# Inspection Panel: Common Violations and How to Avoid Them

Jim Ferritto
Waste Characterization Specialists
Michigan Department of Environmental
Quality



## **Inspection Panel**

- Wade O'Boyle, Grand Rapids
- Mary Ann St. Antoine, Marquette
- Jenny Bennett, Gaylord
- Jill Coulter, Lansing



#### Common Generator Violations

- Waste Characterization
- Waste Accumulation and Handling
- Recordkeeping
- Training



Q: What is it?

A: It's just water

(& some other stuff)

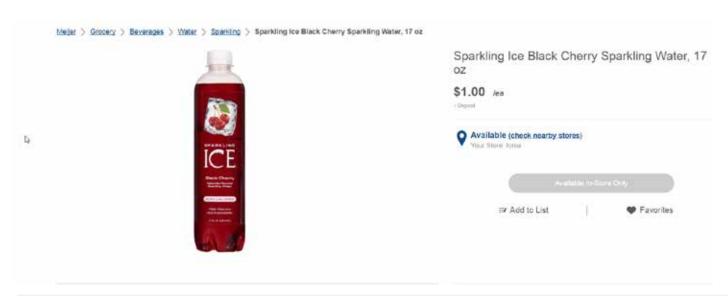
**Waste Characterization** 

WADE O'BOYLE









#### Ingredients

Carbonated Water, Natural Flavors, Apple Juice Concentrate, Malic Acid, Cherry Juice Concentrate, Potassium Benzoate (To Ensure Freshness), Citric Acid, Sucralose, Red 40, Green Tea Extract, Biotin 1% Trit, (Maltodextrin), Niacinamide (B3), D-Calcium Pantothenate (B5), Vitamin B12 0.1% (Mannitol), Vitamin D3, Pyridoxine HcI (B6), Blue 1.





#### ingredients

reverse osmosis water, less than 1.5% of: erythritol, monopotassium phosphate and di-potassium phosphate and magnesium lactate and calcium lactate (electrolyte sources), natural flavors, citric acid, vitamin C (ascorbic acid), stevia leaf extract, vitamin B3 (niacinamide), vitamin B5 (calcium pantothenate), vitamin B6 (pyridoxine hydrochloride), vitamin B12 (cyanocobalamin), gum acacia, glycerol ester of rosin, medium chain triglycerides, betacarotene (for color)

flavored + other natural flavors





CLICK NERE for mery detailed enalysis or self or toll free at 800 678-4423

2010	video	Allulysis	перы
2016	Water	<b>Analysis</b>	Report

ICE MOUNTAIN'S NATURAL SPRING WATER

SUBSTANCE	MINIMUM REPORTING LEVEL	FDA SEQ/EPA MCL	REPORTED RESULTS
Inorganic Minerals and Metals	V		1.
Calcium	0.10	NR	4,1-59
Sodium	0.20	NR	1.2-10
Potassium	0.10	NR	NO
Fluoride	0.100	2.0(1.4-2.4)	ND
Magnesium	0.10	NR	15-22
Nitrate	0.010	10.00	ND-23
Chloride •	0.10	250	1.2-14
Copper	0.050	1.0	ND
pH (units) •	NA NA	6.5-8.5	0.8-8.1
Sulfate •	0.10	250	2.1-39
Arsenic	0.0014	0.010	ND
Lead	0.005	0.005	ND
Total Dissolved Solids •	1.0	500	39-260

All units in (mg/l) or Parts per Million (PPM) unless otherwise indicated.

http://www.tampabay.com/news/environment/water/the-water-in-a-bottle-can-spring-from-just-about-anywhere/418792

https://www.nestle-watersna.com/asset-library/publishingimages/brands/ice%20mountain/icemountain\_water\_analysis.png



EPA Secondary Standard - non-enforceable guidelines regulating contaminants that may cause cosmetic or aesthetic effects in drinking water

<sup>†</sup> Set by California Dept. of Health Services

#### WHAT'S INSIDE

CAFFEINE + TAURINE + B-GROUP VITAMINS + SUGARS + ALPINE WATER.

Red Bull Energy Drink's special formula contains high quality ingredients.





Brewed with 100% Centennial hops from the Pacific Northwest and named after the Two Hearted River in Michigan's Upper Peninsula, this IPA is bursting with hop aromas ranging from pine to grapefruit from massive hop additions in both the kettle and the fermenter.

Perfectly balanced with a malt backbone and combined with the signature fruity aromas of Bell's house yeast, this beer is remarkably drinkable and well suited for adventures everywhere.

Alcohol By Volume: 7.00%

Original Gravity: 107

Shelf Life: 6 Months

NUTRITIONAL INFORMATION (PER 12 OZ. SERVING)

Calories: 212

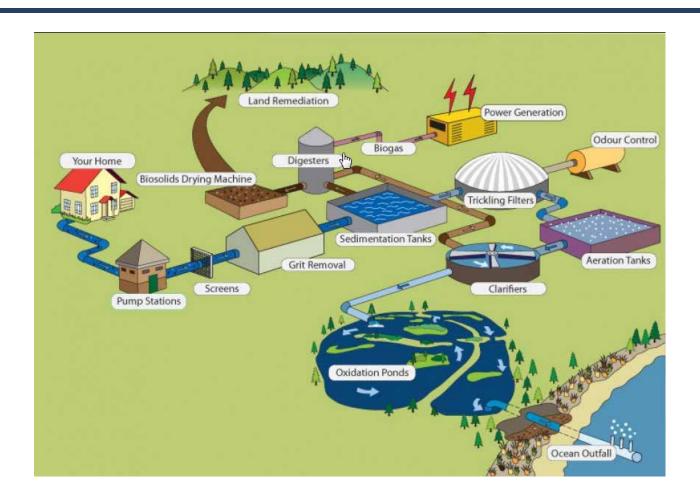
Carbs: 17



https://www.bellsbeer.com/beer/year-round/two-hearted-ale



(& some other ??!)





### Q: What is it?

### A: It's just water (& some other stuff)

#### "Waste characterization"

- I use "water" to illustrate that specifics or characterization is important.
- In the context of waste or byproducts, when someone says, "it's just water (dirt, wood, etc.)", I have many questions (e.g. knowledge, tests, etc.).
- All of the examples are generally speaking, "just water", but also take on individual identities.
- Details make all the difference (& some other stuff):
  - Fishy water, carbonated flavored water, water with flavoring & vitamins, spring water (contains carbonates, iron, etc.), caffeine etc., flavored water & alcohol, and waste water.
  - It's NEVER JUST WATER!



## Generators of Hazardous Waste have "Cradle to Grave" responsibility!!!

Think about WHEN AND WHERE a Product or Chemical would be considered a "waste" (This is a time and a place!).









Gum Note: Nicotine is a listed Hazardous Waste P075 "acute hazardous waste"





#### The Riddle of the Sphinx:

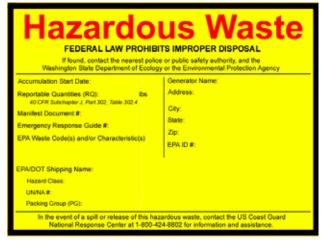
"What walks on four legs in the morning, two legs in the afternoon, three legs in the evening, and no legs at night?"















## Know your own Waste & Manage it Properly

#### Hazardous because:

- 1. Listed
- 2. Characteristic (test)

#### You know because:

- 1. Knowledge
- 2. Tests



### Know your own Waste & Manage it properly

 The KEY- Documentation! Documentation! Documentation!

• If Hazardous- WHY? Document!!! Include knowledge AND lab results (always representative sampling)

 If Non-Hazardous- WHY? Document!!! Include knowledge AND lab results (always representative sampling)



#### Waste Characterization Record

To meet the waste characterization recordkeeping requirements in rules:

- Create a record that details your answers to the waste characterization questions asked in Rules 212 and 213
- Detail must thoroughly document your determination
- Detail are in addition to the records necessary for OSHA safety
- Records should be assembled and readily available at the site of generation for each waste stream

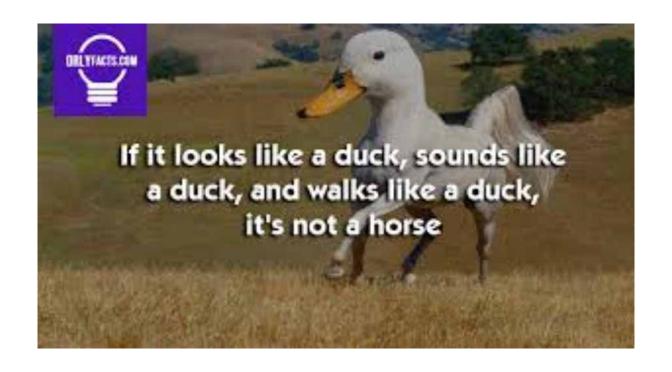


#### Waste Characterization Record

#### Waste characterization record should include:

- waste type/name
- narrative description of the waste
- source of waste
- test result(s) obtained from sampling and analyzing the waste
- description of the sampling procedure(s) used for waste testing
- details on how the sample was determined to be representative of the waste stream
- a copy of Safety Data Sheets (SDS) or other reference materials relied upon for making the waste determination, including calculations used to evaluate subpart BB and CC applicability (to determine the ppmv volatile organic compound content of the waste)











#### Michigan weather: predictably unpredictable



Rules require that the generator ensures that the area where the waste is accumulated is protected from weather, fire, physical damage, and vandals.















#### Look up! Damage from falling ice



#### Damage from snow plows and careless drivers





#### **Vandals**







## Keep IBC Totes, drums and containers stored securely away from driveways, alleys and public access.



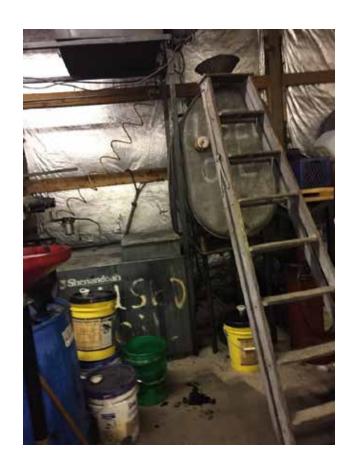








## **Good Housekeeping Prevents Fires**







#### Fuel for fires













## **Ignition Source**







## Ignition source











## Fire, Explosion or Discharge







## Fire, Explosion or Discharge







## Fire, Explosion or Discharge





# Labeling & Closed Containers

#### **AKA**

Where's My Label?
and
How Closed is Closed?

**JENNY BENNETT** 





#### Where's My Label?

#### **Great Question...**

- On the shelf above the accumulation containers?
- Stapled to my transporter's invoice?
- Filed with last year's tax documents?
- Locked in the office of a staff member on extended leave?



### Satellite or 90/180 Day Accumulation Area





























#### How Closed is Closed?

- Why would the regulations require my container to be closed?
- What am I trying to prevent?
- How can I make it easier for my employees to comply?
- How can I be more efficient?



## Liquid vs Solid? Access Needed Multiple Times per Day or Once per Week?









































# Accumulated Happily Ever After!

(actually 270 days or less, depending on your generator status & location, unless you are a CESQG)

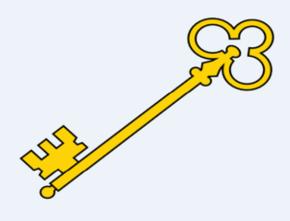




## Training

## Hazardous Waste Part 111

KEY to Success

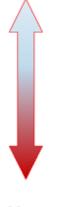


JILL COULTER



# Hazardous Waste Generator Compliance Summary

#### Less Regulation

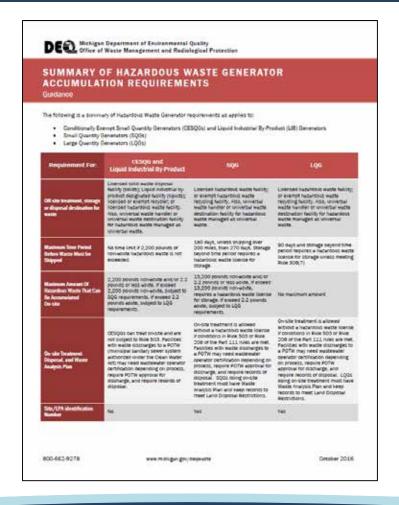


Conditionally Exempt Small Quantity Generators

**Small Quantity Generators** 

**Large Quantity Generators** 

More Regulation





#### Web Resources

 Go to www.michigan.gov/deqwaste Select "Hazardous" tab on the left Select "Hazardous and Liquid Industrial Waste Management" to access resources and statutes/rules

Go to www.michigan.gov/deqretail



#### **Self Certification Form**

#### **Trainer Training - Recorded Webinars**

MDEQ Hazardous Waste Manag	ement & Regulations Webinar Series
Hazardous Waste Genera	ator Trainer - Self Certification
I,	, certify that I have viewed the entirety of the Michigan Department of
general understanding of the hazardous waste and liquid industris Management, and Part 121, Liquid Industrial By-product of the Michiga amended, and the rules promulgated thereunder. I recognize that this compliance measures and training as part of a site-specific hazardous on necessary for on-site personnel to properly perform their daily duties	w related to the waste training program(s) for which I am responsible to gain a all by-product generator requirements under Part 111, Hazardous Waste an Natural Resources and Environmental Protection Act, Act 451 of 1994, as information is essential for me to evaluate the need for additional site specific waste training program. I recognize that additional site-specific staff training is related to the generation and management of hazardous waste. I further us waste tank or Subpart CC requirements, and that additional independent
Waste 101, September 27, 2016	Waste Recordkeeping & Inspection, April 18, 2017
Signature Date Viewed  Universal Waste, November 16, 2016	Signature Date Viewed  Conditionally Exempt Small Quantity Status, May 18, 2017
Signature Date Viewed  Waste Characterization and Generator Status, January 18, 2017	Signature Date Viewed  2017 Part 111 Rule Changes, June 20, 2017
Signature Date Viewed  Used Oil, February 23, 2017	Signature Date Viewed
Signature Date Viewed  Waste Accumulation and Labeling, March 22, 2017  Signature  Date Viewed	Diligent attention was given to assure that the information presented in the webinar series is accurate as of the date of delivery; however, there is no guarantee, expressed or implied, that use of this webinar series will satisfy all regulatory requirements mandated by the regulations and their respective enforcement agencies. Reliance on information from this webinar series is not usable as a defense in any enforcement action or litigation. Viewers are encouraged to also review the relevant statutes and administrative rules which can be accessed through the webinar notes provided for the webinar series or at <a href="https://www.michigan.gov/deqwaste">www.michigan.gov/deqwaste</a> .



### **Training Resources**

#### HAZARDOUS WASTE (HW) MANIFEST & LIQUID INDUSTRIAL BY-PRODUCT (LIB) SHIPPING DOCUMENT GENERATOR TRACKING LOG<sup>1</sup>

Manifest Number or LIB Shipping Document Number <sup>2</sup>	Date shipped off-site	FOR HAZ WASTE ONLY Date LDR <sup>3</sup> submitted	Date HAZ WASTE TSDF Manifest Copy received from TSDF	
				Ц
				Ц
				Ц
				Ц
				Ц
				Ц
				Ц
				Ц
				$\prod$

#### As of the November 5, 2013, HW rules changes:

- Small Quantity Generators (SQG's) and Large Quantity Generators (LQG's) of HW ar Environmental Quality (DEQ) for HW generated in Michigan and shipped to a Michiga transmit this manifest data to the DEQ.
- SQG's and LQG's shipping HW to out of state TSDF remain responsible for mailing the Lansing, Michigan 48909-7538 at least quarterly within thirty days of the end of each As of the March 16, 2016, effective date of the LIB statutory changes:
- LIB generators are no longer responsible for mailing in manifests or shipping docume
- LIB may be documented on a manifest or shipping document meeting the Part 121 st
- Conditionally Exempt Small Quantity Generator(CESQG) hazardous waste liquids mu a manifest or shipping document as well.
- · CESQG's using a manifest and shipping document to document shipment of hazardo documents to the DEQ.
- 1. The DEQ provides this template but does not require this log to be used to record subr 2. LIB consolidated shipping documents require a shipping document number. Individua
- 3. Indicate if a land disposal restriction (LDR) notice (also called land ban notice) was set changes. An LDR notice is required for hazardous waste shipments from SQG's and

MONTH: YEAR:																				
WEEK #	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Labeled																				
Dated																				
Containers Closed																				
Spills																				
Containment																				
Corrective Measures																				
Date																				
Initials																				

On the back, write comments on any areas below that were not in compliance (include the date).

Labeled Check that all drums and all other containers are properly labeled ("Hazardous Waste" and waste number).

If satellite container, check if label has "Hazardous Waste" and either waste number or chemical name, or it can have both

Dated: Check to see if the container has the date listed when waste was first put in the container, and confirm the date on the container has not exceeded 90 days for Large Quantity Generator, or 180 days for Small Quantity Generator, which ever is

applicable. If the date on the container has exceeded 90 days or 180 days, contact management.

If it was a satellite container, check if the date was listed when the containers from that satellite area reached the maximum

amount, either 55 gallons non acute, or 1 quart acute or severely toxic, hazardous waste

Containers Closed: Make sure that containers are closed (e.g., both bungs are in drums, drum ring top is secure, funnel tops closed,

funnel valve closed, or tarp over roll-off box).

Spills: Check that all containers are not leaking, bulged, or in poor condition. Are spills or staining present? If so, contact

Make sure that there hasn't been any degradation to the secondary containment, (e.g., any cracks, is coating sufficient?)

Is there enough set back distance of containers for squirt protection? Are all containers in the containment area?

Are corrective measures needed and taken? Record details on the back. Corrective Measures:

Inspector dates and initials.

Revised 6/2006. Use of this DEQ WHMD checklist is optional, but Large Quantity Generators are required to have written inspection records and all others are encouraged to have written records. Written records are required for regulated waste tanks. Keep records at least 3 years.

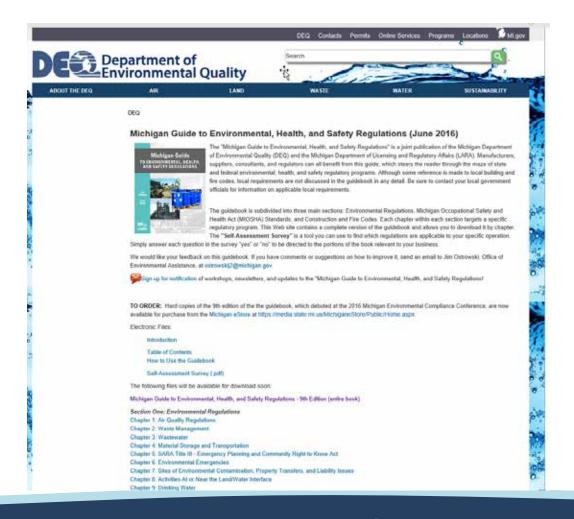
See Part 111 of Ast 451 of 1994 administrative rule R 209.0308(1)(a)(i), 308(2), and Chapter 2 of the MDEG Michigan Manufacturers' Guide to Environmental Safety. and Health Regulations for more information.

DE Template Manifest Log Rev. 3/16



#### DEQ Guidebook

Go to www.michigan. gov/ehsguide





## Different Areas of Training

JOB DISCRIPTION



# Large Quantity Generator Training Requirements

The generator complies with the requirements for owners or operators of interim status facilities in 40 CFR 265 subparts C and D (preparedness prevention & contingency planning), §265.16 (personnel training and part 268 (land disposal restrictions)



### Large Quantity Generator Training Requirements

#### LQG employee training documents:

- Must have written hazardous waste training program
- Must conduct annual training for employees
- Must keep written training records for 3 years
- Training must be conducted by someone qualified to give training
- Must have description of the type of training given



### Small Quantity Generator Training Requirements

The generator shall ensure employees are thoroughly familiar with proper waste handling and emergency procedures relevant to their responsibilities during normal facility operations and emergencies



### Conditionally Exempt Small Quantity Generator Training Requirements

CESQGs do not have any specific training requirements but are encouraged to train regularly to ensure they can safely manage waste during normal operations and during emergencies



### Preparing/Offering Waste for <u>Transport</u>

#### Requires Training to meet:

- Part 111, Hazardous Waste Training
- 49 CFR US DOT Training

See Chapter 4 of guidebook also available on-line at www.michigan.gov/ehsguide



### **Environmental Emergencies**

Prepare for reporting an environmental emergency by reviewing the Release Reporting Table at www.michigan.gov/chemrelease

When in doubt whether to report or when a release impacts waters of the state, notify:

- Your local emergency responders at 911
- DEQ Pollution Emergency Alert System (PEAS) at 800-292-4706 (within Michigan) or 517-373-7660 (outside Michigan)
- EPA National Response Center at 800-424-8802



### **Environmental Emergencies**

MERGENCY	NAME	ERGENCY INFORMATION  Map of facility with emergency equipment, spill equipment, exit routes, and alarm locations.
COORDINATOR	PHONE	IDDES, and distribution
ALTERNATE NAME	NAME	
	PHONE	
FIRE DEPT.	PHONE	
HOSPITAL.	PHONE.	
POLICE	PHONE.	
Fire extinguish	ers are located:	
		· •
National Res Michigan Pol	ponse Center: 1-800-424-8802 lution Emergency: 1-800-292-4706	Provided by: The Environmental Assistance Division and the Waste Management Division of the Michigan Department of Environmental Quality Environmental Assistance Center 1-800-662-9278
Out bound	ous waste requirements may apply.	DEO



#### **Generator Satellite Accumulation**



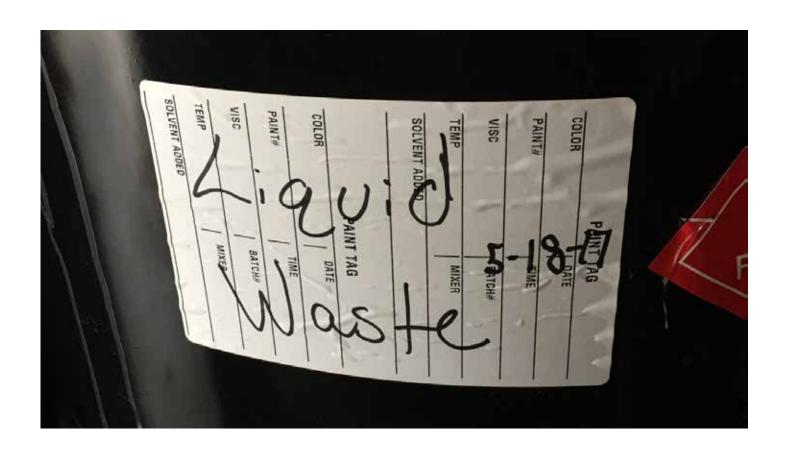


#### Generator **Accumulation** Area





## Labeling





### **Questions?**

