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Training - Seminars, Webcasts, On-Site, Online

Audits - Environmental, Safety, Transportation

Consulting - Plans, Procedures, Reports, EHS Program Management





Hazardous Waste Manifesting

Presented by:

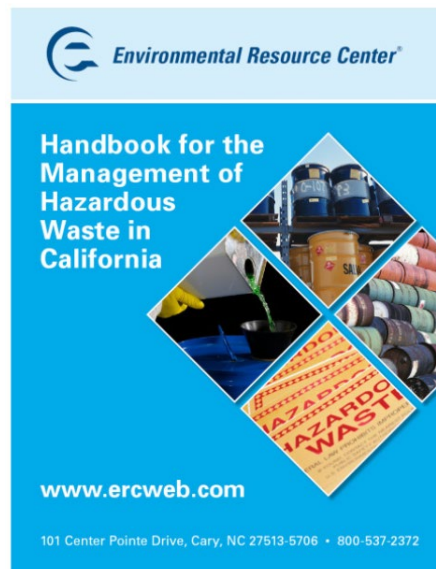


Environmental Resource Center[®]
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Introduction

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- Answerline™ for one year
- Regs of the Day™
- Tips of the Week™
- Book Updates



Introduction



The Uniform Hazardous Waste Manifest

- EPA requires for RCRA hazardous waste
- DTSC requires for non-RCRA hazardous waste
- DOT requires shipping papers for hazardous materials

EPA Form 8700-22

Form Approved OMB No. 2000-0181

Page 011 of 010 (Form designed for use on after 10/20/01 (optional))

1. WASTE MANIFEST

2. WASTE RECEIVING FACILITY

3. WASTE GENERATOR

4. WASTE SHIPPER

5. WASTE RECEIVING FACILITY

6. WASTE RECEIVING FACILITY

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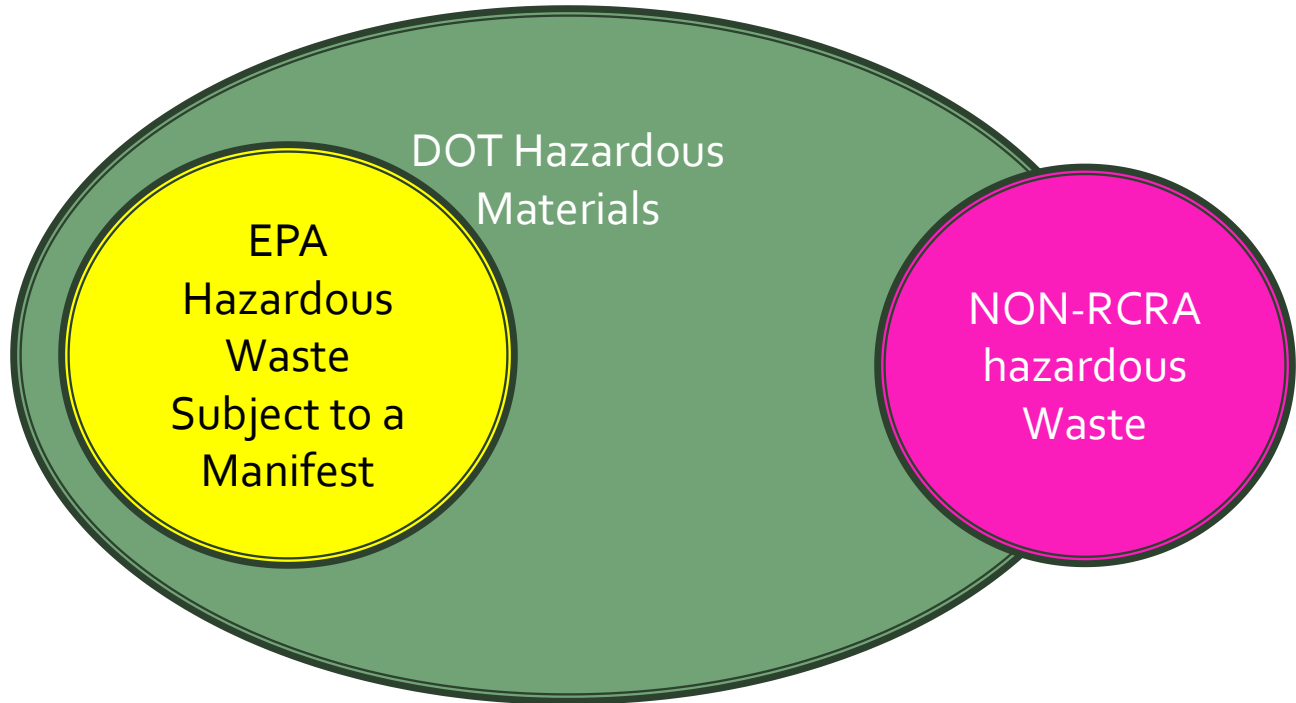
97. WASTE RECEIVING FACILITY

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100. WASTE RECEIVING FACILITY

Relationships



EPA
Hazardous
Waste
Subject to a
Manifest

DOT Hazardous
Materials

NON-RCRA
hazardous
Waste

The Electronic Manifest

- Hybrid/mixed
- Paper/hybrid

RCRA Info

RCRAInfo

RCRAInfo is EPA's comprehensive information system providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976, the Hazardous and Solid Waste Amendments (HSWA) of 1984, and the Hazardous Waste Electronic Manifest Establishment Act of 2012. The system is used to track information provided by the regulated community concerning the generation, shipment, treatment, and disposal of hazardous wastes, as well as significant milestones of State/EPA activity supporting program planning, implementation, and accomplishment reporting. States may use RCRAInfo for some or all aspects of program implementation support, or may use their own system which transmits required data to EPA.

RCRAInfo Sign In

[Sign in](#)[Register](#)[Forgot User Id?](#)[Forgot Password?](#)

Manifest Fees

Manifest Submission Type	Fee per Manifest
Scanned Image Upload	\$22.00
Data + Image Upload	\$10.00
Electronic Manifest (Fully Electronic and Hybrid)	\$6.00



DOT General Requirements

- Printed mechanically or hand-printed
- Legible
- English
- No abbreviations unless allowed
- Numbered continuation pages
- Additional information may not be inconsistent

DOT Shipping Paper Contents

- Basic description
- Quantity and units
- Signature
- Certification
- Distinguish between HM and non-HM

Training – Pop Quiz

- What training do you need to sign a manifest?
 - A. DOT hazmat training
 - B. RCRA training
 - C. Both

The DOT Table (Excerpt)



The DOT Hazardous Materials Table

➤ 49 CFR 172.101

Symbols	Hazardous Materials Descriptions and Proper Shipping Names	Hazard Class or Division	Identification Nos.	PG
(1)	(2)	(3)	(4)	(5)
	Acetone	3	UN1090	II
	Aerosols, <i>flammable (each not exceeding 1 L capacity)</i>	2.1	UN1950	
	Alcohols, n.o.s.	3	UN1987	I II III
D	Asbestos	9	NA2212	III
	Biological substance, Category B	6.2	UN3373	
	Bromine chloride	2.3	UN2901	

Column 2 – DOT Proper Shipping Name

- Accurate
- Specific

Hazardous Materials Descriptions and Proper Shipping Names
(2)
Acetone
Aerosols, flammable (each not exceeding 1 L capacity)
Alcohols, n.o.s.
Asbestos
Biological substance, Category B
Bromine chloride

Order of Specificity

- Specific chemical/article name
 - **Isopropanol**
- End use name
 - **Compounds, cleaning liquid**
- Chemical family name
 - **Alcohols, n.o.s.**
- Generic hazard class name
 - **Flammable liquids, n.o.s.**
 - **Hazardous waste, liquid (or solid), n.o.s.**

PSN

- Italics are not part of PSN
 - May be used
- Directions
 - “or”
 - “see”

Sym-bols	Hazardous Materials Descriptions and Proper Shipping Names
(1)	(2)
	Acetone
	Aerosols, <i>flammable (each not exceeding 1 L capacity)</i>
	Alcohols, n.o.s.
D	Asbestos
	Biological substance, Category B
	Bromine chloride
A W	Carbon dioxide, solid <i>or</i> Dry ice
	<i>Chlorine azide</i>
D G	Compounds, cleaning liquid
	Consumer commodity
G	Corrosive liquid, acidic, organic, n.o.s.
G	Flammable liquids, n.o.s.
D G	Hazardous waste, liquid, n.o.s.
D G	Hazardous waste, solid, n.o.s.
G	Ketones, liquid, n.o.s.
+ I	Methanol
D	Methanol

Naming RCRA Hazardous Waste

- RCRA hazardous waste subject to a manifest
 - Place “**waste**” in front of proper shipping name
 - Unless waste is already part of the name
 - Non-RCRA hazardous waste does NOT get “waste”

Naming Non-RCRA Hazardous Waste

- Non-RCRA with a DOT PSN
 - Use DOT PSN

- Non-RCRA without a DOT PSN
 - Use generic name from Ch. 11, Appendix X, subsection (b), or
 - If not, commonly recognized industrial name, and
 - Non-RCRA hazardous waste, solid
 - Non-RCRA hazardous waste, liquid

Column 3 – Hazard Class or Division

- DOT classification system
- Assigns a number to the danger
 - Hazard class 3, 8, 9
 - Division 2.1, 4.1, 5.2

Hazard Class or Division
(3)
3
2.1
3
9
6.2
2.3
9

DOT Hazard Classes/Divisions

Hazard Class/ Division	Name/Danger
1.1 – 1.6	Explosives
2.1 – 2.3	Flammable, non-flammable/non-poisonous, poisonous gases
3	Flammable liquids
4.1 – 4.3	Flammable solids, spontaneously combustible, dangerous when wet
5.1 – 5.2	Oxidizers and organic peroxides
6.1 – 6.2	Poisonous liquids and solids, and infectious substances
7	Radioactives
8	Corrosive liquids and solids
9	Miscellaneous

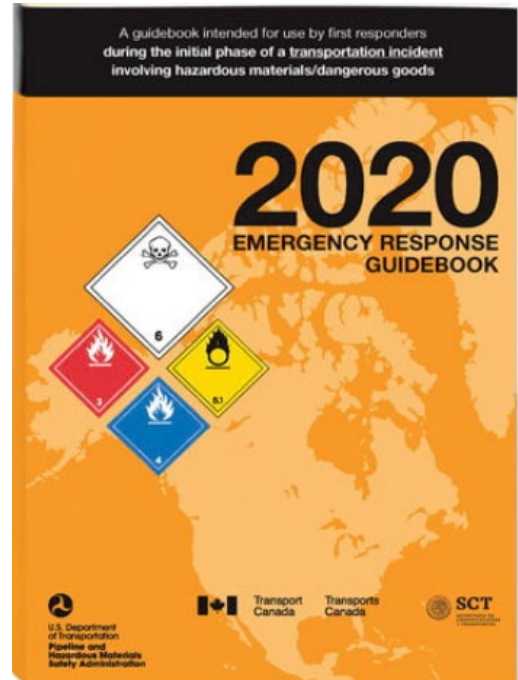
Column 4 – Identification Number

- UN/NA/ID
- Quick identification for emergency responders
- Marked on packages
- Entered on manifest as part of the basic description

Identification Nos.
(4)
UN1090
UN1950
UN1987
NA2212
UN3373
UN2901
UN1845
NA1993

Column 4 – Identification Number

- Emergency Response Guidebook
 - Intended for use by first responders during the initial phase of a transportation incident



ID No.	Guide No.	Name of Material	ID No.	Guide No.	Name of Material
1089	129P	Acetaldehyde	1131	131	Carbon bisulfide
1090	127	Acetone	1131	131	Carbon bisulphide
1091	127	Acetone oils	1131	131	Carbon disulfide
1092	131P	Acrolein, stabilized	1131	131	Carbon disulphide
1093	131P	Acrylonitrile, stabilized	1133	128	Adhesives (flammable)
1098	131	Allyl alcohol	1134	130	Chlorobenzene
1099	131P	Allyl bromide	1135	131	Ethylene chlorohydrin
1100	131P	Allyl chloride	1136	128	Coal tar distillates, flammable
1104	129	Amyl acetates	1139	127	Coating solution
1105	129	Pentanol	1143	131P	Crotonaldehyde
1106	132	Amylamine	1143	131P	Crotonaldehyde, stabilized
1107	129	Amyl chloride	1144	128	Crotonylene
1108	128	n-Amylene	1145	128	Cyclohexane
1108	128	1-Pentene	1146	128	Cyclopentane
1109	129	Amyl formates	1147	130	Decahydronaphthalene
1110	127	n-Amyl methyl ketone	1148	129	Diacetone alcohol
1110	127	Methyl amyl ketone	1149	128	Butyl ethers
1111	130	Amyl mercaptan	1149	128	Dibutyl ethers
1112	128	Amyl nitrate	1150	130P	1,2-Dichloroethylene
1113	129	Amyl nitrite	1152	130	Dichloropentanes
1114	130	Benzene	1153	127	Ethylene glycol diethyl ether
1120	129	Butanols	1154	132	Diethylamine
1123	129	Butyl acetates	1155	127	Diethyl ether
1125	132	n-Butylamine	1155	127	Ethyl ether
1126	130	1-Bromobutane	1156	127	Diethyl ketone
1126	130	n-Butyl bromide	1157	128	Diisobutyl ketone
1127	130	n-Butyl chloride	1158	132	Diisopropylamine
1127	130	Chlorobutanes	1159	127	Diisopropyl ether
1128	129	n-Butyl formate	1160	132	Dimethylamine, aqueous solution

Name of Material	Guide No.	ID No.	Name of Material	Guide No.	ID No.
AC	117	—	Acrylamide, solid	153P	2074
Acetal	127	1088	Acrylamide, solution	153P	3426
Acetaldehyde	129P	1089	Acrylic acid, stabilized	132P	2218
Acetaldehyde ammonia	171	1841	Acrylonitrile, stabilized	131P	1093
Acetaldehyde oxime	129	2332	Adamsite	154	—
Acetic acid, glacial	132	2789	Adhesives (flammable)	128	1133
Acetic acid, solution, more than 10% but not more than 80% acid	153	2790	Adiponitrile	153	2205
Acetic acid, solution, more than 80% acid	132	2789	Adsorbed gas, flammable, n.o.s.	174	3510
Acetic anhydride	137	1715	Adsorbed gas, n.o.s.	174	3511
Acetone	127	1090	Adsorbed gas, oxidizing, n.o.s.	174	3513
Acetone cyanohydrin, stabilized	155	1541	Adsorbed gas, poisonous, corrosive, n.o.s.	173	3518
Acetone oils	127	1091	Adsorbed gas, poisonous, corrosive, n.o.s. (Inhalation hazard zone A)	173	3516
Acetonitrile	127	1648	Adsorbed gas, poisonous, corrosive, n.o.s. (Inhalation hazard zone B)	173	3516
Acetyl bromide	156	1716	Adsorbed gas, poisonous, corrosive, n.o.s. (Inhalation hazard zone C)	173	3516
Acetyl chloride	155	1717	Adsorbed gas, poisonous, flammable, corrosive, n.o.s.	173	3517
Acetylene, dissolved	116	1001	Adsorbed gas, poisonous, flammable, corrosive, n.o.s. (Inhalation hazard zone A)	173	3517
Acetylene, Ethylene and Propylene in mixture, refrigerated liquid containing at least 71.5% Ethylene with not more than 22.5% Acetylene and not more than 6% Propylene	115	3138	Adsorbed gas, poisonous, flammable, corrosive, n.o.s. (Inhalation hazard zone B)	173	3517
Acetylene, solvent free	116	3374	Adsorbed gas, poisonous, flammable, corrosive, n.o.s. (Inhalation hazard zone C)	173	3517
Acetylene tetrabromide	159	2504	Acid, sludge	153	1906
Acetyl iodide	156	1898	Acid butyl phosphate	153	1718
Acetyl methyl carbinol	127	2621	Acridine	153	2713

GUIDE 127 FLAMMABLE LIQUIDS (WATER-MISCIBLE)

POTENTIAL HAZARDS

FIRE OR EXPLOSION

- **HIGHLY FLAMMABLE:** Will be easily ignited by heat, sparks or flames.
- CAUTION:** Ethanol (UN1170) can burn with an invisible flame. Use an alternate method of detection (thermal camera, broom handle, etc.)
- Vapors may form explosive mixtures with air.
- Vapors may travel to source of ignition and flash back.
- Most vapors are heavier than air. They will spread along the ground and collect in low or confined areas (sewers, basements, tanks, etc.).
- Vapor explosion hazard indoors, outdoors or in sewers.
- Those substances designated with a (P) may polymerize explosively when heated or involved in a fire.
- Runoff to sewer may create fire or explosion hazard.
- Containers may explode when heated.
- Many liquids will float on water.

HEALTH

- Inhalation or contact with material may irritate or burn skin and eyes.
- Fire may produce irritating, corrosive and/or toxic gases.
- Vapors may cause dizziness or asphyxiation.
- Runoff from fire control or dilution water may cause environmental contamination.

PUBLIC SAFETY

- **CALL 911. Then call emergency response telephone number on shipping paper.** If shipping paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Keep unauthorized personnel away.
- Stay upwind, uphill and/or upstream.
- Ventilate closed spaces before entering, but only if properly trained and equipped.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing provides thermal protection **but only limited chemical protection.**

EVACUATION

Immediate precautionary measure

- Isolate spill or leak area for at least 50 meters (150 feet) in all directions.

Large Spill

- Consider initial downwind evacuation for at least 300 meters (1000 feet).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.



In Canada, an Emergency Response Assistance Plan (ERAP) may be required for this product. Please consult the shipping paper and/or the ERAP Program Section (page 390).



FLAMMABLE LIQUIDS GUIDE 127 (WATER-MISCIBLE)

EMERGENCY RESPONSE

FIRE

CAUTION: The majority of these products have a very low flash point. Use of water spray when fighting fire may be inefficient.

CAUTION: For fire involving UN1170, UN1987 or UN3475, alcohol-resistant foam should be used.

CAUTION: Ethanol (UN1170) can burn with an invisible flame. Use an alternate method of detection (thermal camera, broom handle, etc.)

Small Fire

- Dry chemical, CO₂, water spray or alcohol-resistant foam.

Large Fire

- Water spray, fog or alcohol-resistant foam.
- Avoid aiming straight or solid streams directly onto the product.
- If it can be done safely, move undamaged containers away from the area around the fire.

Fire Involving Tanks or Car/Trailer Loads

- Fight fire from maximum distance or use unmanned master stream devices or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.
- For massive fire, use unmanned master stream devices or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames) from immediate area.
- All equipment used when handling the product must be grounded.
- Do not touch or walk through spilled material.
- Stop leak if you can do it without risk.
- Prevent entry into waterways, sewers, basements or confined areas.
- A vapor-suppressing foam may be used to reduce vapors.
- Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.
- Use clean, non-sparking tools to collect absorbed material.

Large Spill

- Dike far ahead of liquid spill for later disposal.
- Water spray may reduce vapor, but may not prevent ignition in closed spaces.

FIRST AID

- Call 911 or emergency medical service.
- Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
- Move victim to fresh air if it can be done safely.
- Give artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Wash skin with soap and water.
- In case of burns, immediately cool affected skin for as long as possible with cold water. Do not remove clothing if adhering to skin.
- Keep victim calm and warm.

Column 5 – Packing Groups

- Degree of danger
 - I – Major danger
 - II – Medium Danger
 - III – Minor danger
 - Not all HM has PGs

- Determines packaging

Hazardous Materials Descriptions and Proper Shipping Names	PG
(2)	(5)
Acetone	II
Aerosols, <i>flammable (each not exceeding 1 L capacity)</i>	
Alcohols, n.o.s.	I
	II
	III
Asbestos	III
Biological substance, Category B	
Bromine chloride	
Carbon dioxide, solid or Dry ice	
Chlorine azide	
Compounds, cleaning liquid	I
	II
	III
Consumer commodity	
Corrosive liquid, acidic, organic, n.o.s.	I
	II
	III
Flammable liquids, n.o.s.	I
	II
	III
Hazardous waste, liquid, n.o.s.	III
Hazardous waste, solid, n.o.s.	III
Ketones, liquid, n.o.s.	I
	II
	III
Methanol	II
Methanol	II
<i>Monoethylamine see Ethylamine</i>	

Column 1 - Symbols

- **A** – Air
- **W** – Water
- **D** – Domestic
- **I** – International
- **G** – Generic
- **+** - Fixes basic description

Symbols	Hazardous Materials Descriptions and Proper Shipping Names
(1)	(2)
	Acetone
	Aerosols, <i>flammable (each not exceeding 1 L capacity)</i>
	Alcohols, n.o.s.
D	Asbestos
	Biological substance, Category B
	Bromine chloride
A W	Carbon dioxide, solid <i>or</i> Dry ice
	<i>Chlorine azide</i>
D G	Compounds, cleaning liquid
	Consumer commodity
G	Corrosive liquid, acidic, organic, n.o.s.
G	Flammable liquids, n.o.s.
D G	Hazardous waste, liquid, n.o.s.
D G	Hazardous waste, solid, n.o.s.
G	Ketones, liquid, n.o.s.
+ I	Methanol
D	Methanol

G in Column One

- Must provide technical names with PSN
 - Chemical or microbiological
 - Indicative of the hazard
 - Parenthetical
 - Must have minimum of 2 if ≥ 2 HM in mixture
 - Placed anywhere the PSN goes
 - Package
 - Manifest/shipping papers

DOT Basic Description



The Basic Description

“...the basic description ...must be shown in sequence with no additional information interspersed”

The Basic Description - ISHP

- **I**dentification number - Column 4
- Proper **S**hipping name - Column 2
- **H**azard class - Column 3
- **P**acking group - Column 5

Symbols	Hazardous Materials Descriptions and Proper Shipping Names	Hazard Class or Division	Identification Nos.	PG
(1)	(2)	(3)	(4)	(5)
	Acetone	3	UN1090	II
	Aerosols, <i>flammable (each not exceeding 1 L capacity)</i>	2.1	UN1950	
	Alcohols, n.o.s.	3	UN1987	I II III

Technical Names

- Two allowable places in basic description
 - Between PSN and hazard class
 - At end of basic description
 - Waste codes may be used for hazardous waste

UN1993, flammable liquids, n.o.s., (**acetone, ethanol**), 3, II,

UN1993, flammable liquids, n.o.s., 3, II, (**acetone, ethanol**)

Examples – Before Altering

- UN1090, acetone, 3, II
- UN1993, flammable liquids, n.o.s., 3, II
- NA3082, hazardous waste liquid, n.o.s., 9, III
- UN1263, paint, 3, I
- UN1987, alcohols, n.o.s., 3, II

Examples

- UN1090, **waste** acetone, 3, II
- UN1993, **waste** flammable liquids, n.o.s., (**acetone, ethanol**), 3, II
- NA3082, hazardous waste liquid, n.o.s., 9, III, (**Doo8**)
- UN1263, **waste** paint, 3, I
- UN1987, **waste** alcohols, n.o.s., 3, II, (**ethanol, isopropanol**)

DOT Additional Descriptions



CERCLA - Hazardous Substances

➤ 49 CFR 172.101, Appendix A

Hazardous Substance	Reportable Quantity [RQ], lb (kg)
Acetamide, N-(aminothioxomethyl)-	1000 (454)
Acetone	5000 (2270)
Aroclor 1016	1 (0.454)
Benzene	10 (4.54)
Chloroform	10 (4.54)
Furan	100 (45.4)
Methyl ethyl ketone (MEK)	5000 (2270)
D001 Unlisted hazardous wastes characteristic of ignitability	100 (45.4)
D008 Lead	10 (4.54)
F003 The following spent non-halogenated solvents and solvents:	100 (45.4)
(a) Xylene	1000 (454)
(b) Acetone	5000 (2270)

Hazardous Substances

- Shipping a reportable quantity in a single package
 - Communicate “**RQ**”
 - Non-bulk packages near the PSN
 - Manifest before or after the basic description

DOT Non-Bulk Packaging = ≤ 119 G, ≤ 882 lbs., $\leq 1,000$ lbs.
water capacity pounds gases



Example

- Shipping acetone by ground in 20, 55-gallon drums, each weighing 400 pounds
 - Do we communicate RQ?
 - No – the single package is only 400 pounds

Hazardous Substance	Reportable Quantity [RQ], lb (kg)
Acetamide, N-(aminothioxomethyl)-	1000 (454)
Acetone	5000 (2270)
Aroclor 1016	1 (0.454)
Benzene	10 (4.54)
Chloroform	10 (4.54)
Furan	100 (45.4)
Methyl ethyl ketone (MEK)	5000 (2270)

Example

- Shipping benzene by ground in 1, 5-gallon drum, weighing 42 pounds
 - Do we communicate RQ?
 - Yes – the package is > 10 pounds

Hazardous Substance	Reportable Quantity [RQ], lb (kg)
Acetamide, N-(aminothioxomethyl)-	1000 (454)
Acetone	5000 (2270)
Aroclor 1016	1 (0.454)
Benzene	10 (4.54)
Chloroform	10 (4.54)
Furan	100 (45.4)
Methyl ethyl ketone (MEK)	5000 (2270)

Hazardous Substances and Waste

- 40 CFR 302 - Reportable Quantities
 - If chemical is listed here use the listed RQ
 - Acetone, benzene, methanol
 - If chemical is unlisted (not on THIS list), use unlisted RQ
 - Flammable liquids, corrosive solids

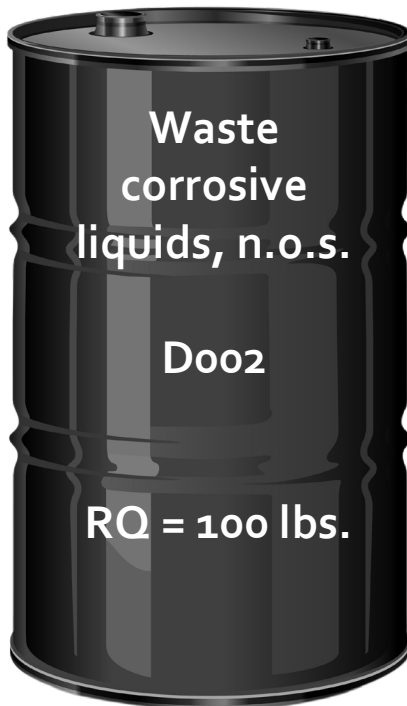
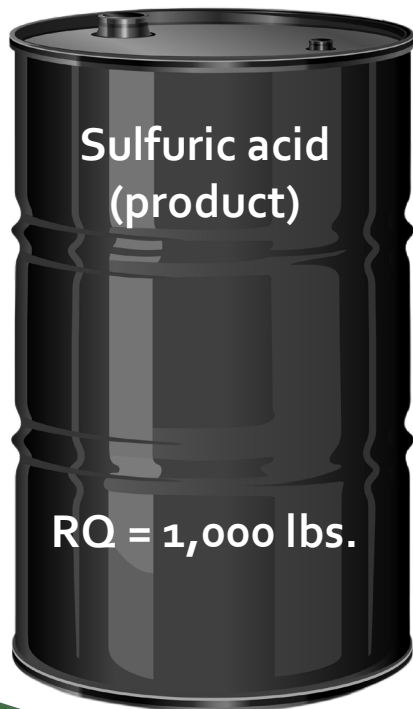
Hazardous substance	Reportable quantity (RQ) pounds (kilograms)
Acetone	5000 (2270)
D001 Unlisted Hazardous Wastes Characteristic of Ignitability	100 (45.4)

CERCLA Reportable Quantities (Excerpt)

Note the RQ for sulfuric acid and unlisted characteristic of corrosivity

Hazardous Substance	CASRN	RCRA Waste No. (If Applicable)	Final RQ – pounds (kg)
Acetone	67-64-1	U002	5,000 (2270)
Aldrin	309-00-2	P004	1 (0.454)
Benzene	71-43-2	U019	10 (4.54)
Ethylene glycol	107-21-1		5,000 (2270)
Sulfuric Acid	7664-93-9 8014-95-7		1,000 (454)
Toluene	108-88-3	U220	1,000 (454)
Unlisted hazardous waste characteristic of corrosivity	NA	D002	100 (454)
Unlisted hazardous waste characteristic of ignitability	NA	D001	100 (454)

Example



Hazardous Substances and Waste

➤ According to 40 CFR 302.5:

“Unlisted hazardous wastes which exhibit toxicity have the reportable quantities listed in Table 302.4 for the contaminant on which the characteristic of toxicity is based. **The reportable quantity applies to the waste itself, not merely to the toxic contaminant**”

Example

- Benzene
- Do18 for leaching > 0.25 mg/L
 - Do you think there is > 10 lbs?
 - Do we need to indicate RQ?
- Yes – “The reportable quantity applies to the waste itself, not merely to the toxic contaminant”



Marine Pollutants

- 49 CFR 172.101, appendix B
- Applies to bulk or boat
- Marine pollutants at single/combined total of **10%**
- Severe marine pollutants at single/combined total of **1%**

- Mark “marine pollutant” to basic description on shipping paper
- Add to packages near the PSN
- Technical names apply



Marine Pollutants

S.M.P.	Marine Pollutant
	Acetylene tetrachloride
PP	Aldrin
	Aniline
	Chlorine
	Cyanogen chloride, stabilized
PP	DDT
	Heptanes
	Lead acetate
PP	Parathion
PP	1,2,3-Trichlorobenzene

Examples

- UN1987, waste alcohols, n.o.s., 3, II, (ethanol, isopropanol), **RQ, (Do11, Doo7)**
- **RQ**, UN1987, waste alcohols, n.o.s., 3, II, (ethanol, isopropanol), **(Do11, Doo7)**
- UN2811, waste toxic solids, organic, n.o.s., (aldrin), 6.1, I, **RQ, marine pollutant**
- **RQ**, UN2811, waste toxic solids, organic, n.o.s., (aldrin), 6.1, II, **marine pollutant**

The Manifest



Sections 1 - 8

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number CAR147852369	2. Page 1 of 2	3. Emergency Response Phone 800-555-5555	4. Manifest Tracking Number 012345678ELC
5. Generator's Name and Mailing Address Miracle Max's Apothecary 100 Thieves Forest, Guildler, TX Generator's Phone: 908-999-5656		Generator's Site Address (if different than mailing address)		
6. Transporter 1 Company Name Humperdink's Hauling		U.S. EPA ID Number NJR123456789		
7. Transporter 2 Company Name		U.S. EPA ID Number		
8. Designated Facility Name and Site Address Wesley's Waste TSDf 234 Buttercup Lane, Floren, CA Facility's Phone: 201-555-6363		U.S. EPA ID Number CAD987654321		

Hazardous waste transporters and TSDFs must have
EPA ID numbers

Section 9

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))
X	1. UN 1090, waste acetone, 3, PG II
X	2. UN 1114, waste benzene, 3, PGII, RQ
X	3. UN1823, sodium hydroxide, solid, 8, II, RQ (D008)
	4. Drilling mud, non-RCRA hazardous waste, solid

Section 10

10. Containers	
No.	Type
2	DM

Code	Type of container
DM	Metal drums, barrels, kegs
DW	Wooden drums, barrels, kegs
DF	Fiberboard, or plastic drums, barrels, kegs
TP	Portable tanks
TT	Cargo tanks (tank trucks)
TC	Tank cars
DT	Dump trucks
CY	Cylinders
CM	Metal boxes, cartons, cases (including roll-offs)
CW	Wooden boxes, cartons, cases
CF	Fiber or plastic boxes, cartons, cases
BA	Burlap, cloth, paper, or plastic

Sections 11 - 12

Code	Unit of Measure
G	Gallons (liquids only)
P	Pounds
T	Tons (2,000 pounds)
Y	Cubic yards
L	Liters (Liquids only)
K	Kilograms
M	Metric tons (1,000 kilograms)
N	Cubic meters

11. Total Quantity	12. Unit Wt./Vol.
110	G

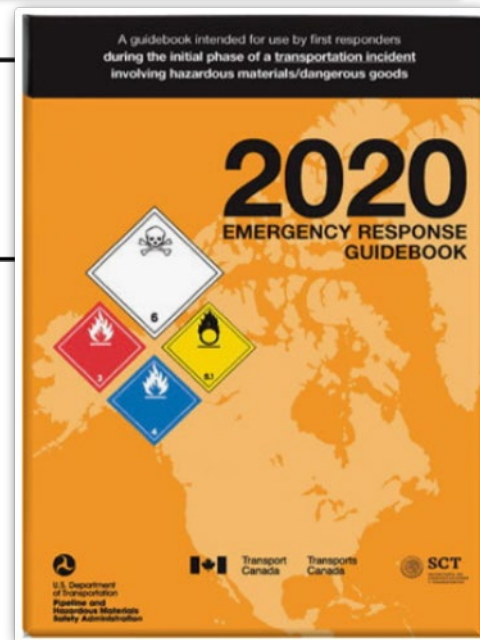
Section 13

11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
		F003	F005	D001
		213		

Section 14

14. Special Handling Instructions and Additional Information

- ERG #
- Profile numbers
- Individual container weights
- Contractual statements



Section 15

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Section 16 - 17

TRANSPORTER INT'L	16. International Shipments			<input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.			Port of entry/exit: _____			
	Transporter signature (for exports only):			Date leaving U.S.: _____						
TRANSPORTER	17. Transporter Acknowledgment of Receipt of Materials									
	Transporter 1 Printed/Typed Name				Signature			Month	Day	Year
	Count Rugen				<i>Count Rugen</i>			02	25	24
Transporter 2 Printed/Typed Name				Signature			Month	Day	Year	



Section 18

SIGNATED FACILITY	18. Discrepancy
	18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection
	18b. Alternate Facility (or Generator) Manifest Reference Number: _____ U.S. EPA ID Number _____
	Facility's Phone: _____
	18c. Signature of Alternate Facility (or Generator) _____ Month _____ Day _____ Year _____
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)	

TSDf must attempt to reconcile discrepancies within 15 days; 24 hours for hazardous wastes of concern

Discrepancies



Quantity - Bulk
Variations > 10%

HW of Concern
Variations > 3%



Quantity - Piece Count
Any variation



Waste Type
Any difference discovered by
inspection or analysis

Section 19 - 20

DESIGNA	19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)			
	1. H019	2. H010	3. H040	4.
	20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a			
	Printed/Typed Name Inigo Montoya	Signature <i>Inigo Montoya</i>	Month 02	Day 29
			Year 24	

Code	Management Method Code Group
Reclamation and Recovery	
H010	Metals recovery including retorting, smelting, chemical, etc.
H020	Solvents recovery (distillation, extraction, etc)
H039	Other recovery or reclamation for reuse including acid regeneration, organics recovery, etc. (specify in comments)
H050	Energy recovery at this site - used as fuel (includes on-site fuel blending before energy recovery; report only this code)
H061	Fuel blending prior to energy recovery at another site (waste generated either on site or received from off site)
Destruction or Treatment Prior to Disposal at Another Site	
H040	Incineration - thermal destruction other than use as a fuel (includes any preparation prior to burning)
H071	Chemical reduction with or without precipitation (includes any preparation or final processes for consolidation of residuals)
H073	Cyanide destruction with or without precipitation (includes any preparation or final processes for consolidation of residuals)

Exception Reports

LQG

- Contact after 35 days
- Exception report after 45 days

SQG

- Not required to contact
- Exception report after 60 days

Can you spot the errors?

6. Transporter 1 Company Name		U.S. EPA ID Number						
7. Transporter 2 Company Name Heritage Transporter		U.S. EPA ID Number IND058484114						
8. Designated Facility Name and Site Address Micronutrients 1550 Research Way Indianapolis, IN 46231		U.S. EPA ID Number						
Facility's Phone: (317) 486-5880								
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
		No.	Type					
X	UN3266, Waste Corrosive Liquid, Basic, Inorganic, N.O.S. (Copper Tetramine Dichloride) B, PG-II, (6004)	19	DF	10,001	D	D002	D004	D010

Can you spot the errors?

1.

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes	
		No.	Type				
	1 Hydrochloric Acid - Corrosive Product HAZ Class 8 Packing Grp 2 UN1789 ^{debris}	1	DF	100	lbs.		

2.

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes	
		No.	Type				
X	2 RQ, Hazardous Waste Solid, n.o.s (Contains: Mercury), 9, III	002	DM	194	P	D009	

3.

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes	
		No.	Type				
	2X WASTE UN1203, GASOLINE, 3, PG II	01	DM	200		D001 D018	

Can you spot the errors?

1.

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers		11. Total Quantity	12. Unit WL/Vol.	13. Waste Codes	
		No.	Type				
	1. RQ, UN1325, Waste Flammable solids, organic, n.o.s. (Benzyl Alcohol), 4.1, PG II, (RQ=100), (ERG#=133)	1	IB	352	P	D003	D007

2.

X	4. UN2813, Water Reactive Solid, N.O.S., (contains powder metals), CLASS 4.3, PG III, (D005), RQ	—	CF	—	P	D005	
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14. Special Handling Instructions and Additional Information

3.

X	3. RQ, UN2810, RQ, WASTE TOXIC LIQUID, ORGANIC, N.O.S., 6.1, PGIII, (MONOETHANOLAMINE)	4	TP	1200 G		D007	D010
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4.

X	2. UN18058, WASTE PHOSPHORIC ACID SOLUTION, 8, PGII	1	DF	55	G	D002	
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Can you spot the errors?

1.

X	1.	UN1993, RQ, Waste Flammable liquids, n.o.s., (Paint, Methyl Ethyl Ketone) 3, II, (RQ=100lbs), ERG# 128	01	DM	30	P	D001	D035
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2.

X	3.	RQ, UN2810, RQ, WASTE TOXIC LIQUID, ORGANIC, N.O.S., 6.1, PGIII, (MONOETHANOLAMINE)	4	TP	1200 G		D007	D010
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3.

9a HM	9b U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers		11. Total Quantity	12. Unit Wt/Vol	13. Waste Codes	
		No.	Type				
X	3. PG II ERG #122 1989-6	001	DF	00100	P		

4.

X	3.	RQ, UN2984, WASTE CORROSIVE LIQUID SODIUM HYDROXIDE NOS (HEPTANE/ISOPROPYL ALCOHOL) 3 (8) PG II		DM	55	G	D001	D002
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14. Special Handling Instructions and Additional Information

Thank You

➤ Regan Bottomley

➤ Andy Smith

rbottomley@ercweb.com

asmith@ercweb.com

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