SEMCOG and DNRE present

Southeast Michigan Environmental Conference: Environmental Regulations Affecting Municipalities

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What Will Session 3 Cover?

Handling Requirements for:

- Transportation
- Land Disposal Restrictions
- Universal Waste
- Used Oil
- Liquid Industrial Waste

Dos and Don’ts of Managing Waste

DNRE Transportation Regulations

- Act 451, Michigan Natural Resource and Environmental Protection Act
  - Part 111, Hazardous Waste
  - Part 121, Liquid Industrial Waste
- Act 138, Hazardous Materials Transportation Act

Hazardous Material
U.S. DOT vs Act 138

U.S. DOT Hazardous Material

- Substances (products & wastes) listed in Hazardous Materials Table found in 49 CFR, 172.101
- Materials exhibiting a hazard during transport
- Hazardous waste is a U.S. DOT hazardous material

Act 138 Hazardous Material

- Includes **only** hazardous waste and liquid industrial waste

Hazardous Material Implementing Authority

- Michigan State Police, Traffic Safety Division implements U.S. DOT regulations and permits U.S. DOT hazardous material transporters

- DNRE implements Act 138 and permits and registers Act 138 hazardous materials transporters.

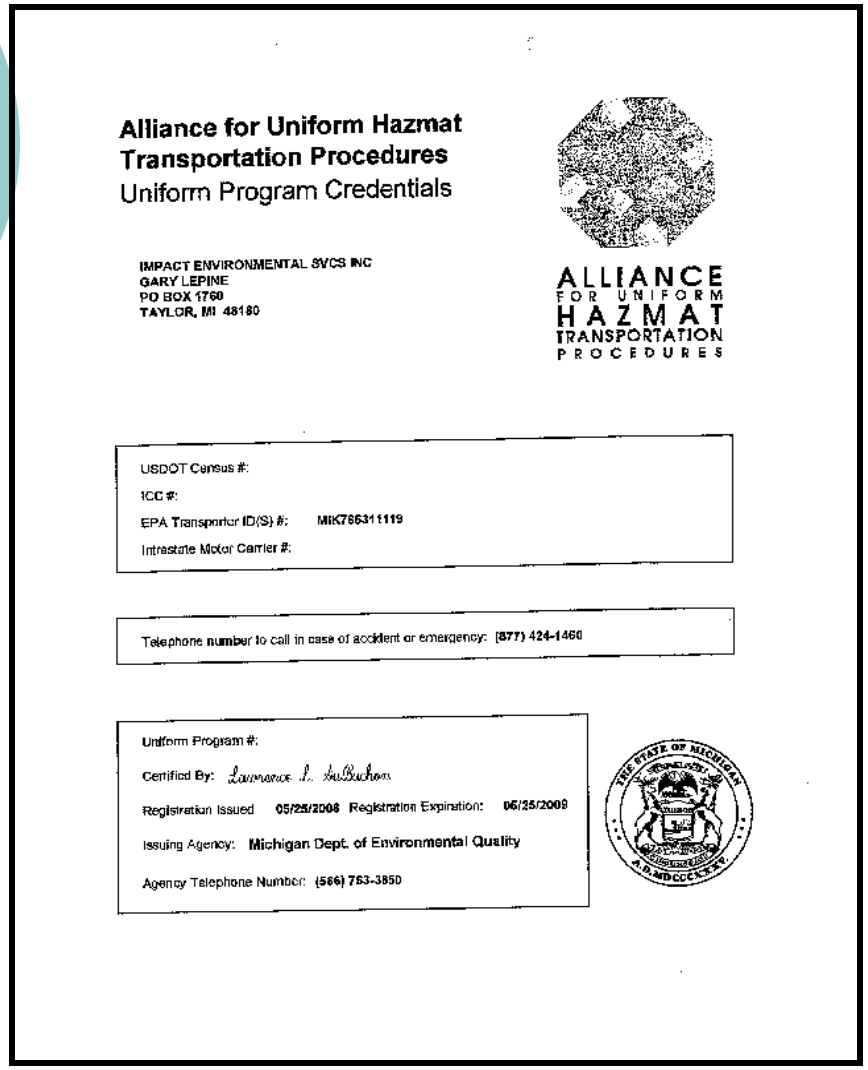
Act 138 Transporter Requirements

- Permit (3 yr) & Registration (1 yr) required for
  - Hazardous waste transport
  - Liquid industrial waste transport
  - Hazardous and liquid industrial waste transport

- Fleet liability coverage must be maintained for accidental occurrences (no less than

  $1,000,000 per occurrence for hazardous wastes and $750,000 or $300,000 per occurrence for liquid industrial waste)

Act 138 Transporter Requirements



Alliance for Uniform Hazmat Transportation Procedures
Uniform Program Credentials

IMPACT ENVIRONMENTAL SVCS INC
GARY LEPINE
PO BOX 1760
TAYLOR, MI 48180

ALLIANCE FOR UNIFORM HAZMAT TRANSPORTATION PROCEDURES

USDOT Census #:
ICC #:
EPA Transporter ID(S) #: MIK786311119
Intrastate Motor Carrier #:

Telephone number to call in case of accident or emergency: (877) 424-1460

Uniform Program #:
Certified By: Lawrence L. LaBuchan
Registration Issued 05/25/2008 Registration Expiration: 06/25/2009
Issuing Agency: Michigan Dept. of Environmental Quality
Agency Telephone Number: (586) 753-3850

THE STATE OF MICHIGAN

- Approval of Act 138 permit & registration result in issuance of "Credential" at left
- Credential must be carried at all times by transporter & presented upon inspection
- Credential lists effective period

Act 138 Transporter Permit/Registration Exemption

- Self transportation:
  - Applies **only** to liquid industrial waste (not hazardous waste)
  - Applies **only** to owner/operator transporting liquid industrial wastes from owner/operator site generated from property or equipment that the generator owns or has an ownership interest.

Act 138 Transporter Permit/Registration Exemption

- Governmental transportation of **only** liquid industrial waste in vehicles owned and operated by government employees

- On-site (not on public roadway) transportation

Hazardous Waste Pre-Transport Requirements
(Rule 305)

- Package, label, and mark each hazardous waste package in accordance with US DOT regulations AND

- Mark each container of ≤119 gallons with:
  - "HAZARDOUS WASTE – Federal Law Prohibits Improper Disposal. If found, contact the nearest police or public safety authority or the U.S. Environmental Protection Agency."
  - Generator name and address
  - Generator Site Identification Number
  - Manifest Tracking Number
  - Hazardous waste codes identifying the waste

Placards

- SQG shipping > 1000 lbs & LQG must have US DOT placards available for transporters.
- Call Michigan State Police, Traffic Safety Division at 517-336-6580 for more info about placards.

Hazardous and Liquid Industrial Waste Transportation Requirements

(Rule 403 & Section 12103)

- Employ only Act 138 permitted & registered transporters to transport hazardous and/or liquid industrial waste by public roadway

- Verify Act 138 transporter credential information by going to www.michigan.gov/dnre, "Waste," "Hazardous and Liquid Industrial Waste Transporters," and "Participating Transporters"

Self Transportation

- Self transport of CESQG waste to HHW collection is exempt from Act 138 permit & registration if transported in volumes < 55 gallons in accordance Part Op Memo 121-2

- Self transport < 55 gallons without a manifest requires explicit records and transport of volumes ≥ 55 gallons requires a manifest

Self Transportation
(Section 12103(4))

Generators transporting own liquid industrial waste in volumes < 55 gallons does not require manifest if:

- Waste is accompanied by record showing the source & quantity of the waste and the designated facility where the waste is being shipped
- Generator obtains signature from the designated facility acknowledging receipt of the waste and provides a copy of the record of shipment to the designated facility
- Generator retains a copy of the shipment record for 3 years from the date of shipment

Land Disposal Restrictions (LDR) Overview

(Rule 311 and 40 CFR 268)

- Applies to listed & characteristic hazardous wastes from SQGs & LQGs
- Requires generator characterize, provide LDR notice to TSD, and maintain records 3 years
- Requires treatment before land disposal for most wastes
- Determine if treatment required by reviewing if waste codes for each waste stream meets the standards in 40 CFR 268.40, 268.45 (debris), or 268.49 (soil)

Land Disposal Restrictions (LDR) Overview

(Rule 311 and 40 CFR 268)

- Land disposal includes any disposal on land (landfill, land treatment, injection well, salt caverns, etc)
- Notification required even for shipment to non-land based TSDs (e.g. incinerator)
- New LDR notification must be sent when there is a waste or facility change
- Also referred to as “land ban” requirements

Land Disposal Restrictions (LDR) Overview

(Rule 311 and 40 CFR 268)

- LDR notice is required when generators performing on-site treatment prior to shipment and when using tolling agreement to ship hazardous waste for recycling
- Characterization to meet LDRs must evaluate underlying hazardous constituents and can be done using knowledge and/or testing
- Discuss LDR requirements with your TSD as many have preprinted forms that can be used to assist generators in meeting the LDRs

Universal Waste Standards
(Rule 228)

Definition: A set of streamlined standards for managing hazardous waste that are intended to help facilitate easier, less expensive disposal and/or development of recycling markets

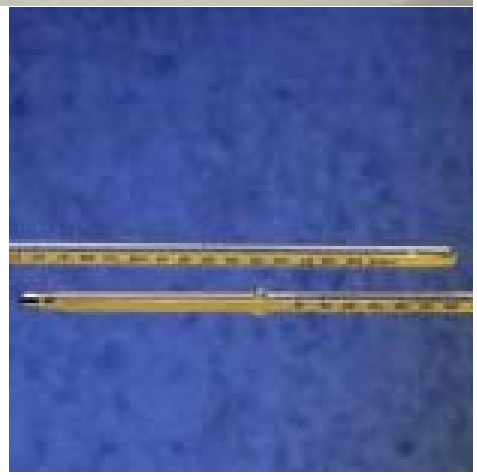
Universal Waste Types:

Electric Lamps
Batteries
Pesticides
Consumer Electronics
Mercury Containing Devices
Pharmaceuticals
Antifreeze

See DNRE Publication Center Universal Waste Guidance

See DNRE Publication Center
Electric Lamp Guidance
LIGHT BULBS
Electric
Lamps

Mercury Devices



Thermostats, automotive mercury switches, sphygmomanometers, & thermometers

Consumer Electronics

See DNRE Publication Center Electronic Equipment Guidance

Devices with circuit boards or liquid crystal/plasma displays common to homes and offices and the same devices found in other settings (e.g. computers, cell phones, televisions, stereos, PDAs, DVD players, etc.)

Pharmaceuticals

See DNRE Publication Center Mixed Medical Waste Guidance

- Drugs only
- Does not include medical waste
- Medical waste is infectious or potentially infectious (e.g. sharps/needles, vaccines with live viruses, body tissue, etc.)
- Do not mix medical waste with pharmaceuticals unless disposing of the waste at a permitted & licensed hazardous waste incinerator authorized to incinerate mixed medical waste

Universal Waste Requirements for All Handlers

- Cannot dispose of universal waste
- Cannot treat universal waste except when:
  - Responding to a release
  - Performing treatment exempt from hazardous waste permitting/licensing or authorized under universal waste handler regulations
- Manage wastes in a way to avoid releases

Universal Waste Requirements for All Handlers

- Send or take universal waste to another handler, destination facility, or foreign destination.
- Inform employees about proper handling and emergency procedure for the waste
- If mixing universal waste with other non-hazardous wastes, managing mixture according to the universal waste standards
- Make prior arrangement for shipment to another universal waste handler

Universal Waste Requirements for All Handlers

- Label each item or container holding items:
  - Universal waste "item name" OR
  - Waste "item name" OR
  - Used "item name"

    (e.g. "Universal Waste Pharmaceutical" or "Waste Pharmaceutical" or "Used Pharmaceuticals")
- Meet liquid industrial waste manifesting requirements if liquid
- Meet U.S. DOT regulations for all shipments

Universal Waste Requirements for All Handlers

- Meet other state's requirements if shipping waste out-of-state
- If other state does not recognize the waste stream as a universal waste type (and waste must be manifested as a hazardous waste), note in Box 14 of the out-of-state hazardous waste manifest that waste was managed as a universal waste in Michigan
- Meet exportation requirements if shipping universal waste out to other countries

Universal Waste Handlers

Handler Types:

- Small Quantity Universal Waste Handler
  - No Site Identification Form required
  - Handles < 11,000 pounds (total all universal waste types combined) during entire calendar year

Universal Waste Handlers

Handler Types:

- Large Quantity Universal Waste Handler
  - Site Identification Form required
  - Handles ≥ 11,000 pounds (total all universal waste types combined) at any time during calendar year

Used Oil

Used oil is "any oil which has been refined from crude oil, or any synthetic oil, which has been used and as a result of use, is contaminated with physical or chemical impurities" and includes:

- **Used Motor Oils**
- **Used Hydraulic Oils**
- **Used Transmission & Brake Fluids**
- **All Synthetic Oils**
- **Spent Quench Oils**
- **Spent Gear Oils**
- **Non-PCB Transformer Oils**
- **Oil-Water Mixtures if sufficient oil exists for legitimate recycling**

See DNRE Publication Center Used Oil Guidance

Used Oil

Used oil does *NOT* include petroleum based products that were not designed to function as lubricating agents or other protective applications

Used oil does *NOT* include:

- Fuels (Gasoline, Diesel, Fuel Oils)
- PCB Oils (TSCA)
- Mineral Spirits
- Certain Test/ Calibration Fluids
- Animal Fat or Vegetable Based Oil

Used Oil

- Used oil is subject to regulation under Parts 111, 121, and 167 of the Michigan Natural Resource and Environmental Protection Act
- Part 111 and 121 establish hazardous waste and liquid industrial management standards for the used oil
- Part 167 requires that the used oil be recycled

Used Oil

- **Used oil** generally does not include used oil containing >1000 PPM halogens

- Used oil with > 1000 PPM halogens is a presumed **listed hazardous waste** unless sufficient characterization data can be presented to **"rebut the presumption"** that the halogens are present from mixing used oil with a listed hazardous waste (chlorinated solvents)

Used Oil

- “Rebutting the presumption” is complicated for transporters & processors accepting used oil from multiple sources and most will not accept used oil > 1000 PPM halogens

- Total halogens are usually tested using SW 846 or using on-site testing equipment like“Chlor-D-Tect”

Used Oil

- If > 1000 PPM halogens present, additional, costly testing is required to “rebut” whether used oil was mixed with hazardous waste:
  - **Analyze for all halogenated Appendix VIII constituent**
  - **If > 100 PPM used oil fails and must be managed as a hazardous waste**
- Conclusion: Do not mix used oil with other wastes to facilitate required recycling and avoid being required to manage the mixture as a hazardous waste

Liquid Industrial Waste Generator Standards

(includes Used Oil)

- Characterize wastes and maintain records for 3 years from last off-site shipment or on-site treatment and/or disposal
- Keep records of all liquid industrial waste produced, treated and/or disposed on-site
- Keep records of hazardous waste generator status to verify regulatory status of CESQG exempted hazardous waste that are liquid

- Obtain and utilize Site Identification Number if manifesting liquid industrial waste for disposal

Liquid Industrial Waste Generator Standards

(includes Used Oil)

- Container or tank accumulation only
- Label containers/tanks with words “Used Oil” or their contents
- Containers/tanks must be compatible with the wastes, closed, and in good condition
- Protect waste from weather, physical damage, fire, and vandals
- Accumulation conducted to prevent escape of wastes to air, water, sewers or the ground

Liquid Industrial Waste Generator Standards

(includes Used Oil)

- Report releases that could threaten health, safety, welfare, or environment
- Respond to releases to stop, contain, and clean up the spill
- Manifest off-site shipments unless consolidated manifesting or self transporting with a trip log
- Use Act 138 permitted & registered liquid industrial waste transporter

See DNRE Publication Liquid Waste Generator Guidance

Liquid Industrial Waste Generator Standards

(includes Used Oil)

- Ship waste only to a designated facility with a Site Identification Number unless treating and/or disposing of the waste on-site
- If disposing of liquid industrial waste on-site to the POTW, maintain record of POTW authorization for the discharge
- Manage in accordance with EPA Spill Control and Countermeasures requirements; Part 31 Water Resources Pollution Incident Prevention Plan requirements, and any tank installation/registration requirements

Do

- Follow exemption requirements
- Maintain required records (characterization, manifests, land disposal restriction, monthly generator status, etc.)
- Minimize waste to minimize regulatory burden
- Train staff to handle hazardous waste and respond to emergencies
- Notify DNRE of reportable releases

Do

- Confirm questionable exemptions with DNRE staff
- Utilize universal waste standard where possible
- Institute measures to prevent releases
- Document correction of observed violations to DNRE ASAP
- Review waste characterization at the time of each process or material change

Do

- Routinely dispose of wastes
- Ship hazardous waste using manifest & via credentialed transporter
- Preventing repeat violations during subsequent inspections
- Keeping waste characterizations on- site
- Ensure you have staff that understand the regulations

Do Not

- Store greater than 90/180 days (SQG/LQG)
- Overlook re-characterizing and/or illegally dispose
- Install hazardous waste tanks without certification

Do Not

- Operate as a SQG or LQG without required secondary containment, training, and emergency planning
- Rely solely on your vendor to ensure compliance
- Transport hazardous waste and/or liquid industrial waste without the required permit and registration

Need Help?

- Go to www.michigan.gov/dnre, select "Key Environmental Topics," "Environmental Assistance," then "Local Government."
- Contact the DNRE EAC at 800-662-9278
- Search the DNRE Publication Center
- Contact DNRE district waste inspection staff
- Contact hazardous waste vendors
- Contact waste consultants