A.IV.7.a See the Recycled Materials Market Directory at [www.michigan.gov/degrmmd](http://www.michigan.gov/degrmmd) and select the PALLETS/WOOD/YARD CLIPPINGS, (pallets, construction and demolition debris, etc.) category. Type in concrete in the Non-category Keyword field. This information can also be found at [www.deq.state.mi.us/documents/deq-ess-p2-p2week-bldgreyclingresources.doc](http://www.deq.state.mi.us/documents/deq-ess-p2-p2week-bldgreyclingresources.doc)

**Q.IV.7.b. Are there any special waste requirements for processing and recycling concrete, brick, or pavement?** 3/28/07

A.IV.7.b. In addition to the resources mentioned under [recycling processes](#), companies recycling concrete or brick need to ensure the materials:

- Do not include exposed reinforcing bars or other construction and demolition waste.
- Materials are not contaminated with hazardous substances exceeding the criteria contained in R 299.4114(3). (The Type B criteria that is referenced in R 299.4115(2)(c) can be found at [www.michigan.gov/deq/0,1607,7-135-3312\\_4123-14201--,00.html](http://www.michigan.gov/deq/0,1607,7-135-3312_4123-14201--,00.html) under the Agricultural Use Approval Appendix C. Questions about inert designations may be directed to Duane Roskoskey, WHMD, at 517.335.4712.)

Two potential contamination sources might be paint containing heavy metals, or materials dropped onto the concrete under an industrial process line. You can conduct a visual inspection of the concrete and ask:

- ✓ Is it stained?
- ✓ Does it have an odor?
- ✓ Is there paint on it?

However, remember not all contamination is noticeable. Acid solutions, solvents and oils can be quickly absorbed by concrete. The generator of the waste is required to characterize their waste by using knowledge or testing to determine concentration levels. Consider requesting copies of their characterizations for your review and records.

The lead swipe test commonly used to identify if lead is present in paint is not an approved test identified in the waste regulations to determine if the concentration exceeds either hazardous or solid waste limits. If testing is required to characterize the waste, it is necessary to collect a representative sample and have a lab run a Toxicity Characteristic Leaching Procedure (TCLP). Lead is considered a D008 hazardous waste if it meets or exceeds 5.0 mg/L TCLP concentration per R 299.9217.

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### **Q.IV.7.c. Can waste concrete or brick be used for riprap or other uses, or buried on-site?** 3/21/07

A.IV.7.c. In addition to the conditions listed above, the burial or use can not violate Part 303, Wetlands Protection of Natural Resource and Environmental Protection Act (NREPA), Part 301, Inland Lakes and Streams of NREPA, or any other state law administered by Land and Water Management Division (LWMD). A [joint permit](#) may be required from LWMD if the material is used in any regulated feature at the land/water interface. A list of the applicable LWMD statutes regulating land/water features can be found at [www.deq.state.mi.us/documents/deq-glm-water-pcu-WaterandLandRegs.pdf](http://www.deq.state.mi.us/documents/deq-glm-water-pcu-WaterandLandRegs.pdf). Call 517-373-9244 or staff in the Environmental Science and Services Division Compliance Assistance Unit at 517-241-8370 for more information about these requirements.

If more than 1,000 cubic yards of brick, masonry, asphalt pavement, and broken concrete are reused for fill, riprap, slope stabilization, or other construction, then the notification form [EQP5117 Inert Materials Notification](#) must be submitted to the WHMD. If you need a printed copy, contact [District Office](#), WHMD.. Return the completed notification to:

SOLID WASTE PROGRAM SECTION  
WASTE AND HAZARDOUS MATERIALS DIVISION  
MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
PO BOX 30241  
LANSING MI 48909-7741

### **Q.IV.7.d. Are there additional air requirements when crushing concrete for recycling purposes?**

A.IV.7.d. Concrete recycling encompasses two distinct processes: transportation of concrete blocks and the crushing of these blocks into more manageable fine material. The air quality requirements depend on the process equipment used, and how much dust (particulate matter) will be emitted to the air from the recycling activity (i.e. crushing, storing and loading activity).

If the recycling activity involves crushing concrete into smaller pieces, then there is a general Air Quality Division (AQD) permit for Non-metallic Mineral Crushing Facilities that must be applied for before the crushing process begins. The general permit is for crushing activity of fine particulate matter (at 10 microns) that does not exceed 2 million tons per year (TPY) at any one job site. If the amount crushed exceeds 2 million TPY at any one job site, then a regular Permit to Install must be applied from the AQD. Both the general permit for Nonmetallic Mineral Crushing Facilities and a regular Permit to Install are located on the MDEQ web site at: [www.michigan.gov/deq](http://www.michigan.gov/deq). Select "Air" "Air Permits," and then "Permits to Install/New Source Review." From there, select either "Application Forms, Instructions and Guidance Documents" for the regular Permit to Install application, or "General Permit- Application Forms and Instructions" for Nonmetallic Mineral Crushing Facilities general permit.

If the concrete recycling activity is limited to loading and transporting concrete blocks, refer to the "[Transporting C & D Waste](#)" section for direction on the air quality requirements for this type of recycling activity.

A nonmetallic mineral crushing facility consists of crusher(s) and associated process equipment including grinding mills, drills, screening operations, bucket elevators, belt conveyors, loading and bagging operations, storage bins, enclosed truck or railcar loading stations and any other material handling equipment operated at the site. Each crusher and screen shall be equipped with a water spray. A baghouse dust collector may alternatively be installed in lieu of water spray for any particular piece of equipment.

Also, crushing processes are subject to the state's emission inventory reporting system or Michigan Air Emissions Reporting System (MAERS). MAERS reporting is for the previous calendar year of operation. More information can be obtained from the MDEQ web site at [www.michigan.gov/deq/0,1607,7-135-3310\\_4148-11409--,00.html](http://www.michigan.gov/deq/0,1607,7-135-3310_4148-11409--,00.html).



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There is also an emission calculation fact sheet, located at [www.deq.state.mi.us/documents/deq-ead-caap-maers-EmissionCalculation-mineralproductprocesses.pdf](http://www.deq.state.mi.us/documents/deq-ead-caap-maers-EmissionCalculation-mineralproductprocesses.pdf) to assist in determining actual emission calculations for reporting into MAERS.

### **Q.IV.7.e. Is asbestos a concern with recycling concrete?** 3/20/07

A.IV.7.e. Yes, asbestos may be found on concrete when it has floor tiles or mastic (the floor glues) on it or mixed with it. See the [asbestos FAQ](#).

[TOPICS](#)

## **IV.8 SCRAP METAL**

### **Q.IV.8.a. How do I find a metal recycler?**

A.IV.8.a. There are several options to use when looking for metal recyclers. Always ask a metal recycler what and how they take materials and if there is a minimum or maximum amount they will accept.

- Michigan citizens and businesses can check with their [local recycling coordinator](#) to find out what recycling options are available in the area.
- Recyclers often advertise in the yellow pages under the heading “Scrap Metal.”
- Metal recyclers that have notified MDEQ are included in the [Recycled Materials Market Directory](#).

### **Q.IV.8.b. What is MDEQ’s recommendation for handling old lead window weights?** 3/20/07

A.IV.8.b. The best option for managing lead window weights is to recycle the lead weights. If the weights are removed from a home, there is an exemption from the hazardous waste regulations. If the weights are removed from a business location and sent for metal recycling, there is a hazardous waste exemption per R 299.9204(1)(p) so they would not need to be labeled as hazardous waste. However, the container under Michigan Occupational Safety and Health Administration regulations would need to be labeled using words such as “lead weights for recycling” on the container.

If the lead weights removed from a company site aren't recycled, then the disposal options would depend on the hazardous waste generator status for the site. That is based on all the hazardous waste generated in a month. Go to chapter 2 of the [Michigan Guide to Environmental, Safety and Health Regulations](#) for an overview of hazardous waste regulations and generator status. If you don't recycle and the facility is a conditionally exempt small quantity generator, check with your waste hauler and landfill if they will accept the weights. If you don't recycle and the facility is either a small quantity generator or large quantity generator, then the weights would need to be managed as hazardous waste.

If you're interested in other lead issues, go to [www.leadfreewheels.org](http://www.leadfreewheels.org) for information and alternative wheel weight vendors.

### **Q.IV.8.c. Does MDEQ license scrap yards that accept metal and other wastes?** 3/27/07

A.IV.8.c. MDEQ does not have a single license for “scrap yards” but there are multiple regulations overseen by different divisions and different agencies that apply to salvage yards depending on their operations. Local agencies may also require a business license for scrap yards or have local restrictions and requirements. It is suggested a business use the MDEQ Permit Information Checklist at <http://www.michigan.gov/deqpermits> especially when developing a new site. It has some common questions to help identify potential permits/licenses that may be needed from the MDEQ.

The publication *Guide for Salvage Yard Owners* at [www.deq.state.mi.us/documents/deq-ead-tas-salvyard.pdf](http://www.deq.state.mi.us/documents/deq-ead-tas-salvyard.pdf) provides an overview of salvage yard state and federal environmental operating requirements. Please be aware this guidance does need to be updated but it is a good starting point.



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The guide topics along with links to updated information include:

[Used oil](#)

[Used oil filters](#)

[Used antifreeze](#)

[Storage tanks](#)

[Used tires](#)

[Old batteries](#)

[CFC \(chlorofluorocarbons e.g. Freon\)](#) Questions about management of refrigerants are handled by the U.S. Environmental Protection Agency (EPA), not the MDEQ. Call the EPA Stratospheric Ozone Information Hotline at 800-296-1996 or Renee Honore, US EPA Region 5 at 312-886-0749 for more information.

Storm Water Permits (Go to [http://www.michigan.gov/deq/0,1607,7-135-3313\\_3682\\_3716---,00.html](http://www.michigan.gov/deq/0,1607,7-135-3313_3682_3716---,00.html) for more information)

[Mercury](#) switch removal. Contact Steven Kratzer, Environmental Science and Services Division, at 517-373-0939 for more mercury pollution prevention information.

The Department of State licenses scrap yards that deal with vehicles under Part 248 of the Michigan Vehicle Code. The specific Department of State license will depend on the yard's activities. See the Department of State dealer's manual at [www.michigan.gov/sos](http://www.michigan.gov/sos) and select "Services for Businesses" "Automobile Dealers." Call their Bureau of Regulatory Services at 888-SOS-MICH with licensing questions.

### **Q.IV.8.d. Can I go to a landfill active area and collect scrap metal or other materials to recycle?**

3/20/07

A. IV.8.d. No. There are restrictions to salvaging materials at a landfill and it is prohibited in the landfill cells for safety and health reasons. Scavaging is prohibited and is defined as "the uncontrolled picking of materials from solid waste".

If you want to collect materials for recycling from a transfer station or in another area in the landfill, contact those operators to discuss your business proposal.

### **Q.IV.8.e. Does MDEQ license scrap metal haulers?** 3/20/07

A.IV.8.e. The MDEQ does not license scrap metal haulers. Companies hauling scrap metal for hire are subject to the MOTOR CARRIER ACT ([Act 254 of 1933](#)). Other materials being shipped for recycling are not subject to this Act. The Michigan Public Service Commission is responsible for the insurance and safety regulation of the intrastate for-hire trucking industry. The Commission processes applications for new or expanded operating authority, registers intrastate motor vehicles and the vehicles of interstate motor carriers conducting business in Michigan, and maintains on file proof of insurance of the motor carriers. For information, contact Herb Fields 517-241-6040 from the Department of Labor and Economic Growth, Michigan Public Service Commission.

### **Q.IV.8.f. What are requirements to recycle waste appliances (refrigerators, freezers, air conditions, etc containing refrigerants)?** 3/20/07

A.IV.8.f. Citizens can check with their local recycling coordinator ([www.michigan.gov/degreswastecontacts](http://www.michigan.gov/degreswastecontacts)) to find what recycling options are available. Some communities offer special waste collection days when citizens can bring in large items. Some recyclers will take appliances containing refrigerants but may charge for its removal. Or a recycler requires the appliance to already have the refrigerant removed properly and "tagged" before they will accept it. Businesses that offer appliance repair often offer to remove refrigerants but the fee for this service varies.

If you want to pick up appliances and take them to a recycling location as a business, discuss any requirements with the recycler. See FAQ [Q.IV.8.](#) about scrap metal.

## Construction and Demolition Waste and Recycling Frequently Asked Questions

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If the appliances contain a refrigerant, it can not be 'bled' to the air but must be removed and captured before it is recycled or disposed. If you will be removing the refrigerant as part of the recycling process, you must meet the EPA regulations regarding the removal of chlorofluorocarbons (CFCs) e.g. Freon™ from appliances. The EPA, not the MDEQ, oversees these regulations. The federal ozone regulations do not require a specific "red tag" to be placed on the appliance when refrigerants are removed from them. But specific information must be provided to the end disposal location informing them that the refrigerant has been properly removed. See the EPA guidance [Complying with the Section 608 Refrigerant Recycling Rule](#). Please call the Stratospheric Ozone Information Hotline at 1-800-296-1996 or Renee Honore, US EPA Region 5 at 312-886-0749 for more information.

The safe disposal requirements went into effect on July 13, 1993. Go to [www.epa.gov/ozone](http://www.epa.gov/ozone) for links to listings of equipment, and trainers plus numerous fact sheets regarding vehicle and home air conditioning systems, chillers & industrial process refrigeration, and other information about the Clean Air Act Section 608 refrigerant recycling rule. A listing of refrigerant recyclers (approved refrigerant reclaimers) is at [www.epa.gov/ozone/title6/608/reclamation/reclist.html](http://www.epa.gov/ozone/title6/608/reclamation/reclist.html).

[TOPICS](#)

## V. TRANSPORTING C&D WASTE

### **Q.V.1. What are business requirements to haul C&D waste?** 3/16/07

A.V.1. The MDEQ does not license companies that haul recyclable materials or solid waste. However, there are requirements that the materials can not blow out of the vehicles or have any liquids leak out of the waste.

Check with your county or city clerk's office for any local requirements or local business license for waste hauling. Also talk with the county's Solid Waste Designated Planning Agency (DPA) to see if anything in the county plan affects your proposed activities. A list of DPA's is at <http://www.deq.state.mi.us/documents/deq-wmd-swp-dpa.pdf>.

Contact the Michigan Center for Truck Safety at 800-682-4682 or go to <http://www.truckingsafety.org/> for vehicle transportation requirements including weight limits, etc. Call MSP Motor Carrier Division (contacts listed at [http://www.michigan.gov/msp/0,1607,7-123-1593\\_3536\\_6248---,00.html](http://www.michigan.gov/msp/0,1607,7-123-1593_3536_6248---,00.html)) with additional questions.

If hauling scrap metal, also see [Q.IV.8.d](#).

### **Q.V.2. What are the air quality requirements for loading and hauling recycled concrete?** 3/28/07

A.V.2. Most of the air quality requirements for loading and hauling recycled concrete center around limiting the amount of dust (also called fugitive dust) that is generated from an activity. Recycled concrete must be loaded onto trucks so that no more than a 20% opacity level is created over a 6 minute averaging time, and there is a 6" distance maintained from the load to the top of the truck. Facilities should implement a fugitive dust plan that includes the following best management practices: minimization of drop distances when loading; applying dust suppressants to storage pile surfaces; enclosing truck loads with tarps when empty or full; and cleaning dust residue from truck wheels and the inside of the truck after emptying.

See the guidance [Managing Fugitive Dust: A Guide for Compliance with the Air Regulatory Requirements for Particulate Matter Generation](#) and the [Water Bureau Nonpoint Source Control Best Management Practice Dust Control](#). The plan should be in place PRIOR to beginning the recycling activity and capture/control particulate wherever possible (asbestos has to be captured). Contact the Air Quality Division [district office](#) for more information.

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### **Q.V.3. Where can I find information about importing or exporting nonhazardous waste?** 5/8/07

Q.V.3. See the information and forms posted at [www.michigan.gov/deqwaste](http://www.michigan.gov/deqwaste) "Solid Waste" "Laws and Rules" "[Landfill Prohibited Materials and Appropriate Disposal Options](#)." Additional information is available from the [Border Center WasteWatcher](#). Contact Rhonda Oyer Zimmerman, WHMD, at 517-373-4750 with questions about solid waste importation.

### **Q.V.4. What additional requirements are there for transporting asbestos waste?** 5/15/07

A.V.4. Check with the licensed landfill you want to use to find out if they have specific days or times when asbestos waste can be brought in. See page 10 of the *Understanding Asbestos NESHAP* guidance at <http://www.deq.state.mi.us/documents/deq-ead-caap-asbestos.pdf> for additional packaging and shipping record requirements.

[TOPICS](#)

## **VI. DEMOLISHING, DECONSTRUCTION, DECOMMISSIONING OR REMODELING BUILDINGS**

### **Q.VI.1. What is the difference between demolition, deconstruction, and decommissioning?** 5/16/07

A.VI.1. Very simply put:

- Demolition is the destruction of a structure without recovery of any materials for reuse or recycling.
- Deconstruction is the dismantling of a structure to recover as many materials as possible in order to recover the maximum amount of materials for their highest and best re-use. It can vary from 'skimming' easily removed items like flooring, staircases and cabinets to full efforts salvaging even the lumber or metal framework.
- Decommissioning is the process used to properly close operations at a facility. It involves a variety of aspects to ensure the site meets environmental and other standards for future redevelopment and reuse. Depending on the circumstances, it may involve either deconstruction or demolition of the structure, or structures may be left intact for future use.

### **Q.VI.2. Are there any compliance assistance resources available for remodeling/demolition/deconstruction/decommissioning buildings and businesses?** 5/21/07

A.VI.2. There are different requirements if the work is being done by the homeowner, by a contractor, and if the site involves a household or is a business. Michigan does not have a guidance document that summarizes all of the state's requirements. There isn't a single notification procedure to notify all the programs that may be affected by this activity. Depending on the facility's circumstances and permits/licenses and specific questions, it may be necessary to talk to multiple divisions and/or local, state and federal agencies when dealing with a facility closure or demolition and renovation projects. Always check with local authorities to see if they require a demolition or renovation permit or have other requirements. If the facility is connected to a waste water treatment plant or drinking water supply or has a local business license, contact local authorities regarding what procedures they may have.

- For environmental questions, call the MDEQ Environmental Assistance Center at 800-662-9278 or email [deq-ead-env-assist@michigan.gov](mailto:deq-ead-env-assist@michigan.gov). See the [asbestos FAQs](#). If you have any doubts/concerns about the required environmental regulations when demolishing or renovating a building, contact the MDEQ [district office](#) at least 10 days prior to the job and to let the district office know that this activity will be taking place.
- For worker health and safety questions, call the MIOASHA Consultation, Education and Training Division at 517-322-1809. See the [MIOASHA Standard Part 20 Demolition](#) and [related standards](#).
- For [maintenance and alteration contractor licensing requirements](#), contact the Department of Labor & Economic Growth at 51-241-9254. Information at [http://www.michigan.gov/cis/0,1607,7-154-35299\\_35414\\_35455-114254--,00.html](http://www.michigan.gov/cis/0,1607,7-154-35299_35414_35455-114254--,00.html)

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**If the facility or individual has any permits, licenses, registrations, certifications, grants, etc issued by an agency, they need to contact the department that issued the permit/registration etc and review permit/registration or contract for conditions.** The state is developing a single access point for various permits/licenses/registrations/certifications through [www.michigan.gov/mitaps](http://www.michigan.gov/mitaps). Some of those permits/licenses/registrations allow you to make changes online. Since this website is under development not all of the state programs are available for electronic applications or updates.

Some common examples of permit changes and other MDEQ notices include:

- Voiding a Permit to Install air permit, follow the instructions at [http://www.deq.state.mi.us/aps/nsr\\_info\\_cont.shtml#VOID](http://www.deq.state.mi.us/aps/nsr_info_cont.shtml#VOID). If the facility is closing and it has a Renewable Operating Permit (ROP) a letter must be sent to the appropriate district office requesting that the ROP be voided. The letter should provide the reason for the void as well as the facility's SRN, ROP number, and address. The letter should be signed by the facility's Responsible Official (as defined in R 336.1118(j)).
- The notification and termination requirements for an NPDES permit for surface water discharge: are specifically listed in their NPDES permit. Contact Water Bureau (WB), NPDES Permit Unit at 517.241.1346 for NPDES requirements. Lists of active permits are at [http://www.michigan.gov/deq/0,1607,7-135-3313\\_3682\\_3713---,00.html](http://www.michigan.gov/deq/0,1607,7-135-3313_3682_3713---,00.html)
- Storm water permit:
  - To terminate an industrial permit, send a letter to the appropriate MDEQ District Office, The letter needs to include the reason for termination, the Certification of Coverage number (coc #), designated name, address and date when there will no longer be any outdoor exposure and discharge. If there is a transfer of ownership, see the permit which identifies what has to be in a letter sent to the new buyer 30 days prior to the transfer and copy the WB District Office.
  - To terminate a construction permit, permittees need to get a "Notice of Termination" form at <http://www.deq.state.mi.us/documents/deq-swq-notform.doc> which must be completed and returned when the site is stabilized. In addition, the storm water construction certified operators are taught during their training program to request termination when the site is stabilized.
- For a groundwater discharge permit, contact the Water Bureau, Groundwater Discharge Permit Unit at 517.373.8148 for more information. The form "REQUEST FOR TERMINATION OF STATE PERMIT ISSUED UNDER PART 31 OF THE NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION ACT, 1994 PA 451, AS AMENDED (ACT 451)" is at <http://www.deq.state.mi.us/documents/deq-water-gwp-applications-termnreq.pdf>
- For regulated underground storage tanks, see the "[Owner's Responsibility: Closure of an UST](#)" summary at [www.deq.state.mi.us/documents/deq-std-EQP3875.pdf](http://www.deq.state.mi.us/documents/deq-std-EQP3875.pdf) and
- For regulated aboveground storage tanks, see the form [CHANGE OF INFORMATION FORM ABOVEGROUND TANKS ONLY](#). Discuss requirements with WHMD Storage Tank staff.

**If the facility was required to submit any reports, contact that department program which oversees those reports to check your requirements.** For example:

- SARA Title III facilities: contact Susan Parker, ESSD, at 517-335-4650 regarding questions about being removed from the SARA Title III list (TRI and Tier 2). For the SARA Title III Program, a letter or email with the name and address of all facilities involved, as well as the name, address, and phone number of any new contacts regarding these facilities is needed. There is no "official" form to send when going out of business. Let MDEQ know where the Tier Two report information should be sent in December. Under sect 302 of SARA Title III (Emergency Planning Notification), the facility

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must notify the LEPC of any changes that affect emergency planning - that would include an ownership change as well as any contact changes. Facilities in the database are taken out only when ESSD is notified by the company to do so. If the facility has been out of business for a length of time but is still in the database, then ESSD will allow the Local Emergency Planning Committees (LEPC) to request they be removed. The LEPC has a form for this procedure.

- Annual Wastewater Reporting (AWR) facilities: contact James Baker ESSD at 517-373-2461 regarding AWR questions. Any current AWR facility files its report for a given calendar year, based on the number of discharge days they were in operation. An accompanying letter should explain that the facility is either closing or moving, etc. There is no specific requirement for a business to notify the MDEQ of such change. However, when the next reporting cycle comes around, the facility would then need to identify its status and any subsequent changes on the form/cover letter.

**In some instances you may have requirements that do not involve permits or reports.** Review what regulations your facility is subject to for potential requirements. For example:

- When a hazardous waste accumulation area (storage area) is closed at a generator's site, the requirements include removing and decontaminating all contaminated equipment, structures, and soil to minimize the need for further maintenance and prevent post-closure escape of hazardous waste. The state rules adopt federal closure requirements e.g. Large Quantity Generators must comply with the generic closure requirements in §§265.111(a) and (b) and 265.114, and the unit-specific closure requirements found in Part 265, Subpart I (containers), Subpart J (tanks), Subpart W (drip pads), and Subpart DD (containment buildings). Contact the District Office, WHMD regarding closure requirements. There is no specific, MDEQ-written closure guidance available.
- Hazardous waste generators and liquid industrial waste generators: If a facility closes, they should either use [MiTAPS](#) or submit the [form EQP5150](#) as a subsequent notification and indicate they have gone out of business on page 2.

Another request to help save department resources is to remove your name from any mailing lists you no longer want to be on. For example if someone was subscribed to [listservers](#) and they no longer want to receive information, please send an email to the listserver at:

[LISTSERV@LISTSERV.MICHIGAN.GOV](mailto:LISTSERV@LISTSERV.MICHIGAN.GOV) In the body of the message, type 'signoff' then the listname you wish to unsubscribe from Example: Signoff LISTNAME. If you had been receiving the DEQ Calendar by mail and no longer wants to receive them or needs to change the mailing address or contact, contact Marlene Osborne 517-335-3153 or email her at [osbornem@michigan.gov](mailto:osbornem@michigan.gov)

**Other resources that can be used as tools when closing down operations at a facility or for operating a business that helps other companies renovate, demolish, deconstruct, or decommission operations include:**

- "[Facility Decommissioning Environmental, Health and Safety Concerns](#)" presentation by [LJB Inc](#) at the 2007 Michigan Safety Conference
- "Wisconsin Pre-demolition Checklist" at <http://dnr.wi.gov/org/aw/wm/publications/demolition/predemo.pdf> for a good overview.
- Section X in the [Used Electric Lamps and Small Ballasts](#) guidance for references to Michigan agencies and on specific regulated materials.
- "[A Guide to Deconstruction](#)" by the Deconstruction Institute at [www.deconstructioninstitute.com/files/learn\\_center/45762865\\_guidebook.pdf](http://www.deconstructioninstitute.com/files/learn_center/45762865_guidebook.pdf) for managing deconstruction efforts.
- "[Managing Your Environmental Responsibilities: A Planning Guide for Construction and Development](#)" summarizing federal requirements available from the Construction Industry Compliance Assistance Center.
- Small Business Administration "Getting Out [of business]" website at [www.sba.gov/smallbusinessplanner/exit/index.html](http://www.sba.gov/smallbusinessplanner/exit/index.html)



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- “[Environmental Management Systems \(EMS\) for the Construction Industry](#) and [MDEQ EMS information](#). Contact Kelie Bond, Environmental Science and Services Division at 517-241-7969 for assistance.

[TOPICS](#)

### **Q.VI.3 If demolishing an abandoned house, are there other issues that I should be concerned about?** 3/21/07

A.VI.3. Yes, discuss with the local health department what should be done with old septic systems and abandoned drinking water wells. Go to [www.michigan.gov/deq/0,1607,7-135-3313\\_3675\\_3689---.00.html](http://www.michigan.gov/deq/0,1607,7-135-3313_3675_3689---.00.html) for information about plugging old wells and any available grants.

[TOPICS](#)

## **VII REMOVING SPECIFIC MATERIALS**

### **VII.1 LIGHT BULBS AND BALLASTS**

#### **Q.VII.1.a. What are the requirements to remove light bulbs and small ballasts before demolition?** 3/16/07

A.VII.1.a. It is recommended these materials be removed by people doing their own renovations at their residences. For business locations, see section X in the [Used Electric Lamps and Small Ballasts](#) guidance for summary of regulations.

[TOPICS](#)

### **VII.2. CARPET**

#### **Q.VII.2.a How do I dispose of carpet and carpet padding?** 3/16/07

A.VII.2.a. Unwanted, worn, or water damaged materials are disposed of as solid waste and taken to a licensed landfill or incinerator. Please do not take the materials out and illegally dump. Not only is it environmentally unfriendly, it costs you as a taxpayer more money when these illegal dumps have to be cleaned up. Michigan does not have any carpet recyclers in operation at this time. If you are interested in what is available in other areas of the country, see the information about post-consumer carpet recycling at [www.carpetrecovery.org](http://www.carpetrecovery.org).

If the carpet and pads are in good condition and not stained or worn, check the local Habitat for Humanity or another similar program for interest in the carpet. This may occur when someone has unwanted carpet that is in near new condition because they are changing their decorating colors/styles or purchased carpeting that was never installed. See information posted on [www.earth911.org](http://www.earth911.org) and the [Carpet and Rug Institute FAQs](#) about dealing with water-damaged or sewage-contaminated carpets.

[TOPICS](#)

### **VII.3 ASBESTOS QUESTIONS- HOUSEHOLD**

#### **Q.VII.3.a. What are some common materials in houses that contain asbestos?** 3/19/07

A.VII.3.a. There are over 3000 applications of asbestos, but following are common uses in homes. For more examples go to EPA's information go to [www.epa.gov/asbestos](http://www.epa.gov/asbestos).

- Roofing and siding shingles made with asbestos.
- Insulation in older homes in walls and attics.
- Artificial ashes and embers sold for use in gas-fired fireplaces.
- Older stove-top pads.
- Wallboard, spackling and/or paints.



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- Ceiling tiles, vinyl floor tiles and the backing on vinyl sheet flooring along with the glues or adhesives used with flooring. This includes uses around wood burning stoves protected with asbestos paper, millboard, or cement sheets and decorative applications that look like popcorn.
- Hot water and steam pipes in older houses may be coated with an asbestos material or covered with an asbestos blanket or tape.
- Oil and coal furnaces and door gaskets may have asbestos insulation.

### **Q.VII.3.b. What are a homeowner's asbestos removal requirements during remodeling/demolition of their home? Are notifications required for demolition and renovation work?** 3/19/07

A.VII.3.b. Homeowners, and contractors hired by homeowners, are exempt from the asbestos National Emissions Standards for Hazardous Air Pollutants (NESHAP) notification, testing and abatement regulations in residences being demolished or renovated if dealing with only one building. If the renovation includes two buildings such as a house and DETACHED garage, the regulations apply. See the EPA guidance materials at <http://www.epa.gov/asbestos/> for doing work on your own home. The contractor would still be subject to the worker health and safety regulations overseen by Department of Labor and Economic Growth.

### **Q.VII.3.c. How does a homeowner dispose of waste containing asbestos?** 5/8/07

A.VII.3.c. Contact your waste disposal company for their specific requirements. If you will be hauling the waste to a landfill yourself, contact the landfill for their requirements. A map and link to a database to find licensed landfill information is at [www.michigan.gov/deq/0,1607,7-135-3312\\_4123-9894--,00.html](http://www.michigan.gov/deq/0,1607,7-135-3312_4123-9894--,00.html).

[TOPICS](#)

## **VII.4 ASBESTOS QUESTIONS- REGULATED FACILITY**

### **Q.VII.4.a. What are the Michigan asbestos regulations?** 3/16/07

A.VII.4.a. Several agencies have requirements regarding asbestos. The MDEQ Air Quality Division oversees the Asbestos National Emissions Standards for Hazardous Air Pollutants (NESHAP) program. The Michigan asbestos NESHAP regulations are the same as the federal environmental requirements for managing and disposing of asbestos waste. The Department of Labor and Economic Growth also oversees regulations pertaining to asbestos abatement and worker health and safety. For an overview, see the *Understanding Asbestos NESHAP* guidance at <http://www.deq.state.mi.us/documents/deq-ead-caap-asbestos.pdf>. Additional MDEQ asbestos information is at [www.michigan.gov/deqair](http://www.michigan.gov/deqair) and in the right column select "Asbestos NESHAP Program" and DLEG asbestos information is at [www.michigan.gov/asbestos](http://www.michigan.gov/asbestos).

### **Q.VII.4.b. How do I contact AQD asbestos staff?** 3/26/07

A.VII.4.b. MDEQ asbestos questions can be directed to:  
Bob Christmas 517.335.4639  
Chad Rogers 517-241-7532  
Joel Asher 906.346.8502 Upper Peninsula  
Thomas Vincent 313.456.4686 Detroit

### **Q.VII.4.c. How do I contact Department of Labor and Economic Growth (DLEG) asbestos staff?** 5/2/07

A.VII.4.c. The general DLEG Asbestos Program number is 517.322.1320. The DLEG asbestos program contacts list is at [http://www.michigan.gov/cis/0,1607,7-154-11407\\_15333\\_15369-41708--,00.html](http://www.michigan.gov/cis/0,1607,7-154-11407_15333_15369-41708--,00.html)

## Construction and Demolition Waste and Recycling Frequently Asked Questions

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### **Q.VII.4.d. What are some common materials in houses that contain asbestos?** 3/19/07

A.VII.4.d. There are over 3000 applications of asbestos, but following are some more common uses in homes. For more examples go to EPA's information go to [www.epa.gov/asbestos](http://www.epa.gov/asbestos).

- Roofing and siding shingles made with asbestos.
- Insulation in older homes in walls and attics.
- Artificial ashes and embers sold for use in gas-fired fireplaces.
- Older stove-top pads.
- Wallboard, spackling and/or paints.
- Ceiling tiles, vinyl floor tiles and the backing on vinyl sheet flooring along with the glues or adhesives used with flooring. This includes uses around wood burning stoves protected with asbestos paper, millboard, or cement sheets and decorative applications that look like popcorn.
- Hot water and steam pipes in older houses may be coated with an asbestos material or covered with an asbestos blanket or tape.
- Oil and coal furnaces and door gaskets may have asbestos insulation.

### **Q.VII.4.e. Where can asbestos waste be taken? Are shipping papers or manifests required?**

3/20/07

A.VII.4.e. See *Understanding Asbestos NESHAP* guidance at <http://www.deq.state.mi.us/documents/deq-ead-caap-asbestos.pdf> regarding how asbestos waste must be contained, labeled and manifested under the air regulations. Discuss with the landfill operator what their requirements are for receiving asbestos waste. A map and link to a database to find licensed landfill information is at [www.michigan.gov/deq/0,1607,7-135-3312\\_4123-9894--,00.html](http://www.michigan.gov/deq/0,1607,7-135-3312_4123-9894--,00.html).

### **Q.VII.4.f. What are the testing requirements to determine if asbestos is present?** 3/19/07

A.VII.4.f. See the *Understanding the Asbestos NESHAP* guidance. To be regulated, material needs to contain greater than 1% of asbestos. Each material is evaluated separately. For example, a wall would need to be evaluated by the paint layer, drywall layer, etc. Have a trained individual take a core sample and have a laboratory test the layers for asbestos. Discuss asbestos testing with the [Air Quality Division Asbestos Program staff](#).

Do not confuse asbestos testing with the [hazardous waste testing requirements](#) to determine if lead or other hazardous wastes are present in the C&D waste. The hazardous waste testing does not include asbestos. Discuss hazardous waste testing requirements with the WHMD district office.

### **Q.VII.4.g. How are burnt buildings and residue managed under the asbestos program?** 5/1/07

A.VII.4.g. If it is regulated building, it is subject to the asbestos regulations. If a homeowner is cleaning up their own home that was not used for any commercial purpose or business, it would not be covered by the NESHAP regulations. Discuss your situation with the [AQD Asbestos Program staff](#).

### **Q.VII.4.h. Under the asbestos program, can a contractor begin emergency cleanup work of water or sewage backup damage at a regulated facility or at a home before submitting the 10 day notification?** 5/7/07

A.VII.4.h. If the damage is at regulated sites and the cleanup must be started after hours or on the weekend, contact the MDEQ Asbestos Program the next business day. There is an emergency provision that can be granted to waive the 10 day notification requirement. The abatement work would still need to meet all the other asbestos requirements.

If the damage occurred at a single residence, it is not a regulated facility and is not subject to the notification requirement.

## Construction and Demolition Waste and Recycling Frequently Asked Questions

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### **Q.VII.4.i. What are company requirements to recycle concrete under the asbestos program?**

5/2/07

A.VII.4.i. All asbestos containing material must be removed prior to recycling concrete. See the fugitive dust management in the [CONCRETE, BRICK, OR PAVEMENT C&D BUSINESS FAQ](#)

### **Q.VII.4.j. When there are community redevelopment projects (or when more than one home is being renovated/demolished in an area), does the community need to submit the asbestos notifications and meet asbestos requirements?**

3/19/07

A.VII.4.j. Community redevelopment projects may be subject to the Asbestos NESHAP requirements including the notification requirement. Discuss with the [Air Quality Division Asbestos Program staff](#).

### **Q.VII.4.k. What are certification and training requirements for a company wanting to do asbestos abatement work ?**

3/19/07

A.VII.4.k. Contact the Department of Labor and Economic Development Asbestos Program and the Michigan Occupational Safety and Health Administration for asbestos remediation company requirements. Links to this agency are available from the MDEQ asbestos webpage at <http://www.michigan.gov/deqair/> and select Asbestos NESHAP Program in the right column.

[TOPICS](#)

## **VII.5 PAINTS and LEAD QUESTIONS- HOUSEHOLD**

### **Q.VII.5.a. Why should I be concerned about paints? How do I test my home for lead?**

5/16/07

A.VII.5.a. Older paints may contain high levels of lead. Latex paint manufactured before August 1990 may contain mercury as well. Although the Consumer Products Safety Commission banned the use of lead in consumer paints in 1978, older homes, especially those built prior to 1978, may have lead-based paint on interior surfaces. According to EPA, lead-based paint dust and chips are dangerous if swallowed or inhaled, especially to small children and pregnant women.

See the EPA guidance "Testing Your Home for Lead in Paint, Dust, and Soil" at

<http://www.epa.gov/lead/pubs/leadtest.pdf>. A list of [EPA approved lead testing laboratories](#) in Michigan is available from the Department of Community Health Lead Hazard Remediation Program.

Additional information about lead issues is available at <http://www.michigan.gov/leadsafe> or call the Michigan Lead Hazard Remediation Program at 866-691-5323 (LEAD) or call the EPA lead hotline at 1-800-424-LEAD.

### **Q.VII.5.b. How do I find a contractor to remove lead based paints?**

5/8/07

A.VII.5.b. A list of lead remediation contractors is available at [www.michigan.gov/documents/Contractors-all\\_35972\\_7.htm](http://www.michigan.gov/documents/Contractors-all_35972_7.htm)

### **Q.VII.5.c. How can I safely clean and remove lead paint from my home and how do I dispose of lead paint waste removed from households?**

5/16/07

A.VII.5.c. Information about safely cleaning for lead and other resources can be found at [www.michigan.gov/leadsafe](http://www.michigan.gov/leadsafe). Also see the EPA guide "[Reducing Lead Hazards When Remodeling Your Home](#)" (PDF) and other information at [www.epa.gov/lead/pubs/leadinfo.htm#remodeling](http://www.epa.gov/lead/pubs/leadinfo.htm#remodeling)

Individuals and contractors doing their own remodeling work should contact the local landfill authority or their solid waste hauler to see if they accept lead based paint waste and what their requirements are to bring in the waste to the landfill. Household hazardous waste collection programs do not normally accept these wastes, but a property owner could check with them if they will take the lead remodeling waste. The local contact list is at [www.michigan.gov/deqreswastecontacts](http://www.michigan.gov/deqreswastecontacts).

Both state and federal regulations allow lead paint related waste generated by either residents or contractors conducting remediation activities at households to be disposed of in properly permitted and

## Construction and Demolition Waste and Recycling Frequently Asked Questions

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licensed landfills, including construction and demolition landfills if the landfill will accept it. "Household" means single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas. Go to <http://www.epa.gov/epaoswer/non-hw/muncpl/landfill/pb-paint.htm> for links to the federal regulations regarding lead paint disposal when generated from residential properties.

### **Q.VII.5.d. How should a household deal with unwanted paints?** 3/27/07

A.VII.5.d. First identify what you have and how much of it. Determine if it is latex or oil based paints, and stains, or varnishes.

Second, if the material is still usable, use it up or find out if your neighbors, friends, or relatives can use the material. Habitat for Humanity <http://www.habitat.org/>, or other nonprofit organizations, may be able to use the material. For example schools, art and theater groups may be able to use paints.

Third, if no one wants it, or it is not usable, then determine your local disposal option. Most household hazardous waste collection programs will not accept latex paints for disposal.

Do NOT put liquid paint in the trash or pour paint down storm or sewer drains. Most waste haulers will not pick up liquid paint. If a local collection program is not available, it will be necessary to dry out the paint before putting in the trash. If there is less than a ¼ can of paint left, it normally will dry out by leaving the lid off. If there is more than that, pour the paint into an absorbent material such as shredded newspaper or kitty litter or pour it in layers in a plastic lined shallow container and allow it to completely dry in an area where children and pets won't get into it. Drying time will depend on humidity and temperature.

If oil based, contact your household hazardous waste collection program (the list of local coordinators is at [www.michigan.gov/deqreswastecontacts](http://www.michigan.gov/deqreswastecontacts)) for local options or go to [www.earth911.org](http://www.earth911.org) for information about handling residential paint. If a collection is not available, see the above steps for hardening latex paints.

To reduce the amount of paint that needs disposal, avoid buying more paint than you need. Do the math, use decorator calculators online, or get assistance from the paint store before buying the paint.

To have a more environmentally friendly home, see the Green Seal Certified Products list of paints at <http://www.greenseal.org/findaproduct/index.cfm#paints> or search the Internet for other brands of environmentally friendly paints.

[TOPICS](#)

## **VII.6 PAINTS and LEAD QUESTIONS- REGULATED FACILITIES**

### **Q.VII.6.a. How should lead paint waste removed from an industrial or business site be handled?**

3/16/07

A.VII.6.a. Non households must determine if the lead paint waste is a hazardous waste. They can do this by using either knowledge or testing using the Toxicity Characteristic leaching Procedure (TCLP). The screening test used to determine if lead paint is present is not the same test used to determine if it is hazardous waste. TCLP concentration of 5.0mg/L or more would characterize the paint waste as D008 hazardous waste. It is important to correctly sample the lead paint waste as there can be different test results based on the amount of demolition waste mixed with the lead paint. The lead concentrations will be higher if the lead paint is being removed vs. when a building is being demolished and there is a dilution of the lead waste in the other debris.

The management and disposal options will depend on the site's hazardous waste generator status. See the [Waste Characterization](#) guidance for more information and summary of the generator categories

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and links to related generator guidance. If the paint is not hazardous waste and fails the paint filter test, it would be managed as liquid industrial waste.

Go to <http://chppm-www.apgea.army.mil/hmwp/Factsheets/LeadPaintWaste.htm> for more information about waste characterization of lead based paint related wastes.

**Q.VII.6.b. What are the requirements if testing lead paint using an XRF GUN (x-ray fluorescent gun that uses a nuclear source to measure amount of lead in paint)?** 3/16/07

A.VII.6.b. Contact the WHMD Radiation Program at 517-241-1253. Staff will need to know which radioactive nuclide (e.g. cadmium 109 or cobalt 57) is in the gun; if the company is from out of state. They may also need to talk with the U.S. Nuclear Regulatory Commission (NRC) about working with <http://www.deq.state.mi.us/documents/deq-ess-p2tas-BannedLandfillMaterials.pdf> a non agreement state. Currently, the NRC <http://www.deq.state.mi.us/documents/deq-ess-p2tas-BannedLandfillMaterials.pdf> regulates the use of most forms of radioactive material including performing lead-in-paint analysis in Michigan. The use of accelerator-produced or naturally-occurring radioactive material is state-controlled and regulated by MDEQ. Although licensing of state-controlled radioactive material has not been fully implemented, registration of such materials with the WHMD is required since materials used in lead-in-paint analyzers may be regulated by the State of Michigan. Staff can provide a copy of Form EQC1615 "RADIATION PROTECTION FOR LEAD PAINT ANALYZERS" that discusses radiation protection requirements for lead-in-paint analyzers (this is not on the Internet).

**Q.VII.6.c. What kind of training and certifications are required for businesses to remove lead paint (operate a lead paint remediation company)?** 5/16/07

A.VII.6.c. If you are interested in becoming a lead remediation contractor, contact the Department of Community Health (DCH), Bureau of Community Services at 517-335-9390 or toll-free 866-691-5323 (LEAD) regarding licenses and certification for lead abatement contractors and other lead professionals and other requirements. See the Michigan's Lead Hazard Remediation Program information at [www.michigan.gov/leadsafe](http://www.michigan.gov/leadsafe).

Also go to [www.michigan.gov/miosha](http://www.michigan.gov/miosha) and select "Standards and Legislation" "[General Industry](#)" for different worker health and safety regulations including "Lead". Contact their Consultation, Education and Training Division at 517-322-1809 for more information.

If your business does fire and water restoration, it is not required to be a certified contractor by the DCH but there is information you may find useful from the Lead Hazard Remediation Program. You still must meet Michigan Occupational Safety and Health Administration requirements.

The hazardous waste regulations also contain hazardous waste training requirements if the work is being done at a regulated facility. Contact the MDEQ Environmental Assistance Center at 800-662-9278 or [district office](#).

**Q.VII.6.d. Should lead panels removed from X-ray room walls during remodeling be disposed or recycled?** 3/16/07

A.VII.6.d. The easiest method of handling lead waste is to recycle it as scrap metal. To find recyclers, look in the Recycled Materials Market Directory at [www.michigan.gov/deqrmmd](http://www.michigan.gov/deqrmmd) or look in the yellow pages look under "Scrap Metal" to find local scrap yards. When recycled, lead is exempt from the hazardous waste regulations.

If it is not recycled, the facility would need to manage it under the applicable hazardous waste regulations.

[TOPICS](#)



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### **VII.7 MOBILE HOME RECYCLING**

**Q.VII.7.a. What are the requirements to recycle or dispose of mobile homes?** 3/19/07

A.VII.7.a. The specific requirements will depend on where the homeowner is doing the demolition work, or if it is done by a company and where the company is doing the recycling/demolition activities. See the [operational memo 115-23 Regulation of Mobile Home Salvaging and Disposal](#). It will also be necessary to remove hazardous materials from the home as discussed under [asbestos](#) and [lead](#) FAQ.

[TOPICS](#)

### **VIII. MISCELLANEOUS QUESTIONS**

**Q.VIII.1. Where can I find the regulations referenced in this FAQ on the Internet?** 3/20/07

A.VIII.1. Regulations can be found on several internet sites including:

- Solid waste regulations are at [www.michigan.gov/deqwaste](http://www.michigan.gov/deqwaste) “Solid Waste” “Solid Waste Statutes and Rules”
- Hazardous and liquid industrial waste regulations are at [www.michigan.gov/deqwaste](http://www.michigan.gov/deqwaste) “Hazardous and Liquid Industrial Waste” “Hazardous and Liquid Industrial Waste Management” “Statutes and Rules”
- Storm water regulations are at [www.michigan.gov/deqwater](http://www.michigan.gov/deqwater) “Surface Water” “Storm Water”
- Asbestos regulations are at [www.michigan.gov/deqair](http://www.michigan.gov/deqair), and in right column select “Asbestos NESHAP Program”
- Air regulations are at [www.michigan.gov/deqair](http://www.michigan.gov/deqair) “Laws and Rules”
- Michigan Occupational Safety and Health Act (MIOSHA) standards are at [www.michigan.gov/miosha](http://www.michigan.gov/miosha)
- Federal EPA regulations are at [www.epa.gov/epahome/lawregs.htm](http://www.epa.gov/epahome/lawregs.htm)
- Michigan administrative rules are at [www.michigan.gov/orr](http://www.michigan.gov/orr)
- Michigan laws are at [www.michiganlegislature.org](http://www.michiganlegislature.org)

**Q.VIII.2. What do the MDEQ acronyms mean in this FAQ?** 3/20/07

A.VIII.2. AQD is Air Quality Division  
ESSD is Environmental Science and Services Division  
MDEQ is Michigan Department of Environmental Quality  
LWMD is Land and Water Management Division  
WHMD is Waste and Hazardous Materials Division  
WB is Water Bureau

[TOPICS](#)

**Q.VIII.3. What is the MDEQ doing to encourage recycling of C&D materials?** 3/16/07

A.VIII.3 There are several efforts being made by the department to encourage C&D recycling.

- The MDEQ hosted a series of meetings throughout Michigan to identify resources and discuss obstacles facing the construction and demolition industry. This information will be used to expand resources on the MDEQ construction web site and to determine where efforts should be directed to be most productive in assisting recycling. This includes the development of training session, fact sheets, guidance documents, etc. The extent of the effort will depend on available resources and potential EPA grant funding. Go to [www.michigan.gov/deqconstruction](http://www.michigan.gov/deqconstruction) for information about these meetings.
- The ESSD maintains the MDEQ Recycled Materials Market Directory at [www.michigan.gov/deqrmmd](http://www.michigan.gov/deqrmmd). Companies may list their recycling services in this directory as a marketing tool and use the directory to find outlets for their collected materials.



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- Numerous resources and tools to assist the construction industry in finding more environmental friendly ways of operating are identified on the Construction and Demolition Pollution Prevention (P2) website at [www.michigan.gov/deqconstruction](http://www.michigan.gov/deqconstruction).
- Technical and compliance assistance are available by going to the [P2 website](#) or calling the Environmental Assistance Center toll-free number at 1-800-662-9278.
- The WHMD evaluates different aspects that may allow additional wastes to be exempted from the solid waste regulations under certain conditions. If a company is interested in recycling a particular material that is not identified below or in R 299.4114, contact Duane Roskoskey, WHMD, at 517.335.4712 or email [roskoskd@michigan.gov](mailto:roskoskd@michigan.gov) to discuss the evaluation process.
- Companies with less than 500 employees are eligible to participate in the free Retired Engineers Technical Assistance Program (RETAP) and have a waste reduction and energy efficiency assessment. See information at [www.michigan.gov/deqretap](http://www.michigan.gov/deqretap).

Financial assistance from the state is very limited at this time. However, there is a low interest loan program available for small business seeking to implement pollution prevention (P2). The Small Business P2 Loan Program provides loans of up to \$400,000 at an interest rate of 5% or less to existing independently owned businesses with 500 or fewer full time employees. Projects that qualify for P2 loan funding include those that either eliminate or reduce waste at the loan applicant's business location (source reduction), result in environmentally sound reuse and recycling for the loan applicant's generated wastes, or conserve energy or water on-site. This loan is not available for start-up companies or for increased process output and/or production. Contact Karen Edlin, ESSD, at 517-373-0604 to discuss potential opportunities. Current MDEQ grant and loan information is available at [www.michigan.gov/deqgrantsandloans](http://www.michigan.gov/deqgrantsandloans) "DEQ Grants & Loans Catalog." The MDEQ does not currently have grant funding available to further encourage the growth of recycling markets or provide financial assistance to new companies in Michigan.

To find available federal EPA funding, go to [www.epa.gov](http://www.epa.gov) and search for "grants". Monies pertaining to a specific material or issue may be available from other agencies. For example the USDA Forest Service issued grants driven by the need for wood disposal options following the state's emerald ash borer outbreak. Check with the local Small Business Development Centers at [www.misbtcdc.org](http://www.misbtcdc.org) for assistance. Occasionally local foundations or organizations also offer grants for specific issues.

### **Q.VIII.4. Are there resources to market recycled products in Michigan? How can I sell materials to the state or bid on state demolition jobs?** 3/21/07

A.VIII.4. For assistance with marketing your company services and products, contact the Small Business and Technology Development Centers at [www.misbtcdc.org](http://www.misbtcdc.org).

Another resource to market your recycling services is to list the company in the MDEQ [Recycled Materials Market Directory](#) (RMMD) under the appropriate category. The application form is on the website (you can also see what competitors in the area have notified MDEQ of their service).

To market your finished product, consider listing in various state or organization recycled products directories. For example some products may be listed as:

- Sustainable living products in the [Midwest Renewable Energy Association directory](#)
- Recycled content products in the [California Integrated Waste Management Board Recycled-Content Product Directory](#)
- Recycled content products in the [Michigan Manufactured Recycled Products Directory](#). Contact Lucy Doroshko, at 517-373-1322 about getting listed in the Michigan directory.

To provide services or sell goods to the state of Michigan, it is necessary to be registered with the Department of Management and Budget. Go to [www.michigan.gov/dmb](http://www.michigan.gov/dmb) and select "Doing Business with the State."

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#### **Q.VIII.5. How can I file a complaint about a business burning or burying demolition waste?** 3/16/07

A.VIII.5. The best way to file a concern is by contacting the local MDEQ District Office if you have concerns about how a business is handling their C&D waste. A list of offices is at [www.michigan.gov/deq](http://www.michigan.gov/deq) "Inside DEQ" "Contact DEQ." That way the inspector can get the details directly from you. You may remain anonymous if you want.

#### **Q.VIII.6. How can I file a complaint about a neighbor burning or burying demolition waste?** 3/16/07

A.VIII.6 Contact your local authorities. The local contact varies between communities. In many places it can be the local fire department or the local health department environmental health section. A directory of fire departments is at [http://www.dleg.state.mi.us/fire\\_directory/](http://www.dleg.state.mi.us/fire_directory/). Contact information for health departments is at [www.malph.org/page.cfm/18/](http://www.malph.org/page.cfm/18/)

If you still have concerns after speaking with local authorities, contact the local MDEQ District Office. A list of offices is at [www.michigan.gov/deq](http://www.michigan.gov/deq) "Inside DEQ" "Contact DEQ."

#### **Q.VIII.7. What are common waste violations?** 3/21/07

A.VIII.7. Solid waste violations are at [www.michigan.gov/deq/1,1607,7-135-3312\\_4123-38928--,00.html](http://www.michigan.gov/deq/1,1607,7-135-3312_4123-38928--,00.html)

Hazardous waste violations are at [www.michigan.gov/deq/1,1607,7-135-3312\\_4118\\_4240-18543--,00.html](http://www.michigan.gov/deq/1,1607,7-135-3312_4118_4240-18543--,00.html)

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#### **Q.VIII.8. I got a printed copy of this FAQ. What are the internet addresses for the references that have links throughout the answers?**

A.VIII.8. Following is the list:

- "Burning Household Waste" [www.deq.state.mi.us/documents/deq-aqd-bhw.pdf](http://www.deq.state.mi.us/documents/deq-aqd-bhw.pdf)
- California Integrated Waste Management Board Recycled-Content Product Directory [www.ciwmb.ca.gov/RCP/](http://www.ciwmb.ca.gov/RCP/)
- Carpet and Rug Institute FAQs <http://www.carpet-rug.org/about-cri/what-is-cri/frequently-asked-questions.cfm>
- Designated Planning Agency contacts list for solid waste planning <http://www.deq.state.mi.us/documents/deq-wmd-swp-dpa.pdf>
- MDEQ district office map [www.michigan.gov/deq](http://www.michigan.gov/deq) "Inside DEQ" "Contact DEQ" or [www.michigan.gov/deq/0,1607,7-135-3306\\_3329-12306--,00.html](http://www.michigan.gov/deq/0,1607,7-135-3306_3329-12306--,00.html)
- MDEQ Permit Information Checklist and permit information at [www.michigan.gov/deqpermits](http://www.michigan.gov/deqpermits)
- Dust Control (*Managing Fugitive Dust: A Guide for Compliance with the Air Regulatory Requirements for Particulate Matter Generation*) [www.michigan.gov/deq/0,1607,7-135-3307\\_3668\\_4148-11396--,00.html](http://www.michigan.gov/deq/0,1607,7-135-3307_3668_4148-11396--,00.html)
- Dust Control (WB Nonpoint Source Control Best Management Practice) [www.deq.state.mi.us/documents/deq-swq-nps-dc.pdf](http://www.deq.state.mi.us/documents/deq-swq-nps-dc.pdf)
- Environmental Management Systems (EMS) for the Construction Industry <http://www.epa.gov/sectors/construction/index.html#ems> and MDEQ EMS information [http://www.michigan.gov/deq/0,1607,7-135-3307\\_3666\\_4149---,00.html](http://www.michigan.gov/deq/0,1607,7-135-3307_3666_4149---,00.html)
- "Facility Decommissioning Environmental, Health and Safety Concerns" presentation <http://www.libinc.com/pageDownload/MS%20presentation-web.pdf>
- Fire Department Suppression Training [www.michigan.gov/deq/0,1607,7-135-3310-65250--,00.html#firedepartment](http://www.michigan.gov/deq/0,1607,7-135-3310-65250--,00.html#firedepartment)
- Gypsum [Drywall Exemption](#) and [Drywall Recycling](#) [www.michigan.gov/deqwaste](http://www.michigan.gov/deqwaste) "Solid Waste" "Exemptions and Guidance"
- Hazardous waste notifications: MiTAPS [www.michigan.gov/mitaps](http://www.michigan.gov/mitaps) or EQP 5150 Site Identification Form [www.deq.state.mi.us/documents/deq-wmd-hwp-EQP5150-FRM.pdf](http://www.deq.state.mi.us/documents/deq-wmd-hwp-EQP5150-FRM.pdf)

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- Inert Materials Notification form at [www.deq.state.mi.us/documents/deq-wmd-swp-egp5117.pdf](http://www.deq.state.mi.us/documents/deq-wmd-swp-egp5117.pdf) (or [www.michigan.gov/deq](http://www.michigan.gov/deq) select "Waste" "Solid Waste" and under Information heading select "Exemptions and Guidance" and scroll down to "Inert Materials Notification")
- Local recycling coordinator [www.deq.state.mi.us/documents/deq-ess-p2-recycle-countycontacts.pdf](http://www.deq.state.mi.us/documents/deq-ess-p2-recycle-countycontacts.pdf)
- Maintenance and alteration contractor licensing requirements [www.michigan.gov/cis/0,1607,7-154-35299\\_35414\\_35455-114254--,00.html](http://www.michigan.gov/cis/0,1607,7-154-35299_35414_35455-114254--,00.html)
- Managing Your Environmental Responsibilities: A Planning Guide for Construction and Development [www.cicacenter.org/links](http://www.cicacenter.org/links)
- Mercury [http://www.michigan.gov/deq/0,1607,7-135-3307\\_29693\\_4175---,00.html](http://www.michigan.gov/deq/0,1607,7-135-3307_29693_4175---,00.html)
- Michigan Occupational Health and Safety (MIOSHA) [www.michigan.gov/miosha](http://www.michigan.gov/miosha)
- Michigan Recycled Materials Market Directory [www.michigan.gov/degrmmd](http://www.michigan.gov/degrmmd)
- Michigan Recycled Products Directory [www.deq.state.mi.us/p2/rpd.asp](http://www.deq.state.mi.us/p2/rpd.asp).
- Midwest Renewable Energy Association directory [www.the-mrea.org/resources.php](http://www.the-mrea.org/resources.php)
- MIOSHA related standards [www.michigan.gov/mioshastandards](http://www.michigan.gov/mioshastandards)
- Motor Carrier Act (*Act 254 of 1933*) [www.michigan.gov/mpsc/0,1607,7-159-16397---,00.html](http://www.michigan.gov/mpsc/0,1607,7-159-16397---,00.html)
- Old batteries [www.deq.state.mi.us/documents/deq-ead-tas-univwaste.pdf](http://www.deq.state.mi.us/documents/deq-ead-tas-univwaste.pdf)
- Open burning [www.michigan.gov/deqair](http://www.michigan.gov/deqair), "[Open Burning Information](#)"
- Operational memo 115-23 *Regulation of Mobile Home Salvaging and Disposal* [www.deq.state.mi.us/documents/deq-wmd-opmemo-115-23.pdf](http://www.deq.state.mi.us/documents/deq-wmd-opmemo-115-23.pdf)
- Ozone and [Complying with the Section 608 Refrigerant Recycling Rule](#) [www.epa.gov/ozone/title6/608/608fact.html](http://www.epa.gov/ozone/title6/608/608fact.html)
- P2 website [www.michigan.gov/deqp2](http://www.michigan.gov/deqp2)
- Playground Equipment Safety Act [www.michiganlegislature.org/mileg.asp?page=getObject&objName=mcl-Act-16-of-1997&queryid=5609332&highlight=Playground%20Equipment%20Safety%20](http://www.michiganlegislature.org/mileg.asp?page=getObject&objName=mcl-Act-16-of-1997&queryid=5609332&highlight=Playground%20Equipment%20Safety%20)
- Scrap Wood Exemption [www.deq.state.mi.us/documents/deq-whmd-stsw-ScrapWoodExemption.pdf](http://www.deq.state.mi.us/documents/deq-whmd-stsw-ScrapWoodExemption.pdf)
- Storage Tanks: *Owner's Responsibility: Closure of an UST* [www.deq.state.mi.us/documents/deq-std-EQP3875.pdf](http://www.deq.state.mi.us/documents/deq-std-EQP3875.pdf), and form "CHANGE OF INFORMATION FORM ABOVEGROUND TANKS ONLY" [www.deq.state.mi.us/documents/deq-std-EQP3858.doc](http://www.deq.state.mi.us/documents/deq-std-EQP3858.doc)
- *Used Antifreeze* [www.deq.state.mi.us/documents/deq-ead-tas-antifrez.pdf](http://www.deq.state.mi.us/documents/deq-ead-tas-antifrez.pdf)
- *Used Electric Lamps and Small Ballasts* [www.deq.state.mi.us/documents/deq-ead-tas-eleclamp.pdf](http://www.deq.state.mi.us/documents/deq-ead-tas-eleclamp.pdf).
- *Used oil and filters* [www.deq.state.mi.us/documents/deq-ead-tas-usedoil.pdf](http://www.deq.state.mi.us/documents/deq-ead-tas-usedoil.pdf)
- Used tires [http://www.michigan.gov/deq/0,1607,7-135-3312\\_4122---,00.html](http://www.michigan.gov/deq/0,1607,7-135-3312_4122---,00.html)
- *Waste Characterization* [www.deq.state.mi.us/documents/deq-ess-p2tas-wastecharacterization.pdf](http://www.deq.state.mi.us/documents/deq-ess-p2tas-wastecharacterization.pdf)

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