Hazardous Materials Transportation

August 2013









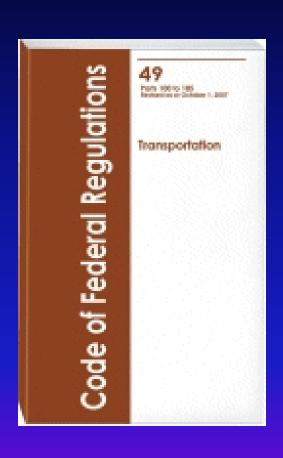


This training is provided to assist University of Wisconsin staff to become familiar with Department of Transportation regulations for preparing and offering hazardous materials for transport. intended for informational purposes only and should not be construed or relied upon as legal advice.

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Why Have Training?





- 172.702 Applicability and responsibility for training and testing.
- (a) A hazmat employer shall ensure that each of its hazmat employees is trained in accordance with the requirements prescribed in this subpart.

What's Required?

- (1) General awareness/familiarization
- (2) Function-specific training
- (3) Safety training
- (4) Security awareness training
- (5) In-depth security plan training

This Training Provides...

General Awareness/Familiarization

Function specific – Sign Manifests

Safety Training

Security Training (not site-specific)



Function-specific training (except as noted)

Site-specific security training

In-depth security plan training

Hazmat employee status

Hazmat Employee

- A person who is employed by a HazMat employer.
- A person who in the course of employment directly affects hazardous materials transportation safety.



Hazmat Employee

A person who during the course of employment

- Loads, unloads or handles hazardous materials
- Prepares hazardous materials for transportation
- Transports hazardous material
- Operates a vehicle used to transport hazardous materials.

Hazmat Employer

A person who uses one or more of its employees in connection with:

> **Transporting hazardous** materials in commerce **Causing hazardous** materials to be transported in commerce





Includes an owner / operator of a motor vehicle, which transports hazardous materials in commerce. Any department, agency, or instrumentality of the United States, a State, a political subdivision of a State, or Indian tribe engaged in an activity described in this definition.

Your employer must certify that you have appropriate

and sufficient training to be a Hazmat Employee



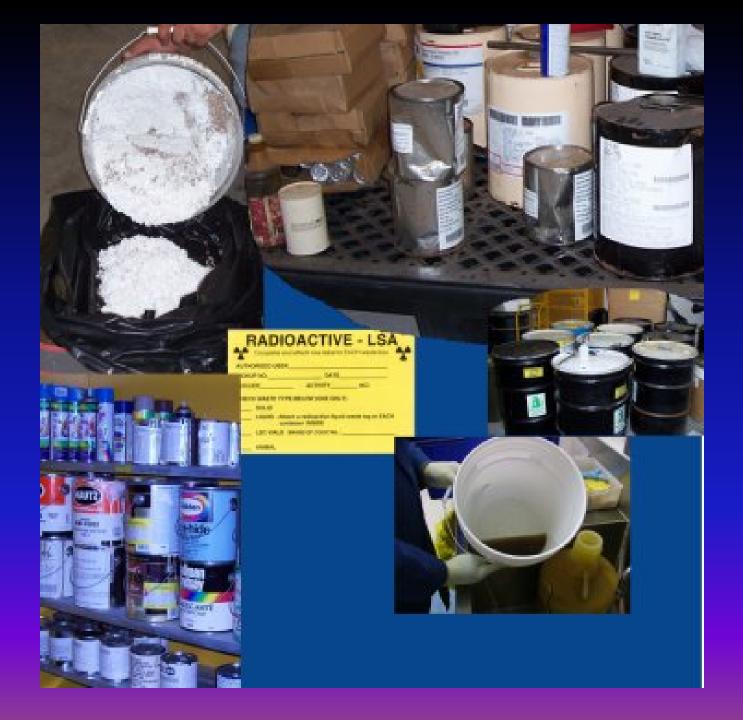
- Most laboratory chemicals
- Solvents
- Alcohol
- Acids
- Compressed gases and lecture bottles
- Dry ice

- Certain cleaners
- Certain pesticides
- Certain paints
- Chemical samples
- Biological samples
- Infectious substances
- Radioactive materials

Hazardous Material is legally defined by class, characteristic and name.







- \bigcirc
- Classify
- Package
- ❖ Mark
- Label
- Placard



Description on Shipping Papers



Hazardous Materials Table 49 CFR 172.101

§172.	§172.101 Hazardous Materials Table												
Sym- bols	Hazardous materials descriptions and proper shipping names	class or	Identifica- tion Numbers	PG	Label Codes	Special provisions (8) Packaging (9) (§172.102) (§173.***) Quantity limitations				9) imitations	(10 Vessel st		
							Excep- tions	Non- bulk	Bulk	Passenger aircraft/rail	Cargo air- craft only	Location	Other
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(8C)	(9A)	(9B)	(10A)	(10B)
	Acetaldehyde	3	UN1089	1	3	A3, B16,T11, TP2, TP7	None .	201	243	Forbidden	30 L	Е	
Α	Acetaldehyde ammonia	9	UN1841	III	9	IP8, IP6	155	204	240	200 kg	200 kg	Α	34
	Acetaldehyde oxime	3	UN2332	III	3	B1, IB3, T4, TP1	150	203	242	60 L	220 L	Α	

Identifies and Classifies Hazardous Materials

Hazardous Materials Table

§172.	§172.101 Hazardous Materials Table							
Sym- bols	Hazardous materials descriptions and proper shipping names	Hazard class or division	Identifica- tion Numbers	PG				
(1)	(2)	(3)	(4)	(5)				
	Acetaldehyde	3	UN1089	- 1				
Α	Acetaldehyde ammonia	9	UN1841	III				
	Acetaldehyde oxime	3	UN2332	III				
	Acetic acid, glacial or Acetic acid solution, with more than 80 percent acid, by mass	8	UN2789	=				
	Acetic acid solution, not less than 50 percent but not more than 80 percent acid, by mass	8	UN2790	Ш				

Columns 1-5 contain the information needed to identify and classify the material on the shipping paper



Column (1) - Symbols

§172.	§172.101 Hazardous Materials Table							
Sym- bols	Hazardous materials descriptions and proper shipping names	Hazard class or division	Identifica- tion Numbers	PG				
(1)	(2)	(3)	(4)	(5)				
	Acetaldehyde	3	UN1089	- 1				
Α	Acetaldehyde ammonia	9	UN1841	III				
	Acetaldehyde oxime	3	UN2332	III				
	Acetic acid, glacial or Acetic acid solution, with more than 80 percent acid, by mass	8	UN2789	=				
	Acetic acid solution, not less than 50 percent but not more than 80 percent acid, by mass	8	UN2790	II				



Other Symbols

 RQ – Reportable quantity – Listed in tables in Appendix A to HMT; must be identified on package and shipping paper.

MP – Marine Pollutant - Deemed to be hazardous to aquatic environment; Listed in Appendix B to HMT



Multiple Symbols

Symbols	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identification numbers	PG	
AW	Carbon dioxide, solid or Dry ice.	9	UN1845		

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Column (2) -Hazardous Materials Description & Proper Shipping Name

§172.	§172.101 Hazardous Materials Table							
Sym- bols	Hazardous materials descriptions and proper shipping names	Hazard class or division						
(1)	(2)	(3)						
	Carbon dioxide, refrigerated liquid	2.2						
AW	Carbon dioxide, solid or Dry ice	9						
	Carbon disulfide	3						

Column 2 lists the hazardous materials descriptions and proper shipping names of materials designated as hazardous materials. Modification of a proper shipping name may otherwise be required or authorized.

Proper shipping names are limited to those shown in Roman type (not italics).



Selecting the Proper Shipping Name

- Look up the material by its chemical name; make sure the properties meet the hazard class definition
- Look for a generic description by usage
 - -Paint
 - —Paint Related Material
- Look for general hazard class entry
 - -Flammable Liquids, n.o.s.

Hazardous Materials Description & Proper Shipping Name

* Hazardous wastes. If the word "waste" is not included in the hazardous material description the proper shipping name shall include the word "Waste" preceding the proper shipping name of the material. For example: Waste acetone.

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Column (3) — Hazard class or Division

§172.	§172.101 Hazardous Materials Table						
Sym- bols	Hazardous materials descriptions and proper shipping names	Hazard class or division					
(1)	(2)	(3)					
	Carbon dioxide, refrigerated liquid	2.2					
AW	Carbon dioxide, solid or Dry ice	9					
	Carbon disulfide	3					

Column 3 contains a designation of the hazard class or division corresponding to each proper shipping name, or the word "Forbidden". A material for which the entry in this column is "Forbidden" may not be offered for transportation or transported.

A basic description of each hazard class and the section reference for class definitions appear in 49 CFR §173.2

Hazard Classes

1	
2.1	Flammable Gas
2.2	Non-Flammable Gas
2.3	Poison Gas
3	
4.1	
4.2	
4.3	
5.1	
5.2	
6.1	Poison Inhalation Hazard
6.1(other than inhalation	hazard, Zone A Poison or B)
6.2	Infectious substance
7	Radioactive
8	Corrosive
9	Class 9



Column (4) – Identification <u>number</u>

§172.	§172.101 Hazardous Materials Table							
Sym- bols	Hazardous materials descriptions and proper shipping names	Hazard class or division	Identifica- tion Numbers	PG				
(1)	(2)	(3)	(4)	(5)				
	Acetaldehyde	3	UN1089	- 1				
Α	Acetaldehyde ammonia	9	UN1841	III				
	Acetaldehyde oxime	3	UN2332	III				
	Acetic acid, glacial or Acetic acid solution, with more than 80 per- cent acid, by mass	8	UN2789	=				
	Acetic acid solution, not less than 50 percent but not more than 80 percent acid, by mass	8	UN2790	II				

Column 4 lists the identification number assigned to each proper shipping name. Those preceded by the letters "UN" are associated with proper shipping names considered appropriate for international transportation as well as domestic transportation.

Those preceded by the letters "NA" are associated with proper shipping names not recognized for international transportation, except to and from Canada.



Column (5) - Packing Group

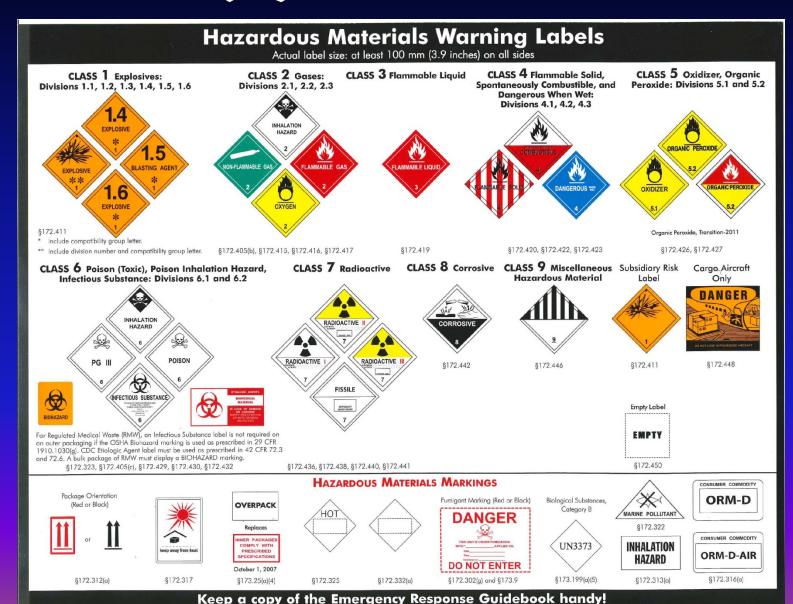
§172.	101 Hazardous Materials Table			
Sym- bols	Hazardous materials descriptions and proper shipping names	Hazard class or division	Identifica- tion Numbers	PG
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	Acetic acid, glacial or Acetic acid solution, with more than 80 per- cent acid, by mass	8	UN2789	II
	Acetic acid solution, not less than 50 percent but not more than 80 percent acid, by mass	8	UN2790	II

Column 5 specifies one or more packing groups assigned to a material corresponding to the proper shipping name and hazard class for that material.

Packing Groups I, II and III indicate the degree of danger presented by the material is either great, medium or minor, respectively.

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Column (6) – Label Codes



Column (7) - Special Provisions

Specifies codes for special provisions as set forth in 49 CFR 172.102

Column (8) - Packaging authorizations Columns 8A, 8B and 8C specify the applicable sections for exceptions, non-bulk packaging requirements and bulk packaging requirements, respectively, in 49 CFR 173

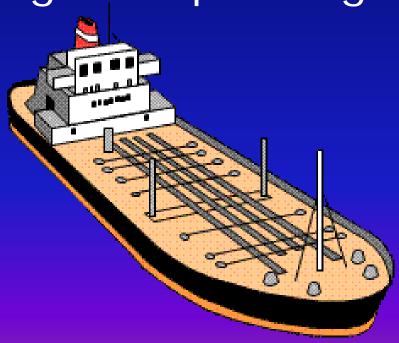
Bulk vs. Non-Bulk

BULK PACKAGING

- Packing, other than a vessel, but including transport vehicle / freight container:
 - Liquids: maximum capacity over 119 gallons
 - Solids: maximum net mass over 400 kg (882 pounds) and maximum capacity over 119 gallons
 - Gases: water capacity over 1000 pounds
- NON-BULK PACKAGING is packing with maximum mass or capacity less than that of bulk packaging

Column (9) — Quantity limitations. Columns 9A and 9B specify the maximum quantities that may be offered for transportation in one package by passenger-carrying aircraft or passenger-carrying rail car (Column 9A) or by cargo aircraft only (Column 9B)

Column (10) - specifies the authorized stowage locations on board cargo and passenger vessels.



Packages

A PACKAGE is the result of the packing process

 PACKAGING is the containers and components making up a package

Packages

Column 8 (Packaging authorization)

» 173.*** three digit number in column is 49 CFR paragraph reference (e.g., 173.306)

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EXAMPLE: Epichlorohydrin
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    » 8a (exceptions) -- none
    » 8b (non-bulk) -- 173.202
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» 8c (bulk) -- 173.243

» If packing requirements are shown, there are additional standards that must be applied

Marking

172.300 Subpart D

Individual preparing the shipment is Responsible for marking the package

- » Description/Proper shipping name
- » Technical name, if required
- » Identification number include UN / NA

BATTERY FLUID, AC

UN 4G/X20/S/04/USA/+AJ00000

» Name and address of consignor or consignee

Must be durable and in English; visible, on a contrasting background with no obstructions



Marking

Additional marking requirement ---Combination packages that have inner packages of liquid hazardous material must be marked with orientation arrows on two opposite vertical sides of the package.

Technical Names – any package that has a "G" in column 1 of the hazardous materials table must have a technical name in parentheses included with the proper shipping name.

Labeling

172.400 Subpart E

Labeling is the responsibility of the shipper

Once the material has been classified and a proper shipping name has been selected:

- 1. Locate proper shipping name in column 2 of HMT
- 2. Refer to column 6 of the Table
- 3. First code listed is the primary label, second is subsidiary
- Refer to chart for label substitution table 172.101 (g)



Labeling

Placement

- » Must be clearly visible and not obscured
- » Must be printed on or affixed to a background of contrasting color

POISON

- » Must have a dotted or solid line on the outer boarder
- » Can not be placed on the bottom of the box
- » If possible, label should be located on the same surface near the proper shipping name marking.
- » Primary and Subsidiary labels need to be within 6 inches of one another

Labeling

Limited Quantities

There are exceptions to labeling for limited quantities in the following sections:

- → Section 173.150 Exceptions for Class 3
- Section 173.151 Exceptions for Division 4.1
- Section 173.152 Exceptions for Division 5.1 and 5.2
- → Section 173.154 Exceptions for Class 8
- → Section 173.155 Exceptions for Class 9

Placards

- Located on bulk packaging and vehicles
- Indicates primary hazard of the material
- Some classes must be placarded in any amount. The remaining classes are placarded at 1,001 lbs. or

greater



Placards

Shipper must offer correct placards

All required placards on each side and both ends

- Dangerous Mixed Loads
 - Typically Corrosive and Flammable

- A shipping paper is a document used to identify freight being offered for transportation
- It is the responsibility of the shipper (you) to properly prepare the shipping papers.
- A shipping paper is required to accompany each shipment of hazardous materials during transportation.
- Hazardous materials shipping papers must be retained for 375 days after the material is accepted by the carrier.
- Retain Hazardous Waste Manifests for 3 years

HAZARDOUS MATERIAL BILL OF LADING



OFFICE OF THE ADJUTANT GENERAL

Generator's Phone ()
 Transporter 1 Company Name

Transporter 2 Company Name
 Designated Facility Name and Site Address

1. Generator's Name and Mailing Address

9. US DOT Description proluting Proper Shipping Name, Hazard Co

J. Additional Descriptions for Materials Listed Above

14. Emergency Phone # ___

Printed/Typed Name & Position Title

18. Discrepancy Indication Space

as noted in Item 18. Printed/Typed Name & Position Title

DMA Form 46

(APRI 94)

13. Special Handling Instructions and Additional Information

 GENERATOR'S CERTIFICATION: I hereby declare that the or shipping name and are classified, packed, marked, and labels to applicable international and national governmental regular Resources.

16. TRANSPORTER 1 Acknowledgement of Receipt of Materials PrintedTyped Name & Position Title 17. TRANSPORTER 2 Acknowledgement of Receipt of Materials PrintedTyped Name & Position Title

19. FACILITY OWNER OR OPERATOR: Certification of receipt of

Cusy Drembutton 1 - Facility retain 2 - Fe

originate in proper windflate for transport according to applicable

If ACCEPTANCE FOR PAINTERS INVESTIGET, THE SHAPEBY CONTAINS NASHONITHE MATERIAL INTEREST FOR USE IN, OF

international and national povernmental regulations.

INCOME TO REPREMEND MEDICAL PRODUCTS. DR MENTAGES

: Eignelune

(anoda, gnimnew eas)

State of Wisconsin / DEPARTMENT OF MILITARY AFFAIR

	D BOX 14587 ON 53714-0587	Uniform w Waste w S Constitute	L'ARDOUS I	Generator & Number		2 Page 1 of 3 Eme General			00	00000	154	JJK
BHIFFER'S DECLARATION'F	OR DÁNGEROUS GOODS	(Provide at feast the	nee-copies	to FedEx Express)	N -				USEPAR	Number		
Shipper	*************	AFWINDS No							U.S. EPA IO	Number		
			tigis er		N-			ē.	US EPAID	Number		
Consignee :		Fed	E	X	-		10. Conta No.	Type	11 Total Quantity	12 Unit WLMH	13 Waste C	Codes
Two completed and signed copies be handed to the operator.	r of this Declaration must	- WARNING			•							+
TRANSPORT OSTALS		Falura to comply in all rus Dangarous Goods Regult				7, 17			a data			
This shipment is within the limitations prescribed for dreiter non-applicable; PANSENGEN CARGO AND CARGO ARCOPAT ARCHART OKLY	Alicport of Departure :	of the applicable law, so This Declaration must no be completed and/or sign forwarder of an WTA being	tead to la t. to any ni vad by a c	più penidées. roussiances.								
Airport of Diverination	***************************************	Shomest type: (delete no NON-RADICACTIVE KA	n-applicable KIALTIVA	b)								
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I hundry declare that the controls according described above by the					N	DESIGN	ATED FAC	CILITY TO	DESTIN.	ATION STA	TE (IF REC	QUIRED

- Every HM shipment must be accompanied by shipping papers
 - Meets all DOT shipping paper requirements
- Shipping papers must contain
 - Basic description for each material
 - Shippers certification
 - A signature
 - 24-hour Emergency Contact Phone Number

Description of hazardous material (172.200):

- » Proper shipping name (Column 2)
- » Hazard Class (Column 3)
- » UN/NA Identification number (Column 4)
- » PG...I, II, III (Column 5)
- » Limited Quantities or Ltd Qty
- The first 4 items <u>must</u> be shown in sequence with no other information interspersed unless authorized by regulations.
- Identification number must include UN/NA and the packing group must be shown in <u>Roman numerals</u> and <u>preceded</u> with the letters PG.

Epichlorohydrin, 6.1, UN 2023, PG II



Technical Names

- Most n.o.s and generic shipping names must have a technical name entered in parentheses and found within the hazardous materials basic description.
- If a letter "G" is identified in column 1 of the hazardous materials table, a technical name must appear in parentheses.

Flammable liquid, n.o.s., 3, UN1993, PG I (benzene, xylene)

Flammable liquid, n.o.s. (benzene, xylene), 3, UN1993, PG I

Emergency Response Telephone Number

- In most cases an emergency response phone number must be entered on the shipping paper.
- The emergency number must be monitored at ALL TIMES the hazardous material is in transportation.
- It is the responsibility of the person providing the phone number to make sure that the agency or business has the necessary information on file PRIOR to shipment.



Uniform Hazardous Waste Manifest

Designed to track HW cradle-to-grave

Generator Responsibility

Required by EPA & DOT

sse print or type. (Form designed for use on elite (12-pitch) type		mergency Response Ph	noe 4 Marifae	Form A Tracking Num	pproved. OMB No.	. 2050-
UNIFORM HAZARDOUS 1. Generator ID Number WASTE MANIFEST	2.1961013.0	mangarity response Fil	4. marmes	Juning Hulli		
5. Generator's Name and Mailing Address	Gen	erator's Site Address (if o	different than mailing addre	rss)		
Generator's Phone:						
6. Transporter 1 Company Name			U.S. EPAID	Number		
7. Transporter 2 Company Name			U.S. EPAID	Number		
7. Harisporter 2 Company Name			U.S. EPAID	number		
Designated Facility Name and Site Address			U.S. EPA ID	Number		
Facility's Phone:						
9a 9b. U.S. DOT Description (including Proper Shipping Name, Ha	izard Class, ID Number,	10. Containers		12 Unit	13. Waste Cod	les
HM and Packing Group (if any))		No.	Type Quantity	Wt.Not.		-
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		1 1		ΙĖ		
Special Handling Instructions and Additional Information						_
5 GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare marked and labelediplacarded, and are in all respects in proper or Exporter, I certify that the contents of this consignment conform to	ondition for transport according to applicable the terms of the attached EPA Acknowledgm	international and national ent of Consent.	d governmental regulation	hipping name, a s. If export shipn	nd are classified, par nent and I am the Prin	ckaged, nary
I certify that the waste minimization statement identified in 40 CFR Generator's/Offeror's Printed/Typed Name	262.27(a) (f I am a large quantity generator Signature		uantity generator) is true.		Morth Da	v Y
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6. International Shipments	Пенти	Post of court				_
Transporter signature (for exports only):	Export from U.S.	Port of entry/e Date leaving t				
7. Transporter Acknowledgment of Receipt of Materials						
ransporter 1 Printed/Typed Name	Signature				Month Day	y . Y
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ransporter 2 Printed/Typed Name	Signatur				Month Da	, ,
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IBb. Alternate Facility (or Generator) Facility's Phone	□ /ype		mber:	Number	March 5.	
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18b. Alternate Facility (or Generator)		Manifest Reference Nu	mber:	Number	Month De	
19b. Alternate Facility (or Generator) Facility's Phone 18b. Signature of Alternate Facility (or Generator)		Manifest Reference Nu	mber:	Number	Month Da	
19b. Alternate Facility (or Generator) Facility's Phone 18b. Signature of Alternate Facility (or Generator) 19 Hazardous Waste Report Management Method Codes (i.e., codes f.) 2	for hazardous waste treatment, disposal, and	Manifest Reference Nu recycling systems)	U.S. EPAID	Number	Month Da	
19b. Alternate Facility (or Generator) Facility's Phone. Bib. Signature of Alternate Facility (or Generator)	for hazardous waste treatment, disposal, and	Manifest Reference Nu recycling systems)	U.S. EPAID	Number	Month Da	ay I
18th Alternate Facility (or Generator) Facility's Phone. 18th Signature of Alternate Facility (or Generator) 19 Hazandous Waste Report Management Method Codes (i.e., codes f	for hazardous waste treatment, disposal, and 3	Manifest Reference Nu recycling systems)	U.S. EPAID	Number		ay I



Generator's EPA ID Number Emergency Telephone Number

se print or type. (Form designed for use on elite (1	z-pitch) typewriter.)		Fo	m Approved. OMB No. 2050-00
UNIFORM HAZARDOUS WASTE MANIFEST	2. Page 1 c			Number
Generator's Phone:	& Mailing Address	Generator's Site Address (if di	fferent than mailing address) ator's Site Add	Iress
Transporter's Na	me & EPA ID Numb	er	U.S. EPAID Number	
7 Sporter 2 Gompany Name			U.S. EPAID Number	
Designated Facility Name and Site Address			U.S. EPA ID Number	
Facility's Phone:			ı	
9b. U.S. DOT Description (including Proper Ship and Packing Group (if any))	oing Name, Hazard Class, ID Number,	10. Containers No.	11. Total 12. Unit	1.5 Waste Codes
6 US DOT Desc	ription	7 Nu	mber of conta	iners
2.				
3.				
**.				
4. Special Handling Instructions and Additional Informat	ion			
GENERATOR'S/OFFEROR'S CERTIFICATION: I marked and labeled/placarded, and are in all respec Exporter, I certify that the contents of this consignm	ets in proper condition for transport according to app	licable international and national		
I certify that the waste minimization statement ident	fied in 40 CFR 262.27(a) (if I am a large quantity ge	enerator) or (b) (if I am a small qu	antity generator) is true.	Month Day Yea
nerator's/Offeror's Printed/Typed Name	5	ignature		Month Day Ye

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П	14. Special Handling Instructions and Additional Information								
П									
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П		408 M D 85450 B M 5550	70 75 80 14					000 W5 40	
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П	I certify that the waste minimization statement identified in 40 CFR 26			Lauantity den	erator) is true				
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П	Generator's Certification	tion					i	1	1
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딛	16. International Shipments Import to U.S.	Export from U.S.	Port of ent	rv/evit					
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The Real Property lies	mand bottor digitation (for oxbotto or try).		Date (cain	ig 0.0					-
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S	Transporter s signatur								
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<u> -</u>	250	Туре	Residue		Partial Re	jection		Full Rej	ection
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	18. Discrepancy 18a. Discrepancy Indication Space Quantity	6.5	Residue Anifest Reference	Number.				Full Rej	ection
	18. Discrepancy 18a. Discrepancy Indication Space Quantity	6.5		Number:	Partial Re			Full Rej	ection
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Uniform Hazardous Waste Manifest

Continuation Page

	nt or type. (Form designed for use on elite (12-pitch) typewriter.) ORM HAZARDOUS WASTE MANIFEST (Continuation Sheet)	22. Page	23. Mani	fest Tracking Nu	mber	Approved		
24. G	enerator's Name							
100				U.S. EPAID	Number			
25. 1	ransporter Company Name			1				
26. 1	ransporter Company Name			U.S. EPAID	Number			
27a.	27b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number,	28. Contai		29. Total	30. Unit	31.1	Waste Code	90
HM	and Packing Group (if any))	No.	Туре	Quantity	Wt./Vol.	-		T
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32. S	oecial Handing Instructions and Additional Information							
33. Tr	ansporterAcknowledgment of Receipt of Materials d/Typed Name Signature					Mo	nth Da	y Year
34. Ti Printe	ansporterAcknowledgment of Receipt of Materials d/Typed Name Signature					Мо	nth Da	y Year
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J. U	screpancy							
36. H	azardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and n	ocycling systems)			-			
					\perp			

PCBs on UHWM

- Use Hazardous Waste Manifest to ship PCB waste
- Report weight of PCBs in kilograms (kg)
- Include out-of-service date on manifest
- If not otherwise HW, do NOT send copy to DNR



Uniform Hazardous Waste Manifest

Page	Distribution
1	Designated Facility to Destination State (if required)
2	Designated Facility to Generator State (if required)
3	Designated Facility to Generator
4	Designated Facility's Copy
5	Transporter's Copy
6	Generator's Initial Copy

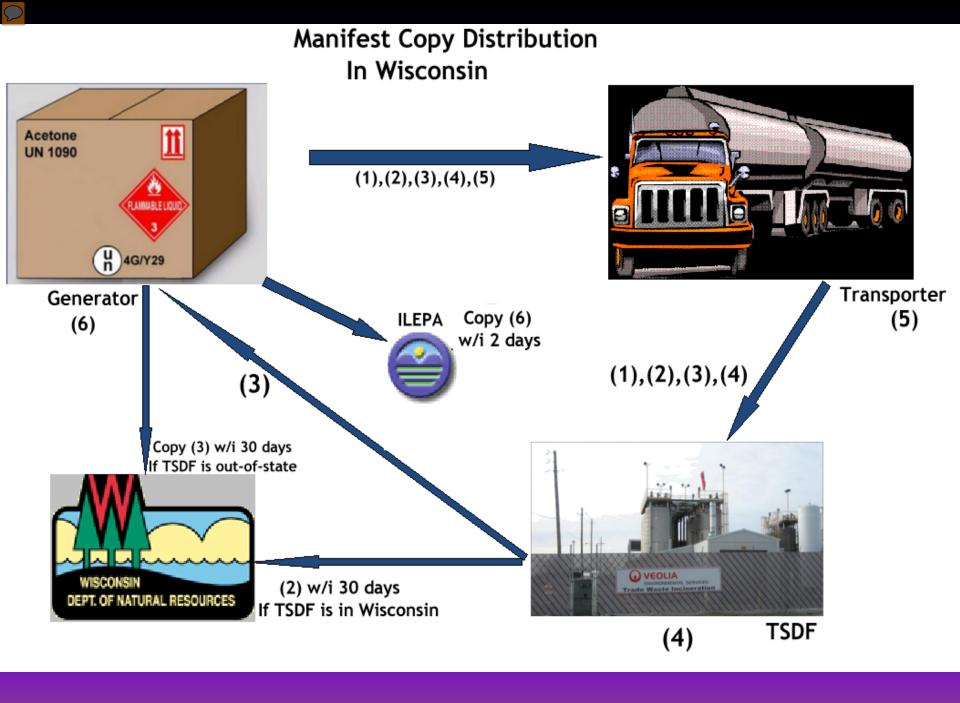
Uniform Hazardous Waste Manifest State-Specific Instructions

Wisconsin – If Designated Facility is in Wisconsin, Generators do NOT send copy to DNR.

If Designated Facility is **NOT** in Wisconsin, Generators send signed copy to DNR within 30 days of receipt from facility.

Illinois – If Designated Facility is in Illinois, Generators send copy to ILEPA within 2 days of shipment of RCRA-hazardous or PCB waste.

Texas – Texas does NOT require signed copies from either Generator or Designated Facility.



Uniform Hazardous Waste Manifest

- Generator Manifest Responsibilities
 - Prepare shipping papers
 - Always check for container discrepancies or other errors (EPA ID Number)
 - Print clearly and press hard (All copies must be legible)
 - Violations will come back to the generator

Hazmat Safety

Each hazmat employee shall receive safety training in:

- Emergency Response
- Hazard Protection
- Avoiding accidents, safe handling

OSHA or EPA training may be substituted if applicable.



Hazmat Safety – Emergency Response

- Basic description & technical name
- Immediate hazards to health; risks of fire or explosion; immediate precautions to be taken in the event of an accident or incident; immediate methods for handling fires; initial methods for handling spills or leaks in the absence of fire; and preliminary first aid measures.

Hazmat Safety – Emergency Response

- 24 hour number provided by contractor
- Monitored at all times
- Knowledgeable of material being shipped
- Entered on shipping paper

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Hazmat Safety – Measures to Protect Employees

- HAZCOMM
- OSHA Lab Safety Standard
- Do not perform an aggressive response
- PPE Program





Hazmat Safety – Avoiding Hazmat Accidents

- Proper inspection/handling of hazmat packages
- Familiar with types of classification
- Secondary containment
- Awareness of surroundings
- Do not vary from established procedures.



- DO NOT touch a container that is open, leaking, weeping, broken or if the hazardous material is not otherwise contained
- DO NOT expose yourself to hazardous materials unless you are trained to use them.
- DO handle packages carefully to prevent accidents. Carry packages securely. Don't use mechanical lifts or carts unless you have been trained

Hazmat Safety

Small spills (one which you can safely clean up yourself)

Major spill (one which you can't safely clean

up yourself)



Hazmat Safety

To clean up a small chemical spill (i.e., one which you can safely clean up yourself)

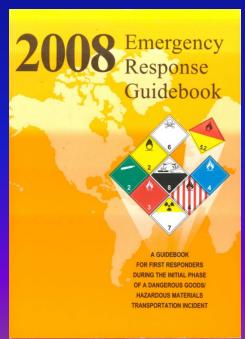
Notify your colleagues and your supervisor

Control access to the area to prevent

contact or spread of the spill

Consult Emergency Response







What should be done if a discharge of hazardous waste occurs during transportation?

- 1. Call the Wisconsin 24-hour number emergency hotline: 800/943-0003.
- 2. Comply with the hazardous substance spill requirements in section 292.11, Wisconsin Statutes and ch. 706, Wis. Adm. Code.
- 3. Give notice as required by 49 CFR 171.15 to the National Response Center at 800/424-8802.
- 4. Report in writing as required by 49 CFR 171.16 to the Information Systems Manager, DHM-63, Research and Special Programs Administration, U.S. DOT, Washington, D.C. 20590-0001.
- 5. Remove, containerize, transport and dispose of spilled hazardous waste according to the hazardous waste management requirements in the NR 600 Series, Wis. Adm. Code

Necessary Information for 911 Call...

- Name
- Location
- Type of emergency (i.e., Fire, Spill, Explosion)
- Any injuries
- DO NOT HANG UP!

Hazmat Security

- Use the "Eyes and Ears" approach
- Make security a way of life
- Identify your vulnerabilities



Hazmat Security

Assess

- Develop performance standards
- Develop/implement security plan
- Train and administer



Hazmat Security Plan

49 CFR 172.800

"...each person who offers for transportation in commerce or transports in commerce one or more of the following hazardous materials must develop and adhere to a security plan for hazardous materials that conforms to the requirements of this subpart:"

Sixteen categories including :

- (9) A quantity of a Division 4.3 material requiring placarding in accordance with subpart F of this part;
- (11) Any quantity of organic peroxide, Type B, liquid or solid, temperature controlled;



- ❖ § 172.802 Components of a security plan
- Assessment of security risks for shipments of the hazardous materials listed in §172.800 and appropriate measures to address the assessed risks. At a minimum, a security plan must include the following elements:
- (1) Personnel security.
- (2) Unauthorized access.
- (3) En route security.



Other plans may substitute

In-depth security plan training

- Company security objectives
- Organizational security structure
- Procedures
- Employee duties and responsibilities
- Specific actions to be taken





Additional Resources

- Uniform Hazardous Waste Manifest video http://www.pneac.org/hazwastemanifest/ manifest_video/manifest.html
- Training resources (not a complete list)
 - Lion Technology
 - JJ Keller & Associates
 - FedEx
 - Environmental Resource Center

Conclusions

- Hazmat employer must certify
- Site specific security plan/training
- Function-specific training required



Conclusions

❖ "A hazmat employee shall receive the training required by this subpart at least once every three years."

Training records must include:

- (1) The hazmat employee's name;
- (2) The most recent training completion date of the hazmat employee's training;
- (3) A description, copy, or the location of the training materials used to meet the requirements in paragraph (a) of this section;
- (4) The name and address of the person providing the training; and
- (5) Certification that the hazmat employee has been trained and tested



