

HAZARDOUS WASTE

in 1 Hour ...or less

(for Solid Waste Administrators & Staff)

Minnesota Pollution Control Agency

Industrial Division

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MPCA; Hazardous Waste Publications

<http://www.pca.state.mn.us/waste/pubs/business.html>

10 Steps to Hazardous Waste Compliance

1 Evaluate waste
Determine
generator size

2 Get a Generator
Identification
Number

3 Get a license
Pay a fee

4 Place waste in
containers
Mark them

5 Accumulate
and store waste
properly

6 Transport, dispose
of hazardous
waste correctly

7 Manifest
shipments of
hazardous waste

8 Plan for
emergencies

9 Train personnel

10 Keep
records

Special topics



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MPCA; '10 Steps to Compliance'

<http://www.pca.state.mn.us/waste/pubs/business.html>

Waste – what is it?

A material
**not needed, used,
wanted and/or
unusable**

NOT a material you or
someone else can and
WILL reuse



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MPCA #w-hw1-01; Evaluate Waste

<http://www.pca.state.mn.us/publications/w-hw1-01.pdf>

A waste may be –

Nonhazardous

Exempt

Hazardous

- Listed
- Characteristic



Exempt – “RCRA Empty” Containers

- All waste that can be removed has been

and

- < 3% remains
(container < 119 gallons)

or

- < 0.3% remains
(container > 119 gallons)

or

- < 1 inch remains
(tar or other extremely viscous material)



Exempt – ...with conditions

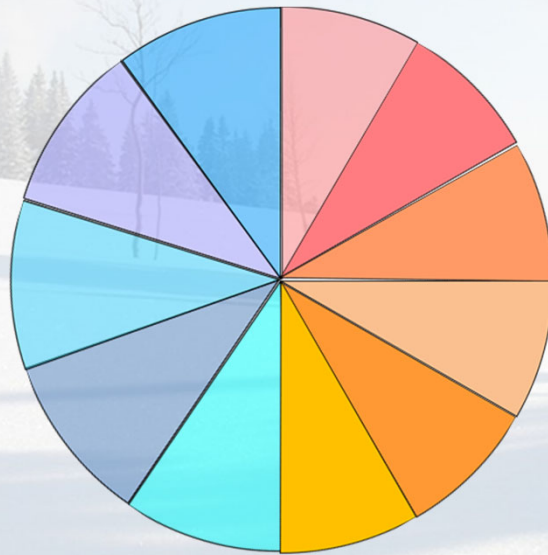
- Universal wastes
- Used oil
- E-waste
- HHW (until collected)*



A waste may be hazardous
for **two** reasons:

Listed

Characteristic



Listed:

F-list

- Solvents



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MPCA #w-hw2-00; F-list

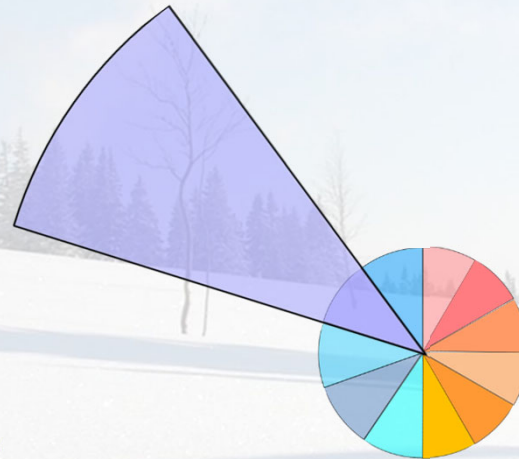
<http://www.pca.state.mn.us/publications/w-hw2-00.pdf>

Listed:



P-list

- Pesticides
- Pharmaceuticals



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MPCA #w-hw2-02; P-list

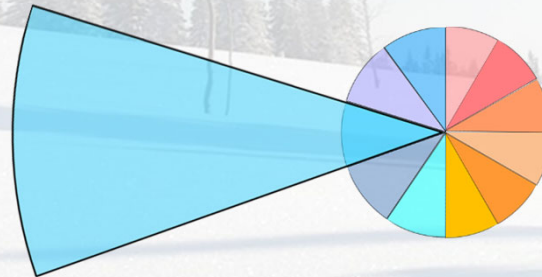
<http://www.pca.state.mn.us/publications/w-hw2-02.pdf>

Listed:



U-list

- Industrial chemicals
- Pharmaceuticals



Listed:



K-list

- Specified industries' wastes

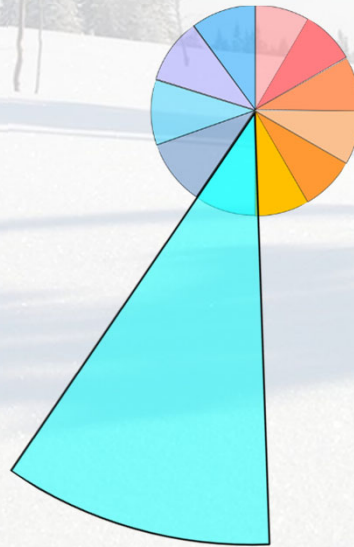


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MPCA #w-hw2-01; K-list

<http://www.pca.state.mn.us/publications/w-hw2-01.pdf>

Listed:



PCBs

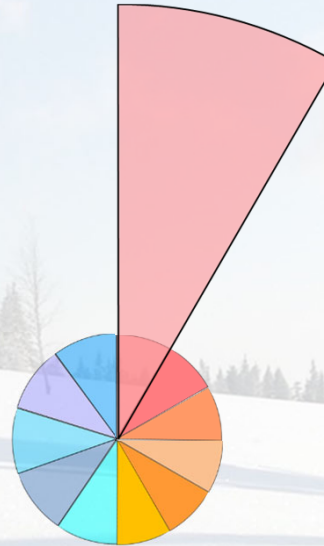
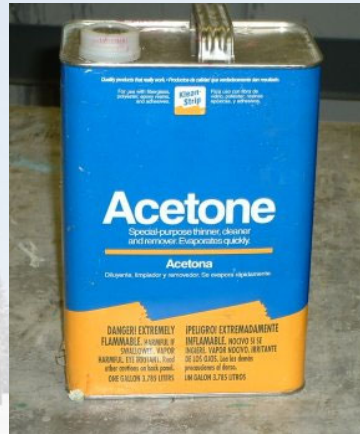
- Shredder residue*
- Lamp ballasts*
- Caulk/sealants*



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MPCA #w-hw4-48a; Identifying, Using and Managing PCBs
<http://www.pca.state.mn.us/publications/w-hw4-48a.pdf>

Characteristic:

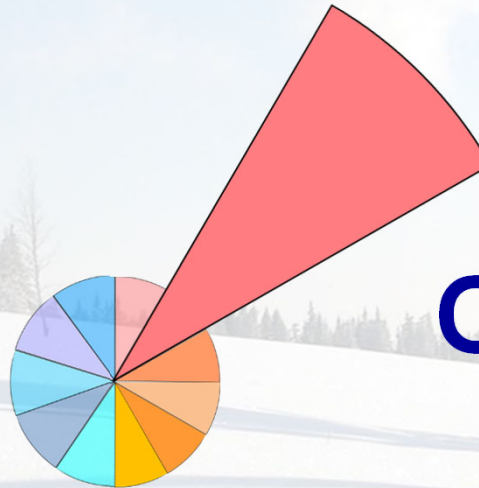
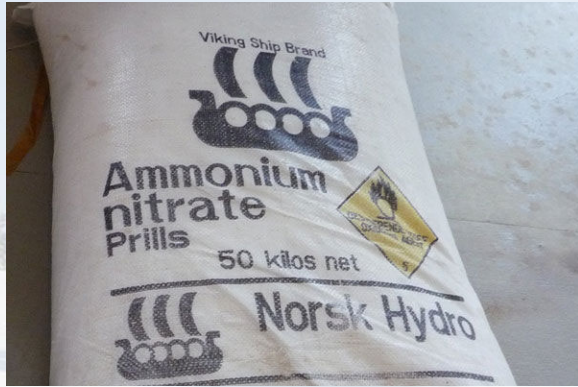


Ignitable

- Solvents
- Oil-based paint*
- Aerosols



Characteristic:

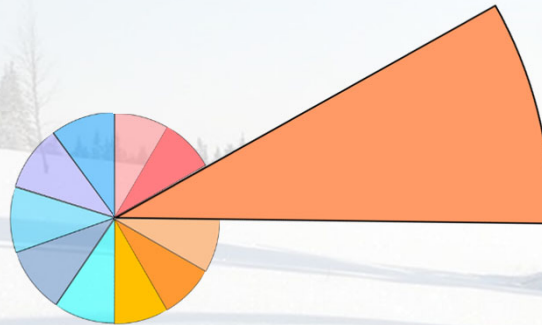


Oxidizer

- Fertilizers
- Bleaches



Characteristic:

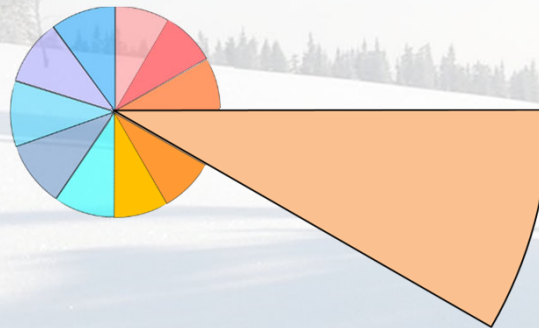


Reactive

- Water-reactives
- Airbags



Characteristic:



Corrosive

- Acids
- Cleaners

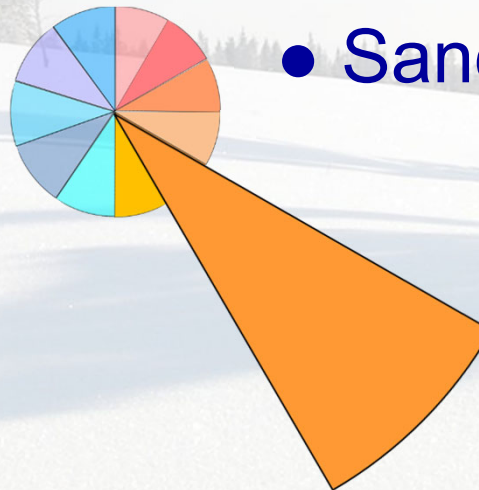


Characteristic:



Toxic

- Lead paint remediation waste*
- Sandblasting debris



Characteristic:



Lethal

- Poisons
- Pesticides



Evaluate Waste

- Every waste must either be:

- assumed to be hazardous

OR

- evaluated** as non-hazardous

(documented as non-hazardous)

- knowledge
- testing



Hazardous Waste ID#s

- Site-specific

- **contiguous**

- ☒ regional locations must **each** obtain a unique Hazardous Waste Identification Number*
 - ☒ ...AND manage their hazardous waste separately*



Hazardous Waste Containers

- “Hazardous Waste”
- Clear description
- Accumulation start date



HAZARDOUS WASTE

ACCUMULATION

START DATE _____

CONTENTS _____

HANDLE WITH CARE!

CONTAINS HAZARDOUS OR TOXIC WASTES

HAZARDOUS WASTE

FEDERAL LAWS PROHIBIT IMPROPER DISPOSAL

IF FOUND, CONTACT THE NEAREST POLICE,
PUBLIC SAFETY AUTHORITY OR THE U.S.
ENVIRONMENTAL PROTECTION AGENCY

GENERATOR INFORMATION:

NAME: _____ PHONE: _____

ADDRESS: _____

CITY: _____ STATE: _____ ZIP: _____

EPA ID NO.: _____ EPA WASTE NO.: _____

ACCUMULATION START DATE: _____

MANIFEST DOCUMENT NO.: _____

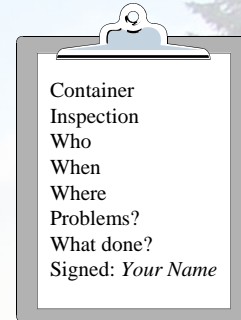
D.O.T. PROPER SHIPPING NAME AND UN OR NA NO. WITH PREFIX

HANDLE WITH CARE!

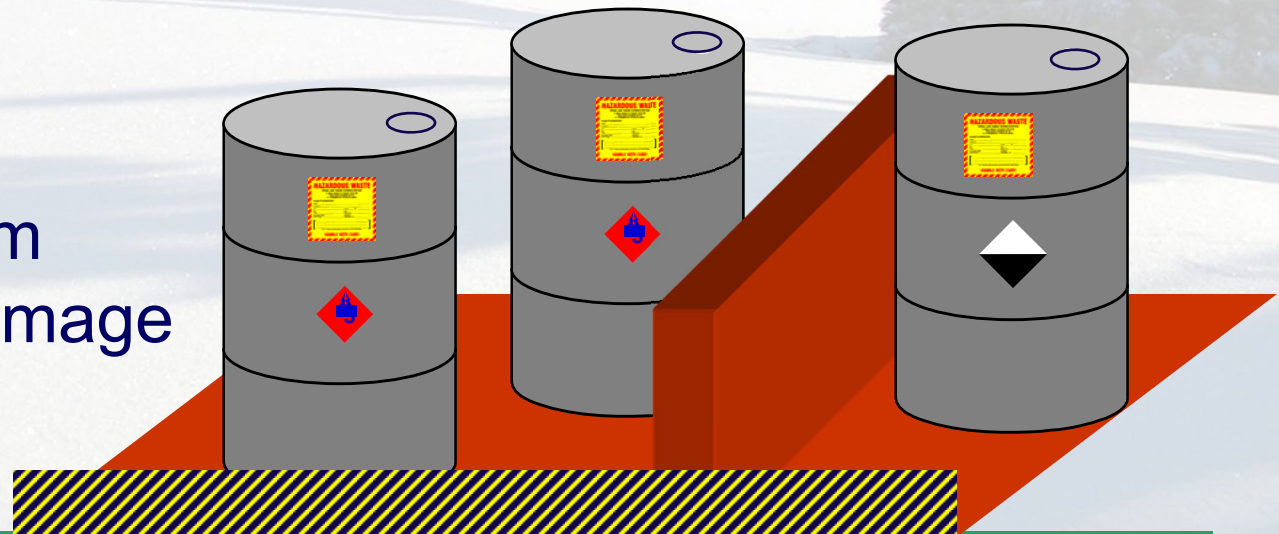


Storing Indoors

- Closed containers
- Impermeable containment surface
- Adequate aisle space
- Separate incompatible wastes
- Documented weekly inspections



- *Protected from inadvertent damage (if applicable)



Storing Outdoors

- All Indoor requirements
 - + Shading
 - + Weather protection
 - + Security




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MPCA #w-hw1-04-05; Hazardous Waste Storage

*<http://www.pca.state.mn.us/publications/w-hw1-04-05.pdf>*²³

Accumulation Volume & Time Limits

Generator Size	Volume Limit	Time Limit
VSQG	1000 kg	180* days at ≥ 1000 kg
SQG	3000 kg	180* days
LQG	None	90 days

A cartoon illustration of a person wearing a green beanie with a yellow pom-pom and a blue jacket, looking at a calendar. The calendar is open to the month of December. The background is a snowy landscape with evergreen trees.

**VSQGs/SQGs ≥ 200 miles from designated TSDF may accumulate additional 90 days*



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MPCA #w-hw1-04-05; Hazardous Waste Storage

<http://www.pca.state.mn.us/publications/w-hw1-04-05.pdf>²⁴

Ship Off-site

■ Transporters

- ❑ Transporter & Vehicle properly licensed
- ❑ Containers are DOT-labeled
- ❑ Vehicle properly placarded
 - ◆ Shipper is responsible



Questions?

Call MNDOT at (651) 405-6060



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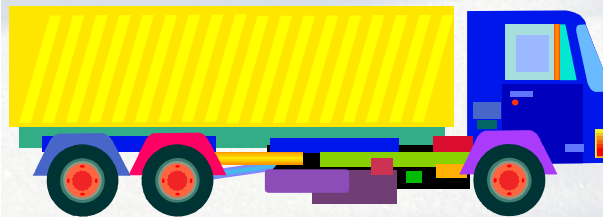
MnDOT; Office of Freight & Commercial Vehicle Operations
<http://www.dot.state.mn.us/cvo/>

Manifest Shipments

■ “Cradle to Grave” Tracking Document

- ❑ *Only trained staff sign*
- ❑ Information accurate
- ❑ Ensure ‘3-signature’ copies are received from disposal facility

The image shows a sample of an EPA Waste Manifest form (Form 8700-22). The form is titled "WASTE MANIFEST" and includes fields for generator information, transporter information, and disposal facility information. The manifest number is 002268539 JJK. The form is divided into sections for Generator, Transporter, and Designated Facility, each with specific fields for name, address, phone, and EPA ID number. There is also a table for listing hazardous waste materials with columns for quantity, type, and U.S. EPA ID number. The form includes a section for "Special Handling Instructions and Additional Information" and a "Generator's Certification" section where the generator certifies that the contents are fully and accurately described. The form is signed by the generator, transporter, and disposal facility.



Plan for Emergencies

- VSQG

- None required

- [*strongly recommended*]

- SQG

- Emergency Coordinator

- must be familiar with hazardous wastes

- LQG

- Full Contingency Plan



Equipment

- Ensure emergency equipment is accessible



Training

■ Who?

- ❑ All staff having **ANY** hazardous waste duties
 - ☒ Generation
 - ☒ Transport
 - ☒ Storage
 - ☒ Manifesting
 - ☒ Emergency Response

■ What?

- ❑ Proper waste handling
- ❑ Emergency procedures
- ❑ **Relevant to their duties** during
 - ☒ Normal facility operations **AND**
 - ☒ Emergencies



Recordkeeping



- Available for inspection at generator site
- Paper *or* Electronic



Universal Wastes

- ❑ Batteries



- ❑ Fluorescent/High-Intensity Discharge Lamps



What about green tips?

- ❑ Mercury-containing Equipment



- ❑ Collected pesticides



Universal Wastes: Management

- Store to prevent damage



- Label

UNIVERSAL WASTE	
CONTENTS	_____
ACCUMULATION START DATE	_____
SHIPPER	_____
ADDRESS	_____
CITY, STATE, ZIP	_____

- Accumulate <1 year



- Ship only for:

- recycling
- consolidation
- proper disposal



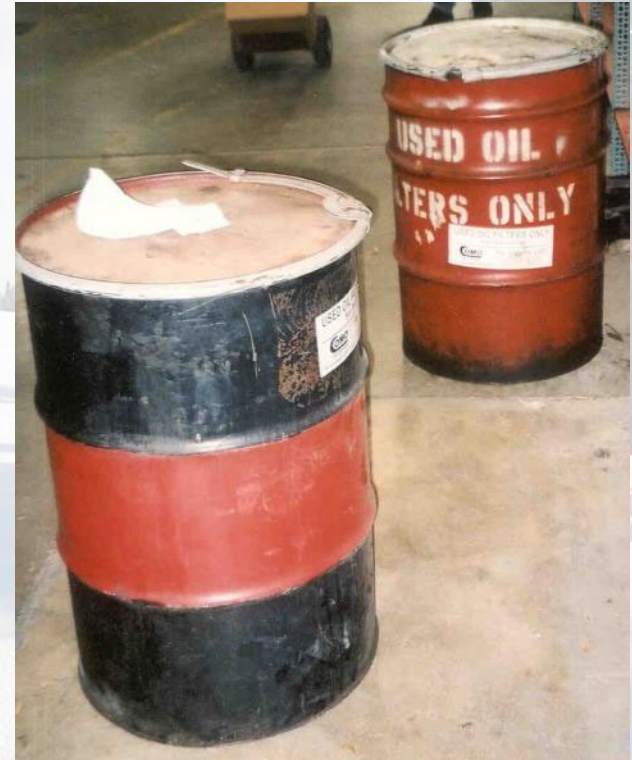
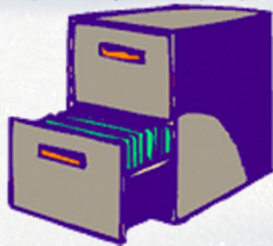
Universal Wastes: Management

- If damaged, Universal Wastes must be stored in:
 - closed,
 - leak-proof,
 - labeled containers



Used Oil (+rags, filters, absorbents)

- Store in closed, leakproof containers
- Store on impermeable surface
- Label containers
- Keep shipment records



Used Oil - Burning

- Without testing, you may burn used oil from:
 - yourself
 - 'do-it-yourself'-ers
 - farmers

- Test all other sources



E-waste

- Recycle
- Protect from release
- If you collect, register with MPCA



*HHW Removed by Businesses

- Remains HHW only if taken:
 - same-day to
 - notified & agreeable HHW Collection Program



*PCBs – Shredder Residue

- Waste, not daily cover



- Shredder must show acceptable rolling average



*PCBs - Ballasts & Capacitors

- Assume contain PCBs unless:
 - ☒ Labeled "No PCBs"
 - ☒ Date of manufacture is known to be post-1979
- Manage under TSCA requirements
 - ☐ **Report as hazardous waste disposal*



*PCBs – Caulk/Sealants

- Demolition waste if disposed w/structure



- Hazardous waste if separated during remediation

- Must be removed before burning**



*Lead Paint

- Demolition waste if disposed w/structure



- Hazardous waste if separated during remediation

- *Does not* need to be removed before burning**



**Burning Structures

- Allowed ONLY for legitimate fire training
 - all buildings - includes houses, barns, & government
- Pre-burn inspection
 - asbestos
 - hazardous components
 - PCB caulk
 - *lead paint may remain*



*Oil-based Paint



- Collection Program available by July 14
- Run by PaintCare



- Collection at retail outlets
- Disposal funded by sale surcharge
- *remains a hazardous waste*



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MPCA #4683; Paint Stewardship
<http://www.pca.state.mn.us/ycx948u>

Appliance Recyclers

- Recycling = any processing
- File Permit-By-Rule (PBR) w/MPCA
 - County SWA or Zoning Officer sign-off
 - Refrigerant technician certification



MPCA #w-hw3-02; Appliance Recycling

<http://www.pca.state.mn.us/publications/w-hw3-02.pdf>



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Salvage Yards

- PBR if processing appliances
- Stormwater Permit
- <500 waste tires



Compliance Resources

- MPCA Small Business Environmental Assistance Program (SBEAP)
 - Free
 - Confidential

 - 651-282-6143
 - 800-657-3938



Compliance Resources

- Minnesota Technical Assistance Program (MnTAP)
 - Free
 - Downloadable self-assessments



Questions?

Any MPCA staff

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Electronic copies of this presentation and all other presentations available free

