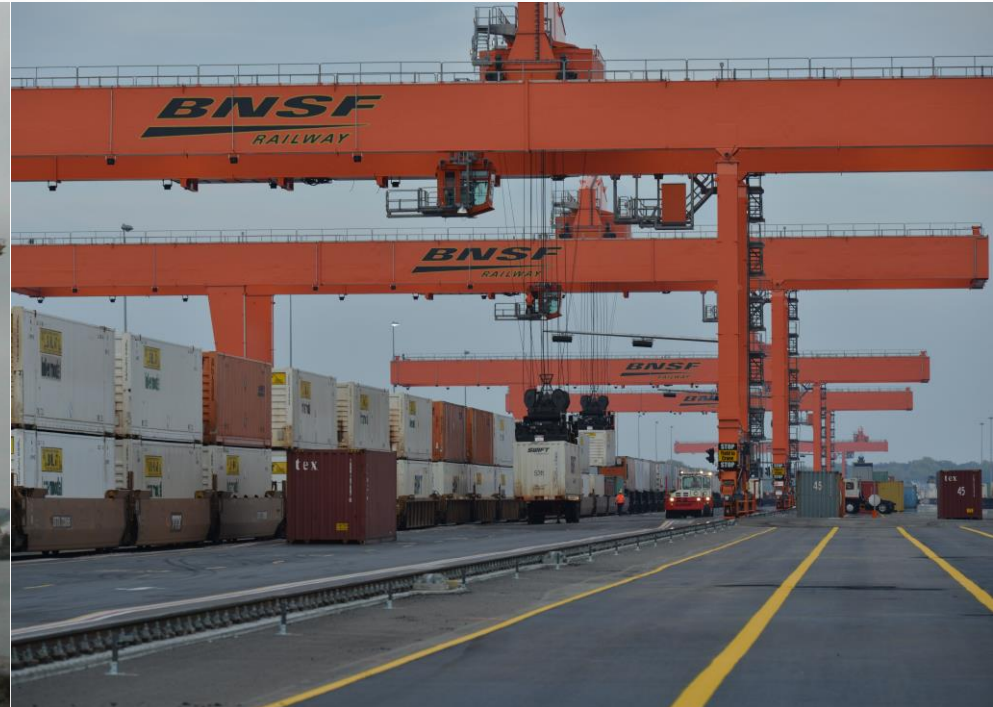




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HOUSTON HAZARDOUS MATERIALS CONFERENCE





TOPICS

- Information about intermodal facilities
- International Shipments and the IMDG Code
- How to Determine an IMDG (International Dangerous Goods Code) Shipment
- Types of Hazardous Materials Documentation
- Segregation of Materials Loaded in a Container
- Portable Tanks
- IBC's
- Inspection process
- Markings/ Placarding



INTERMODAL FACILITIES

➤ Coastal Intermodal Terminal

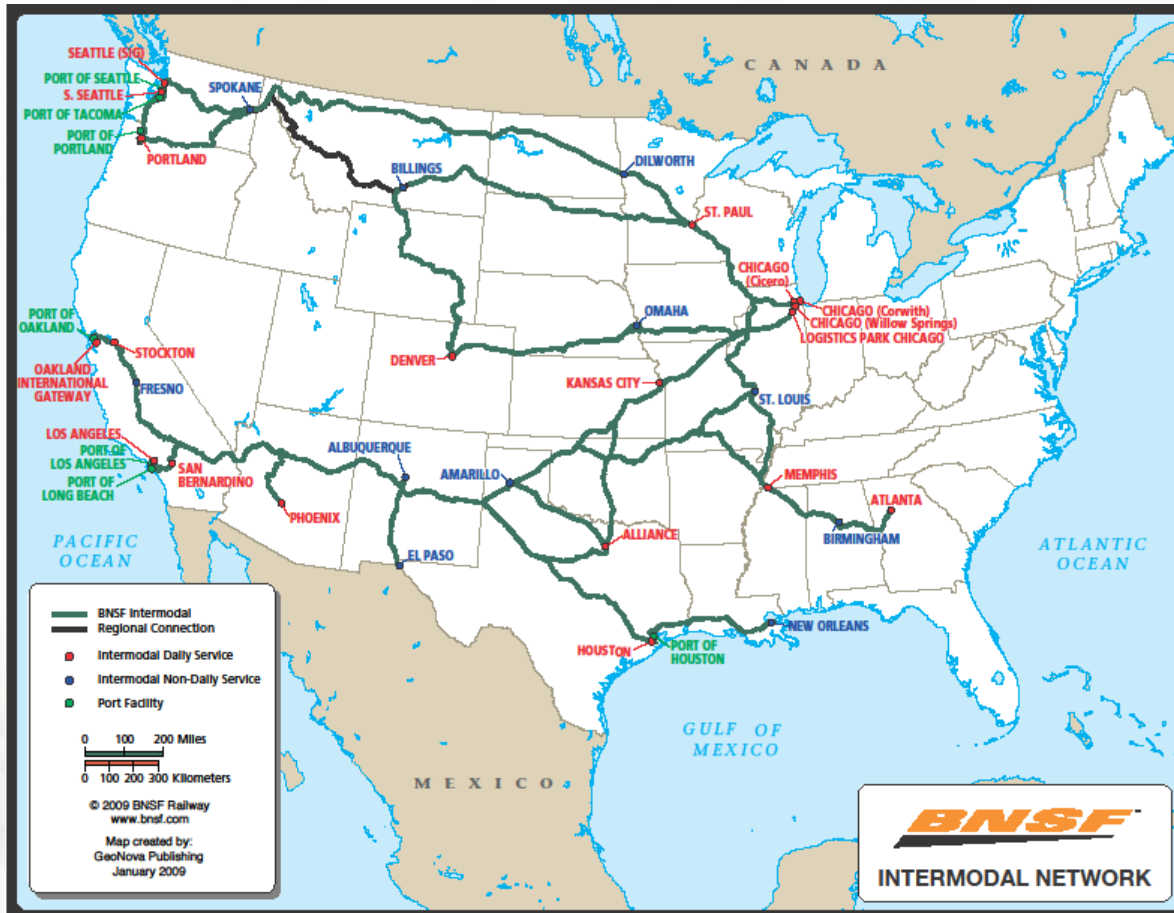
1. Receiving sea going ships and transferring cargo
2. Customs facilities
3. Multi-modal transfers direct from ship
4. On-dock equipment to support Ultra Large Container Vessels (ULCV's) currently up to 21,413 TEU's (twenty foot equivalent units) OOCL Hong Kong

➤ Inland Intermodal Terminal

1. Located away from traditional coastal borders
2. Take on time-consuming sorting for domestic goods and processing of containers away from congested and expensive seaports areas

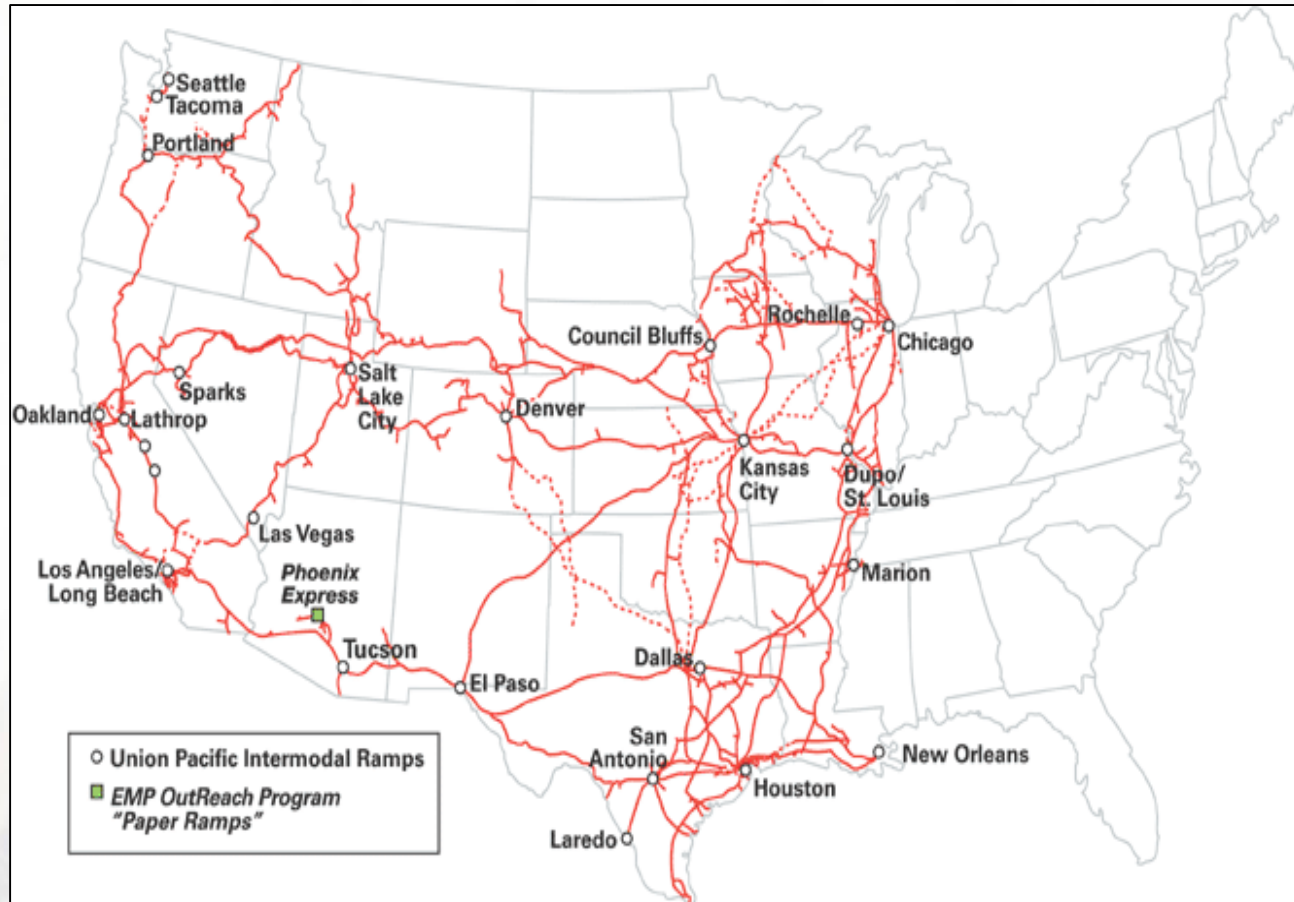


BNSF





UPRR





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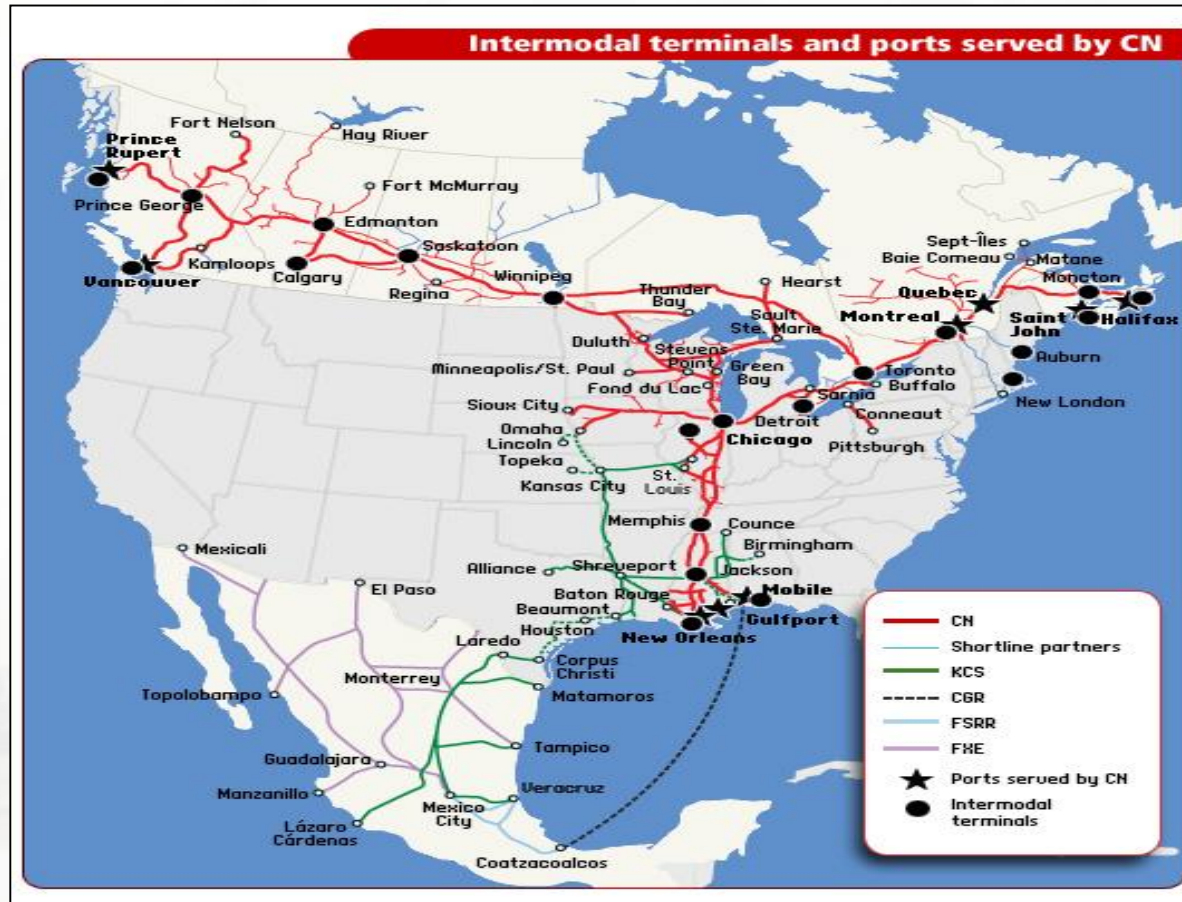
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CN





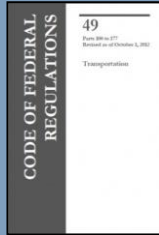
INTERMODAL SHIPMENTS OF HAZARDOUS MATERIALS

Topics:

- Determine the requirements for shipping intermodal packages internationally
- Recognize importers & exporters requirements for international shipments, transported using IMDG Code & Canadian TDG Regulations
- Identify the various types of portable tanks & Intermediate Bulk Containers (IBC) used to ship hazardous materials
- Identify applicable marking requirements for IBC's & international markings stenciled on intermodal packages



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49 CFR vs. INTERNATIONAL STANDARDS



§171.12 (Canada) & §171.22-23
(International and for specific materials)

Rule of Thumb

May be shipped International, if 49 CFR does not apply !
Must be shipped 49 CFR, if International does not apply !

1. Applicable if **any part** of the transportation is in accordance with IMDG, TDG, ICAO, IAEA – subject to the limitations in Part 171 Subpart C ! If the offeror opts to use either of the acceptable set of foreign regulations, the shipment must meet all of the applicable requirements + 49 CFR limitations.
2. **Forbidden materials** per 49 CFR are prohibited in transportation.
3. **Except for Canadian shipments**, an importer must provide the forwarding agent at the place of entry into the U.S., timely & complete written HM information.
4. **49 CFR emergency response information, HM training, security requirements, incident reporting, HM registration** are applicable.
5. EPA shipments of **Haz. Substances & Haz. Wastes** must comply with 49 CFR.



International Shipments

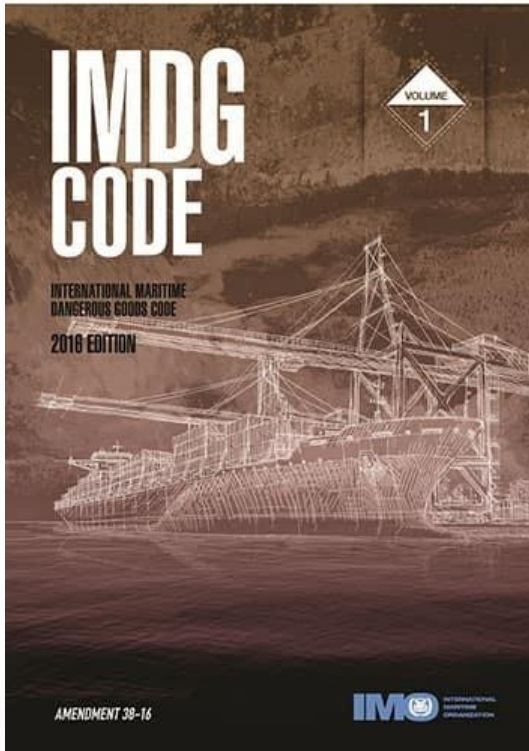
6. Except for IMDG shipments, **Marine Pollutants** in bulk packages meet 49 CFR shipping paper marking requirements.
7. **PIH & Poisonous 6.1 materials** must conform to 49 CFR.
8. **Class 7 (RAM)** shipments must conform to 49 CFR.
9. **Chemical oxygen generators, Class 1 explosives, Organic peroxides & Self-reactive materials** must be classed, approved & described in accordance with 49 CFR.
10. Except for IBC's & UN Portable tanks, **bulk packages** must conform to 49 CFR.
11. After May 4, 2009, all HM shipping papers (unless excepted from the certification requirement by 49 CFR) must have a **shipper's certification** per §172.204.





IMDG Code – General Overview

Volume 1



Contains: 6 parts in vol. 1 + 1 part in vol. 2:

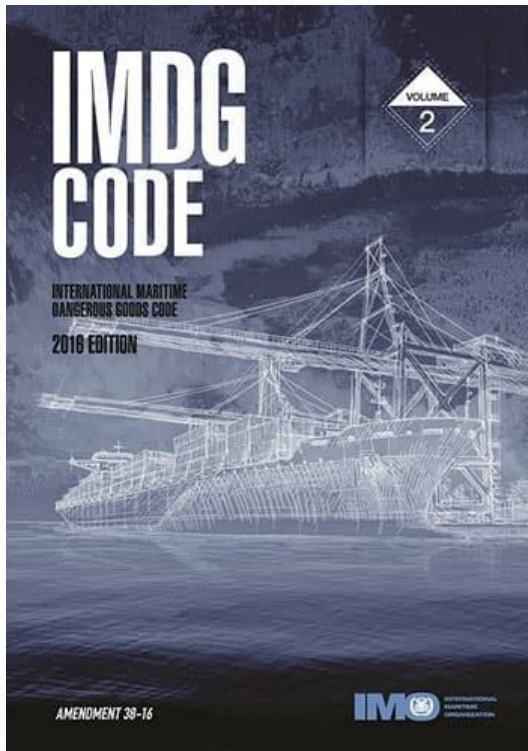
- **Part 1** - General provisions, definitions & training
- **Part 2** - Classification (*hazard classes*), definition of marine pollutant
- **Part 3 (DG List) is located in Volume 2**
- **Part 4** - Packing & Tank provisions
- **Part 5** – Consignment procedures
- **Part 6** – Construction & testing of packagings, IBC's, Large Packagings, Portable tanks, MEGC's & Road tank vehicles
- **Part 7** – Provisions concerning transport operations



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IMDG Code – General Overview

Volume 2



Contains:

- **Part 3** – Dangerous Goods list (*listed by ID number*)
- **Special provisions** (*from col. 6 of the DG list – all numbered*)
- **Exceptions** (*i.e., limited quantities & excepted quantities*)
- **Appendix A** – List of generic & n.o.s. proper shipping names – *listed by primary hazard class*
- **Appendix B** – Glossary of terms (*mostly explosives*)
- **Index** – Proper shipping names in **alphabetical order**, with ID numbers, hazard class & marine pollutant notation



IMDG SHIPMENT?

- **EDI** : LH3 line D=Domestic C=Canadian I=International IMDG
- **Shippers Certification Statement: DOT**: “This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.”
- **NOTE**: In line one of the certification the words “herein-named” may be substituted for the words “above-named”.
- “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.”
49 CFR 172.204
- **Shippers Certification Statement: IMDG**: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name(s), 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
- **IMDG 5.4.1.6.1**



HAZARDOUS MATERIAL DOCUMENTATION

- BOL-Bill of Lading
 - Origin shipper and trucking company
- EDI-Electronic Data Interchange
 - 404 Initial tender of a shipment between the shipper (offeror) and a rail carrier (Shippers certification)
 - 417 Rail carrier Waybill interchange- Used to provide detailed movement instructions
- HAZDEC-Hazardous Materials Declaration
 - Hazardous materials shipping documents for IMDG



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SEGREGATION OF MATERIALS INSIDE CONTAINERS

- 1) For domestic shipments by rail use the segregation table in part 174
- 2) For domestic and international shipments by water segregation inside cargo transport units is not allowed. 49 CFR 176.83(d) or IMDG 7.3.4.1. (IMDG: if the segregation designation is “away from” the material maybe transported in the same container with approval of the “Competent Authority”)



Placarding

of cargo transport units

Chapter 5.3.1



- ✚ IMDG placards are also referred to as “**Enlarged Labels**”.
- ✚ Placards shall also be displayed for those **subsidiary risks** for which a subsidiary risk label is required. However, CTU’s containing goods of more than one class need not bear a subsidiary risk placard if the hazard represented by that placard is already indicated by a primary risk placard.
- ✚ For **freight containers, semi-trailers & portable tanks**, placards are required to be displayed on both sides & both ends.
- ✚ Specifications for IMDG placards: At least **250 mm** by **250 mm** (9.8 inches). **Note: U.S. Placards measure at least 273 mm by 273 mm (10.8 inches).**



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Placarding

of cargo transport
units

Chapter 5.3.1



Note: IMDG Code does not specifically prohibit foreign text displayed on placards, *except for Class*

7





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Questions ?

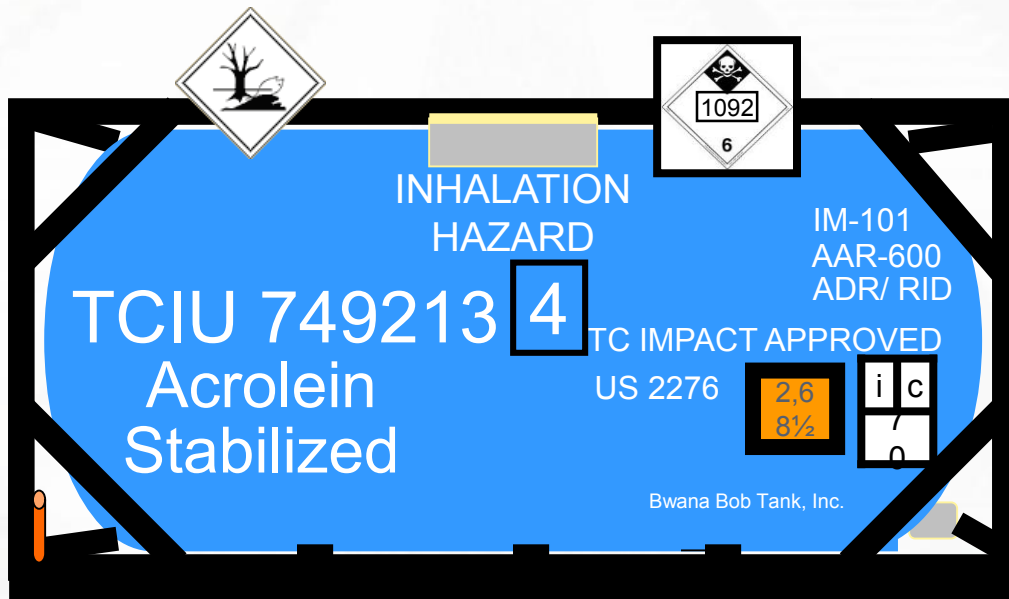


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PORTABLE TANKS

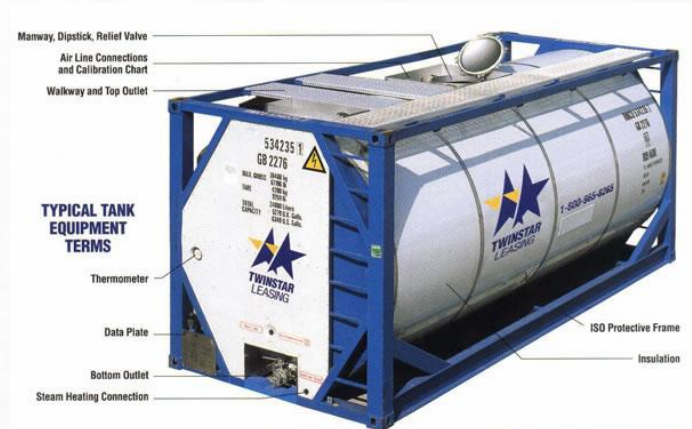




BASIC TYPES OF PORTABLE TANKS

Frame Tank

Barrel of the tank is completely enclosed in a rectangular frame & the **frame** bears the load.



Beam Tank

Barrel of the tank is framed on both ends & the **barrel** supports part of the load.



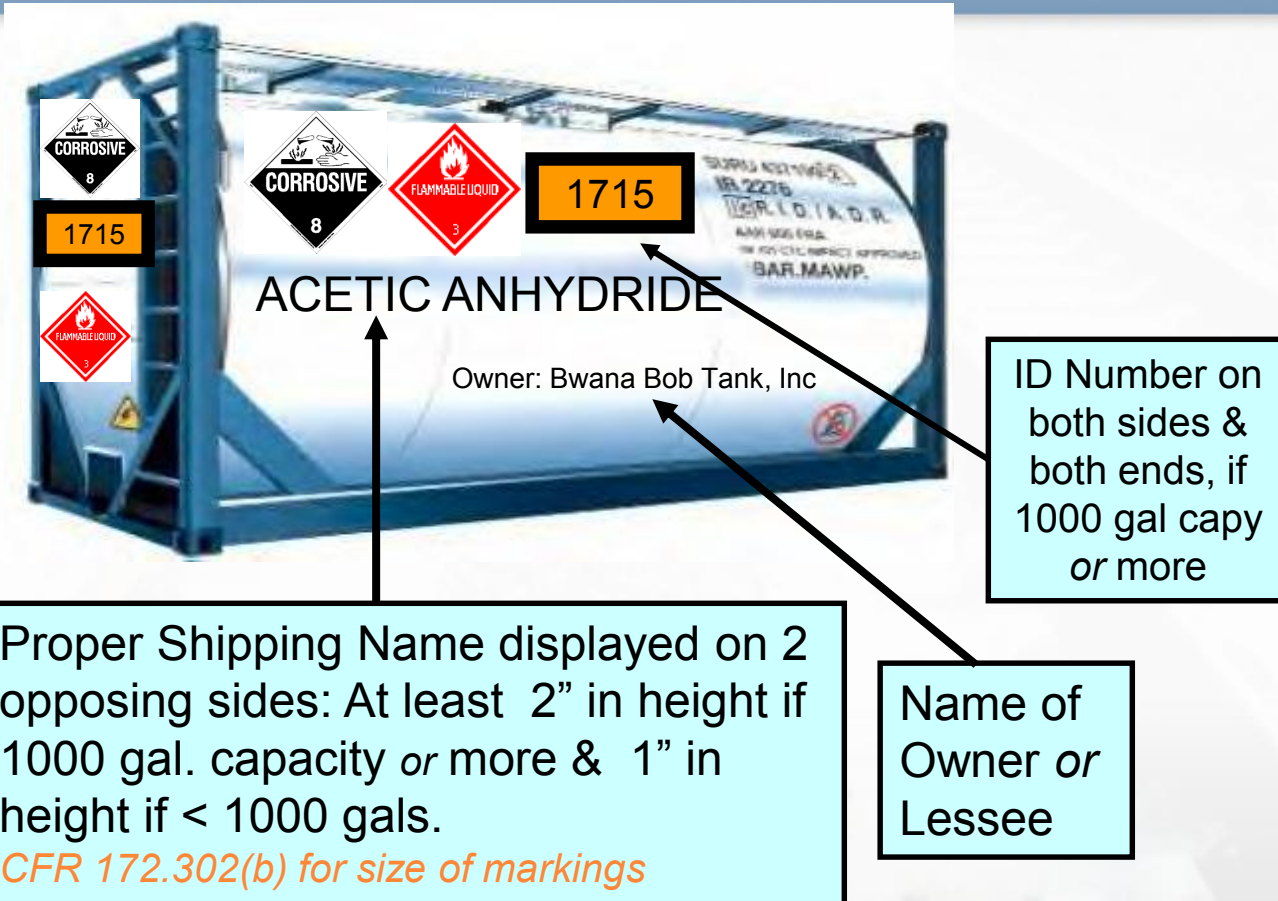


CLASSIFICATIONS OF PORTABLE TANKS

Type	Description	Compatible
IM 101	MAWP ≥ 1.75 Bar (25.4 psig) & < 6.8 Bar (100 psig) Designed in accordance with ASME Codes.	IMO 1
IMO Type 1	MAWP ≥ 1.75 Bar (25.4 psig) or above. See IMDG Code 13.1.2.13	IM 101 DOT 51
IM 102	MAWP ≥ 1 Bar (14.5 psig) but < 1.75 Bar (25.4 psig) Designed in accordance with ASME Codes.	IMO 2
IMO Type 2	MAWP ≥ 1 Bar (14.5 psig) < 1.75 Bar (25.4 psig) See IMDG Code 13.1.2.14	IM 102
DOT 51	Design pressure between 6.9 Bar (100 psig) & 34.48 Bar (500 psig), ASME Steel construction, Water capy >1,000 lbs	IMO 1 IMO 5
IMO Type 5	Design pressure between 6.9 Bar (100 psig) & 34.48 Bar (500 psig), See IMDG Code 13.102.14	DOT 51



DOT MARKING OF PORTABLE TANKS





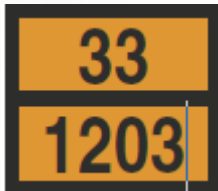
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INTERNATIONAL UN AND HAZARD MARKING





INTERNATIONAL UN AND HAZARD MARKING



The hazard identification number in the top half of the orange panel consists of two or three digits. In general, the digits indicate the following hazards:

- 2 - Emission of gas due to pressure or chemical reaction
- 3 - Flammability of liquids (vapors) and gases or self-heating liquid
- 4 - Flammability of solids or self-heating solid
- 5 - Oxidizing (fire-intensifying) effect
- 6 - Toxicity or risk of infection
- 7 - Radioactivity
- 8 - Corrosivity
- 9 - Risk of spontaneous violent reaction

NOTE: The risk of spontaneous violent reaction within the meaning of digit 9 includes the possibility, due to the nature of a substance, of a risk of explosion, disintegration and polymerization reaction followed by the release of considerable heat or flammable and/or toxic gases.

- Doubling of a digit indicates an intensification of that particular hazard (i.e., 33, 66, 88).
- Where the hazard associated with a substance can be adequately indicated by a single digit, the digit is followed by a zero (i.e., 30, 40, 50).
- A hazard identification number prefixed by the letter "X" indicates that the substance will react dangerously with water (i.e., X88).



INTERNATIONAL MARKINGS

TCIU 749213 4

The boxed number is a “**check digit**” used to validate the owner code & serial number, based on an ISO formula.



Top number is the height in **Meters** & fraction of a meter.
The bottom number is height in **Feet** & fraction of a foot.

US 2276

Letters represent the **Country Code of Registration**
Next 2 digits represent the **Size Code**– See ISO 6346-1984 (E)
Last 2 digits represent the **Type of Container Code**- See ISO 6346-1995(E) :

73 or T3 for Dangerous Liquids, Test Pressure 1.5 BAR
74 or T4 for Dangerous Liquids, Test Pressure 2.65 BAR
75 or T5 for Dangerous Liquids, Test Pressure 4 BAR
76 or T6 for Dangerous Liquids, Test Pressure 6 BAR
77 or T7 for Dangerous Gases, Test Pressure 10.5 BAR
78 or T8 for Dangerous Gases, Test Pressure 22 BAR

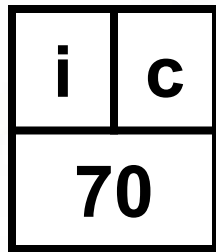


INTERNATIONAL MARKINGS #2

ADR / RID

ADR – European design approval by ROAD

RID – European design approval by RAIL



Railway Approval Decal in accordance with UIC-Codex. The code for the country of registration is displayed in the bottom half of the marking.

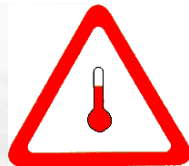
TC IMPACT APPROVED

Transport Canada approval for RAIL impact prototype testing.

M.A.W.P. 43.5 psi (3 BAR)

Max. Allowable Working Pressure. NOTE:

1 BAR = 14.504 psi



150°C

Elevated Temperature Material



USE OF IM PORTABLE TANKS

Hazmat may **NOT** be loaded in a Portable Tank with bottom outlets unless authorized by an applicable T-code:

T1,3 & 6 – Must be equipped with at least 2 serially fitted & mutually independent shut-off devices & must include:

- a) An external stop-valve fitted as close to the shell as reasonably practicable, and
- b) A liquid tight closure at the end of the discharge pipe, which may be a bolted blank flange or a screw cap.

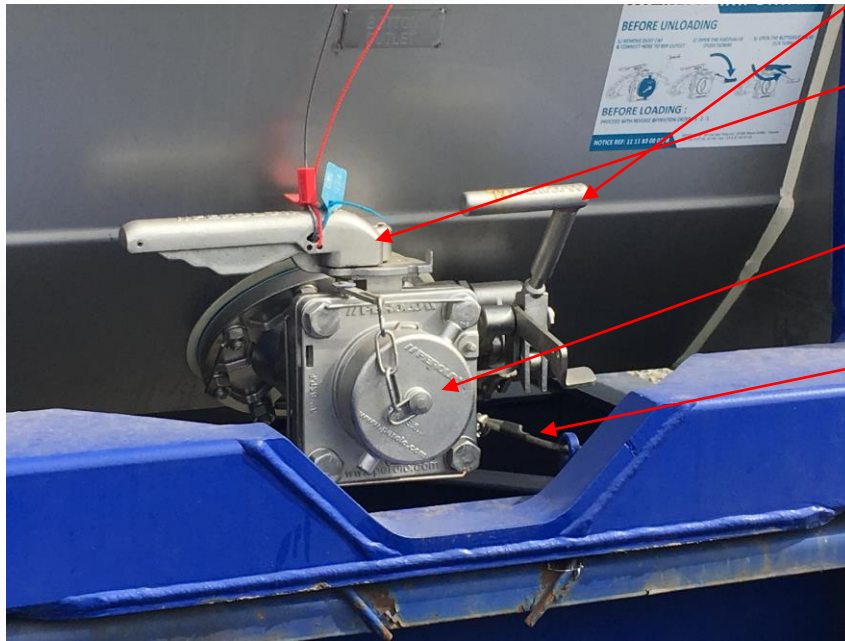
T2,4,7,11,12,15,16,17,18,23 –Must be equipped with at least 3 serially fitted & mutually independent shut-off devices & must include:

- a) A self-closing internal stop-valve.
- b) An external stop-valve fitted close to the shell.
- c) A liquid tight closure at the end of the discharge pipe.
- d) For liquids that are flammable, pyrophoric, oxidizing or toxic, the remote means of closure must be capable of thermal activation.



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BOTTOM OUTLET



- Internal Valve
- External Valve
- Outlet Cap
- Remote Shutoff



PERIODIC TESTING OF PORTABLE TANKS

IM Portable Tanks - CFR 180.605

Hydrostatic Tank Test at not more than 5 year intervals

- Tested to a pressure not less than 150% of MAWP
- Witnessed by an approval agency
- Mo & Yr of test **marked** on or near the Data Plate
- Visual Inspection at not more than 2 ½ year intervals
 - Mo & Yr of the inspection **marked** on or near the Data Plate
 - If the 5 yr test is conducted, the marked date is acknowledgement that the visual inspection was performed on that date. (i.e.: duplicate marking of a 2 ½ year inspection date & 5 year test date are not required)
- Spring Loaded pressure relief valves must be removed & tested at no more than 2 ½ year intervals



PERIODIC TESTING OF DOT 51 TANKS

DOT 51 Tanks - CFR 180.605

- Hydrostatic Tank Test at not more than **5 year** intervals
 - Tested to a pressure not less than **150% of MAWP**
 - A complete **visual** inspection of the tank, valves & closures
 - **Mo & Yr** of test **marked** on or near the Data Plate
 - Any tank that has not been used to transport hazmat for a period of **1 year or more** may **NOT** be returned to hazmat service until it has been **TESTED**.
 - Any damaged or deteriorated tanks must be **RETESTED** before returning to service



INSPECTING PORTABLE TANKS PRIOR TO FILLING

Visual Inspection of:

- ✓ The shell, piping, valves & other appurtenances for corroded areas, dents, defects in welds & other defects such as missing, damaged or leaking gaskets.
- ✓ All flanged connections or blank flanges for missing or loose nuts & bolts.
- ✓ All emergency devices for corrosion, distortion, or any damage or defect that could prevent their normal operation.
- ✓ All required markings on the tank for legibility
- ✓ Manlid covers for securement.

- *CFR 180.605*



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INTERMEDIATE BULK CONTAINERS



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INTERMEDIATE BULK CONTAINER (IBC)



A rigid or flexible portable bulk packaging (other than cylinders & portable tanks) which is designed for **mechanical handling**.

Max. capacity of **793 gals** (3000 liters, 106 cubic feet).

* See §173.35

* **Not suitable for Packing Group I liquids !**



POP MARKING OF IBC's

- 11- Rigid (gravity discharge for solids)
- 21- Rigid (solids w/pressure > 1.45psi)
- 31- Rigid (for liquids)
- 13- Flexible (gravity discharge)- solids

Mo & Yr of manufacture

Authorizing Country

Manufacturer
(Registered)



11A/Y/10/04/USA/ABC/5500/1500

- A - Steel
- B - Aluminum
- C - Wood
- D - Plywood
- F - Reconstituted wood
- G - Fiberboard
- H - Plastic
- L - Textile
- M - Multi-wall paper
- N - Metal (other than steel or aluminum)

Performance Standard
 X – for PG I, II & III
 Y – for PG II & III
 Z – for PG III only

Stacking test load in kg.
 1kg = 2.2 lbs
 "0" means not suitable for stacking

Max. permissible gross mass in kg or, Max. permissible net mass in kg for flexible IBC's

Composite IBC's will have 2 letters, 1st indicates the inner receptacle, the 2nd indicates the outer. "1" trailing indicates "rigid" & "2" indicates "flexible". Ex: 11HA1 (plastic inner & steel outer, rigid IBC for solids)



RETEST & INSPECTION OF IBC's

§180.352

- (b) Tests & inspections of Metal, rigid plastic & composite IBC's
 - 1) Each IBC intended to contain **solids** that are loaded or discharged under pressure or intended to contain **liquids** must be retested for **leakproofness** every 2.5 years, starting from the date of manufacture or the date of a repair.
 - 2) An **external visual inspection every 2.5 years** for missing or damaged markings, service equipment, cracks, warpage, corrosion or any other damage which might render it unsafe.
 - 3) An **internal inspection every 5 years** for cracks, warpage, corrosion or any other damage which might render it unsafe. Metal IBC's inspected for minimum wall thickness.
- (c) Visual inspection for flexible, fiberboard, or wooden IBC's
 - 1) Required markings that are missing, damaged or difficult to read.
 - 2) Flexible IBC's for lifting straps, seams & any fabric used is free of cuts, tears, etc.
 - 3) Fiberboard IBC's for end joint proper secured & the walls free of defects.
- (f) Retest date – most recent periodic retest must be marked near the POP marking.
- (g) Record Retention – The owner or lessee must keep records of periodic tests, inspections & repairs until the tests are successfully performed again or at least 2.5 years from the date of the last test.



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PLACARDING OF TRANSPORT UNITS

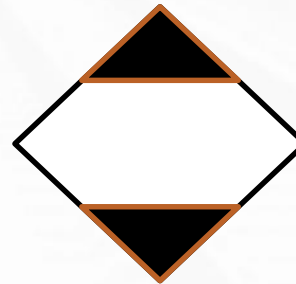
- Domestic transportation: Not authorized by IMDG
- Dangerous placard- (b) *DANGEROUS placard*. A freight container, unit load device, transport vehicle, or rail car which contains non-bulk packages with two or more categories of hazardous materials that require different placards specified in table 2 of paragraph (e) of this section may be placarded with a DANGEROUS placard instead of the separate placarding specified for each of the materials in table 2 of paragraph (e) of this section. However, when 1,000 kg (2,205 pounds) aggregate gross weight or more of one category of material is loaded therein at one loading facility on a freight container, unit load device, transport vehicle, or rail car, the placard specified in table 2 of paragraph (e) of this section for that category must be applied.
- Exceptions: 172.504
- (c) *Exception for less than 454 kg (1,001 pounds)*. Except for bulk packagings and hazardous materials subject to §172.505, when hazardous materials covered by table 2 of this section **are transported by highway or rail**, placards are not required on—
- (c)(1) A transport vehicle or freight container which contains less than 454 kg (1001 pounds) aggregate gross weight of hazardous materials covered by table 2 of paragraph (e) of this section; or
- (f)(9) For Class 9, a CLASS 9 placard is not required for domestic transportation, including that portion of international transportation, defined in §171.8 of this subchapter, which occurs within the United States. However, a bulk packaging must be marked with the appropriate identification number on a CLASS 9 placard, an orange panel, or a white square-on-point display configuration as required by subpart D of this part.



ORM-D (Consumer Commodity)

VS.

Limited Quantity



- **ORM-D** is being phased out, except by air and **until December 31, 2020** package may be marked as ORM-D and is not required to be marked as limited quantity
- Primary reason – to align with the international standards (*i.e.*, IMDG, ICAO, TDG)
- Regulations affected:
 - ✓ §172.315 (Limited Quantities)
 - ✓ §172.316 (ORM-D)
 - ✓ §173.156 (Package exceptions for Ltd Qty & ORM-D)
- Packaging requirements to qualify:
 - ✓ When authorized in package exceptions (*column 8A – HMT*)



ORM-D (Consumer Commodity)

VS.

Limited Quantity



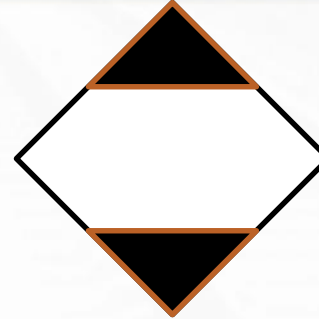
- Limited Quantities for “Air” requires a “Y” placed in the middle of the mark. Ltd Qty packages, marked with a “Y” are acceptable for use in **all modes** of transportation.
- *Except by air*, packages are **excepted from labeling**
- **Unless the material meets the definition of a hazardous substance, hazardous waste, marine pollutant, or is being transported by air or water; the shipment is excepted from shipping paper requirements. 172.200(b)(3)**



ORM-D (Consumer Commodity)

VS.

Limited Quantity



- The marking (*Ltd Qty* or *ORM-D*) must be applied on at least **one side** or **one end** of the outside of the package (min. 100mm X 100mm).
- If the cargo transport unit (*i.e., freight container, trailer, etc*) contains only *Ltd Qty*, the *Ltd Qty* marking must be applied on **both sides** & **both ends** of the container (min. 250mm X 250mm).
- *Ltd Qty* packages may be subject to the 66 lb. (30 kg) gross weight limitation, *unless specifically required per the package exceptions in column 8A of the HM Table. For example: Consumer commodity carries a §173.156 in column 8A, which excludes such shipments from strong-tight packaging standards in §173.24 & the 66lb. GWL.*



INSPECTION AUTHORITY

(HAZARDOUS MATERIALS COMPLIANCE MANUAL)

- ..to inspect, at a **reasonable time** and in a **reasonable way**, records and properties related to:
 - (A) manufacturing, fabricating, marking, maintaining, reconditioning, repairing, testing, or distributing a package or a **container** for use by a person in transporting HM in commerce; or
 - (B) the transportation of HM in commerce.
- This authority included the inspection of shipments and shipping documentation other than those conceded to relate to hazardous cargoes. This is necessary to ensure that all HM shipments are designated as such and comply with all the applicable statutes and regulations. Inspectors must, however, heed the statutory injunction to “**inspect at a reasonable time and in a reasonable way.**”
 - Summary. FRA inspectors are authorized to inspect railroads, offeror, or other facilities and all pertinent documents whenever doing so would reasonably be expected to serve a purpose of ascertaining or encouraging compliance with the HMR. Neither a warrant nor any other prior approval is necessary. **Inspectors and other enforcement personnel need only conduct their affairs courteously, including displaying credentials when asked, and in such a manner as to disrupt the facility’s business as little as possible.**



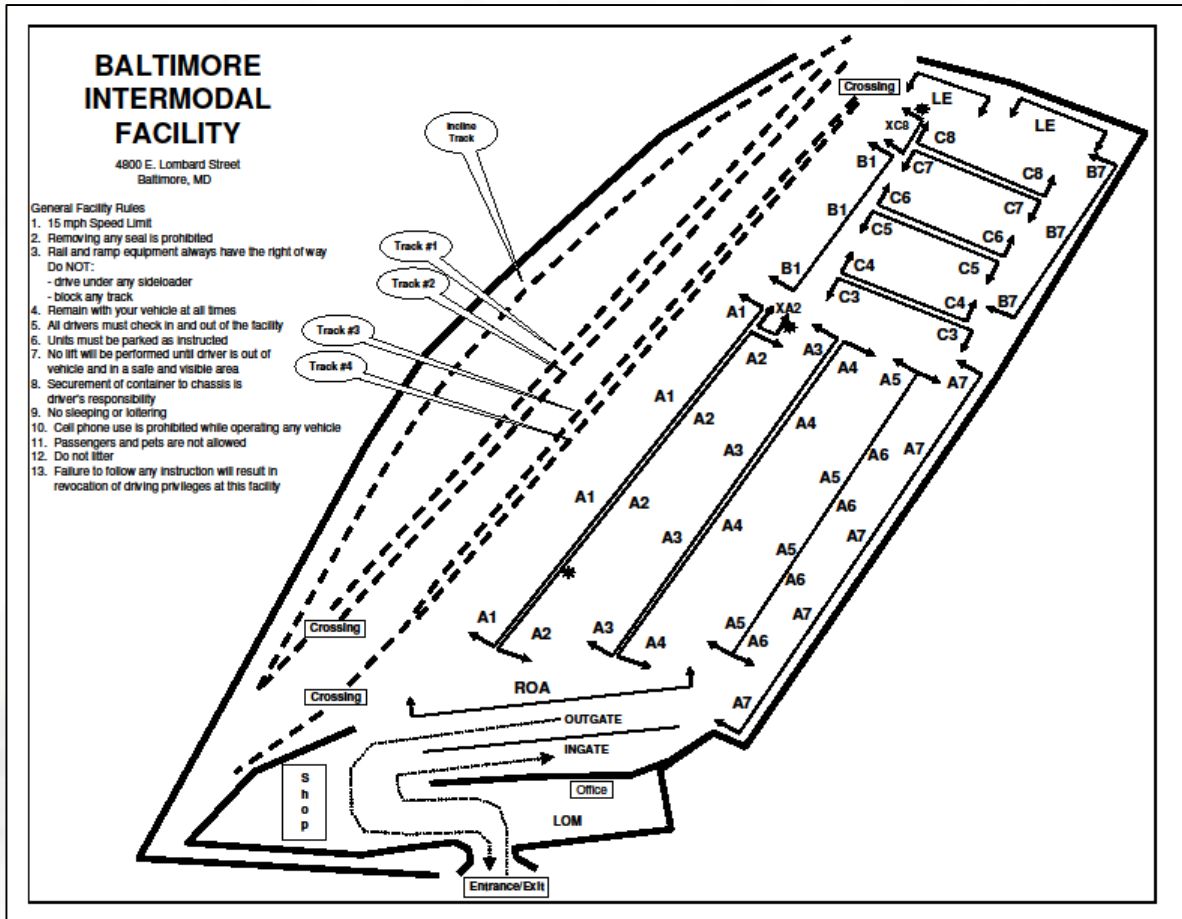
PRE-INSPECTION SUGGESTIONS AND CONSIDERATIONS PRIOR TO INSPECTING AN INTERMODAL FACILITY

- Visit the main office and determine the organizational structures (name and contact number)
- Lay out of the property and container locations (get a map). Get a tour if possible.
- Is there is a trouble pit (for leaking containers) or an area where non-compliant shipments are held.
- Company safety policy, speed limits, flashing lights, PPE, traffic cones, etc. Get a site safety briefing.
- If not accompanied by facility personnel, establish a contact, usually the ramp Coordinator for rail, Container Yard (CY)Manager for port facilities
- During 'peak time' personnel are very busy
- Get a schedule of incoming and departing trains
- Determine if there is an In-gate/out gate opportunity
- Determine if there is a ramp and de-ramp opportunity





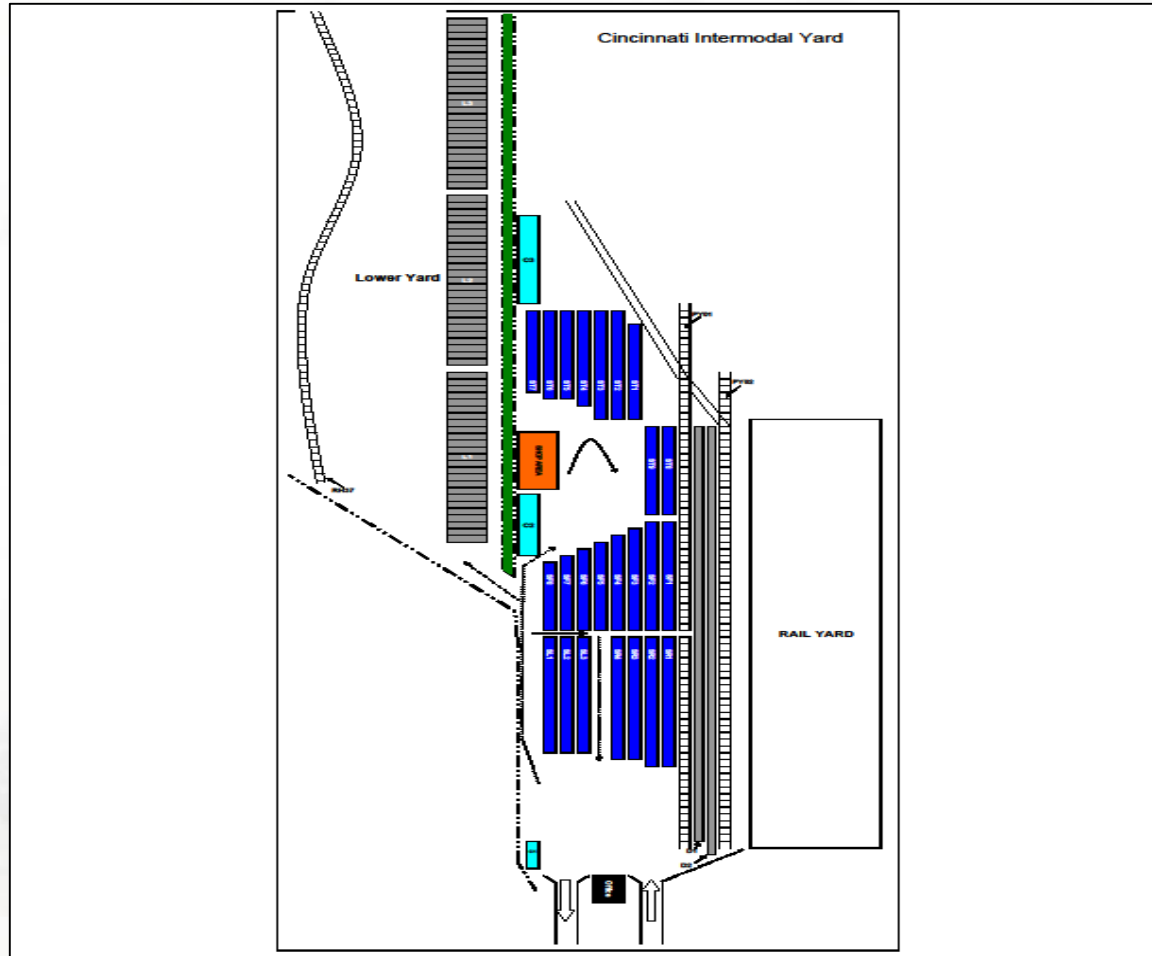
UNDERSTAND FACILITY LAYOUT





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UNDERSTAND FACILITY LAYOUT





INSPECTION SUGGESTIONS

- Retrieve a list of Rail related Hazardous Materials (HM) currently on the premises. (list is only good for a short period of time)
- Print waybills/ BOL's/ Hazardous materials declaration (hazdec) for HM that you have selected to inspect
- Pre sort your inspection by areas (could be numbers, colors, actual locations, etc.)



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BE AWARE OF FIXED AND MOVING HAZARDS

- Trucks
- Container scanning systems
- Cranes
- Loaders
- Trains
- Vehicle traffic





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PORTABLE VACIS

(VEHICLE AND CONTAINER INSPECTION SYSTEM)



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BNSF SIX TRACK GANTRY



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SIDE LOADER



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STRADDLE CRANES

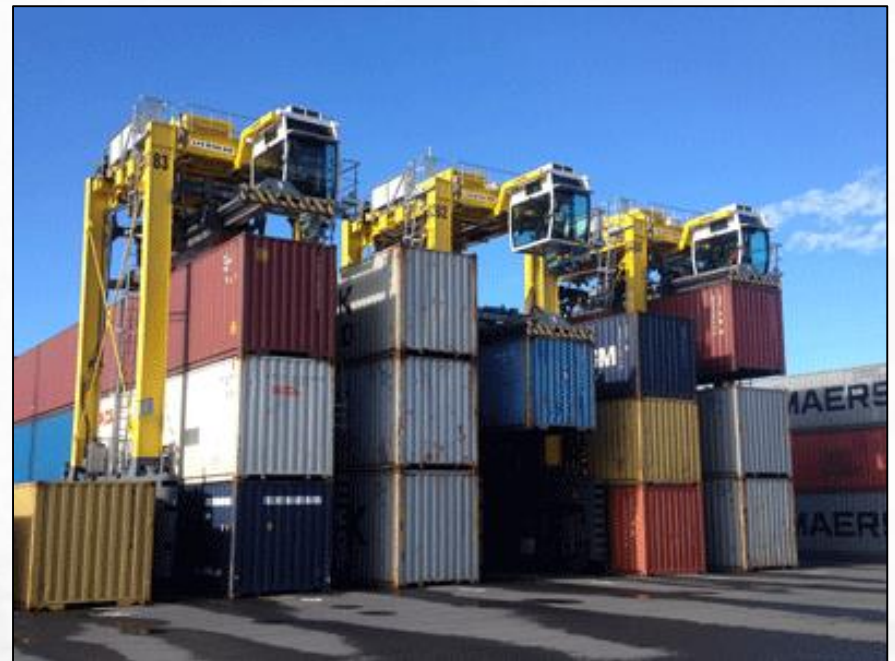


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MULTIPLE UNITS WILL BE WORKING AT THE SAME TIME





ITEMS TO CONSIDER WHEN TARGETING:

- Risk level of HM listed on Waybills or Consist
- Potential problems on the shipping papers
- Larger quantities
- Package type
- Variety of different HM in same container
- Multiple containers with same HM
- Known problem shippers, consolidators, etc.
- Where shipment is going
- Where shipment is from
- Portable tanks
- More?



THINGS TO BE LOOKING FOR:

- ❖ Damaged HM containers, potential leaking or load shift, notify ramp personnel, **Do Not Open**
- ❖ Bulging doors or sides, notify ramp personnel, **Do Not Open**
- ❖ Odors or smells, if detected stay clear, notify ramp personnel, **Do Not Open**
- ❖ Placards and markings not consistent with billing description
- ❖ Poorly placarded, missing, wrong, incomplete, multiple placards, markings
- ❖ Portable tanks, markings, placards, closures
- ❖ Incorrect location from paperwork
- ❖ Train arrivals, placard visibility, over stacked placarded portable tanks, tank orientation, consist accuracy
- ❖ Train departure same as above, ensure list is oriented correctly
- ❖ HM container “on hold” in rail data system or by sticker



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GAS EXPLOSION



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LEAKING HAZMAT



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SHIFTED LOAD?

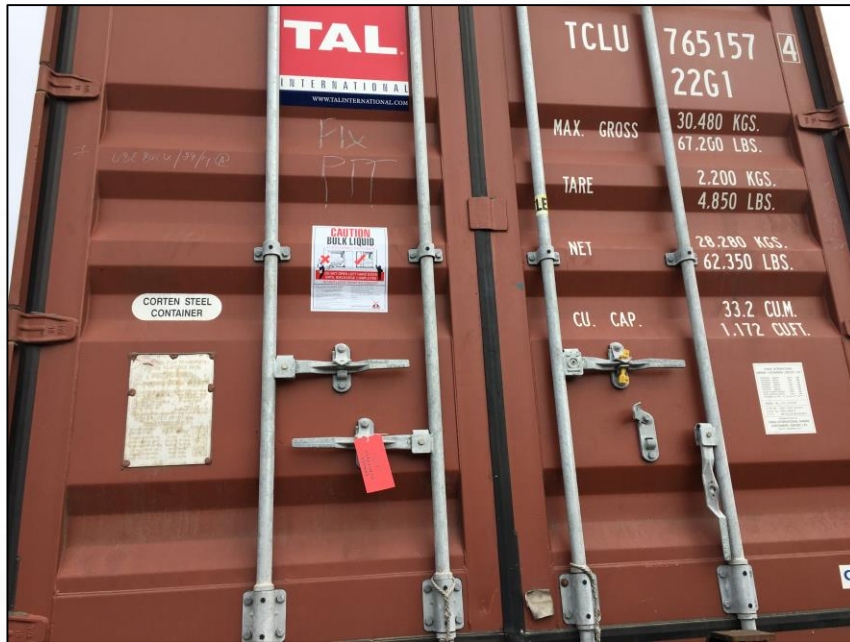


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BLADDER LOADED IN CONTAINER





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PROPER SHIPPING NAME?



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SAFETY EQUIPMENT AND CONCERNS DURING INTERMODAL FACILITY INSPECTIONS

- PPE- high visibility vest and eye protection. Know your surroundings
- Cell phone and facility contact numbers
- Note wind direction
- Proper tools
- Security strap
- Seal replacement
- Gloves
- Protection against moving equipment
- Hazards on the facility, improperly parked chassis
 - FRA Inspection Policy not Regulatory



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USCG INSPECTOR KIT CHECKLIST

Container Inspection Kit Checksheet		
ITEM NAME	NSN OR PART No.	SOURCE OF SUPPLY
CG Vest	#217-CG (SAR Vest)	LSC 813-645-2748
High Viz Inspector Vest	8068 Flo-Orange	SECO 1-800-248-3041
Hard Hat, Full Brim	4LN96	Grainger
Gloves, Mechanics, leather palm	6WU32	Grainger
Inspection Chalk, white	2F908	Grainger
Safety Glasses, clear	5JE24	Grainger
Safety Glasses, gray	5JE25	Grainger
Tool Bag, OD Green	5140-00-473-6256	GSA Advantage
Bolt Cutter, 18" clip cut	5110-00-596-9162	GSA Advantage
Cable Cutter, Compound	2D PK2	Grainger
Hacksaw Kit	4YR51	Grainger
Hacksaw Blades	4RA71	Grainger
Linemans Pliers	4YU69	Grainger
Insp. Flashlight, LED	2010 (Saberlight)	Pelican (Gov't Sales)
Container Strap	90-6 (1" x 6" Lanyard)	Bairstow (404)-351-2600
Ear Plugs	TL1-G1948965	GSA Advantage
Sun Block, packets	2A293	Grainger
IIICL Inspection Tool Kit	4199 Damage Kit	IIICL (202) 223-9800
PERSONNEL MONITORS		
GAMIC (4 Gas Meter)	FOUO	Area WMD Coordinator
PRD (Rad. Det)	FOUO	Area WMD Coordinator
CITAT SUPPLIES		
High Security Seals	N/A	CITAT 405-954-8985
CG 5577	N/A	CITAT 405-954-8985
Hold Stickers	N/A	CITAT 405-954-8985
REFERENCES		
Emergency Resp. Guide	2008 ERG	USDOT/GPO(866) 512-1800
49 CFR (Early Edition)	EARLY0013	LabelMaster 800-621-5808
IMDG	IMD0009	LabelMaster 800-621-5808
IIICL Inspection Guide (IIICL-5)	1111 Insp Guide	IIICL (202) 223-9800
IIICL Repair Guide (IIICL-5)	1105 Repair Guide	IIICL (202) 223-9800
IMO Circ 134	N/A	http://www.imo.org/



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IMPROPERLY PARKED CHASSIS



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SAFETY DURING CONTAINER OPENING

- Have a planned egress in case of emergency
 - Assume container content is against doors, open with caution (leave yourself a place to go), **USE THE STRAP.**
 - Protecting the container being inspected from movement and the movement of adjacent containers
 - Approach all containers with caution
 - Ground inspection-sharp objects-tripping hazards
 - Under chassis inspection, leaks, odor, tampered with, audible sounds
 - With doors open, allow container to vent (over 5 minutes is suggested)
 - Attempt to locate HM without entering the container, paperwork is often located near the doors.
 - Do not go into container if it requires crawling over contents for visibility
 - Do not enter more than 3 feet into container
- FRA Inspection Policy not Regulatory



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USE OF SECURITY SEALS



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SEAL PLACEMENT





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SEAL PLACEMENT





SEAL REPLACEMENT



- Seals be must be replaced in kind to maintain equivalent security, unable to replace in kind **“the seal shall not be removed”**
- Maintain control over container until container is re-sealed
- Replacement seal must be entered in the inspection report, container number, removed seal number, replacement seal number, hazard class, and UN Number.
- Seal replacement information must be given to coordinator before leaving the facility to update container electronic record

- FRA Inspection Policy not Regulatory



FEDERAL RAILROAD ADMINISTRATION

SAFETY POLICY, PROCEDURES, AND

RECOMMENDATIONS

(OCTOBER, 2017)

- **4.0 Common Sense Safety Practice in a Railroad Environment**
- 4.10 Intermodal TOFC/COFC Inspection Safe Work Procedure; safe work practices to follow during an intermodal trailer or container inspection
- 1. If possible , park your vehicle in front of a trailer to prevent someone from attaching to the trailer and moving it while the trailer is being inspected.
 - a. What should you do if you have to leave and you don't want the container removed ? Call the Ramp co
-coordinators cell phone
 - b. Even though you have protected the container you are inspecting from the head end, you may use safety
cones for the units on both sides and behind as added protection. If personnel are available a spotter will work.

FRA Inspection Policy not Regulatory



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INSPECTION PROCESS

THINGS YOU MAY FIND

- Leaking product
- Blocking and bracing
- Package orientation
- Labels and marking
- Package un specifications
- Quantity, container vs. shipping papers
- HM not listed on bills or missing required information
- Placards not visible, railcar
- Stacked placarded IM tanks, valve orientation
- Consist accuracy
- Non-declared
- others



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PLACARD VS. PLACARD ?



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PLACARDING FOR SUBSIDIARY HAZARDS



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UNDECLARED HM

- HM items found in container and not declared on waybill, BOL, HAZDEC, EDI 404 or 417
- Placards on Container, listed as non-hazmat on documentation.
- Non-placarded leaking, abnormal odor, sound, physical signs may help detect an undeclared shipment
- All similar containers are placarded, one or two are not
- MASFO (Multi Agency Strike Force Operation)- USCG is checking non-HM containers



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OUT-GATE/IN-GATE INSPECTIONS



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RELEASE DETECTED BY VINEGAR ODOR



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BLOCKING AND BRACING



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PLACARDS NOT VISIBLE



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LEAKING DRUMS



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PLACARDED VS. NON-HAZ



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IM TANK, MARKING VS. PLACARDS



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NEED A FEW CRANES?



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THE END?

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