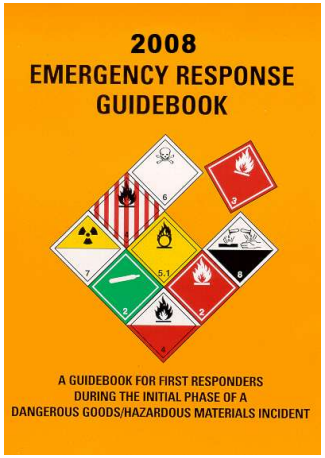
WESTBURY FIRE DEPARTMENT

PROBATIONARY DRILL

HAZ-MAT AWARENESS

WESTBURY FIRE DEPARTMENT

HAZ-MAT AWARENESS



BASIC
HAZAROUS MATERIAL
AWARENESS REVIEW

USE OF THE
EMERGENCY RESPONSE
GUIDE-2008

Hazardous Material Awareness Review

Why do you need to know this?

The US Dept. of Labor Occupational Safety And Health Administration (aka: OSHA)

OSHA 29 CFR 1910.120 - **requires :**

ALL First Responders be trained to the Awareness Level of Hazardous Material and includes the use of this Emergency Response Guidebook.

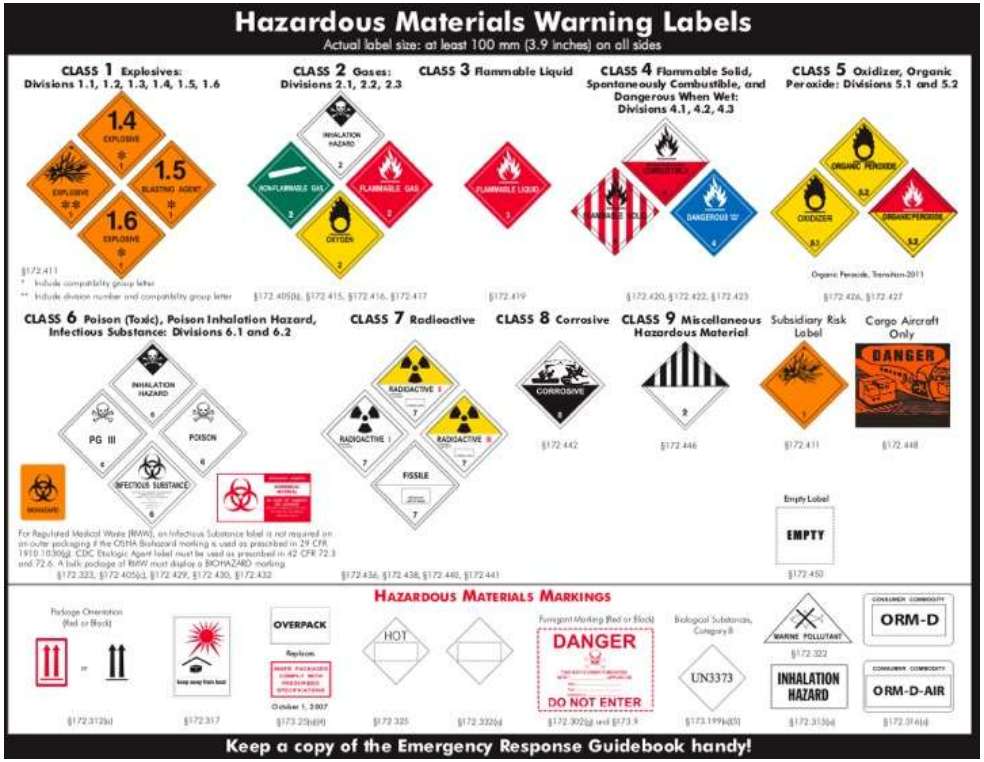
OSHA also requires, a service that responses to Haz-Mat incidents provide Annual Refresher Training to all it's members, to the level in which the service provide.

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

Why do you need to know this?

Definition Hazardous Materials:

A hazardous material is any item or agent (biological, chemical, physical) which has the potential to cause harm to humans, animals, or the environment, either by itself or through interaction with other factors.



Hazardous Material Awareness Review

Why do you need to know this?

Public Safety "Duty to Act"

All Public Safety responders have a "Duty to Act" under the law.

Level of involvement, is defined by the agencies Emergency Response Plan (ERP).

Westbury FD – as with most Fire Dept. operates to the "**Operations Level**" at a Haz-Mat Incident.

What does that mean?

Hazardous Material Awareness Review

Why do you need to know this?

Five Levels of Training:

- First Responder Awareness Level
- ***First Responder Operational Level***
- Hazardous Materials Technician
- Hazardous Materials Specialist

broken down into specific items: Transportation, Storage, use…

- Hazardous Materials Incident Commander

Awareness & Operations – Defense
Technicians & Specialists – Offense
IC – Head Coach

Hazardous Material Awareness Review

Why do you need to know this?

Primary Objectives at the *Operations Level* is to:

Recognition

Isolation

Protection

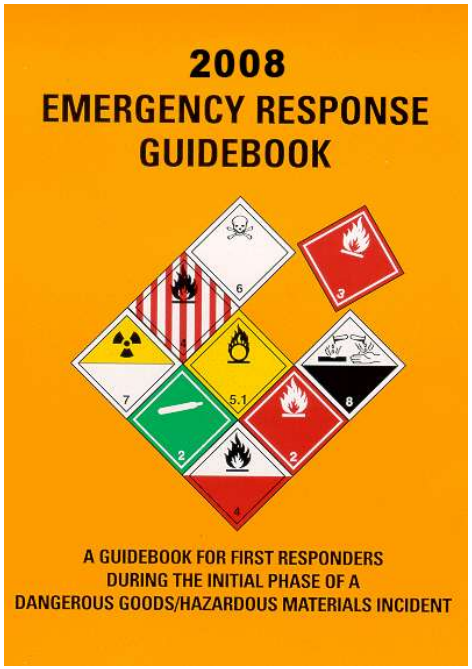
Notification

Then when needed,
Assist Tech/Specialist

Operations Level also play a vital role in the Decontamination Process under the guidance of the Tech / Specialist

Hazardous Material Awareness Review

Why do you need to know this?

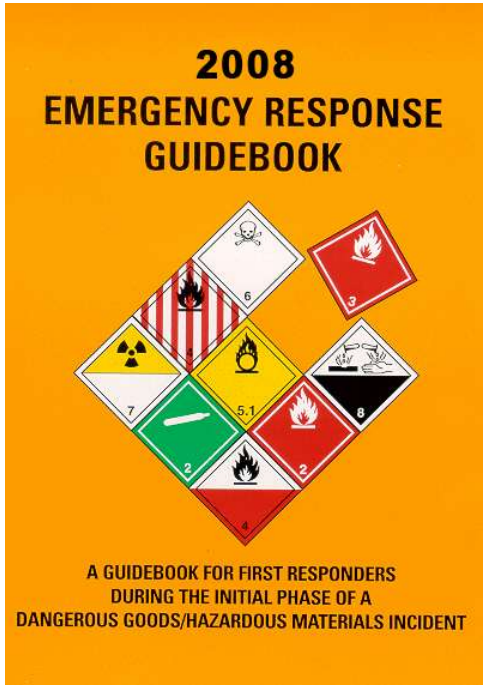


The Primary Tool we'll use to meet our objectives:

Emergency Response Guidebook

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

What is the ERG used for ?



An EGR is printed guide
used in the "initial response phase" of an incident
(the period following arrival on scene ,
and/or the identification of dangerous substance is confirmed)

then

Protective Actions and area Securement measures are initiated,

and

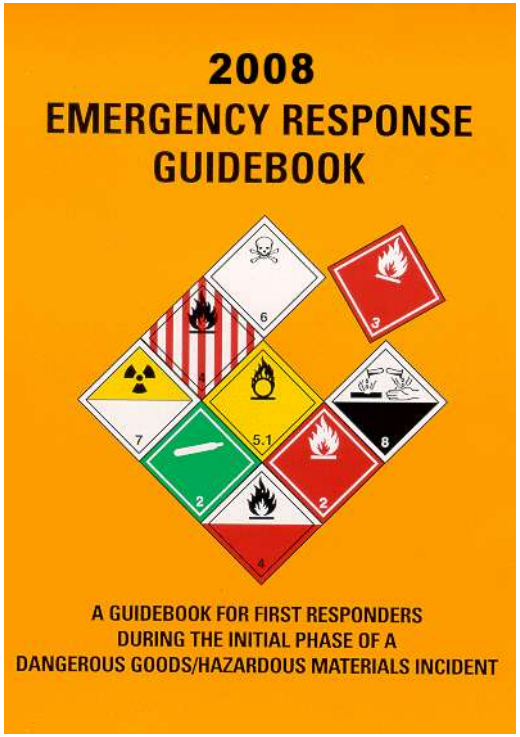
assistance from qualified personnel is requested.

Remember our Objectives:

Recognition
Isolation
Protection
Notification

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

What is the ERG used for ?



The ERG is a First Responder tool and not something a Hazmat Technician will be using to deal with an incident later.

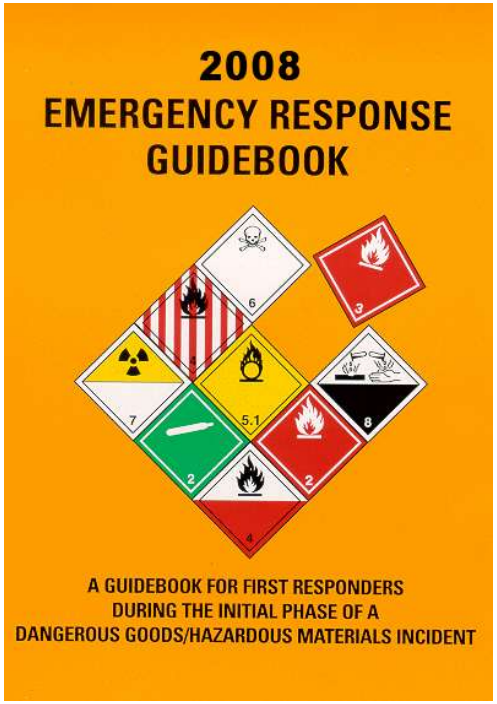
Although proper use of the ERG will make the Tech's job easier, **if the initial action plan was implemented properly.**

Especially with **Proper Product Identification**.

We don't want to set a plan for product "A" when we really have product "D".

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

Where do we find the ERG ?

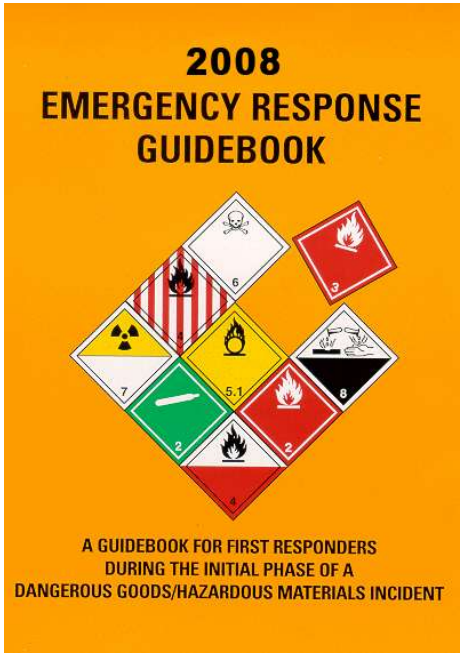


An ERG is located in the officers compartment of all of our initial response vehicles. – (by clipboards)

For the Chief's vehicles, it may be located in their back command area and on their laptops.

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

How do we use the ERG ?



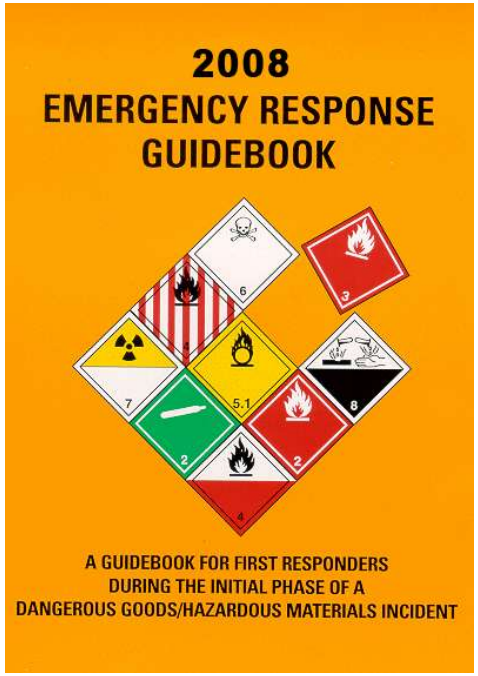
Use of an ERG begins at the calls inception.

If the dispatched information leads you to believe there may be a dangerous material involved, the ERG should be made easily accessible and ready for use.

These incidents should be approached using caution and preferably upwind (wind at you back), if at all possible.

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

How do we use the ERG ?



With Fixed Locations, (that have known Haz-Mat,)

The ERG can be used by the Chiefs in Pre Planning, setting up a Pre Incident Action Plans for these locations.

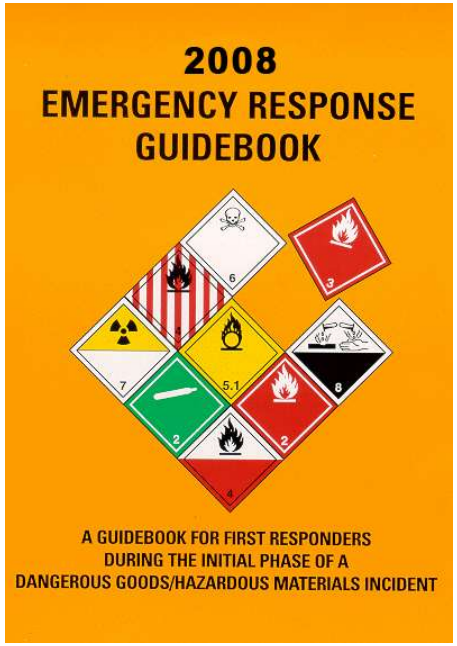
Members could then have direction prior to ever leaving Headquarters, by the computer sheets.

Dispatchers can also give this additional data to rig as the unit goes 21 and while in route.

This is why it's important to note items we see at everyday calls, things that may impose a Hazard to us later, get that info back to the dispatchers, so it gets into our system.

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

How do we use the ERG ?



Proper use of the ERG begins with

<u>Identification:</u>

We need to know 1 or more of the following:

1. **Product Name**

2. **Products 4 digit ID Number**

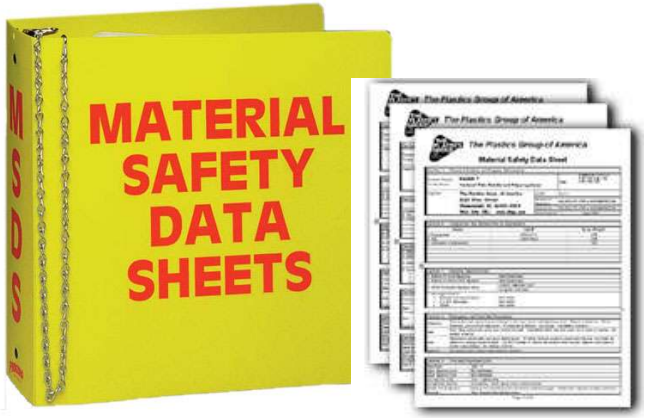
3. **Type of container its being transported in**.

4. **Type of Placard or Label on the container**

How do we find the Product Name ?

In most cases the name of the product can be found by locating the person who made the call for help.

You are most likely being called to the premise because they spilled the product and they know what it is?



All Locations that have a hazardous material on premise will have Material Safety Data Sheets (aka: **MSDS**) for **each** product.

The MSDS will explain **everything** about the product: Name, contact info for its maker, physical and chemical characteristics, hazards, exposures, first aid procedures….

MATERIAL SAFETY DATA SHEET -

MATERIAL SAFETY DATA SHEET

Issued: August 6, 1992
REVISED: February 2, 2010

SECTION 1: PRODUCT INFORMATION

Product Name: **RAIN - SHIELD CLEAR MB**
Manufacturer: GEMITE PRODUCTS INC.
Address: 1787 Drew Road, Mississauga, ON L5S 1J5
Emergency Phone: US: 888-443-6483 CANADA: 905-672-2020
Chemical Family: Acrylic Emulsion Based Water Borne
T.D.G. Classification:

SECTION 2: HAZARDOUS INGREDIENTS

INGREDIENTS	%	TLV	CAS NO.
Ethylene Glycol	3.5		107 – 21 –5
Ester Alcohol	1.1		25265 – 77 –4

SECTION 3: PHYSICAL DATA

Physical State: Aqueous Paint
Odour & Appearance: Odourless, Water borne thin solution
Vapour Pressure: Unknown
Vapour Density:
Evaporation Rate:
Boiling Point: 100 °C
Specific Gravity: 1.1
PH: 9 - 10

SECTION 4 : FIRE & EXPLOSION DATA

Flammability: Nonflammable
Extinguishing Media: N/A
Special Procedures: N/A
Flash Point: N/A
Auto Ignition Temp: N/A
Upper Flammability Limit: N/A
Lower Flammability Limit: N/A
Hazardous Combustion Products: N/A
Explosion Data: No fire or explosion hazards

SECTION 5: REACTIVITY DATA

Conditions Contributing to Instability: Stable
Incompatibility: Very Compatible
Hazardous Polymerization: Will not occur
Reactivity Conditions: None
Hazardous Products of Decomposition: Decomposition products of acrylic polymers

SECTION 6: TOXICOLOGICAL PROPERTIES

Route of Entry: Eyes, Mouth, Skin
Skin Contact: Reddening of skin upon repeated or prolonged contact
Eye Contact: Slight irritation to eyes with direct contact
Inhalation: Over exposure from spray mist may irritate upper respiratory tract
Ingestion: N/A
Effects of Chronic Exposure: N/A
Effects of Acute Exposure: N/A
TLV: N/A

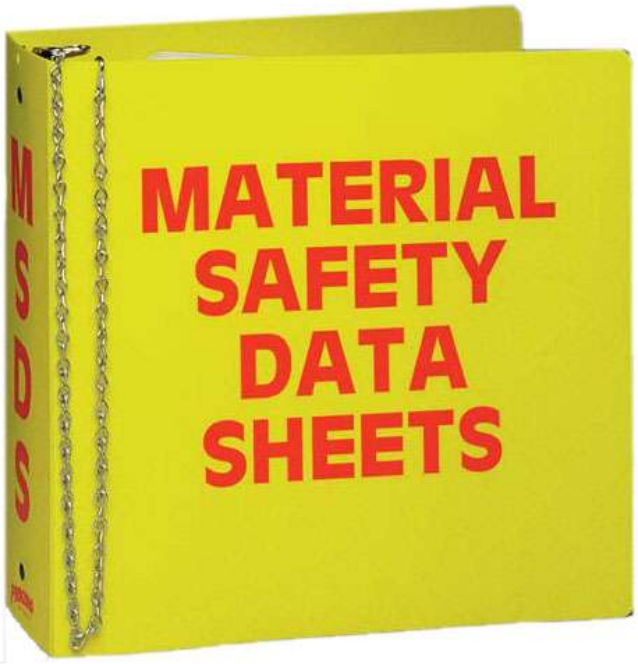
SECTION 7: PREVENTATIVE MEASURES

Protective Equipment
- Gloves Type: Impervious gloves
- Respiratory Type: Respiratory protection is required when sanding or grinding the finished product
- Eye Type: Safety glasses when spraying
- Footwear Type: N/A
- Clothing Type: N/A
Engineering Controls: N/A
Leak/ Spill: Wash down with water
Waste Disposal: Same as paint.
Handling Procedures & Equipment: Avoid skin and eye contact.
Storage Needs: Keep container closed when not in use.

SECTION 8: FIRST AID MEASURES

Eye Contact: Irrigate with large amounts of water for at least 15 minutes. Seek medical attention if irritation persists.
Skin Contact: Wash exposed areas with clean, fresh water and soap.
Inhalation: Move person to fresh air and seek medical attention.
Ingestion: Unless unconscious or convulsing, dilute material with water or milk. Do not induce vomiting. Consult physician.

N/A : Not applicable



MSDS sheets can be found in common areas, such as break rooms, since all personnel inside that premise must have access to them.

The best way to immediately obtain the MSDS sheets at an incident is to have the person in charge of location have someone get them for you!

For Product being Transported – **Non Fixed Locations**

Roadway – within the Drivers Arms Length,
Bill of Lading (usually in the drivers door pocket)

Rail – on the conductor person,
Consist

Waterway – in the wheel house,
Dangerous Cargo Manifest

Airplane – in the Cockpit,
Air Bill

These all list the Cargo being Carried by the transportation vessel, they are similar to the MSDS sheets and will the have specific data on each of the products being carried.

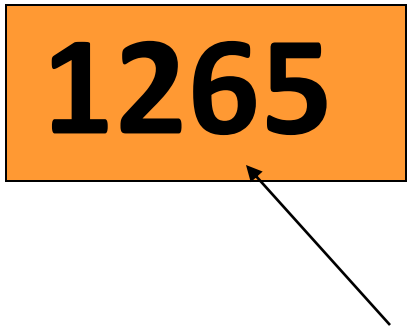
How do we find the Product's ID Number ?

Product ID number can be found **on** the "containers" -
by a label or placard.

This Products ID is 1075

How do we find the Product's ID Number ?

For Products that originated overseas, you may see a Orange rectangle with 4 black numbers



This Products ID is 1265

Identifying Product Containers

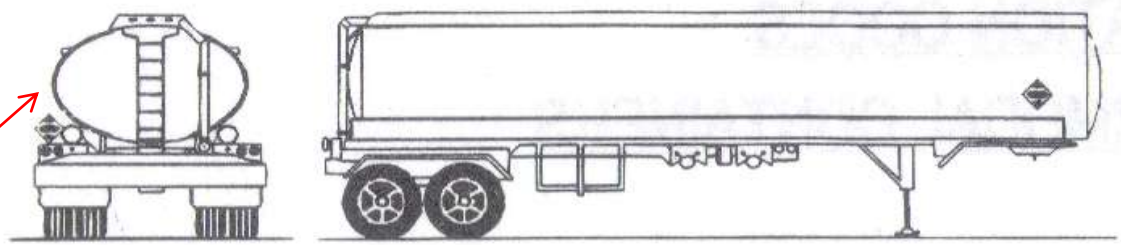
When we talk about identifying the product by it's containers, we are talking about, while it's being transported.

In almost all cases, we won't need to identify Product by its container in a facility, since we'll be able to get its MSDS.

For products being transported, it may be on fire and we'll be unable to get its Data Sheets, this is when Container ID becomes important.

Identifying Products Containers / Containers of Transportation

NON- PRESSURE LIQUID TANK



Oval in shape

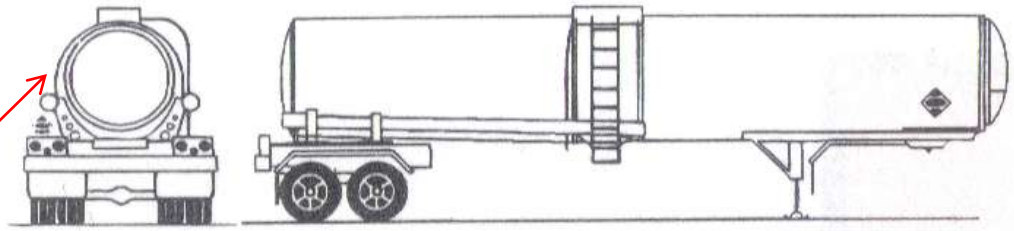
DOT406, TC406 Non-pressure
Liquid Tank
(MC306, TC306)

131

Can be seen daily delivering gasoline to the local stations

Identifying Products Containers / Containers of Transportation

LOW PRESSURE LIQUID TANK



DOT407, TC407 Low pressure
Chemical Tank
(MC307, TC307)

137

Round in shape

Note difference from Non Pressure – Round tank & **Not** Oval Shape

Identifying Products Containers / Containers of Transportation

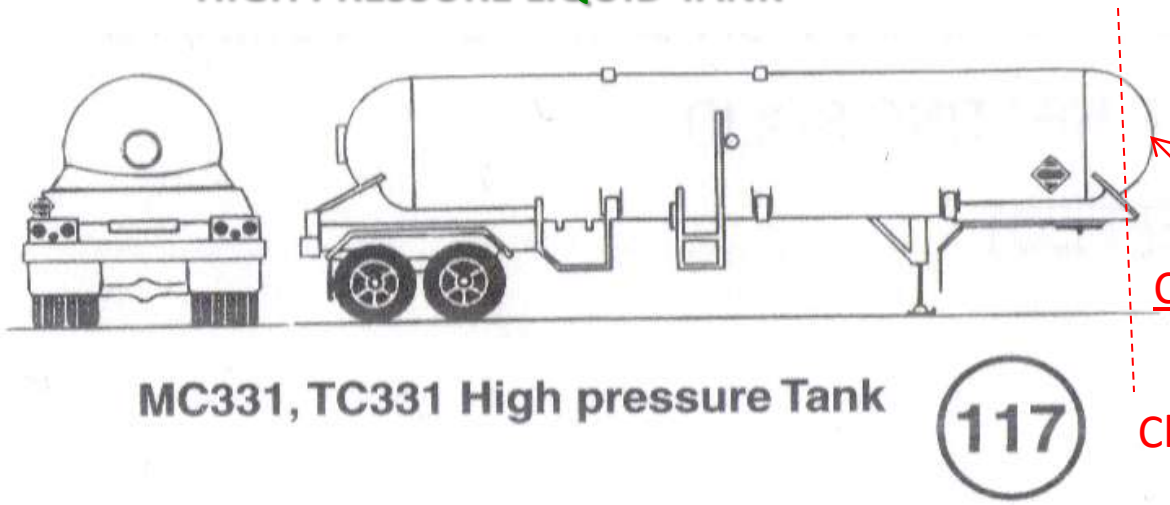
CORROSIVE LIQUID TANK

Difference from Low Pressure is has <u>Multiple Support Bands</u> in tank, due to weight of product

Can be seen regularly delivering Caustic Soda to the Water Districts Wells Stations

Identifying Products Containers / Containers of Transportation

HIGH PRESSURE LIQUID TANK



Circular shape

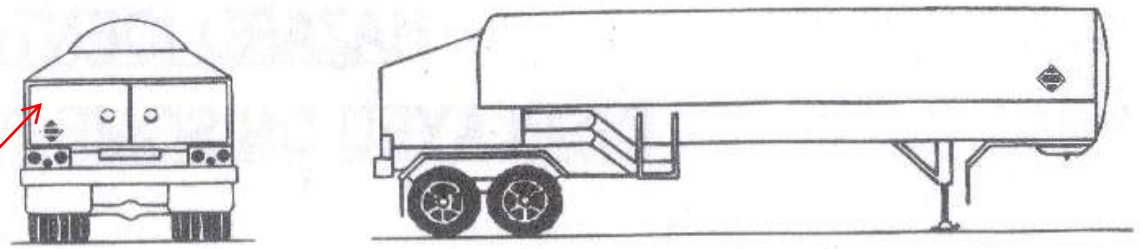
Chemical tank
Flatter

Can be seen regularly delivering propane

Note: roundness of tank front and back – not flat like low pressure

Identifying Products Containers / Containers of Transportation

CRYOGENIC LIQUID TANK



Housing on back

MC338, TC338 Cryogenic Liquid Tank
(MC306, TC306)

117

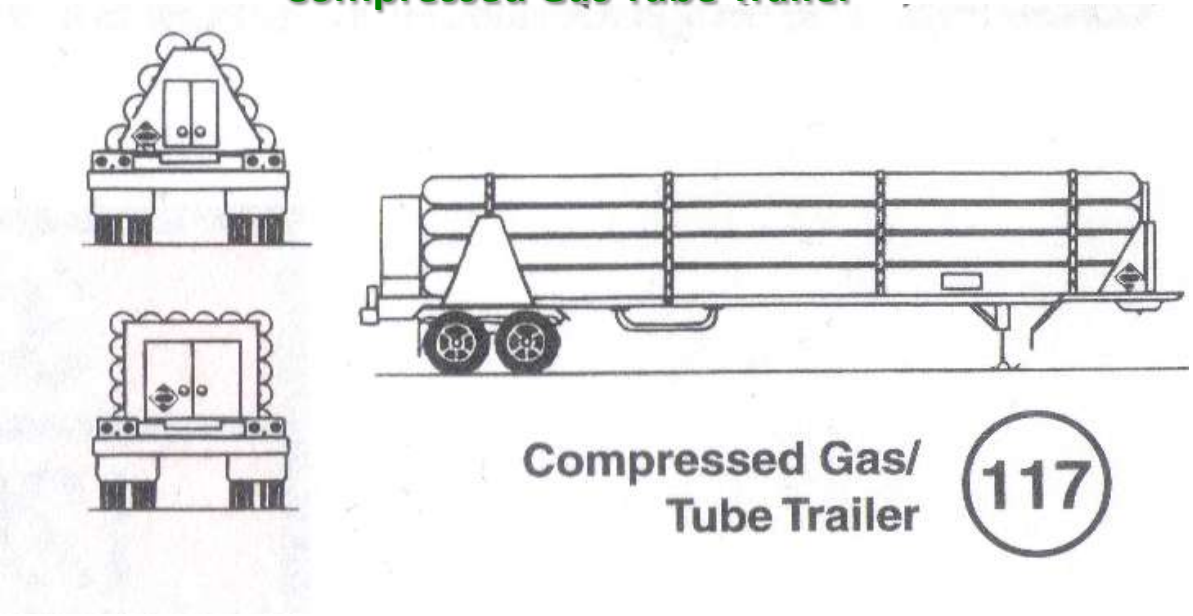
Tank within a Tank – Outside tank is what keeps the inner Tank Cold

Besides the product hazard, the container is also a hazard,
temperatures inside the outer tank could be 100's of degrees below freezing.
If this tank is ruptured the product warms. What effect will it have on the product?

Most cases, the product is cooled to make it a liquid so more can be transported,
as it is heated, it will convert back to a gas, and a lot of it.

Identifying Products Containers / Containers of Transportation

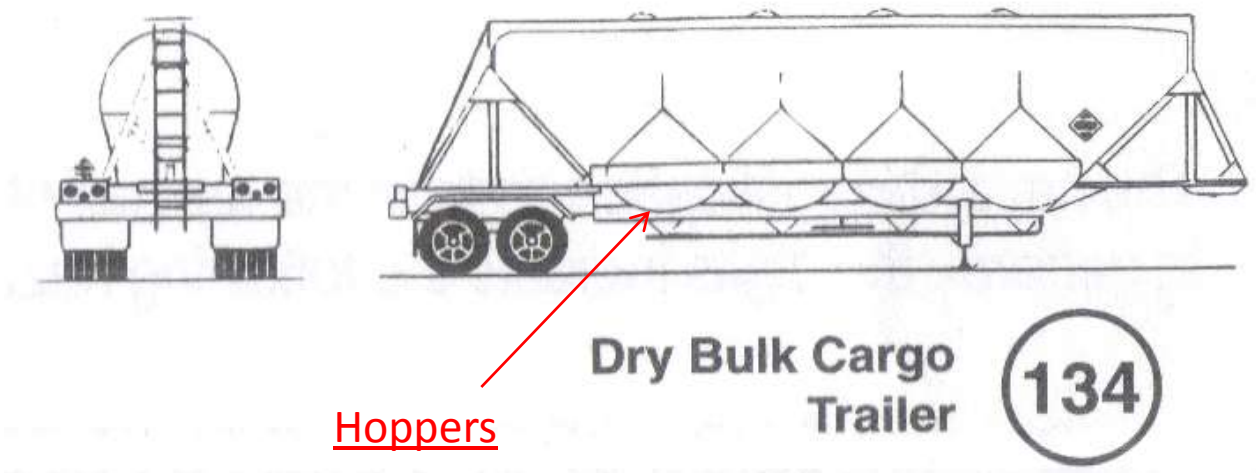
Compressed Gas Tube Trailer



Besides used for Transportation, they stay parked on premises for long periods, as the product is being off loaded. Once they are empty the entire trailer is replaced.

Identifying Products Containers / Containers of Transportation

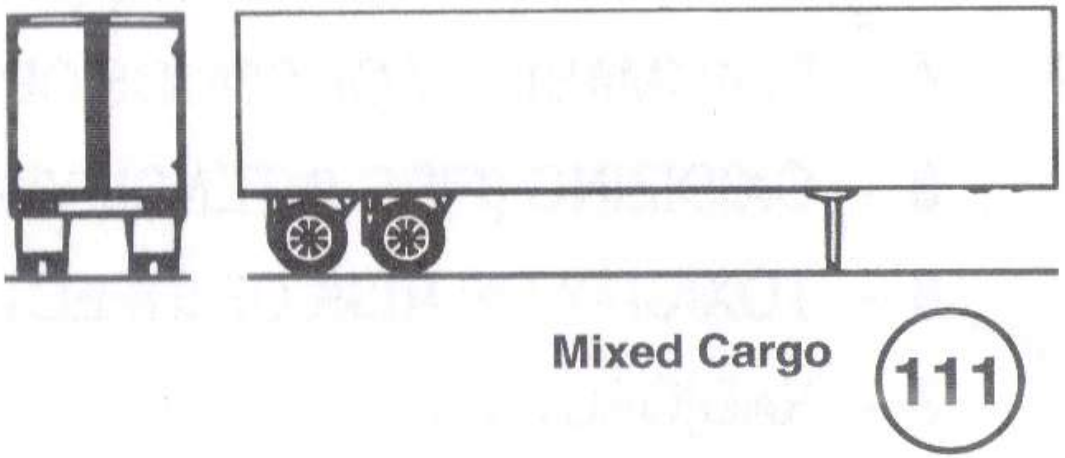
DRY BULK CARGO TRAILER



Can be seen regularly delivering Cement or Flour to bakeries

Identifying Products Containers / Containers of Transportation

MIXED CARGO TRAILER



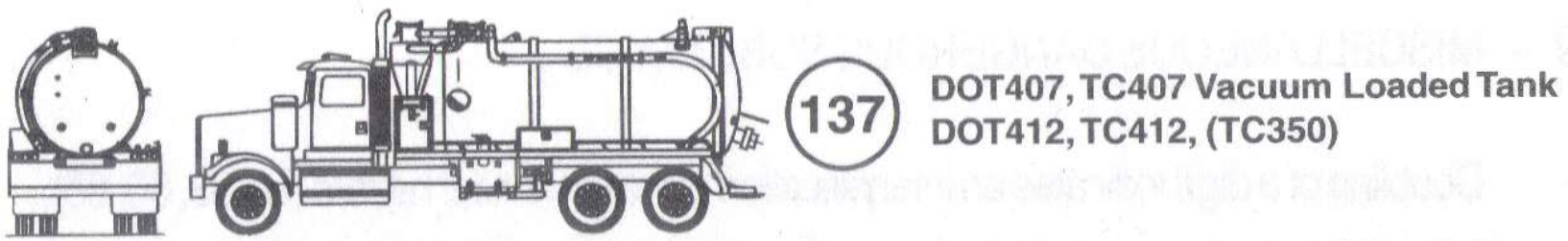
Can be seen regularly anytime, anywhere, **delivering anything**

Real danger is mixed product – you may a 2 safe products but when mixed together produce a dangerous one – (Clorox & Ammonia)

Example – Grocery delivery truck

Identifying Products Containers / Containers of Transportation

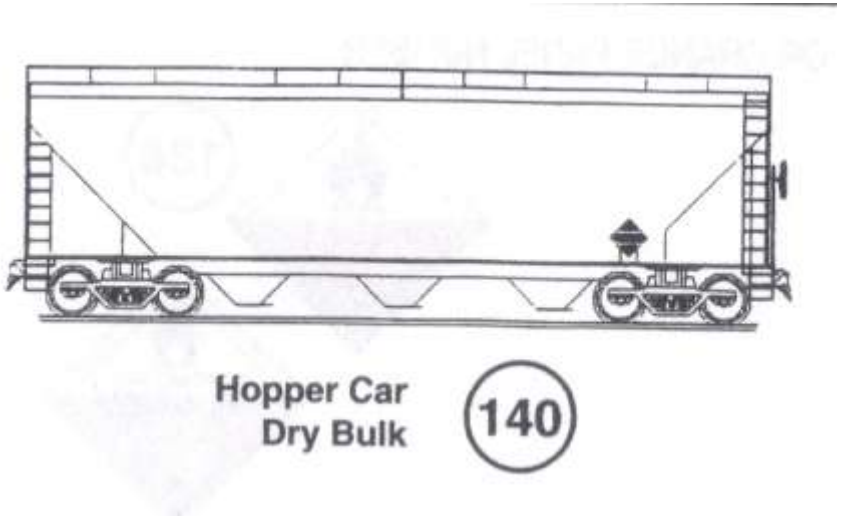
VACUUM LOADED TANK



Can be seen regularly on Voice Road in Carle Place – Citywide Sewer

Identifying Products Containers / Containers of Transportation

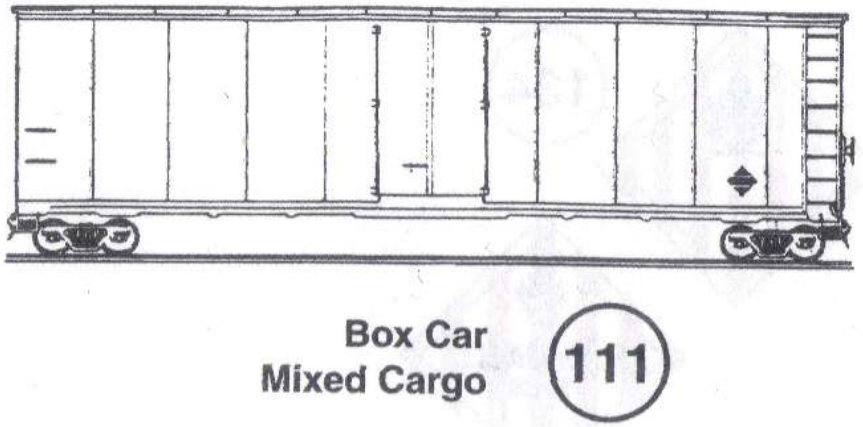
HOPPER CAR DRY BULK



Carries Dry Powder products, Cement Very Common on Rails

Identifying Products Containers / Containers of Transportation

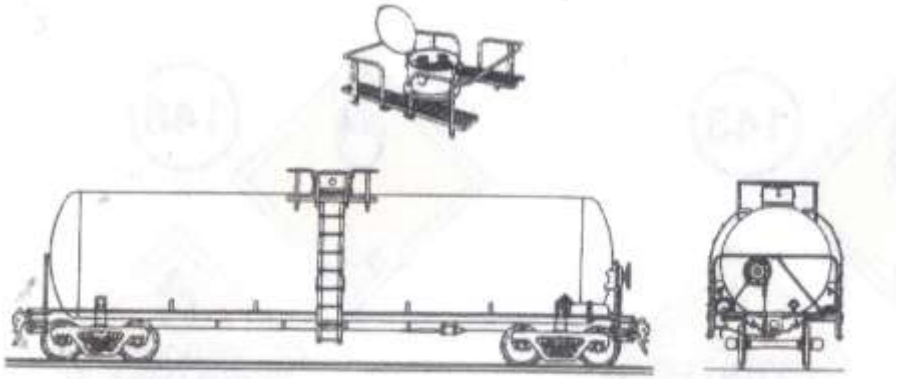
BOX CAR MIXED CARGO



Can be seen regularly anytime, anywhere, **delivering anything**

Identifying Products Containers / Containers of Transportation

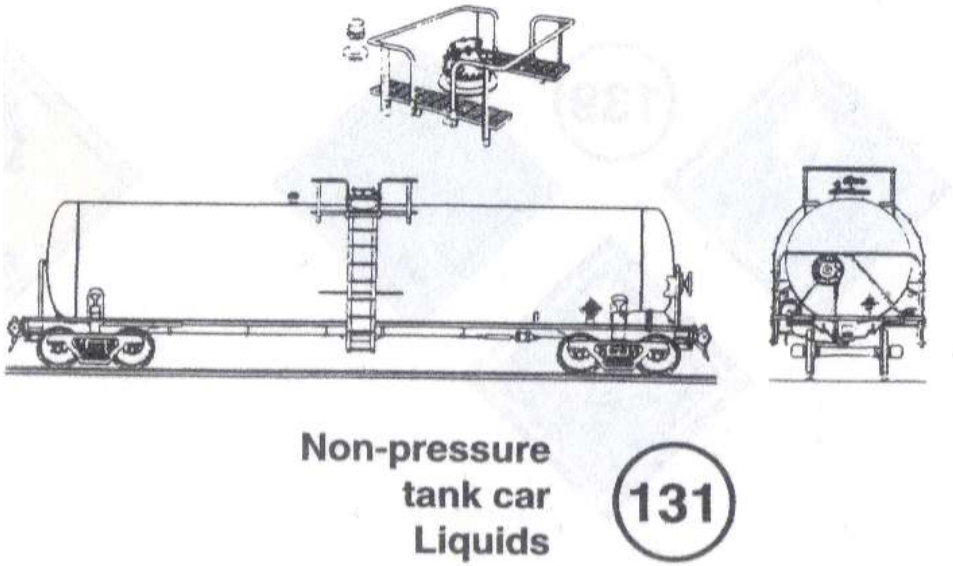
PRESSURE TANK CAR COMPRESSED LIQUIFIED GASES



All valves on top housed within 1 single control center

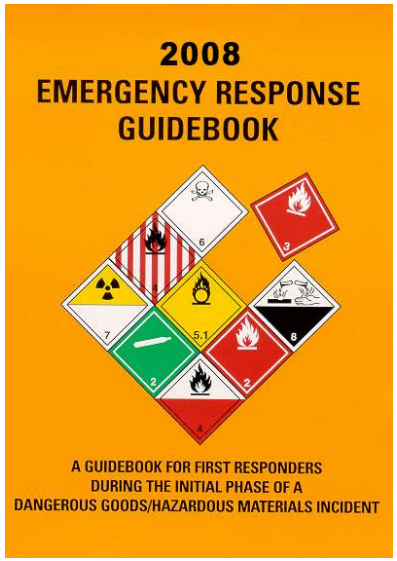
Identifying Products Containers / Containers of Transportation

NON- PRESSURE TANK CAR LIQUIDS

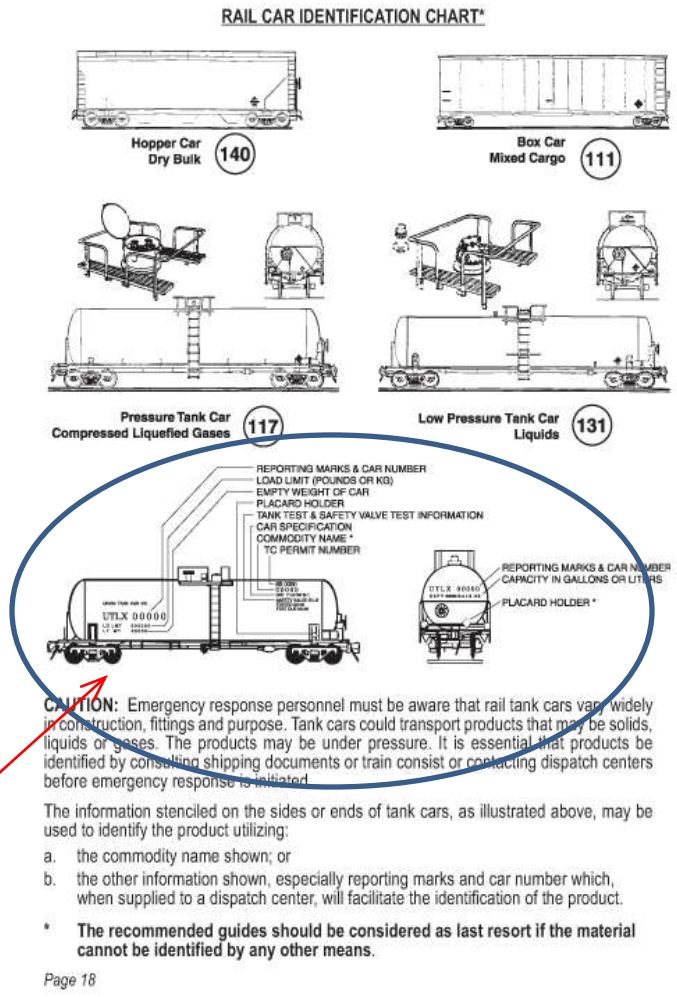


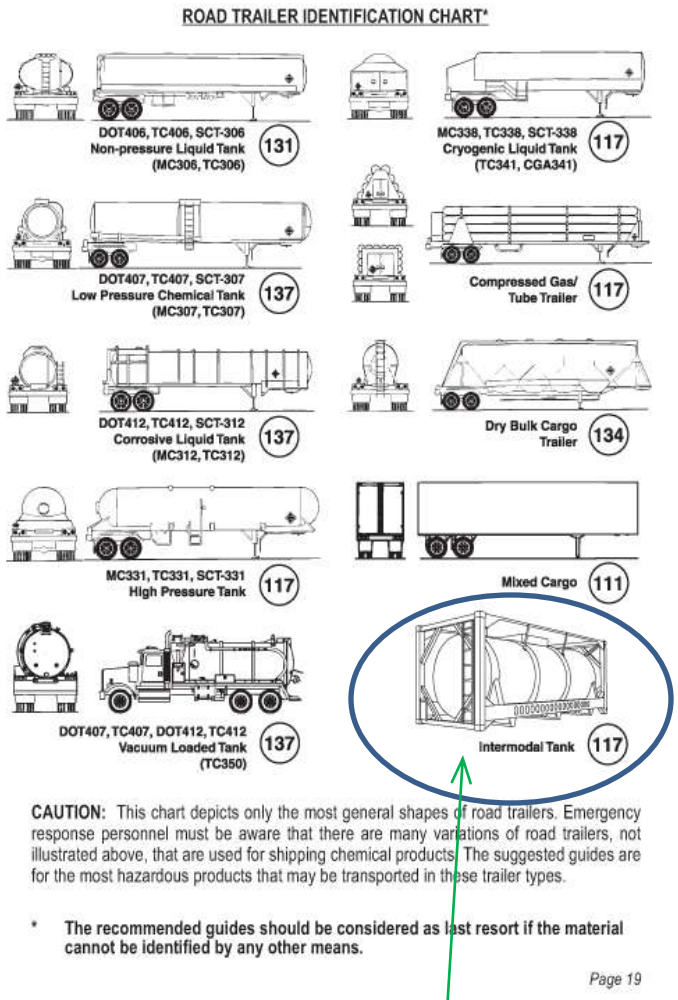
Looks similar to pressure tank car, but difference is it has
Multiple discharge Valves on top

Identifying Products Containers / Containers of Transportation



Help ID
Train tank car
Markings





All can be found on page **18** & **19** of ERG

Shipping Cargo Tanks
from a Ship to Back of Truck

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

Identifying Products Containers / Containers of Transportation

All these are common means of transporting a hazardous material from place to place.

Be aware most hazard occurs **not** while the product is being transported, but when the product is being **loaded & unloaded** from their containers.

Identifying Placards By - Class of Hazardous Material

Class 1 - Explosives
Division 1.1 Explosives with a mass explosion hazard
Division 1.2 Explosives with a projection hazard
Division 1.3 Explosives with predominantly a fire hazard
Division 1.4 Explosives with no significant blast hazard
Division 1.5 Very insensitive explosives; blasting agents
Division 1.6 Extremely insensitive detonating articles

Class 2 - Gases
Division 2.1 Flammable gases
Division 2.2 Non-flammable, non-toxic* compressed gases
Division 2.3 Gases toxic* by inhalation
Division 2.4 Corrosive gases (Canada)

Class 3 - Flammable liquids/ combustible liquids

Class 4 - Flammable solids; Spontaneously combustible materials; and Dangerous when wet materials
Division 4.1 Flammable solids
Division 4.2 Spontaneously combustible materials
Division 4.3 Dangerous when wet materials

Class 5 - Oxidizers and Organic peroxides
Division 5.1 Oxidizers
Division 5.2 Organic peroxides

Class 6 - Toxic* materials and Infectious substances
Division 6.1 Toxic* materials
Division 6.2 Infectious substances

Class 7 - Radioactive materials

Class 8 - Corrosive materials

Class 9 - Miscellaneous dangerous goods

Identifying Placards/Labels

Placards/Labels are the warning label affixed to the products container.

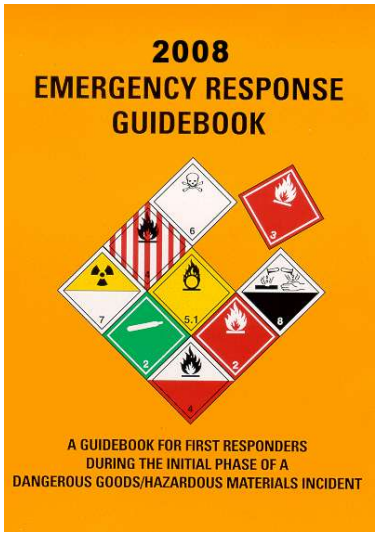
Class 3 - Flammable liquid

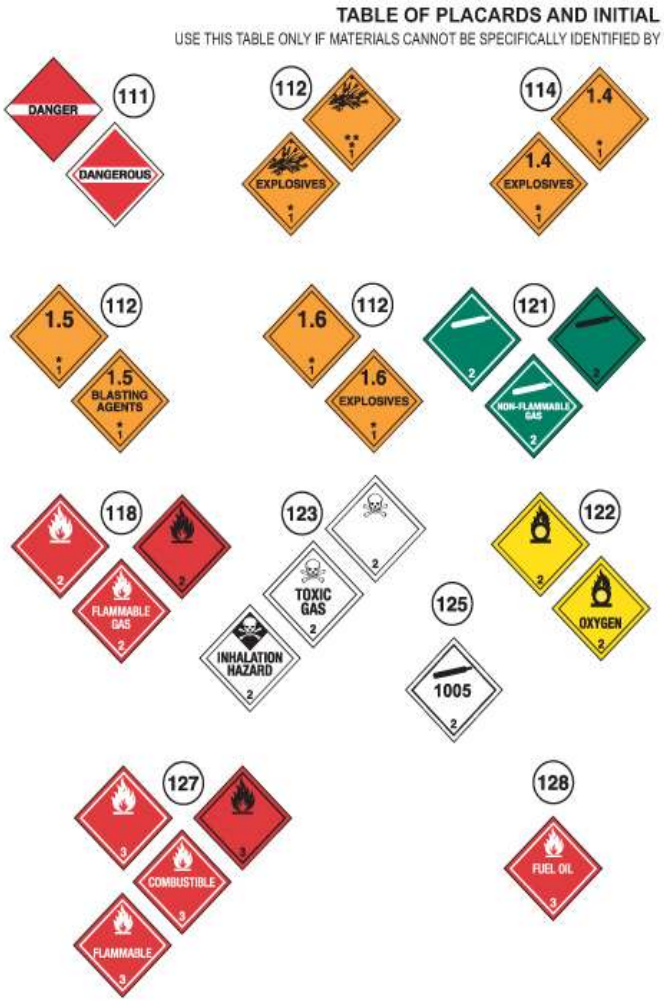
Class 2 - Gas

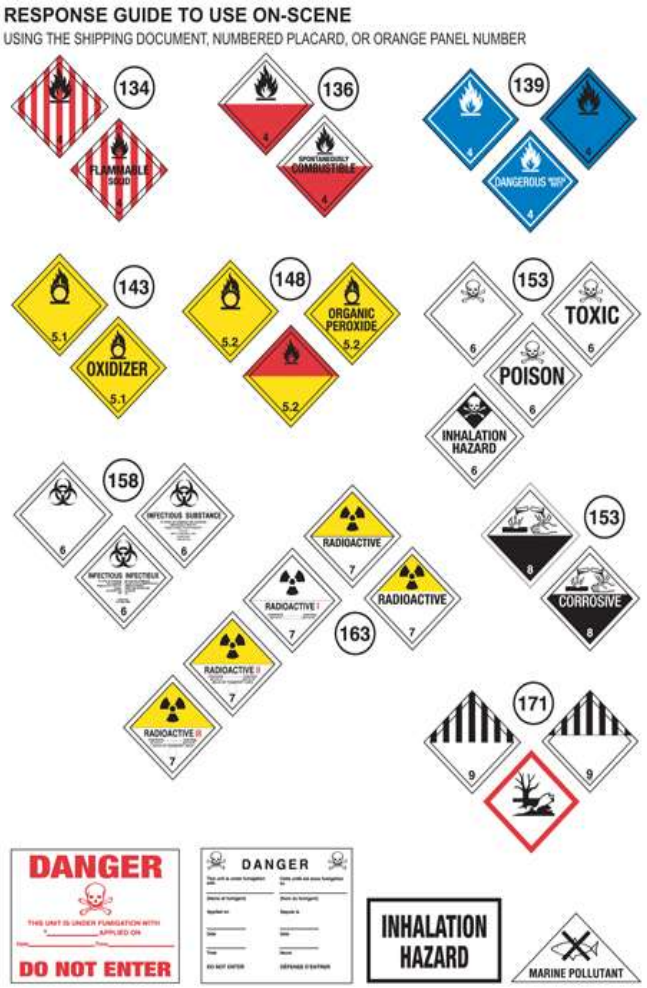
Class 4 - Flammable solid

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

Identifying Placards







All can be found on page **16** & **17** of ERG

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

Identifying Placards/Labels

When you have a placard that displays an ID Number along with the Class, **reference the ID in the guide**, since it's more specific to the product and will give you the products actual name.

NFPA 704 Style Placards

As you enter a structure you may see a NFPA 704 Placard:

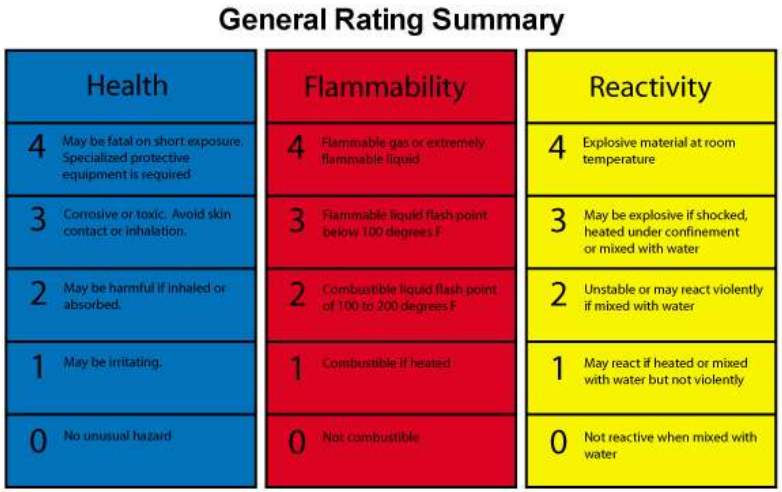
RED – FLAMMABILITY

BLUE – HEALTH

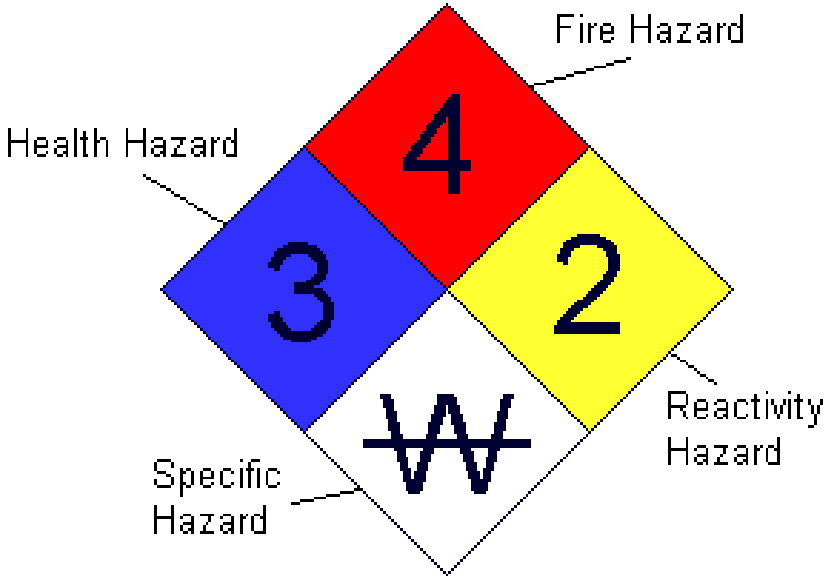
YELLOW – REACTIVITY

WHITE – SPECIAL HAZARD

NFPA 704 Style Placards



NFPA 704 Style Placards



Rates on a scale of 0-4,
4 being most dangerous

RED – FLAMMABILITY – **4**
(How Flammable it is) Flash < 73 degree F

BLUE – HEALTH – **3**
(How it will effect your Health) Extreme danger

YELLOW – REACTIVITY – **2**
(how well does it play) chemical change is violent

WHITE – SPECIAL HAZARD – W with line through it
(*reacts with water – do not use*)

NFPA 704 Style Placards

What does this mean?

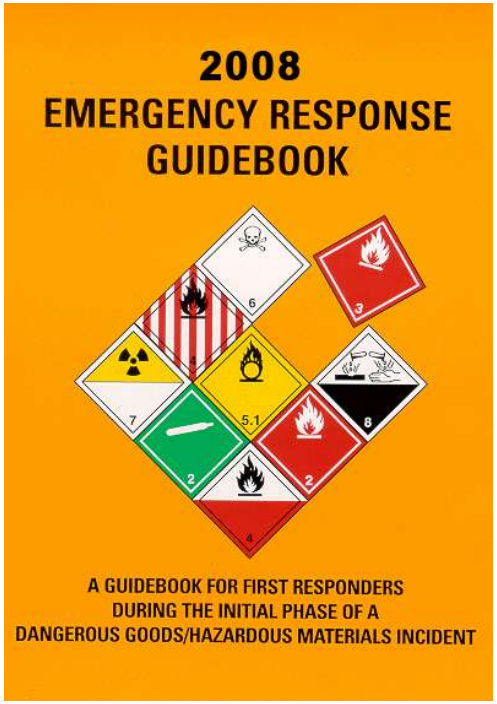
RED – Flammability – 3
Flash below 100 degree F

BLUE – Health Hazard – 2
hazardous

YELLOW – Reactivity – 1
Unstable if heated

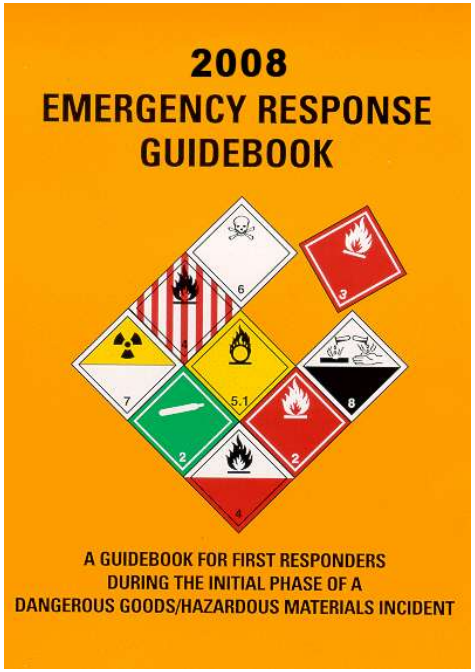
The W with the line represent
it reacts to water, so don't use water.

Our 1 danger will be the 3 – Fire below 100 degrees but do we use water to keep temp down? NO



NFPA 704 Style Placards

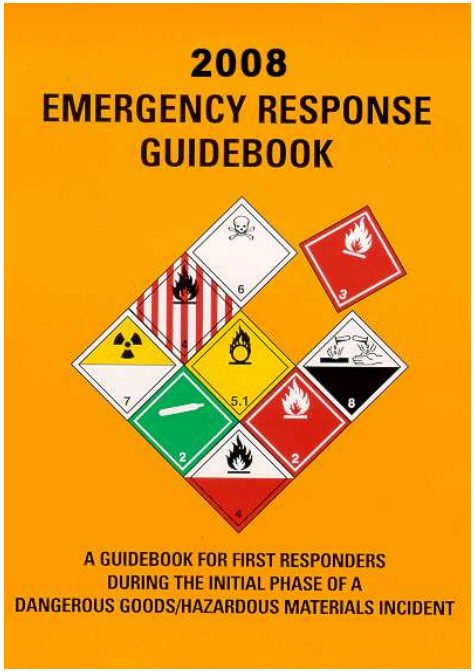
How do we reference this to the ERG?



NFPA 704 Style Placards

How do we reference this to the ERG?

We can't; because we still have **not accomplished** meeting 1 of our objectives: **Name**, **Number**, Item **Placard listing the class** of Hazardous Material or **Container Identification**.



NFPA 704 Style Placards

How do we reference this to the ERG?

This may be all you find,
If so, let this placard guide you to cautions,
as you get the additional data.

Hint:
Health mean you may not want to get to close…

NFPA 704 Style Placards

How do we reference this to the ERG?

These NFPA 704 placards are usually found on the gates entering a facility or on the building, visible as you enter.

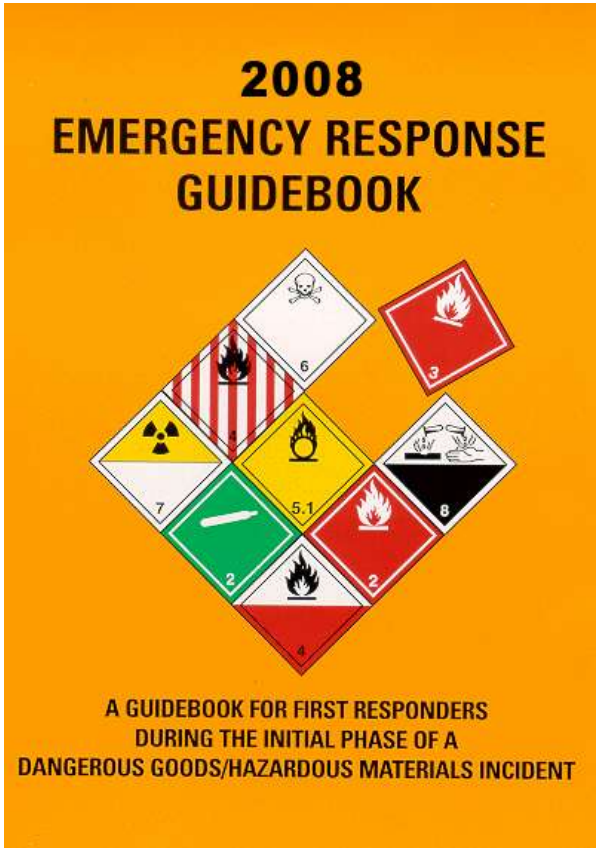
This will take into consideration all hazardous material in the premise and is very Non-specific.

This is why more information is required and it is not addressed in the ERG.

Think of it as your warning label to what to come.

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

Putting what we now know to use, utilizing the ERG



Once we've learned:

*1. The Products Name
*2. The Products 4 digit ID #
3. The Type of Container it's being Transported in
   Or
4. The Placard that is on the products container

NOW WHAT DO WE DO ?

* Our Main Objective to get either a Name or ID , since will give us a more precise action plan.

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

Putting what we now know to use, utilizing the ERG

When we looking at the ERG from the side we notice:

It is Divided into 4 Sections

Yellow
Blue
Orange
Green

The White pages are instructional pages to the guides use.

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

Putting what we now know to use, utilizing the ERG

Yellow-bordered pages:
Index list of dangerous goods in numerical order by **ID number**.

This section of the guide will be consulted if you had the Products ID Number of the material involved.

This list displays the 4-digit ID number of the material followed by its assigned emergency response guide and the full material name.

For example:

ID No.	**Guide No.**	**Name of Material**
1090	**127**	Acetone

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

ID No.	Guide No.	Name of Material
1030	115	1,1-Difluoroethane
1030	115	Difluoroethane
1030	115	Refrigerant gas R-152a
1032	118	Dimethylamine, anhydrous
1033	115	Dimethyl ether
1035	115	Ethane
1035	115	Ethane, compressed
1036	118	Ethylamine
1037	115	Ethyl chloride
1038	115	Ethylene, refrigerated liquid (cryogenic liquid)
1039	115	Ethyl methyl ether
1039	115	Methyl ethyl ether
1040	119P	Ethylene oxide
1040	119P	Ethylene oxide with Nitrogen
1041	115	Carbon dioxide and Ethylene oxide mixture, with more than 9% but not more than 87% Ethylene oxide
1041	115	Carbon dioxide and Ethylene oxide mixtures, with more than 6% Ethylene oxide
1041	115	Ethylene oxide and Carbon dioxide mixture, with more than 9% but not more than 87% Ethylene oxide
1041	115	Ethylene oxide and Carbon dioxide mixtures, with more than 6 % Ethylene oxide
1043	125	Fertilizer, ammoniating solution, with free Ammonia
1044	126	Fire extinguishers with compressed gas
1044	126	Fire extinguishers with liquefied gas
1045	124	Fluorine
1045	124	Fluorine, compressed

ID No.	Guide No.	Name of Material
1046	121	Helium
1046	121	Helium, compressed
1048	125	Hydrogen bromide, anhydrous
1049	115	Hydrogen
1049	115	Hydrogen, compressed
1050	125	Hydrogen chloride, anhydrous
1051	117	AC
1051	117	Hydrocyanic acid, aqueous solutions, with more than 20% Hydrogen cyanide
1051	117	Hydrogen cyanide, anhydrous, stabilized
1051	117	Hydrogen cyanide, stabilized
1052	125	Hydrogen fluoride, anhydrous
1053	117	Hydrogen sulfide
1053	117	Hydrogen sulphide
1055	115	Isobutylene
1056	121	Krypton
1056	121	Krypton, compressed
1057	115	Lighter refills (cigarettes) (flammable gas)
1057	115	Lighters (cigarettes) (flammable gas)
1058	120	Liquefied gases, non-flammable, charged with Nitrogen, Carbon dioxide or Air
1060	116P	Methylacetylene and Propadiene mixture, stabilized
1060	116P	Propadiene and Methylacetylene mixture, stabilized
1061	118	Methylamine, anhydrous
1062	123	Methyl bromide
1063	115	Methyl chloride

ID No.	Guide No.	Name of Material
1063	115	Refrigerant gas R-40
1064	117	Methyl mercaptan
1065	121	Neon
1065	121	Neon, compressed
1066	121	Nitrogen
1066	121	Nitrogen, compressed
1067	124	Dinitrogen tetroxide
1067	124	Nitrogen dioxide
1069	125	Nitrosyl chloride
1070	122	Nitrous oxide
1070	122	Nitrous oxide, compressed
1071	119	Oil gas
1071	119	Oil gas, compressed
1072	122	Oxygen
1072	122	Oxygen, compressed
1073	122	Oxygen, refrigerated liquid (cryogenic liquid)
1075	115	Butane
1075	115	Butane mixture
1075	115	Butylene
1075	115	Isobutane
1075	115	Isobutane mixture
1075	115	Isobutylene
1075	115	Liquefied petroleum gas
1075	115	LPG
1075	115	Petroleum gases, liquefied
1075	115	Propane
1075	115	Propane mixture
1075	115	Propylene
1076	125	CG
1076	125	Diphosgene
1076	125	DP
1076	125	Phosgene

ID No.	Guide No.	Name of Material
1077	115	Propylene
1078	126	Dispersant gas, n.o.s.
1078	126	Refrigerant gas, n.o.s.
1079	125	Sulfur dioxide
1079	125	Sulphur dioxide
1080	126	Sulfur hexafluoride
1080	126	Sulphur hexafluoride
1081	116P	Tetrafluoroethylene, stabilized
1082	119P	Trifluorochloroethylene, stabilized
1083	118	Trimethylamine, anhydrous
1085	116P	Vinyl bromide, stabilized
1086	116P	Vinyl chloride, stabilized
1087	116P	Vinyl methyl ether, stabilized
1088	127	Acetal
1089	129	Acetaldehyde
1090	127	Acetone
1091	127	Acetone oils
1092	131P	Acrolein, stabilized
1093	131P	Acrylonitrile, stabilized
1098	131	Allyl alcohol
1099	131	Allyl bromide
1100	131	Allyl chloride
1104	129	Amyl acetates
1105	129	Amyl alcohols
1105	129	Pentanols
1106	132	Amylamines
1107	129	Amyl chloride
1108	128	n-Amylene
1108	128	1-Pentene
1109	129	Amyl formates
1110	127	n-Amyl methyl ketone
1110	127	Amyl methyl ketone

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

Putting what we now know to use, utilizing the ERG

Blue-bordered pages:
List of dangerous goods in alphabetical order by the **material's name**.

This section of the guide would be consulted by the name of the material involved. This list displays the name of the material followed by its assigned emergency response guide and 4-digit ID number.

For example:

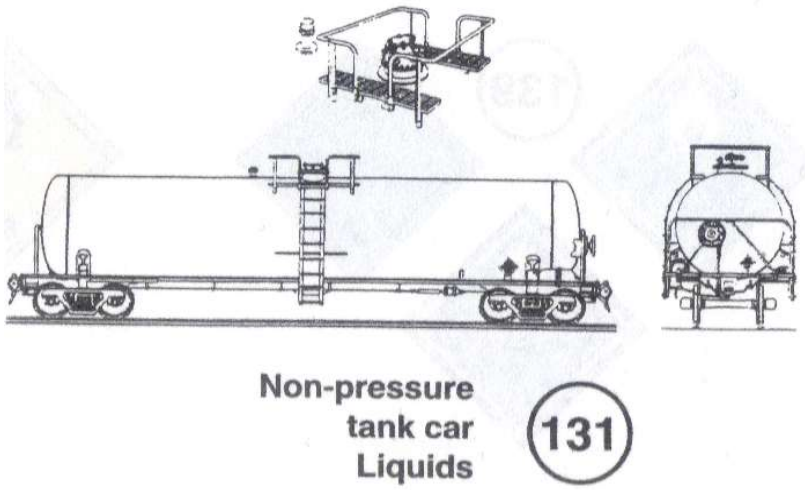
Name of Material	**Guide No.**	**ID No.**
Calcium	138	1401

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

Name of Material	Guide No.	ID No.
Bisulfates, aqueous solution	154	2837
Bisulfites, aqueous solution, n.o.s.	154	2693
Bisulfites, inorganic, aqueous solution, n.o.s.	154	2693
Bisulphates, aqueous solution	154	2837
Bisulphites, aqueous solution, n.o.s.	154	2693
Bisulphites, inorganic, aqueous solution, n.o.s.	154	2693
Blasting agent, n.o.s.	112	——
Bleaching powder	140	2208
Blue asbestos	171	2212
Bombs, smoke, non-explosive, with corrosive liquid, without initiating device	153	2028
Borate and Chlorate mixtures	140	1458
Borneol	133	1312
Boron tribromide	157	2692
Boron trichloride	125	1741
Boron trifluoride	125	1008
Boron trifluoride, compressed	125	1008
Boron trifluoride, dihydrate	157	2851
Boron trifluoride acetic acid complex	157	1742
Boron trifluoride acetic acid complex, liquid	157	1742
Boron trifluoride acetic acid complex, solid	157	3419
Boron trifluoride diethyl etherate	132	2604
Boron trifluoride dimethyl etherate	139	2965
Boron trifluoride propionic acid complex	157	1743
Boron trifluoride propionic acid complex, liquid	157	1743
Boron trifluoride propionic acid complex, solid	157	3420
Bromates, inorganic, aqueous solution, n.o.s.	140	3213
Bromates, inorganic, n.o.s.	141	1450
Bromine	154	1744
Bromine, solution	154	1744
Bromine, solution (Inhalation Hazard Zone A)	154	1744
Bromine, solution (Inhalation Hazard Zone B)	154	1744
Bromine chloride	124	2901
Bromine pentafluoride	144	1745
Bromine trifluoride	144	1746
Bromoacetic acid	156	1938
Bromoacetic acid, solid	156	3425
Bromoacetic acid, solution	156	1938
Bromoacetone	131	1569
Bromoacetyl bromide	156	2513
Bromobenzene	130	2514
Bromobenzyl cyanides	159	1694
Bromobenzyl cyanides, liquid	159	1694
Bromobenzyl cyanides, solid	159	1694
Bromobenzyl cyanides, solid	159	3449
1-Bromobutane	130	1126
2-Bromobutane	130	2339
Bromochlorodifluoromethane	126	1974
Bromochloromethane	160	1887
1-Bromo-3-chloropropane	159	2688
2-Bromoethyl ethyl ether	130	2340
Bromoform	159	2515
1-Bromo-3-methylbutane	130	2341
Bromomethylpropanes	130	2342
2-Bromo-2-nitropropane-1,3-diol	133	3241
2-Bromopentane	130	2343
2-Bromopropane	129	2344
Bromopropanes	129	2344
3-Bromopropyne	130	2345
Bromotrifluoroethylene	116	2419
Bromotrifluoromethane	126	1009
Brown asbestos	171	2212
Brucine	152	1570
Butadienes, stabilized	116P	1010
Butadienes and hydrocarbon mixture, stabilized	116P	1010
Butane	115	1011
Butane	115	1075
Butanedione	127	2346
Butane mixture	115	1011
Butane mixture	115	1075
Butanols	129	1120
Butoxyl	127	2708
Butyl acetates	129	1123
Butyl acid phosphate	153	1718
Butyl acrylates, stabilized	129P	2348
n-Butylamine	132	1125
N-Butylaniline	153	2738
Butylbenzenes	128	2709
n-Butyl bromide	130	1126
Butyl chloride	130	1127
n-Butyl chloroformate	155	2743
sec-Butyl chloroformate	155	2742
tert-Butylcyclohexyl chloroformate	156	2747
Butylene	115	1012
Butylene	115	1075
1,2-Butylene oxide, stabilized	127P	3022
Butyl ethers	128	1149
n-Butyl formate	129	1128
tert-Butyl hypochlorite	135	3255
N,n-Butylimidazole	152	2690
n-Butyl isocyanate	155	2485
tert-Butyl isocyanate	155	2484
Butyl mercaptan	130	2347
n-Butyl methacrylate, stabilized	130P	2227
Butyl methyl ether	127	2350
Butyl nitrites	129	2351
Butyl propionates	130	1914
Butyltoluenes	152	2667
Butyltrichlorosilane	155	1747
5-tert-Butyl-2,4,6-trinitro-m-xylene	149	2956
Butyl vinyl ether, stabilized	127P	2352
1,4-Butynediol	153	2716
Butyraldehyde	129	1129
Butyraldoxime	129	2840
Butyric acid	153	2820
Butyric anhydride	156	2739
Butyronitrile	131	2411
Butyryl chloride	132	2353
Buzz	153	2810
BZ	153	2810
CA	159	1694
Cacodylic acid	151	1572
Cadmium compound	154	2570
Caesium	138	1407
Caesium hydroxide	157	2682
Caesium hydroxide, solution	154	2681
Caesium nitrate	140	1451
Calcium	138	1401

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

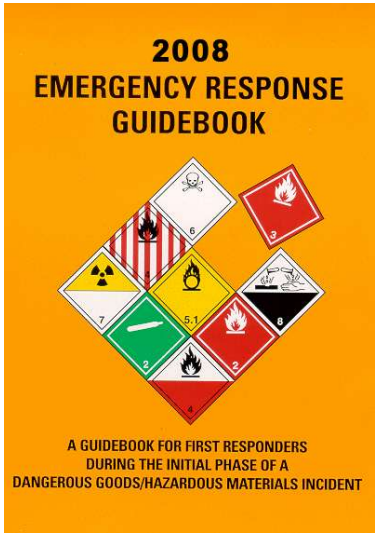
Putting what we now know to use, utilizing the ERG



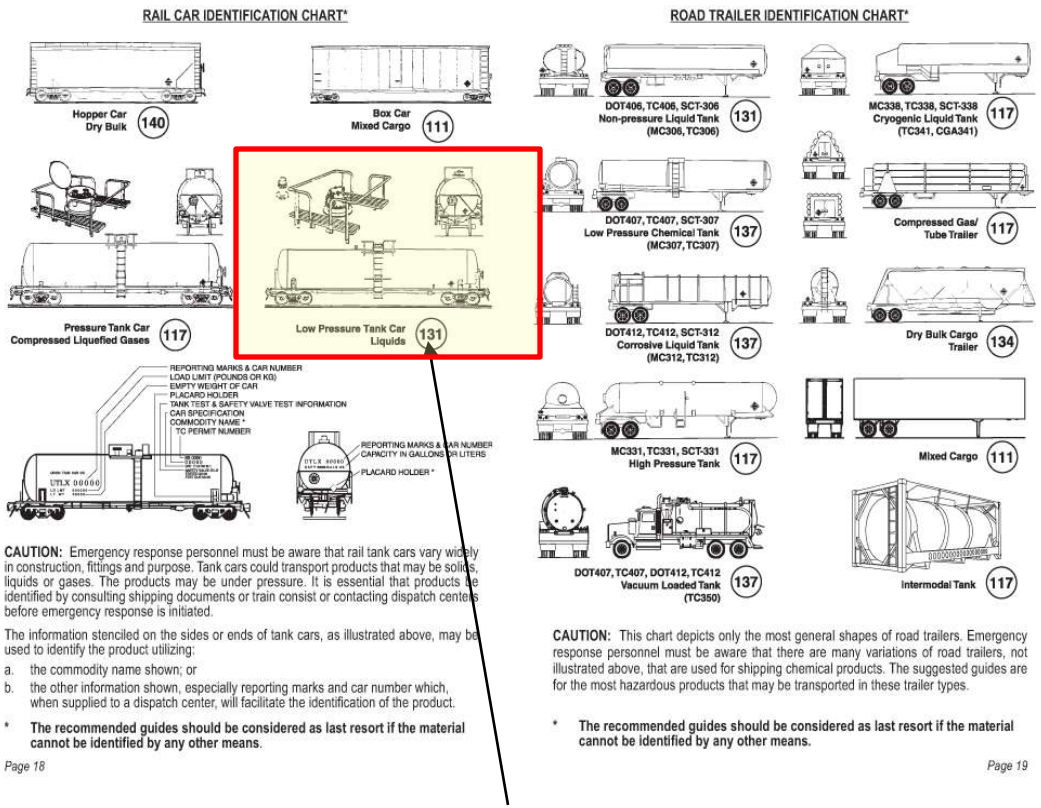
Knowing this is the container that is leaking,
What guide will we be using to handle the incident?

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

Putting what we now know to use, utilizing the ERG



Page 18 & 19



From Container ID

We'll use Reference Guide Number 131

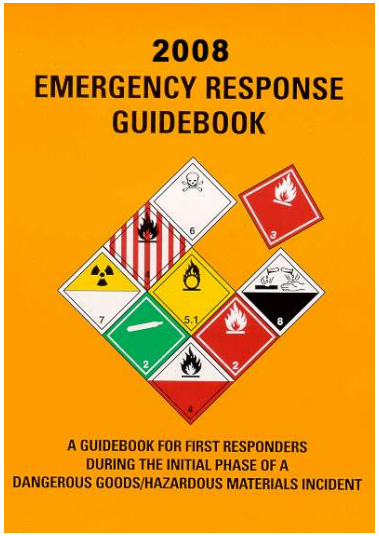
HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

Putting what we now know to use, utilizing the ERG

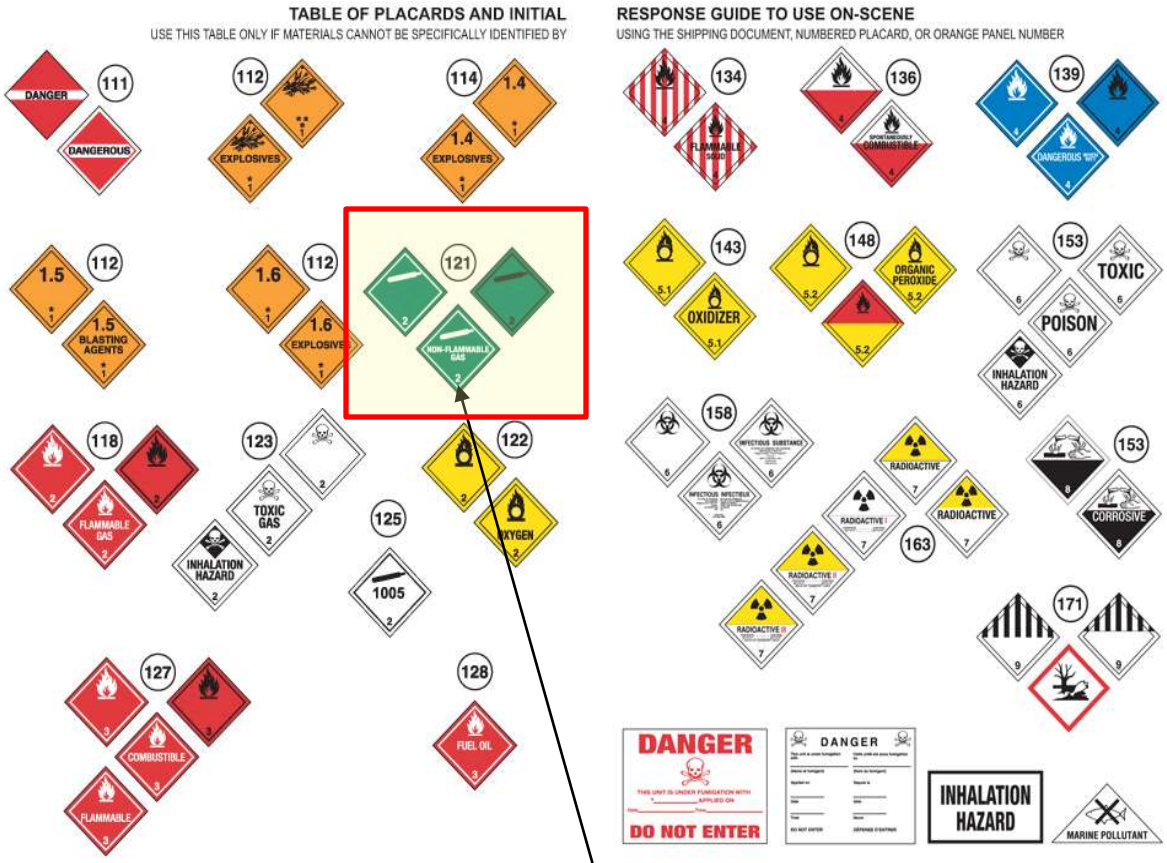
Knowing the container has this label,
What guide will we be using to handle the incident?

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

Putting what we now know to use, utilizing the ERG



Page 16 & 17



From Placard Reference

We'll use Reference Guide Number 121

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

Putting what we now know to use, utilizing the ERG

Our Main Objective is to get to the **Orange Sections** of the Guide.

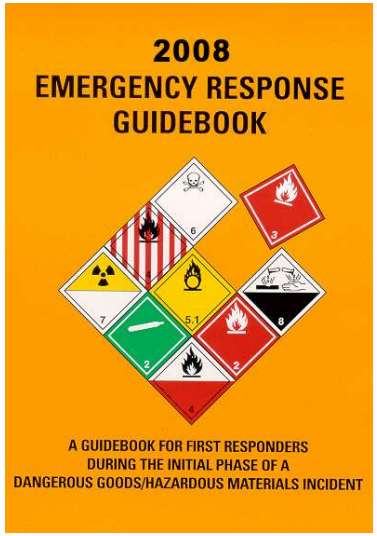
Orange-bordered pages:
This section is the most important section of the guidebook because it is where all the safety recommendations are provided.

It comprises a total of 62 individual guides, presented in a two-page format. Each guide provides safety recommendations and emergency response information to protect yourself and the public.

The left hand page provides safety related information whereas the right hand page provides emergency response guidance and activities for fire situations, spill or leak incidents and first aid.

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

Putting what we now know to use, utilizing the ERG



SO:

If we have an ID number of 1203

What color in the Guide would we reference that?

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

Putting what we now know to use, utilizing the ERG

If we have an ID number of 1203

What color in the Guide would we reference that?

YELLOW

ID No:	Guide No.	Name of Material
1203	**128**	Gasoline

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

Putting what we now know to use, utilizing the ERG

If we had a Chemical Name: Sulfuric acid

What color in the Guide would we reference that?

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

Putting what we now know to use, utilizing the ERG

If we had a Chemical Name: Sulfuric acid

What color in the Guide would we reference that?

BLUE

Name of Material:	Guide No.	ID No.
Sulfuric Acid	**137**	1830

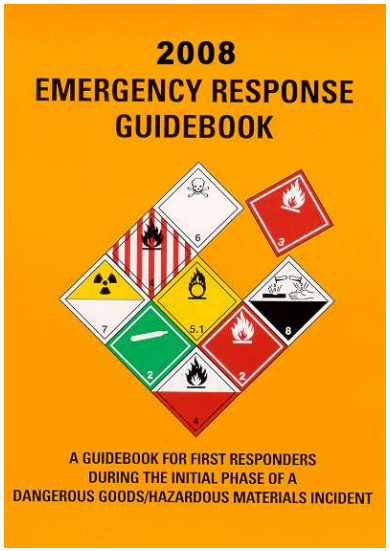
HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

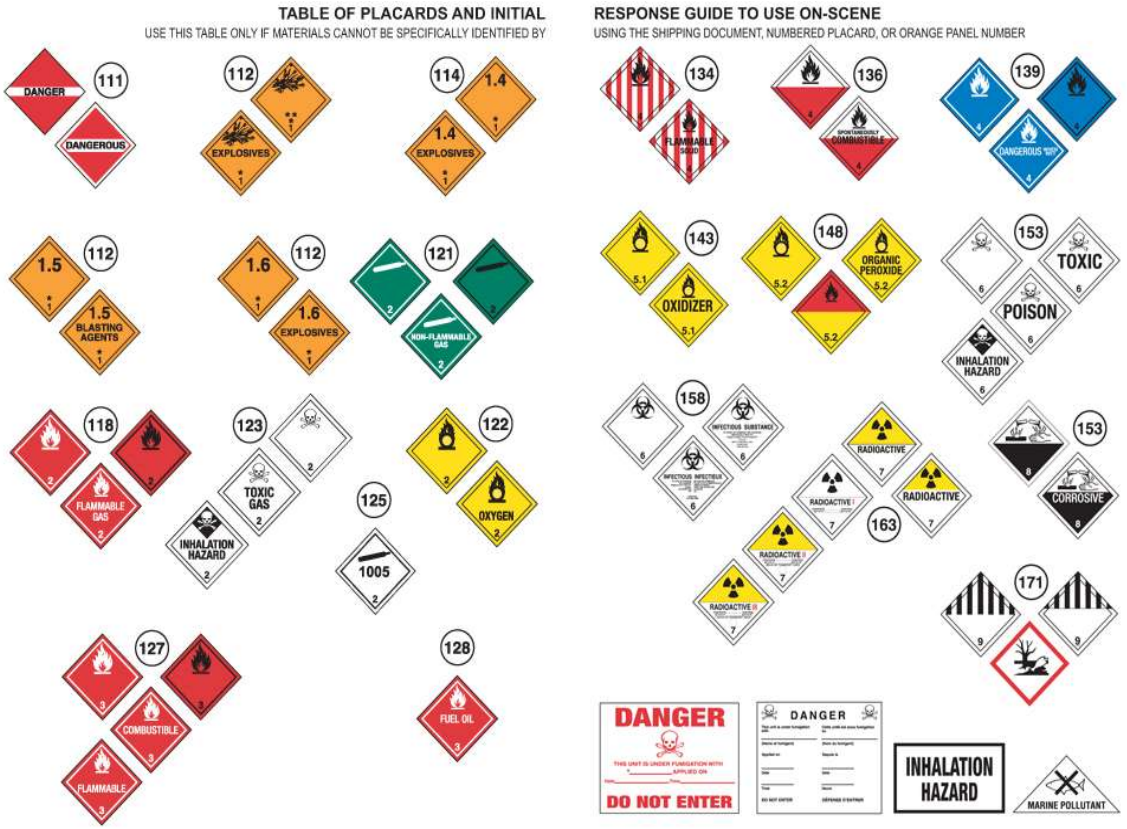
Putting what we now know to use, utilizing the ERG

This placard is on a container that is leaking

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

Putting what we now know to use, utilizing the ERG

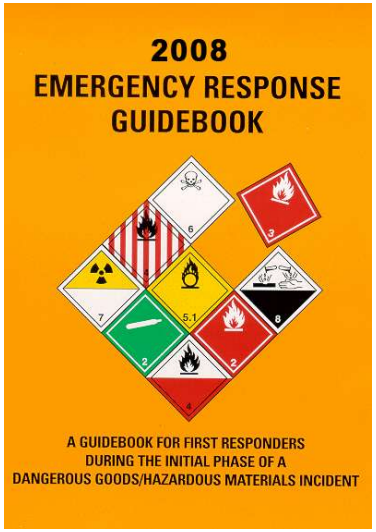


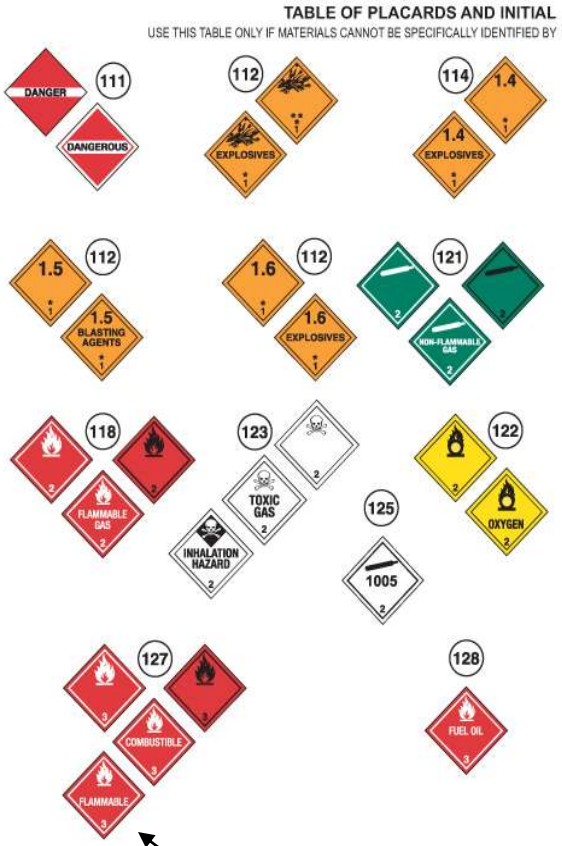


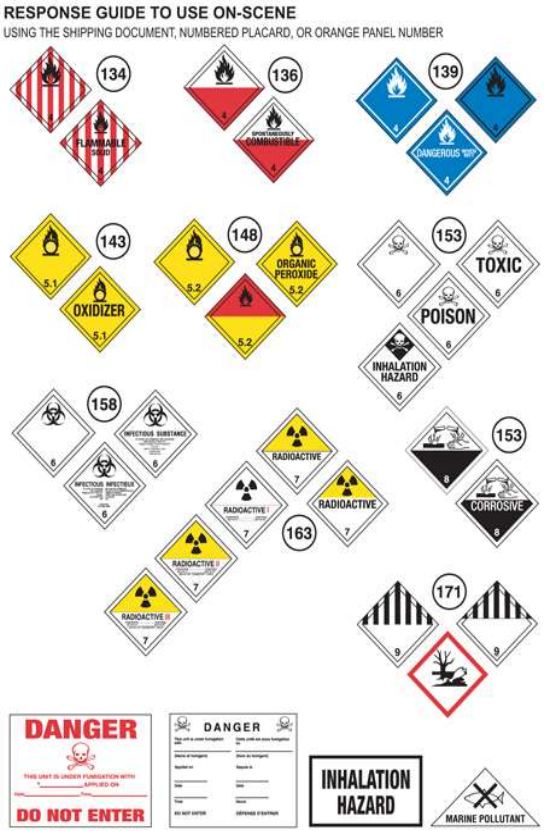
Using page 16 & 17 of the ERG (shown above)
What Guide Number will we use to handle the Incident?

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

Putting what we now know to use, utilizing the ERG



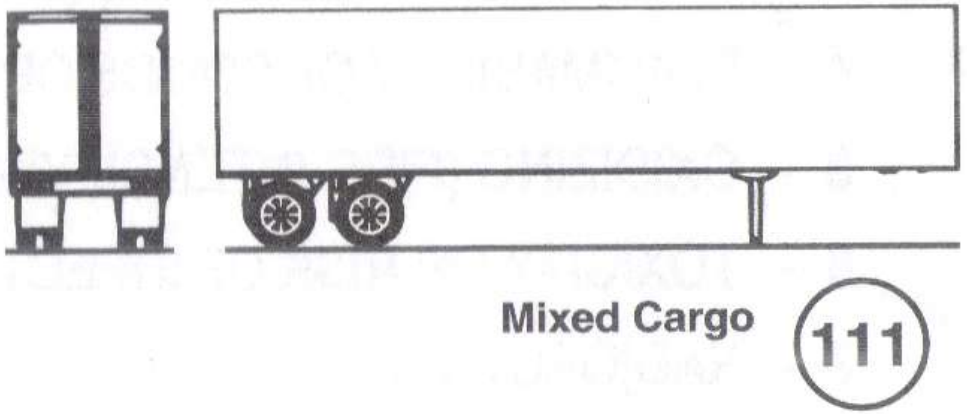




Guide 127

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

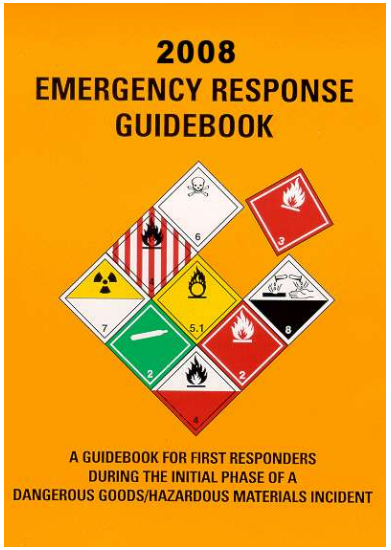
Putting what we now know to use, utilizing the ERG

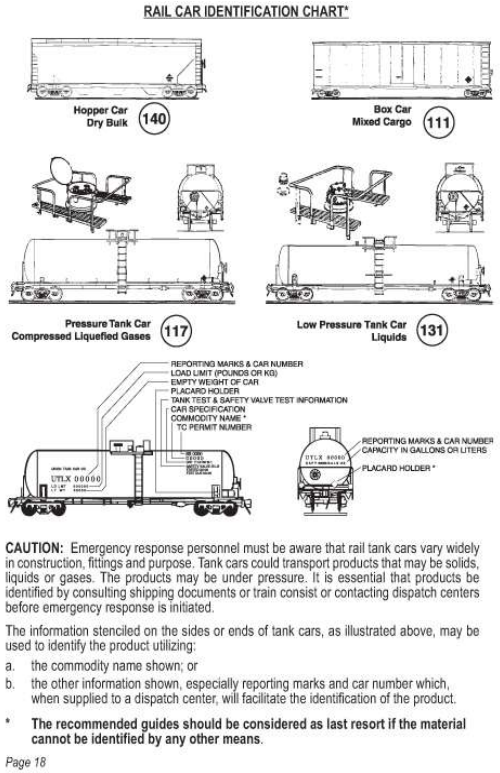


You have something leaking from a container that looks like this, Which Guide will we use?

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

Putting what we now know to use, utilizing the ERG





RAIL CAR IDENTIFICATION CHART*

Hopper Car Dry Bulk (140)

Box Car Mixed Cargo (111)

Pressure Tank Car Compressed Liquefied Gases (117)

Low Pressure Tank Car Liquids (131)

REPORTING MARKS & CAR NUMBER
LOAD LIMIT (POUNDS OR KG)
EMPTY WEIGHT OF CAR
PLACARD HOLDER
TANK TEST & SAFETY VALVE TEST INFORMATION
CAR SPECIFICATION
COMMODITY NAME *
TC PERMIT NUMBER

REPORTING MARKS & CAR NUMBER
CAPACITY IN GALLONS OR LITERS
PLACARD HOLDER *

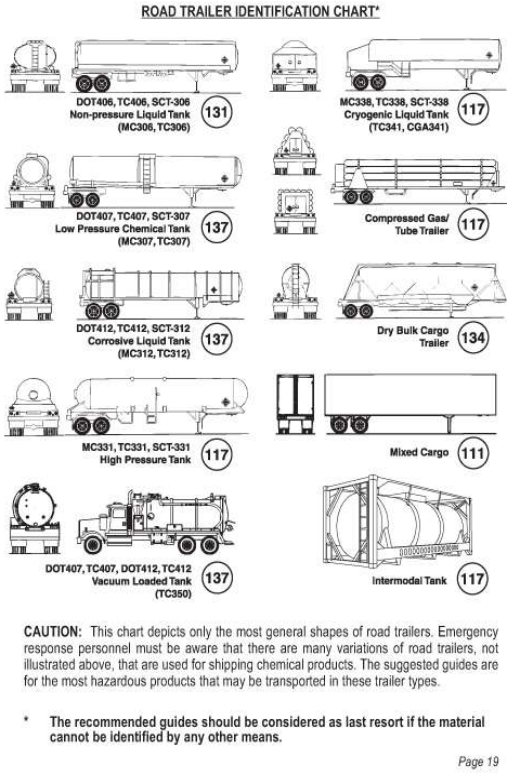
CAUTION: Emergency response personnel must be aware that rail tank cars vary widely in construction, fittings and purpose. Tank cars could transport products that may be solids, liquids or gases. The products may be under pressure. It is essential that products be identified by consulting shipping documents or train consist or contacting dispatch centers before emergency response is initiated.

The information stenciled on the sides or ends of tank cars, as illustrated above, may be used to identify the product utilizing:

a. the commodity name shown; or
b. the other information shown, especially reporting marks and car number which, when supplied to a dispatch center, will facilitate the identification of the product.

* **The recommended guides should be considered as last resort if the material cannot be identified by any other means.**

Page 18



ROAD TRAILER IDENTIFICATION CHART*

DOT406, TC406, SCT-306 Non-pressure Liquid Tank (MC306, TC306) (131)

MC338, TC338, SCT-338 Cryogenic Liquid Tank (TC341, CGA341) (117)

DOT407, TC407, SCT-307 Low Pressure Chemical Tank (MC307, TC307) (137)

Compressed Gas/ Tube Trailer (117)

DOT412, TC412, SCT-312 Corrosive Liquid Tank (MC312, TC312) (137)

Dry Bulk Cargo Trailer (134)

MC331, TC331, SCT-331 High Pressure Tank (117)

Mixed Cargo (111)

DOT407, TC407, DOT412, TC412 Vacuum Loaded Tank (TC350) (137)

Intermodal Tank (117)

CAUTION: This chart depicts only the most general shapes of road trailers. Emergency response personnel must be aware that there are many variations of road trailers, not illustrated above, that are used for shipping chemical products. The suggested guides are for the most hazardous products that may be transported in these trailer types.

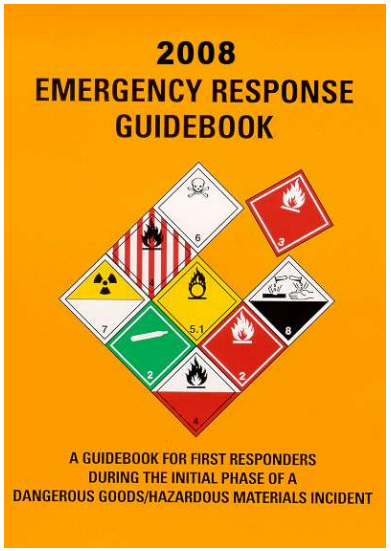
* **The recommended guides should be considered as last resort if the material cannot be identified by any other means.**

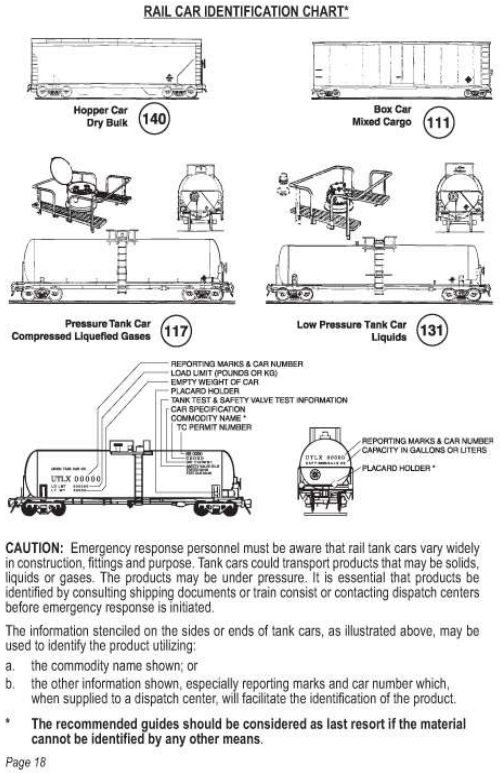
Page 19

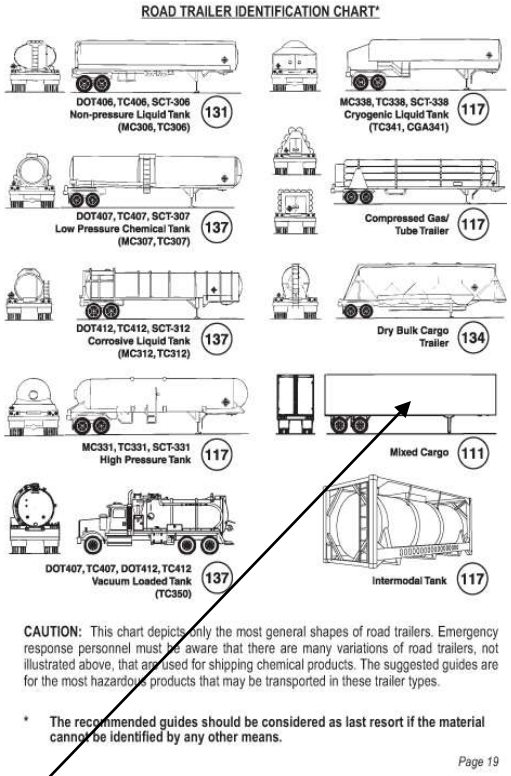
Using page 18 & 19 of the ERG (shown above)
What Guide Number will we use to handle the Incident?

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

Putting what we now know to use, utilizing the ERG







Guide 111

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

Putting what we now know to use, utilizing the ERG

Guide 111

Guide 111 is probably the most used since it references **all unknowns and mixed items**.

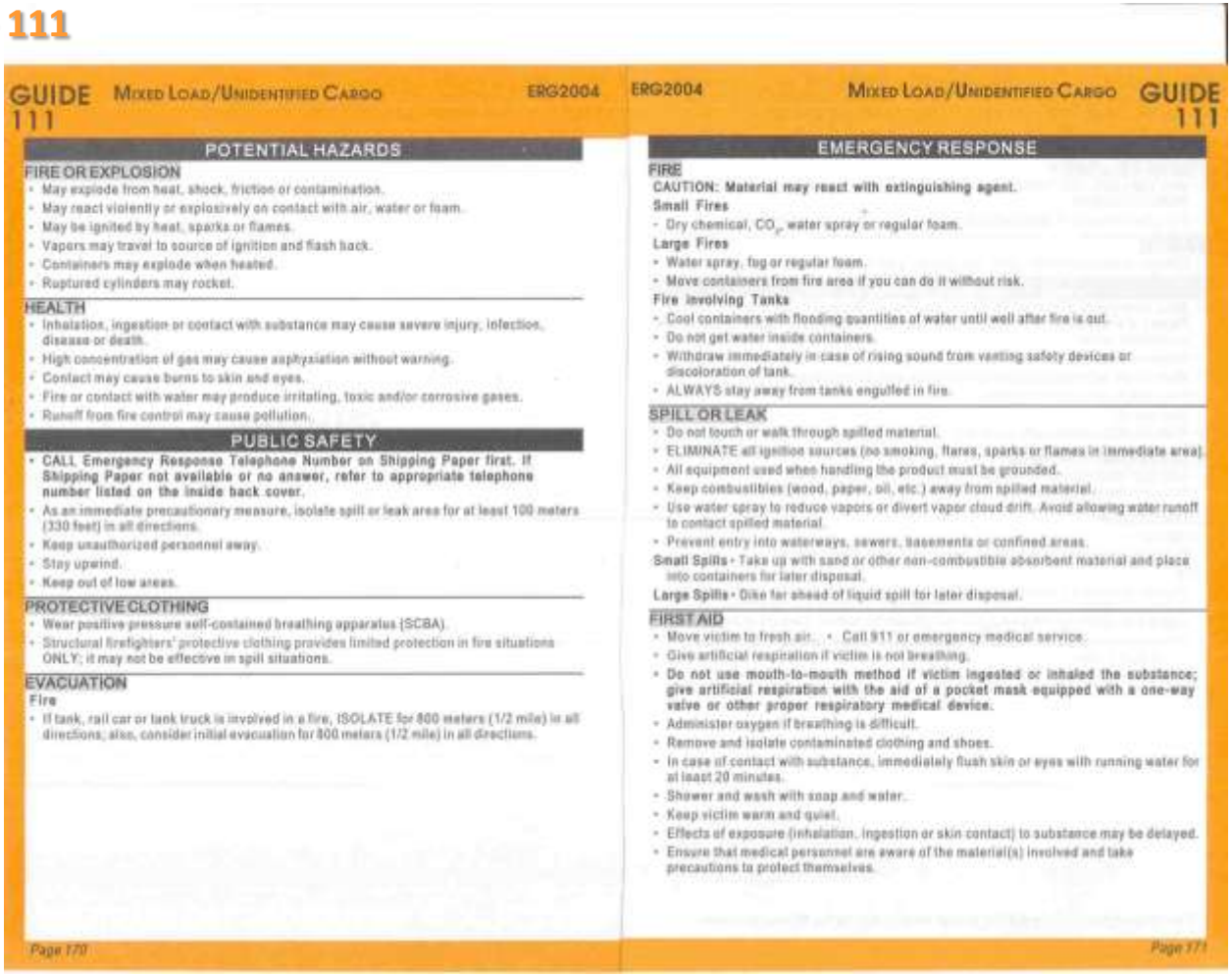
This is why it's the 1st pages in the Orange Section.

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

Using the Guide to handle an incident

What does the Orange Pages in the Guide tell us?

Guide 111



GUIDE 111 MIXED LOAD/UNIDENTIFIED CARGO ERG2004

POTENTIAL HAZARDS

FIRE OR EXPLOSION
- May explode from heat, shock, friction or contamination.
- May react violently or explosively on contact with air, water or foam.
- May be ignited by heat, sparks or flames.
- Vapors may travel to source of ignition and flash back.
- Containers may explode when heated.
- Ruptured cylinders may rocket.

HEALTH
- Inhalation, ingestion or contact with substance may cause severe injury, infection, disease or death.
- High concentration of gas may cause asphyxiation without warning.
- Contact may cause burns to skin and eyes.
- Fire or contact with water may produce irritating, toxic and/or corrosive gases.
- Runoff from fire control may cause pollution.

PUBLIC SAFETY
- **CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- As an immediate precautionary measure, isolate spill or leak area for at least 100 meters (330 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.

PROTECTIVE CLOTHING
- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it may not be effective in spill situations.

EVACUATION
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.

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ERG2004 MIXED LOAD/UNIDENTIFIED CARGO GUIDE 111

EMERGENCY RESPONSE

FIRE
CAUTION: Material may react with extinguishing agent.
Small Fires
- Dry chemical, CO_2, water spray or regular foam.

Large Fires
- Water spray, fog or regular foam.
- Move containers from fire area if you can do it without risk.

Fire involving Tanks
- Cool containers with flooding quantities of water until well after fire is out.
- Do not get water inside containers.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.

SPILL OR LEAK
- Do not touch or walk through spilled material.
- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- All equipment used when handling the product must be grounded.
- Keep combustibles (wood, paper, oil, etc.) away from spilled material.
- Use water spray to reduce vapors or divert vapor cloud drift. Avoid allowing water runoff to contact spilled material.
- Prevent entry into waterways, sewers, basements or confined areas.

Small Spills • Take up with sand or other non-combustible absorbent material and place into containers for later disposal.

Large Spills • Dike far ahead of liquid spill for later disposal.

FIRST AID
- Move victim to fresh air. • Call 911 or emergency medical service.
- Give artificial respiration if victim is not breathing.
- **Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.**
- 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.
- Shower and wash with soap and water.
- Keep victim warm and quiet.
- Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

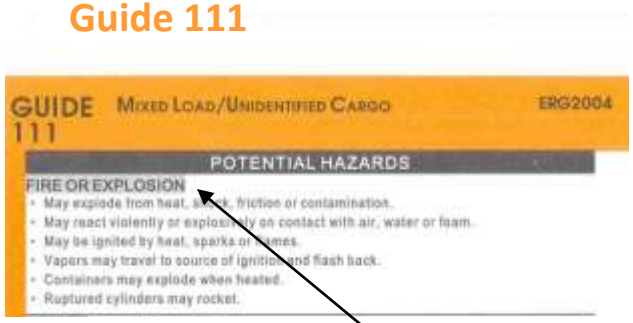
Page 171

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

Using the Guide to handle an incident

What does the Orange Pages in the Guide tell us?

Guide 111



Our 1st Priority is to address Fire or Explosion

Due to the fact - the product is **unknown** or **multiple products** mixed could make an even more dangerous product.

The Fire or Explosion potential needs to be dealt with first.

Once we know it's secure, then what?

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

Using the Guide to handle an incident

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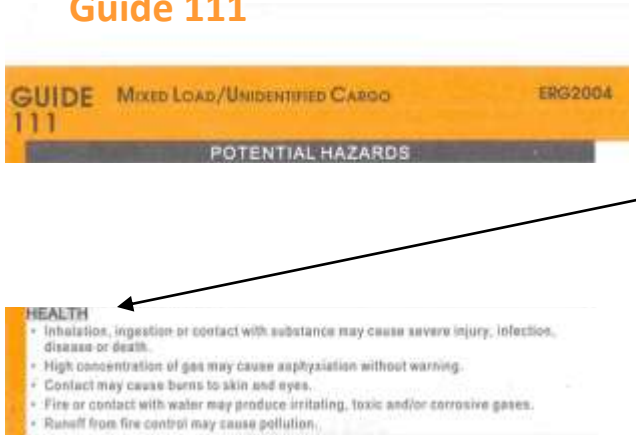


Our 2nd Priority is to address Health Hazard

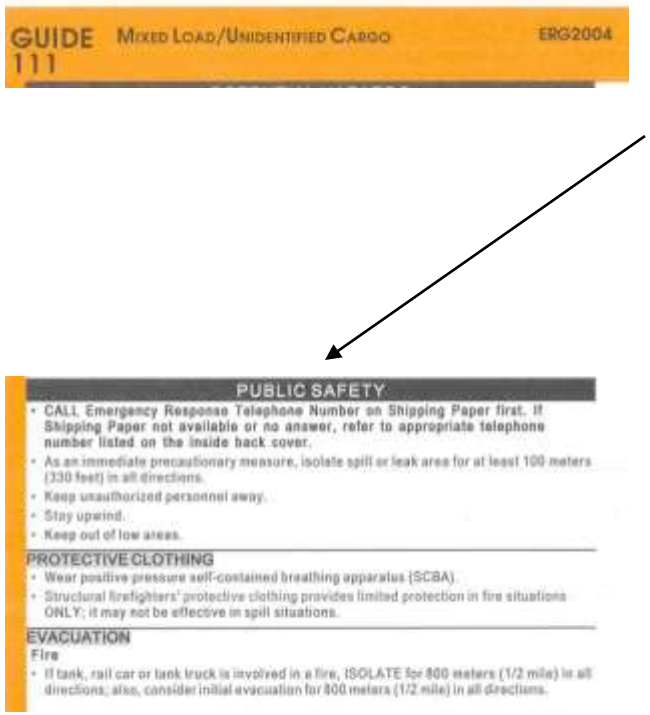
Both of these items can and should be addressed at the same time, but what is listed 1st has the most potential for danger.

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

Using the Guide to handle an incident

Guide 111

What does the Orange Pages in the Guide tell us?


GUIDE 111 MIXED LOAD/UNIDENTIFIED CARGO ERG2004

PUBLIC SAFETY

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- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it may not be effective in spill situations.

EVACUATION

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.

The next section deals with addressing the problem

It lets you know:
Getting the shipping papers is important and to call their Emergency Response Telephone Number.

Isolate for 330’ in all directions (Hot Zone)
(Only use Proper PPE in Hot Zone)

Stay upwind – (Wind at your back)

Keep out of Low Area

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

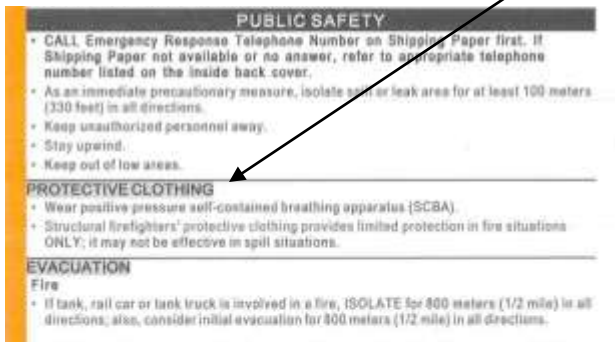
Using the Guide to handle an incident

Guide 111

What does the Orange Pages in the Guide tell us?


GUIDE 111 MIXED LOAD/UNIDENTIFIED CARGO ERG2004

The next section deal with addressing the problem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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.

<u>Protective Clothing</u>:

Wear Positive Pressure SCBA - (not a Hepa Mask)

Structural Firefighting gear has limited protection and may not be effective in spills

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

Using the Guide to handle an incident

Guide 111

What does the Orange Pages in the Guide tell us?


GUIDE 111 MIXED LOAD/UNIDENTIFIED CARGO ERG2004

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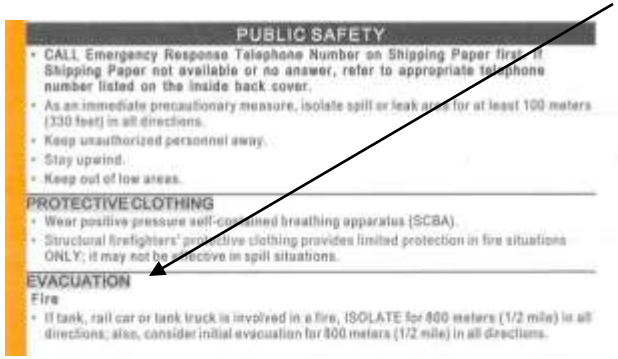
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Fire

- 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.

Evacuation:

If Tank, Rail car or Tank truck on Fire –
Isolate 1/2 Mile in all directions (Hot Zone)
Evacuate 1/2 mile in all directions

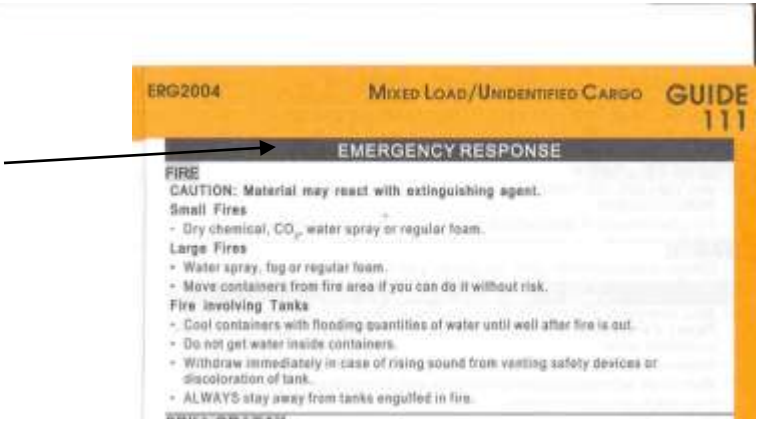
HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

Using the Guide to handle an incident

What does the Orange Pages in the Guide tell us?

Guide 111

Page 2 - lets you know how to meet the objective.



If you have small fire – Dry Chem., CO2, water spray or regular foam.

Large Fire – Water spray, fog or regular foam

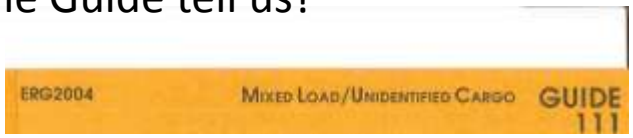
Fire involving Tanks –
Cool container – flooding quantities …..

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

Using the Guide to handle an incident

Guide 111

What does the Orange Pages in the Guide tell us?

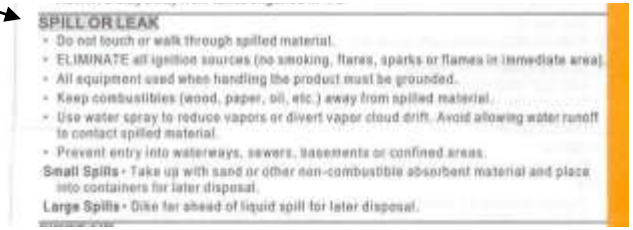


Page 2 lets you know how to meet objective.

<u>Spills & Leaks:</u>
Don't Touch or Walk Through

Eliminate all Ignition sources…

Explains how to **control** spill, not Cleaning it Up!



HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

Using the Guide to handle an incident

Guide 111

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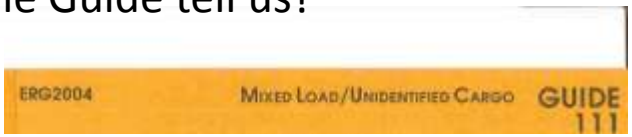
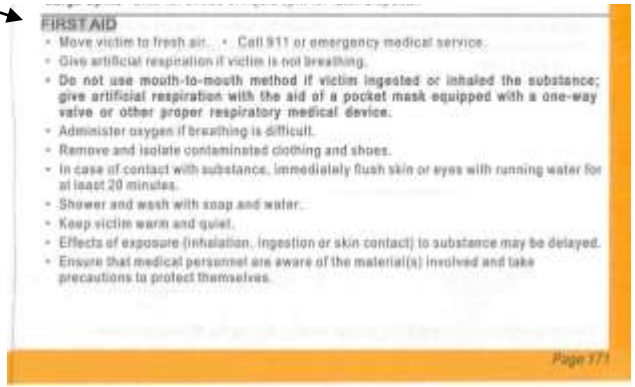


Page 2 lets you know how to meet objective.

First Aid:

This section will explain what to do medically for persons that come into contact with the product.



HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

Using the Guide to handle an incident

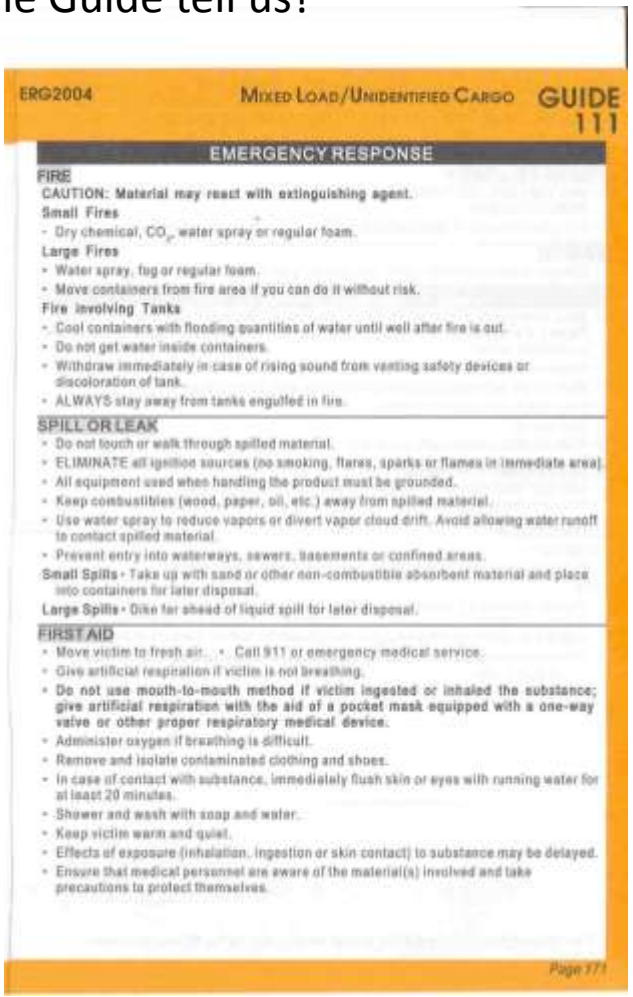
Guide 111

What does the Orange Pages in the Guide tell us?

If you have the MSDS Sheets for the product,

Use those directions over this Guides, since they are more specific to the Actual Product.

This Guide is more Generic, taking in account multiple products with same reactions.



ERG2004 MIXED LOAD/UNIDENTIFIED CARGO GUIDE 111

EMERGENCY RESPONSE

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- Remove and isolate contaminated clothing and shoes.
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- Shower and wash with soap and water.
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- Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

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HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

Putting what we now know to use, utilizing the ERG

This Leaves the Green Pages,

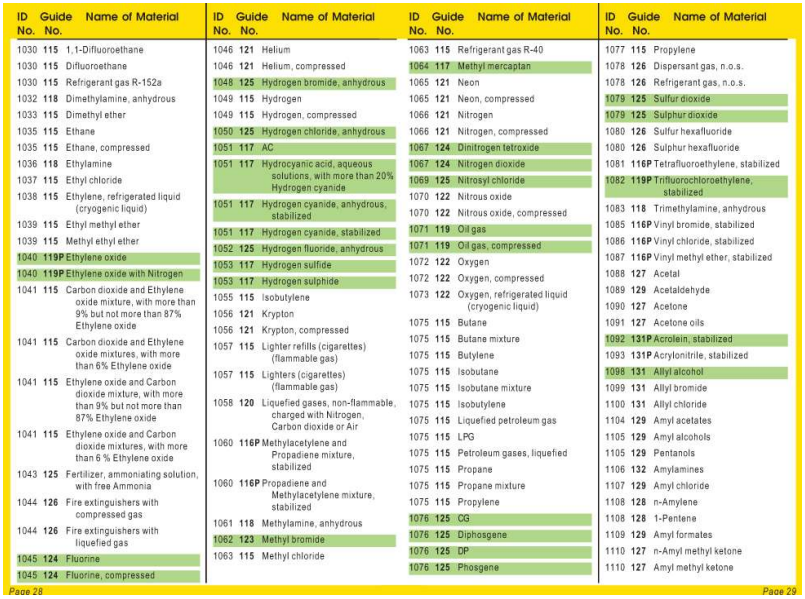
What are they used for?

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

Putting what we now know to use, utilizing the ERG

The **Green Pages** are used to identify products that are **GASES**.

When you look up a product by either Name or ID,
You'll notice some of the products names are Highlighted in green:



ID No.	Guide No.	Name of Material
1030	115	1,1-Difluoroethane
1030	115	Difluoroethane
1030	115	Refrigerant gas R-152a
1032	118	Dimethylamine, anhydrous
1033	115	Dimethyl ether
1035	115	Ethane
1035	115	Ethane, compressed
1036	118	Ethylamine
1037	115	Ethyl chloride
1038	115	Ethylene, refrigerated liquid (cryogenic liquid)
1039	115	Ethyl methyl ether
1039	115	Methyl ethyl ether
1040	119P	Ethylene oxide
1040	119P	Ethylene oxide with Nitrogen
1041	115	Carbon dioxide and Ethylene oxide mixture, with more than 9% but not more than 87% Ethylene oxide
1041	115	Carbon dioxide and Ethylene oxide mixtures, with more than 6% Ethylene oxide
1041	115	Ethylene oxide and Carbon dioxide mixture, with more than 9% but not more than 87% Ethylene oxide
1041	115	Ethylene oxide and Carbon dioxide mixtures, with more than 6 % Ethylene oxide
1043	125	Fertilizer, ammoniating solution, with free Ammonia
1044	126	Fire extinguishers with compressed gas
1044	126	Fire extinguishers with liquefied gas
1045	124	Fluorine
1045	124	Fluorine, compressed
1046	121	Helium
1046	121	Helium, compressed
1048	125	Hydrogen bromide, anhydrous
1049	115	Hydrogen
1049	115	Hydrogen, compressed
1050	125	Hydrogen chloride, anhydrous
1051	117	AC
1051	117	Hydrocyanic acid, aqueous solutions, with more than 20% Hydrogen cyanide
1051	117	Hydrogen cyanide, anhydrous, stabilized
1051	117	Hydrogen cyanide, stabilized
1052	125	Hydrogen fluoride, anhydrous
1053	117	Hydrogen sulfide
1053	117	Hydrogen sulphide
1055	115	Isobutylene
1056	121	Krypton
1056	121	Krypton, compressed
1057	115	Lighter refills (cigarettes) (flammable gas)
1057	115	Lighters (cigarettes) (flammable gas)
1058	120	Liquefied gases, non-flammable, charged with Nitrogen, Carbon dioxide or Air
1060	116P	Methylacetylene and Propadiene mixture, stabilized
1060	116P	Propadiene and Methylacetylene mixture, stabilized
1061	118	Methylamine, anhydrous
1062	123	Methyl bromide
1063	115	Methyl chloride
1063	115	Refrigerant gas R-40
1064	117	Methyl mercaptan
1065	121	Neon
1065	121	Neon, compressed
1066	121	Nitrogen
1066	121	Nitrogen, compressed
1067	124	Dinitrogen tetroxide
1067	124	Nitrogen dioxide
1069	125	Nitrosyl chloride
1070	122	Nitrous oxide
1070	122	Nitrous oxide, compressed
1071	119	Oil gas
1071	119	Oil gas, compressed
1072	122	Oxygen
1072	122	Oxygen, compressed
1073	122	Oxygen, refrigerated liquid (cryogenic liquid)
1075	115	Butane
1075	115	Butane mixture
1075	115	Butylene
1075	115	Isobutane
1075	115	Isobutane mixture
1075	115	Isobutylene
1075	115	Liquefied petroleum gas
1075	115	LPG
1075	115	Petroleum gases, liquefied
1075	115	Propane
1075	115	Propane mixture
1075	115	Propylene
1076	125	CG
1076	125	Diphosgene
1076	125	DP
1076	125	Phosgene
1077	115	Propylene
1078	126	Dispersant gas, n.o.s.
1078	126	Refrigerant gas, n.o.s.
1079	125	Sulfur dioxide
1079	125	Sulphur dioxide
1080	126	Sulfur hexafluoride
1080	126	Sulphur hexafluoride
1081	116P	Tetrafluoroethylene, stabilized
1082	119P	Trifluorochloroethylene, stabilized
1083	118	Trimethylamine, anhydrous
1085	116P	Vinyl bromide, stabilized
1086	116P	Vinyl chloride, stabilized
1087	116P	Vinyl methyl ether, stabilized
1088	127	Acetal
1089	129	Acetaldehyde
1090	127	Acetone
1091	127	Acetone oils
1092	131P	Acrolein, stabilized
1093	131P	Acrylonitrile, stabilized
1098	131	Allyl alcohol
1099	131	Allyl bromide
1100	131	Allyl chloride
1104	129	Amyl acetates
1105	129	Amyl alcohols
1105	129	Pentanols
1106	132	Amylamines
1107	129	Amyl chloride
1108	128	n-Amylene
1108	128	1-Pentene
1109	129	Amyl formates
1110	127	n-Amyl methyl ketone
1110	127	Amyl methyl ketone

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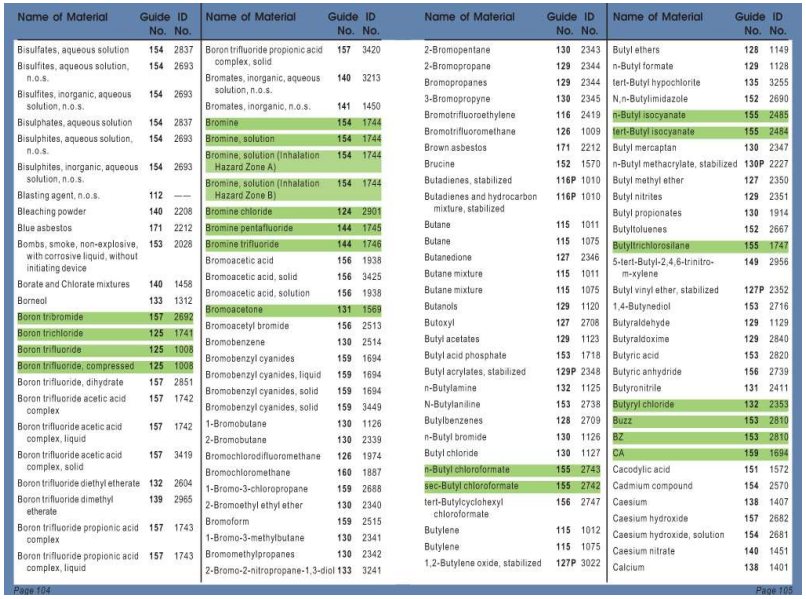

Name of Material	Guide No.	ID No.
Bisulfates, aqueous solution	154	2837
Bisulfites, aqueous solution, n.o.s.	154	2693
Bisulfites, inorganic, aqueous solution, n.o.s.	154	2693
Bisulphates, aqueous solution	154	2837
Bisulphites, aqueous solution, n.o.s.	154	2693
Bisulphites, inorganic, aqueous solution, n.o.s.	154	2693
Blasting agent, n.o.s.	112	----
Bleaching powder	140	2208
Blue asbestos	171	2212
Bombs, smoke, non-explosive, with corrosive liquid, without initiating device	153	2028
Borate and Chlorate mixtures	140	1458
Borneol	133	1312
Boron tribromide	157	2692
Boron trichloride	125	1741
Boron trifluoride	125	1008
Boron trifluoride, compressed	125	1008
Boron trifluoride, dihydrate	157	2851
Boron trifluoride acetic acid complex	157	1742
Boron trifluoride acetic acid complex, liquid	157	1742
Boron trifluoride acetic acid complex, solid	157	3419
Boron trifluoride diethyl etherate	132	2604
Boron trifluoride dimethyl etherate	139	2965
Boron trifluoride propionic acid complex	157	1743
Boron trifluoride propionic acid complex, liquid	157	1743
Boron trifluoride propionic acid complex, solid	157	3420
Bromates, inorganic, aqueous solution, n.o.s.	140	3213
Bromates, inorganic, n.o.s.	141	1450
Bromine	154	1744
Bromine, solution	154	1744
Bromine, solution (Inhalation Hazard Zone A)	154	1744
Bromine, solution (Inhalation Hazard Zone B)	154	1744
Bromine chloride	124	2901
Bromine pentafluoride	144	1745
Bromine trifluoride	144	1746
Bromoacetic acid	156	1938
Bromoacetic acid, solid	156	3425
Bromoacetic acid, solution	156	1938
Bromoacetone	131	1569
Bromoacetyl bromide	156	2513
Bromobenzene	130	2514
Bromobenzyl cyanides	159	1694
Bromobenzyl cyanides, liquid	159	1694
Bromobenzyl cyanides, solid	159	1694
Bromobenzyl cyanides, solid	159	3449
1-Bromobutane	130	1126
2-Bromobutane	130	2339
Bromochlorodifluoromethane	126	1974
Bromochloromethane	160	1887
1-Bromo-3-chloropropane	159	2688
2-Bromoethyl ethyl ether	130	2340
Bromoform	159	2515
1-Bromo-3-methylbutane	130	2341
Bromomethylpropanes	130	2342
2-Bromo-2-nitropropane-1,3-diol	133	3241
2-Bromopentane	130	2343
2-Bromopropane	129	2344
Bromopropanes	129	2344
3-Bromopropyne	130	2345
Bromotrifluoroethylene	116	2419
Bromotrifluoromethane	126	1009
Brown asbestos	171	2212
Brucine	152	1570
Butadienes, stabilized	116P	1010
Butadienes and hydrocarbon mixture, stabilized	116P	1010
Butane	115	1011
Butane	115	1075
Butanedione	127	2346
Butane mixture	115	1011
Butane mixture	115	1075
Butanols	129	1120
Butoxyl	127	2708
Butyl acetates	129	1123
Butyl acid phosphate	153	1718
Butyl acrylates, stabilized	129P	2348
n-Butylamine	132	1125
N-Butylaniline	153	2738
Butylbenzenes	128	2709
n-Butyl bromide	130	1126
Butyl chloride	130	1127
n-Butyl chloroformate	155	2743
sec-Butyl chloroformate	155	2742
tert-Butylcyclohexyl chloroformate	156	2747
Butylene	115	1012
Butylene	115	1075
1,2-Butylene oxide, stabilized	127P	3022
Butyl ethers	128	1149
n-Butyl formate	129	1128
tert-Butyl hypochlorite	135	3255
N,n-Butylimidazole	152	2690
n-Butyl isocyanate	155	2485
tert-Butyl isocyanate	155	2484
Butyl mercaptan	130	2347
n-Butyl methacrylate, stabilized	130P	2227
Butyl methyl ether	127	2350
Butyl nitrites	129	2351
Butyl propionates	130	1914
Butyltoluenes	152	2667
Butyltrichlorosilane	155	1747
5-tert-Butyl-2,4,6-trinitro-m-xylene	149	2956
Butyl vinyl ether, stabilized	127P	2352
1,4-Butynediol	153	2716
Butyraldehyde	129	1129
Butyraldoxime	129	2840
Butyric acid	153	2820
Butyric anhydride	156	2739
Butyronitrile	131	2411
Butyryl chloride	132	2353
Buzz	153	2810
BZ	153	2810
CA	159	1694
Cacodylic acid	151	1572
Cadmium compound	154	2570
Caesium	138	1407
Caesium hydroxide	157	2682
Caesium hydroxide, solution	154	2681
Caesium nitrate	140	1451
Calcium	138	1401

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If the product is Highlighted Green, this lets you know the Product is a Gas and the **Green Pages need to be looked at**.

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

Putting what we now know to use, utilizing the ERG

The Green Pages provide two different types of recommended safe distances which are:

"**Initial isolation distances**" - (Hot Zone)

and

"**Protective action distances**." – (Evacuation Area)

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

Putting what we now know to use, utilizing the ERG

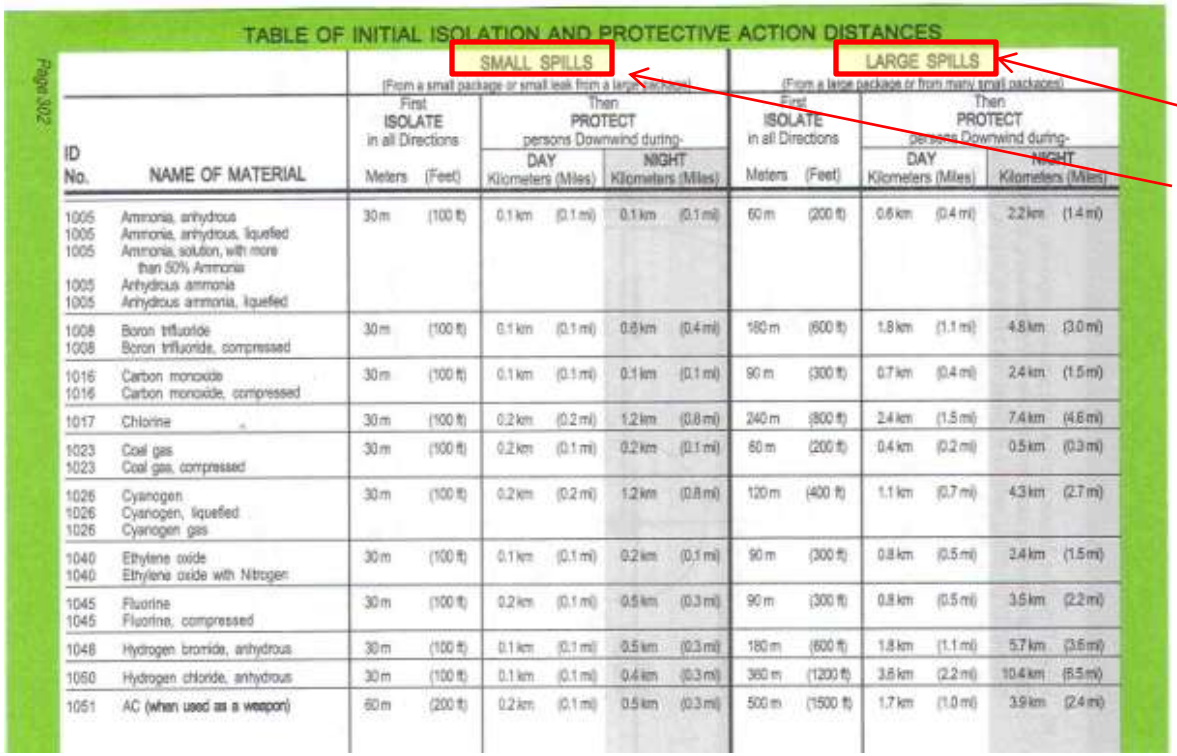

TABLE OF INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES

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1008 1008	Boron trifluoride Boron trifluoride, compressed	30 m	(100 ft)	0.1 km	(0.1 mi)	0.6 km	(0.4 mi)	180 m	(600 ft)	1.8 km	(1.1 mi)	4.8 km	(3.0 mi)
1016 1016	Carbon monoxide Carbon monoxide, compressed	30 m	(100 ft)	0.1 km	(0.1 mi)	0.1 km	(0.1 mi)	90 m	(300 ft)	0.7 km	(0.4 mi)	2.4 km	(1.5 mi)
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1045 1045	Fluorine Fluorine, compressed	30 m	(100 ft)	0.2 km	(0.1 mi)	0.5 km	(0.3 mi)	90 m	(300 ft)	0.8 km	(0.5 mi)	3.5 km	(2.2 mi)
1048	Hydrogen bromide, anhydrous	30 m	(100 ft)	0.1 km	(0.1 mi)	0.5 km	(0.3 mi)	180 m	(600 ft)	1.8 km	(1.1 mi)	5.7 km	(3.6 mi)
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NOTE The TOP:

It's Broken into:

Small & **Large** Spills

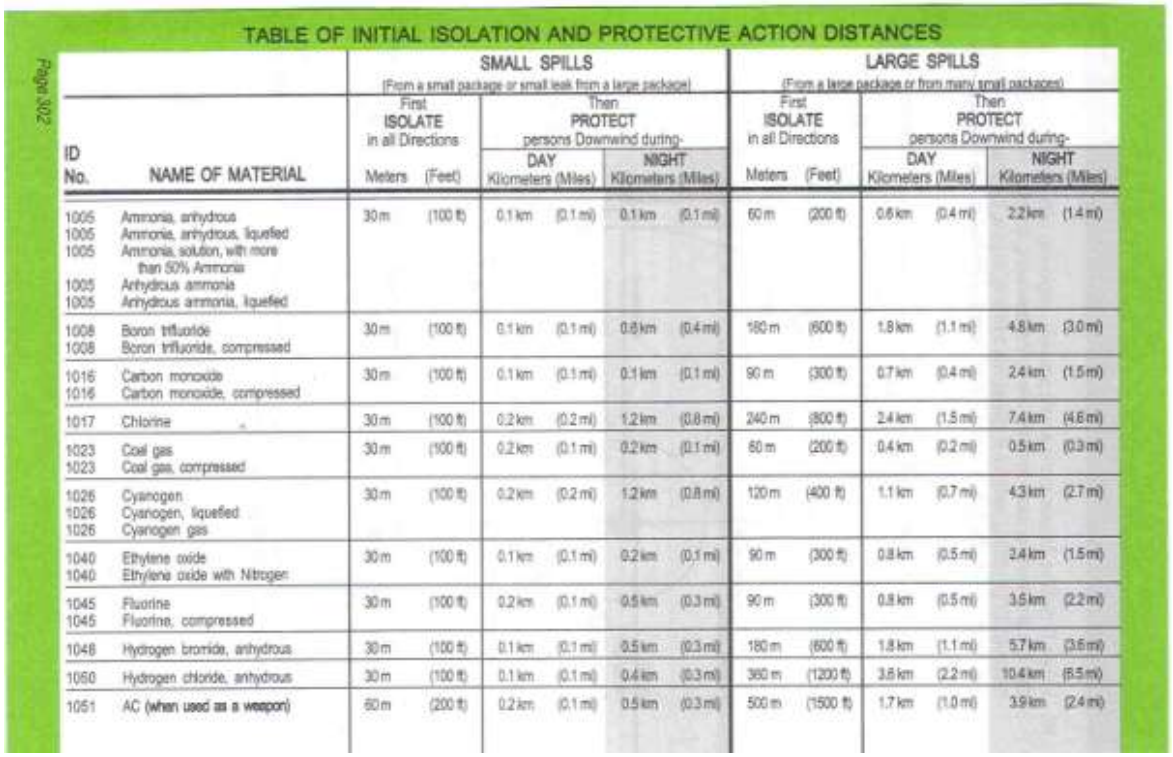
Small = usable amounts

Large = Multiple amounts, as a case or tanker.

Use better judgment, *not written in stone*, always better to be safe, leaning to large, then sorry.

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

Putting what we now know to use, utilizing the ERG



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1026 1026 1026	Cyanogen Cyanogen, liquefied Cyanogen gas	30 m	(100 ft)	0.2 km	(0.2 mi)	1.2 km	(0.8 mi)	120 m	(400 ft)	1.1 km	(0.7 mi)	4.3 km	(2.7 mi)
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Isolation :

This is around the entire spill. (center outwards)

This will be the “Hot zone”

No personnel shall enter without **proper PPE**.

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

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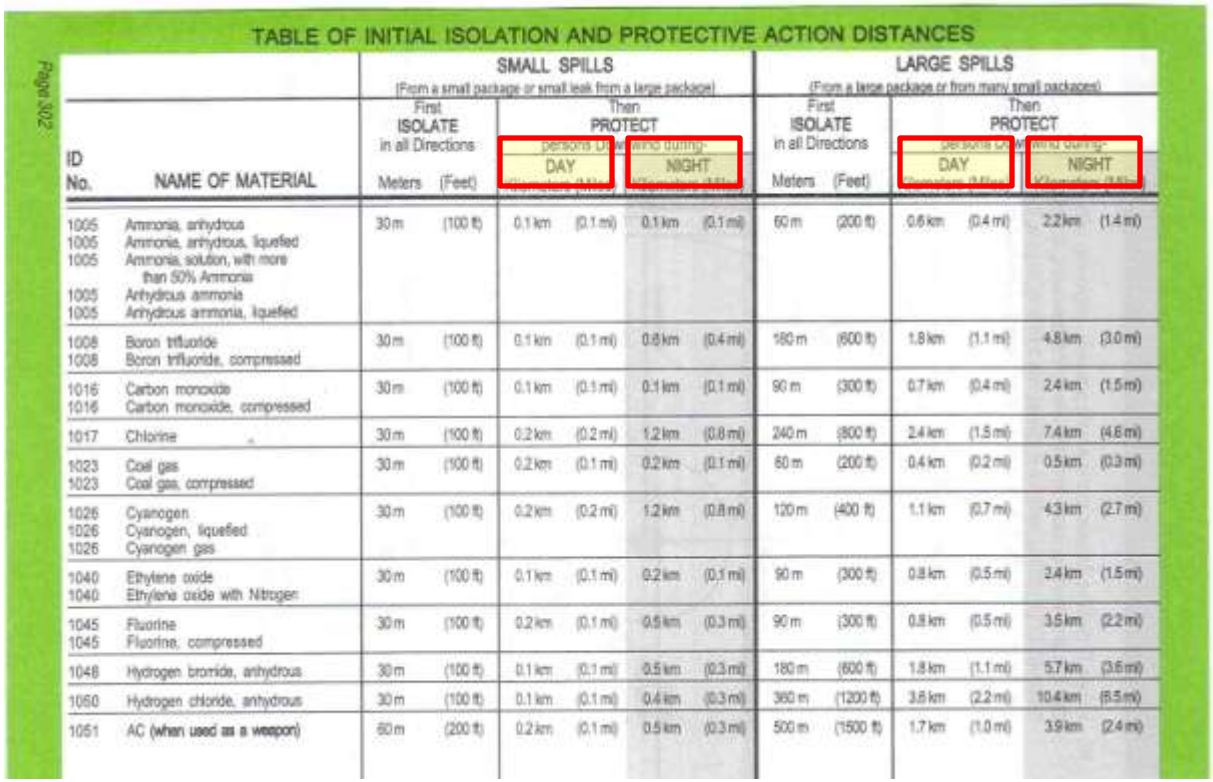

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1005	Ammonia, anhydrous, liquefied												
1005	Ammonia, solution, with more than 50% Ammonia												
1005	Anhydrous ammonia												
1005	Anhydrous ammonia, liquefied												
1008	Boron trifluoride	30 m	(100 ft)	0.1 km	(0.1 mi)	0.8 km	(0.4 mi)	180 m	(600 ft)	1.8 km	(1.1 mi)	4.8 km	(3.0 mi)
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1016	Carbon monoxide	30 m	(100 ft)	0.1 km	(0.1 mi)	0.1 km	(0.1 mi)	90 m	(300 ft)	0.7 km	(0.4 mi)	2.4 km	(1.5 mi)
1016	Carbon monoxide, compressed												
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1023	Coal gas	30 m	(100 ft)	0.2 km	(0.1 mi)	0.2 km	(0.1 mi)	60 m	(200 ft)	0.4 km	(0.2 mi)	0.5 km	(0.3 mi)
1023	Coal gas, compressed												
1026	Cyanogen	30 m	(100 ft)	0.2 km	(0.2 mi)	1.2 km	(0.8 mi)	120 m	(400 ft)	1.1 km	(0.7 mi)	4.3 km	(2.7 mi)
1026	Cyanogen, liquefied												
1026	Cyanogen gas												
1040	Ethylene oxide	30 m	(100 ft)	0.1 km	(0.1 mi)	0.2 km	(0.1 mi)	90 m	(300 ft)	0.8 km	(0.5 mi)	2.4 km	(1.5 mi)
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Protect :

This is the evacuation area.

This defines who could be effected by the product within 30 minutes of the spill.

Since **day time** air is lighter then the **nights air -**
(once Sun sets),
you can see there are
2 different distances.

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

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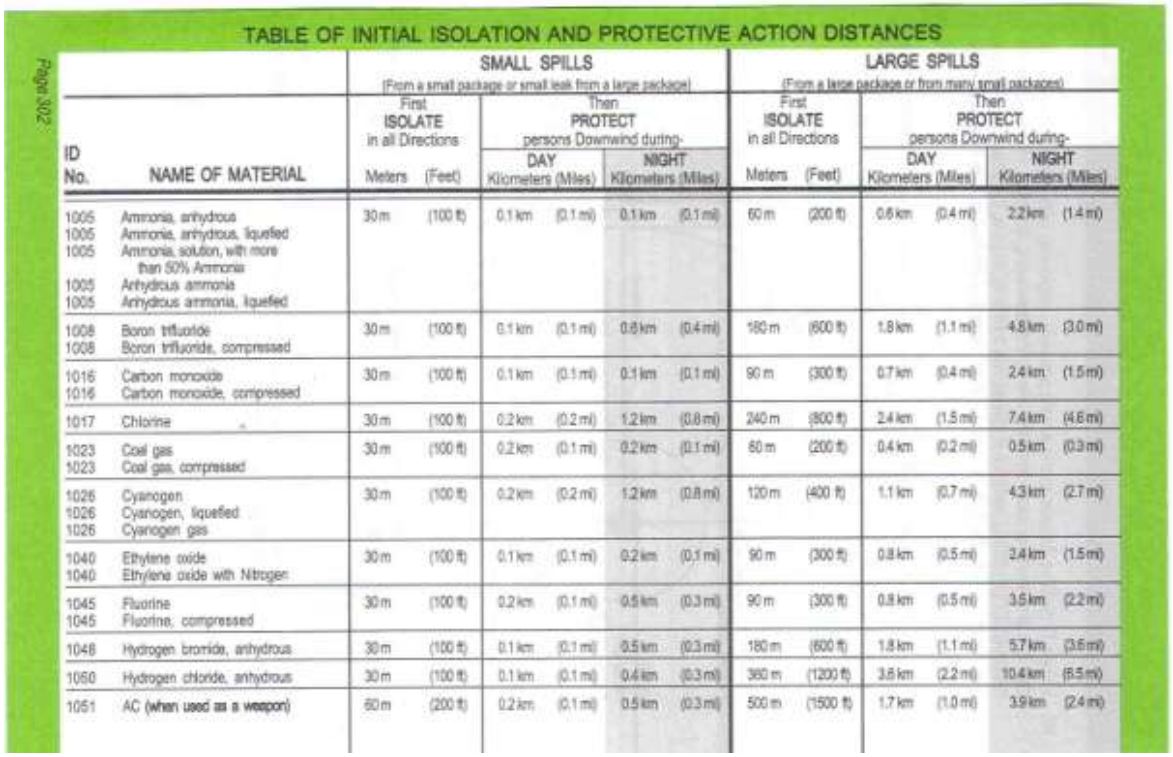

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Protect :

Evacuation is only done to the **Downwind** direction, from the spill.

Note – Wind directions can change during the event, **so will the protected area**, wind needs to be monitored.

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

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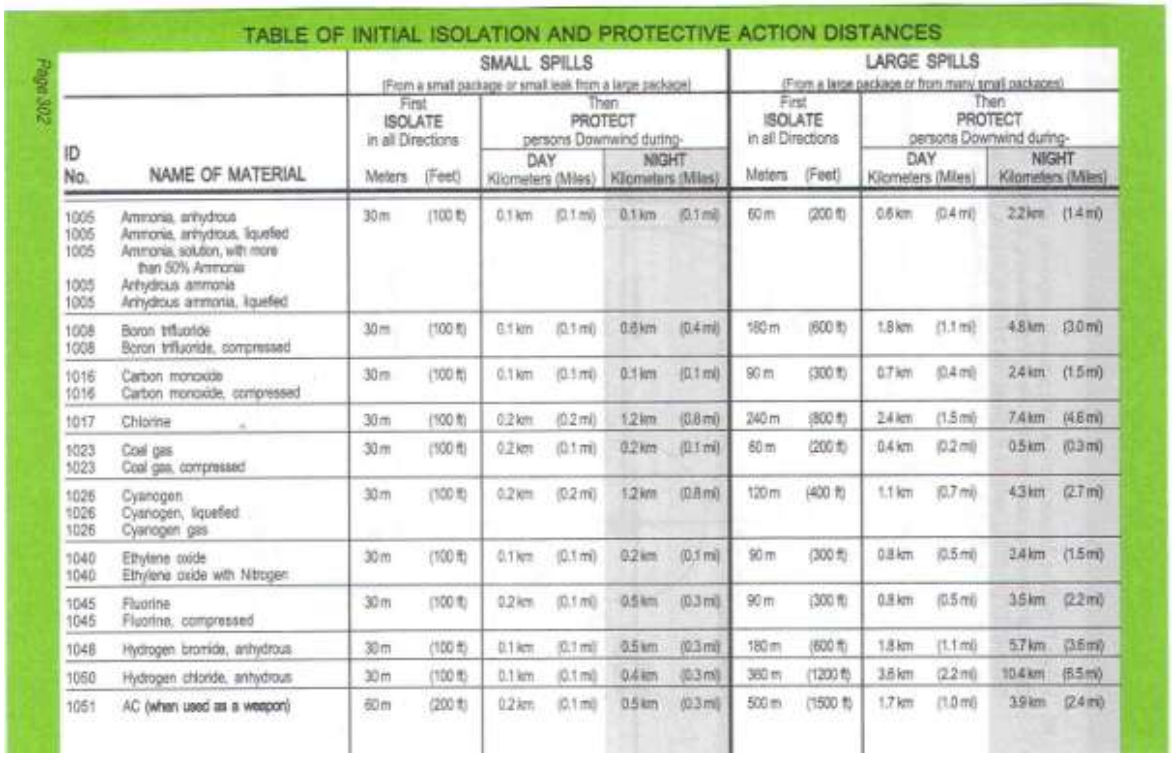

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Protect :

Evacuation can be removing people from the area, but if this will create a larger hazard for the people being evacuated, then it will mean, sheltering in place:

Closing windows, turning off burners, air conditioners…. and leaving them where they are at, as long as they are inside a form of shelter.

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

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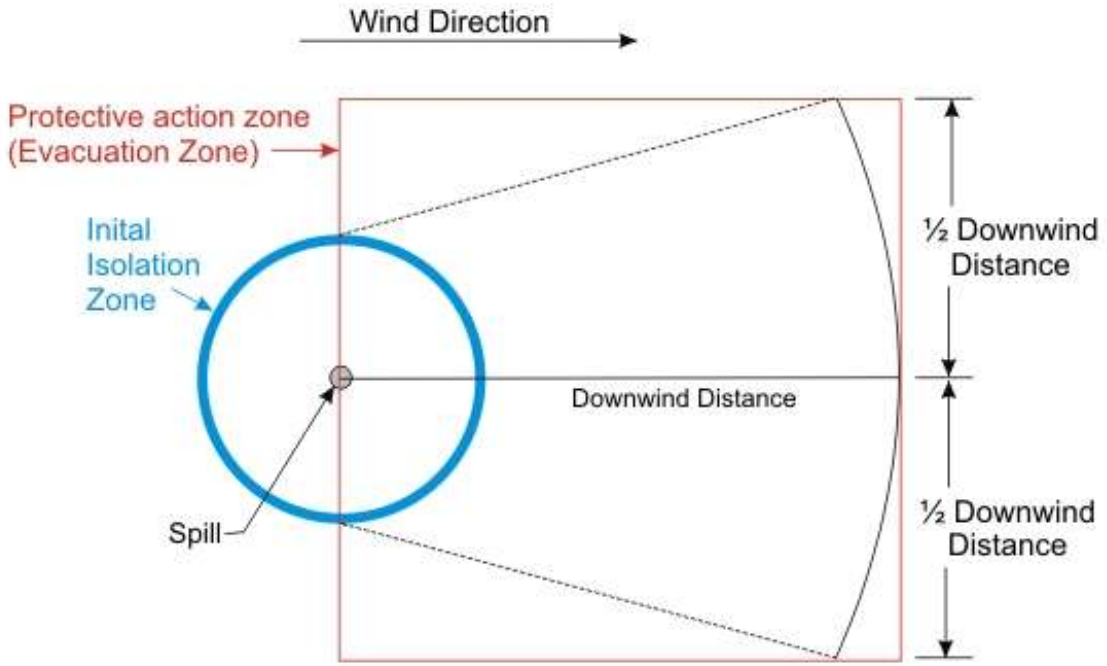
Isolation & Protection Zones



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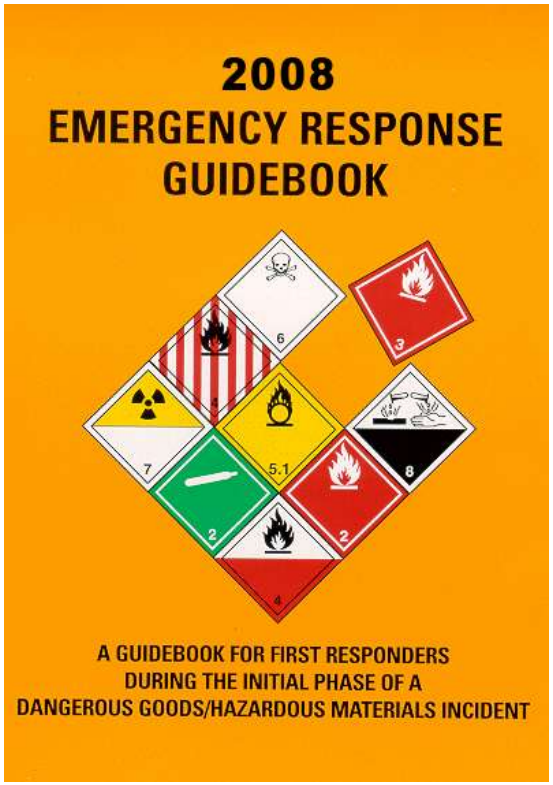
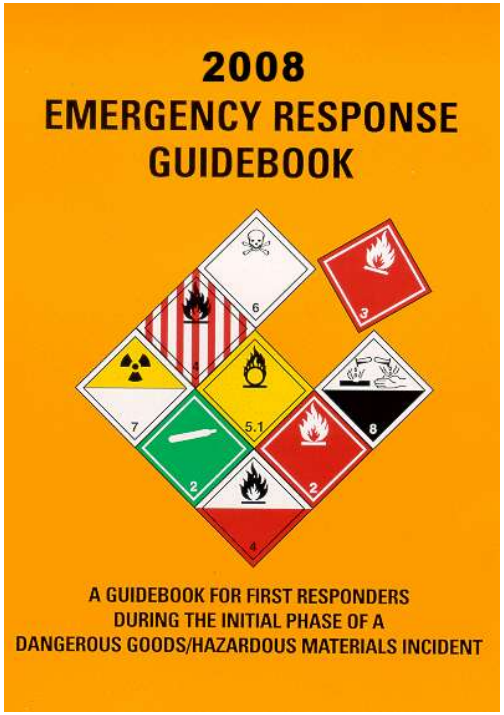


What if the Guide doesn't have the Information you need?

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

Go to the last page of the Guide (inside back cover):



UNITED STATES

1. CHEMTREC®

1-800-424-9300
(Toll-free in the U.S., Canada, and the U.S. Virgin Islands)
703-527-3887 For calls originating elsewhere
(Collect calls are accepted)

2. CHEM-TEL, INC.

1-800-255-3924
(Toll-free in the U.S., Canada, and the U.S. Virgin Islands)
813-248-0585 For calls originating elsewhere
(Collect calls are accepted)

3. INFOTRAC

1-800-535-5053
(Toll-free in the U.S., Canada, and the U.S. Virgin Islands)
352-323-3500 For calls originating elsewhere
(Collect calls are accepted)

4. 3E COMPANY

1-800-451-8346
(Toll-free in the U.S., Canada, and the U.S. Virgin Islands)
760-602-8703 For calls originating elsewhere
(Collect calls are accepted)

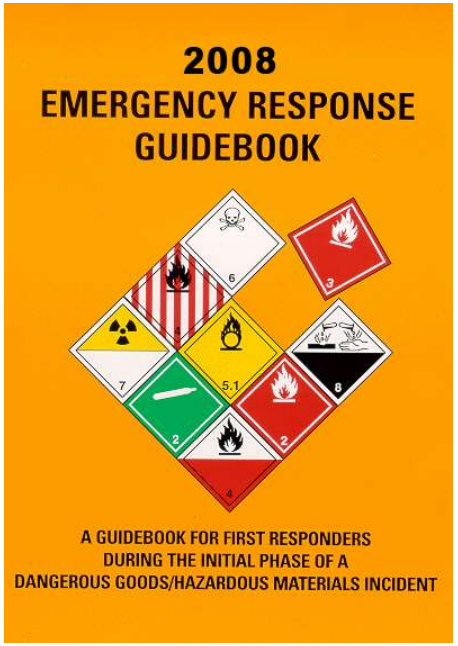
5. MILITARY SHIPMENTS

703-697-0218 - Explosives/ammunition incidents
(Collect calls are accepted)
1-800-851-8061 - All other dangerous goods incidents

These are additional numbers to call, with 24 hours support,
they can help you further.

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

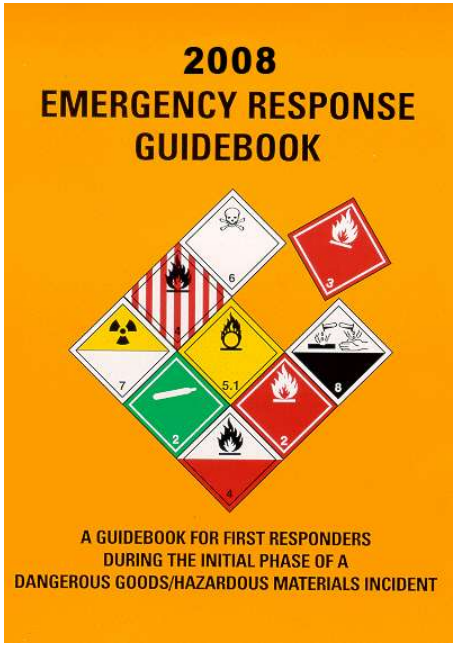
Lets Review:



If we know the products Name,
where in the guide will we look?

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

Lets Review:

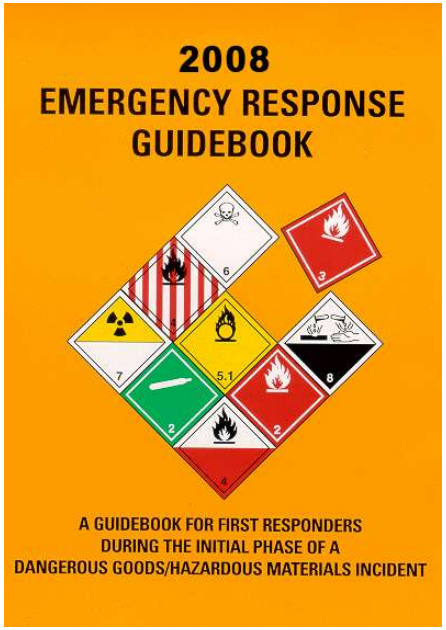


If we know the products Name, where in the guide will we look?

Blue pages for Guide Number
then using the guide # in the
Orange pages for Guidance on handling
the Incident

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

Lets Review:

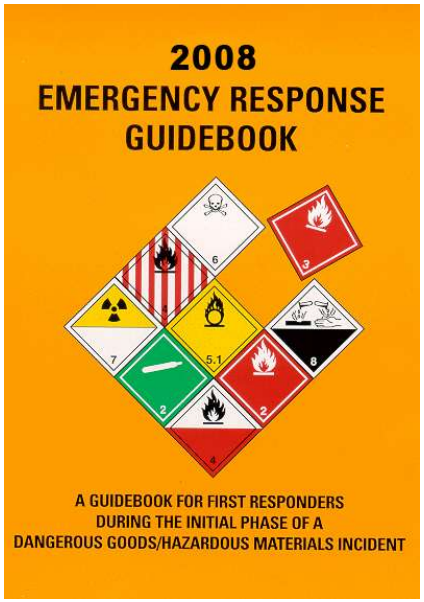


When we see a chemical name highlighted in Green ,

What does it mean, and what extra things do we need to do?

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

Lets Review:

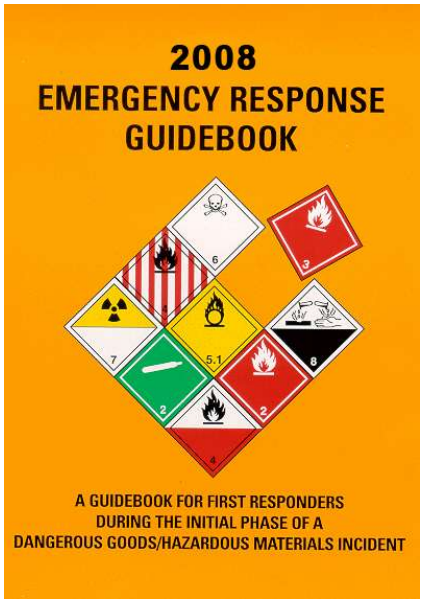


When we see a chemical name highlighted,
What does it mean, and what extra thing do we need to do?

This means we are dealing with a gas
besides using the Orange pages for guidance
we'll need to go to the
Green pages for Isolation and Evacuation distances.

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

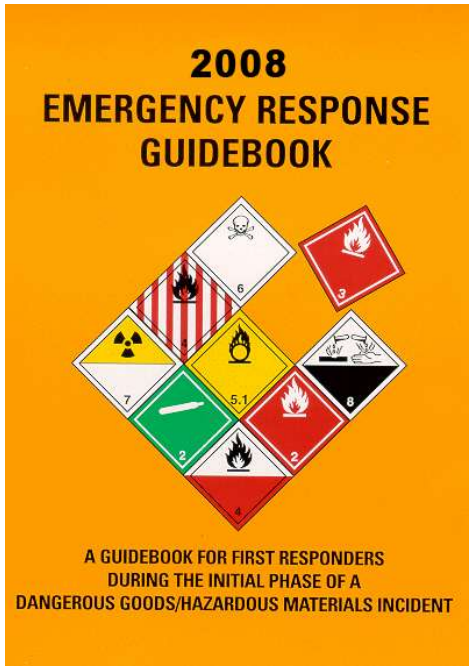
Lets Review:



Is the Emergency Response Guidebook an
Offensive or **Defensive** tool
and
what tool is better used to handle an incident?

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

Lets Review:



Is the Emergency Response Guidebook an Offensive or Defensive tool and what tool is better used to handle an incident?

The ERG is a **Defensive tool**,
used to meet incident priorities:
Recognition, Isolation, Protection, Notification

The **MSDS** (buildings), Bill of lading (roadway), Consist (train), Dangerous Cargo Manifest (boat), or Air Bill (plane), are usually more specific then the ERG, and should provide the same information and then some…

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

Lets Review:

A tanker truck carrying the following product rolled over and is leaking from the top hatch.

NOW WHAT?

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

Lets Review:

The ID No. is 1202 and it is a flammable liquid (Class 3, red placard);

The **YELLOW**-bordered pages indicate that the substance is *Diesel fuel* or *Fuel oil*, and refers to **Guide 128**;

The substance is not highlighted; there is no need to use the **GREEN** Section;

The **Guide 128** corresponds to ***Flammable Liquids (Non-Polar / Water-Immiscible)***;

As an immediate precautionary measure, the Guide suggests to isolate spill or leak area for at least 150 feet in all directions.

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

Lets Review:

At **Guide 128**, under the ***Potential Hazards*** Section, the ***Fire or Explosion*** hazards precede the ***Health*** hazards;

This type of substance is flammable and vapors may form explosive mixture with air;

Most vapors are heavier than air, they will spread along the ground and collect in low or confined areas;

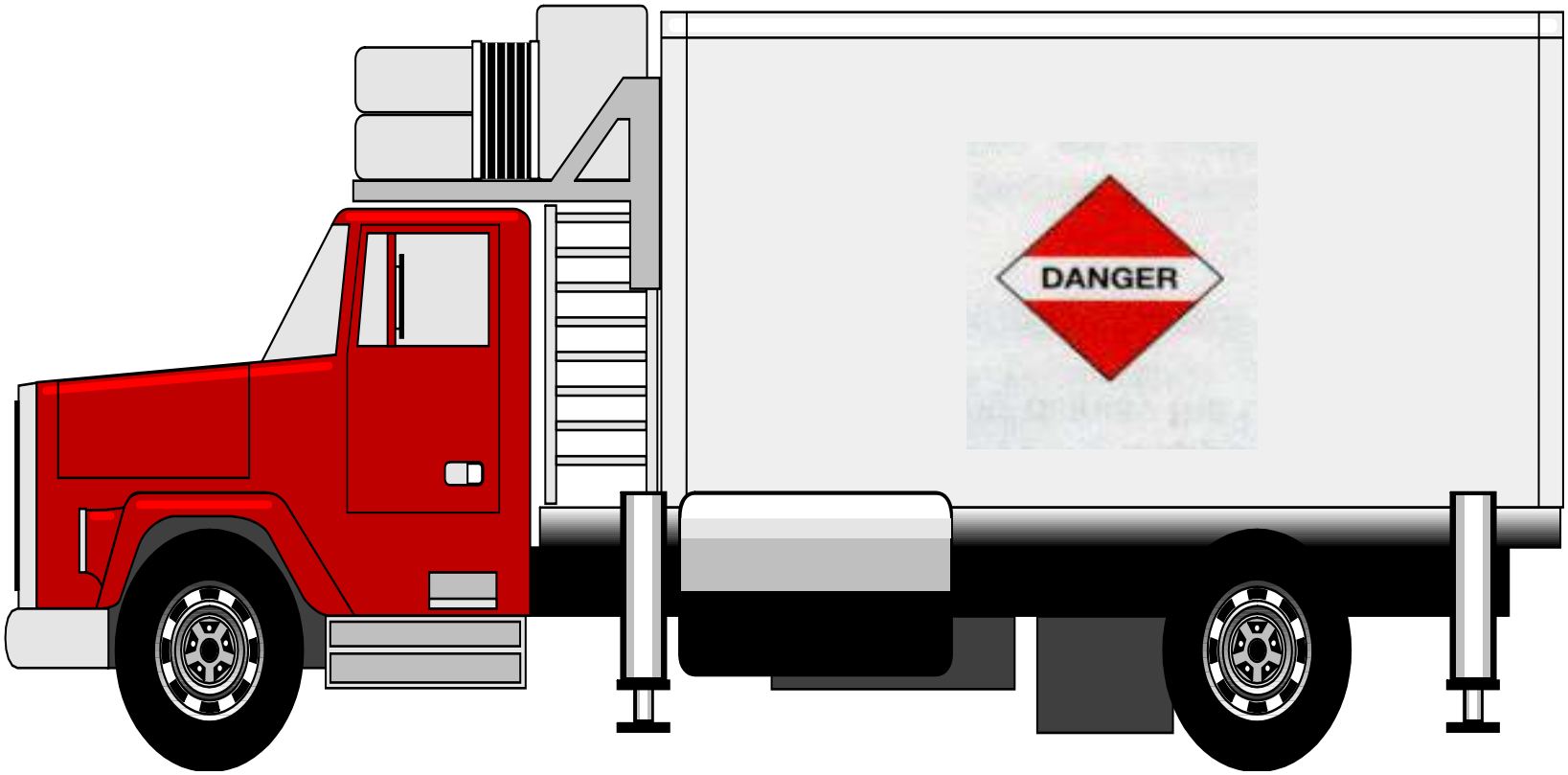
Containers may explode when heated;

Inhalation or contact with material may irritate or burn skin and eyes.

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

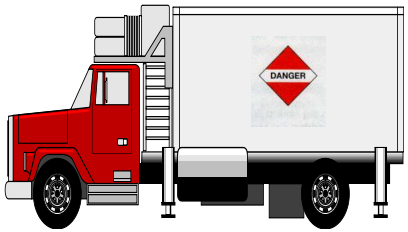
Lets Review:

This is your Hazard Call – Now what?



HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

Lets Review:



There is no ID No. and the DANGER placard indicates a mixed load of dangerous goods;

In this case, refer to **Guide 111**,

Mixed Load / Unidentified Cargo;

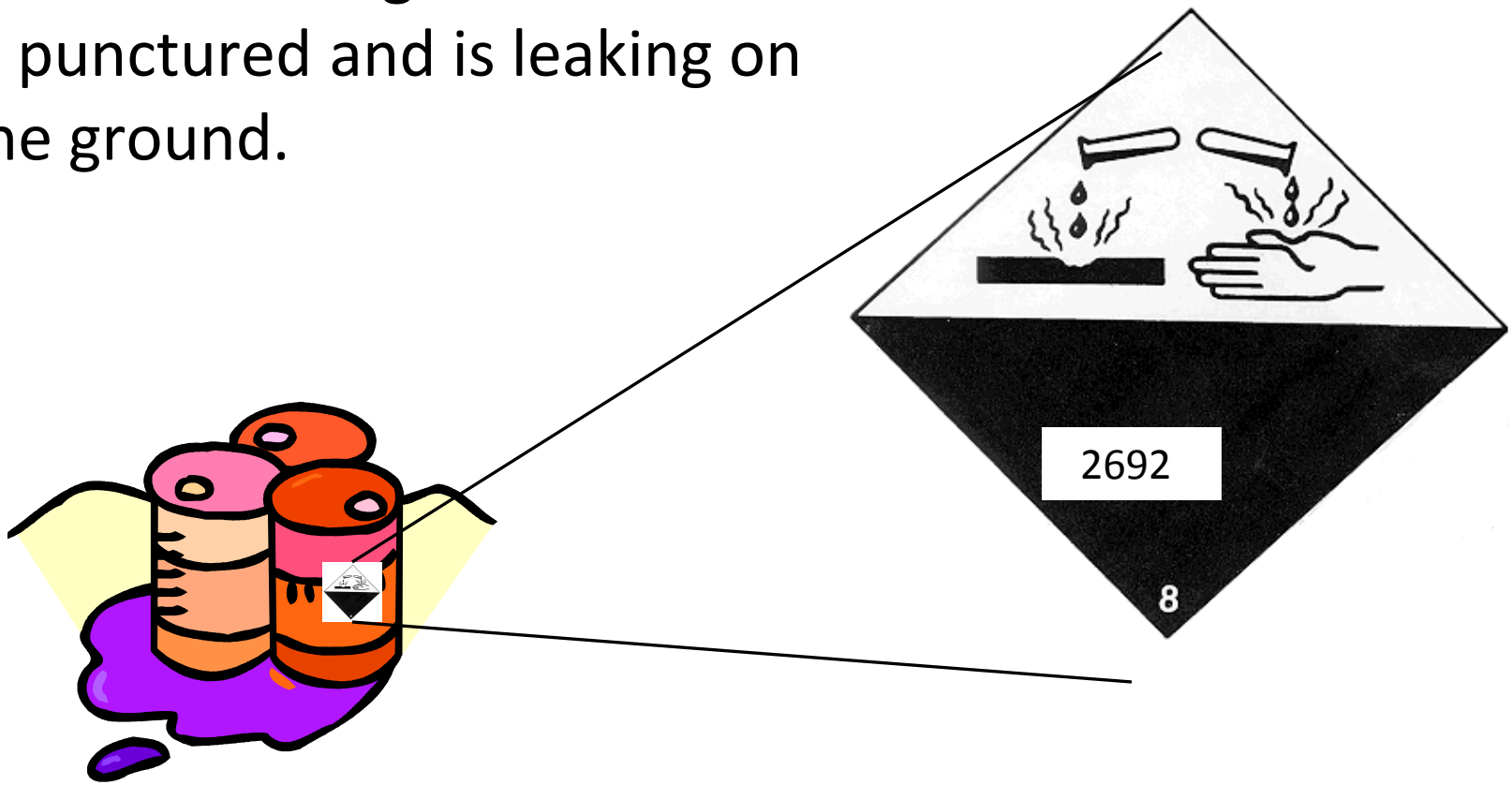
As an immediate precautionary measure, the Guide suggests to isolate the area for at least 330 feet in all directions, until the contents of the vehicle is known;

In case of fire, the Guide suggests to isolate for 1 mile in all directions and to consider an initial evacuation of ½ mile in all directions;

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

Lets Review:

A drum containing this substance is punctured and is leaking on the ground.



HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

Lets Review:

The ID No. is 2692;

The **YELLOW**-bordered pages indicate that this substance is called *Boron tribromide;*

It refers to **Guide 157** and is highlighted;

The **Guide 157** correspond to ***Substances – Toxic and/or Corrosive (Non-Combustible / Water-Sensitive)***;

Since the substance is highlighted and there is a spill situation, the **GREEN** Section must be used to determine the Initial Isolation and Protective Action Distances;

For this product, the **GREEN** Section presents 2 separate entries for ID No. 2692: the 1st one applies when the product is spilled on the ground and the 2nd one, when it is spilled in water;

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

Lets Review:

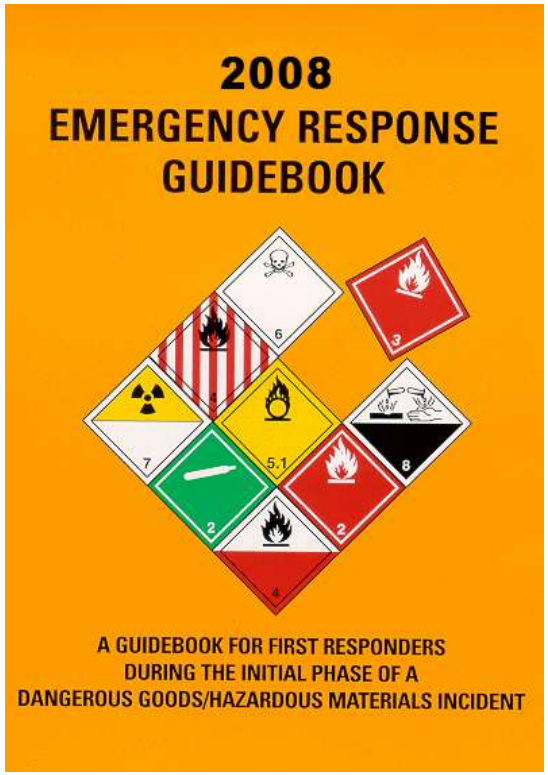
In this case, the product is spilled on the ground and the Initial Isolation Distance suggested in the **GREEN** Section is 90 feet in all directions for a small spill and 180 feet in all directions for a large spill;

Additionally, the Protective Action Distances for day and night will have to be taken from the **GREEN** Section;

The **Guide 157** indicates that this type of substance is toxic and non-combustible, but a fire will produce irritating, corrosive and/or toxic gases.

HOW TO USE AN EMERGENCY RESPONSE GUIDEBOOK

Final Words:



Remember our safety is ALWAYS the first concern and the top priority.

Don’t become part of the event by

making yourself a victim!

THE END

WESTBURY FIRE DEPARTMENT

PROBATIONARY DRILL

National Incident Management System

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PROBATIONARY DRILL

NIMS – Is a federal Requirement of all Emergency Personnel

The Higher Rank you achieve the higher level of NIMS training that is required.

All personnel are required to have IS 700, 100 and 200 and is a departmental requirement to be removed from probation.

IS – 700 : Introduction to National Incident Management System

IS – 800 : Introduction to National Response Framework

IS – 100 : Introduction to Incident Command System

IS – 200 : Incident Command System – Single Resource & Initial Actions

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PROBATIONARY DRILL

Intro to - IS700

National Incident Management System

Aka - NIMS

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PROBATIONARY DRILL

What is N.I.M.S.?

N.I.M.S is a comprehensive, national approach to incident management that is applicable at all jurisdictional levels.

Its intent is to:

- Be applicable across a full spectrum of potential incidents and hazard scenarios, regardless of size or complexity.

- Improve coordination and cooperation between public and private entities in a various of domestic incident management activities.

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PROBATIONARY DRILL

Why do we need to know this?

After Sept 11, Hurricane Katrina, and other large scale events across the USA – The Federal Government came to the conclusion there was a need for a common Emergency Management System, since at these large scale incidents we were now seeing a very diverse group operating.

Fire Service/Police/Municipalities/Private Companies

President Bush issued Homeland Security Presidential Directive 5 and adopted N.I.M.S.

WESTBURY FIRE DEPARTMENT

PROBATIONARY DRILL

Why do we need to know this?

Homeland Security Presidential Directive 5 -

requires a consistent nationwide template to enable all government, private-sector and non-governmental organizations to effectively work together during domestic incidents.

There needed to be a management plan since this never really work too effective in past.

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PROBATIONARY DRILL

Why do we need to know this?

In adopting NIMS the Federal Government, **required** "all personnel with a direct role in emergency preparedness, incident management or response, complete this training".

They also required all personnel complete this training by year end 2006 or the service would not be eligible for Federal Grant Funding or a public funded contract may not be issued.

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PROBATIONARY DRILL

How does this effect us?

We as emergency care providers, are required to have 100% compliance or we could loose our ability to bid on Fire Protection contracts with the Town of North Hempstead, Town of Hempstead, Village of Old Westbury and our any of our Private Contracts that receive public funding.

We must have the ability to provide a certificate of completion for IS-700, IS-100 and IS-200 for all of our members on the "**ACTIVE Fire ROLLS**" if any of these contractor have occasion to ask. Failing to do so, could constitute a failure to renew a contract or grounds to terminate our existing contract.

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PROBATIONARY DRILL

NIMS Components:

NIMS uses several components that work together as a system and building the framework for preparing, preventing, responding and recovering from a domestic incident:

1. **Command & Management**
2. **Preparedness**
3. **Resource Management**
4. **Support Technologies**
5. **Ongoing Management and Maintenance**

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PROBATIONARY DRILL

1. Command & Management:

Command & Management is based on 3 organizational systems:

A. **The Incident Command System** (ICS) which defines the operating characteristics, management components, and structure of incident management organization through the life of the incident.

The Fire service has been utilizing ICS for over 30 years and there isn't too many changes by NIMS.

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PROBATIONARY DRILL

A. Incident Command System :

The Incident Command System (ICS) builds a ***Unified Command*** – establishes 1 Boss,

- *who will provide a **manageable span of control** – ideally no person will be responsible to manage more the 7 people or tasks.*
- ICS helps all responders communicate and get what they need, when they need it.
- ICS provides a safe, efficient, and cost effective response and recovery strategy.

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PROBATIONARY DRILL

A. Incident Command System:

The Incident Command System (ICS) has several features that make it well suited to managing incidents and include:

- Common terminology - ability to use plain English - no agency codes, radio signal or jargon.
- Organizational Resources – all resources are **TYPED** an "Engine" is and Engine for everyone, same national standard . This goes for all equipment.
- Organization Facilities – Facilities have common names – example: Command Post, Base, Camp, Helibase …..
- Manageable span of control – Keeps manageable level of control - not giving too much responsibility – 3 : 7 is ideal

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PROBATIONARY DRILL

A. Incident Command System:

The Incident Command System (ICS) has several features that make it well suited to managing incidents and include:

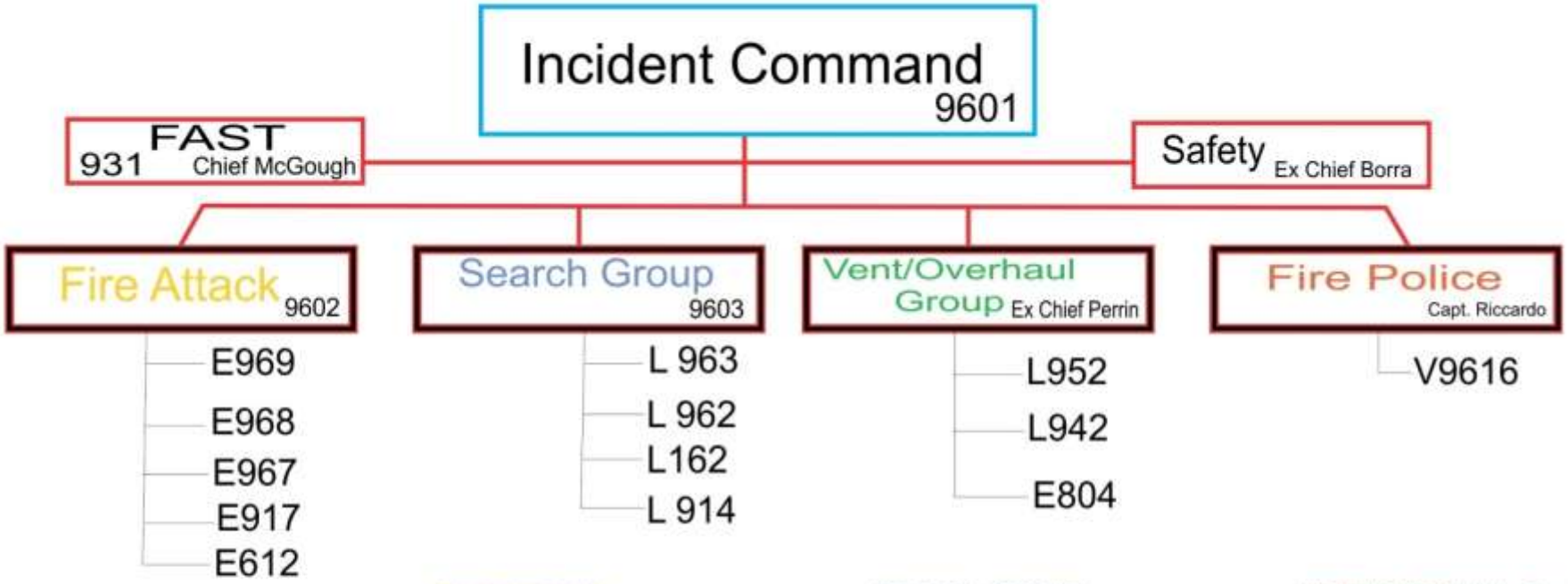
- Use of position titles – Common Tiles

  Incident Command = Incident Commander, Head of Section = Chief, Branch Leader = Director …..
- Incident Action Plan – IC will develop a plan of action which will be communicated to all levels, though appropriate leaders
- Integrated communications – Use of IC hardware so managers know their tasks and Radio and Cell phone communication to get assigned task working.
- Accountability – in an effective command with a 3:7 span of control, it is very easy for leader to keep account of the people assigned to then, which make it easy to get total accountability.

Incident Command - Titles

Organizational Level	Title
• Incident Command	• Incident Commander
• Command Staff	• Officer
• General Staff (Section)	• Chief
• Branch	
• Division/Group	• Director
• Unit	• Supervisor
• Strike Team/Task Force	• Leader
	• Leader

Simple Example of A Unified Command



Incident Command
RIT
Safety
Fire Attack
Search Group
Vent/Overhaul
Fire Police

Controls 6 people
Communication 6 people
Accounts for 6 people

FIRE ATTACK
E 969
E 968
E 967
E 917
E 612

Controls 5 Unit Officers
Communicate IC + 5 Units OIC
Account for 5 Units OIC

SEARCH GROUP
L 963
L 962
L 162
L 914

Controls 4 Unit Officers
Communicate IC + 4 Units OIC
Account for 4 Units OIC

VENT/OVERHAUL Group
L 952
L 942
E 804

Controls 3 Unit Officers
Communicate IC + 3 Units OIC
Account for 3 Units OIC

FIRE POLICE
V 918

Controls 1 Unit Officers
Communicate IC + Units OIC
Account for 1 Units OIC

UNITS
Unit Officer Control Units Personnel
Communicate with Sector Chief & Team
Account for all Personnel on Units

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PROBATIONARY DRILL

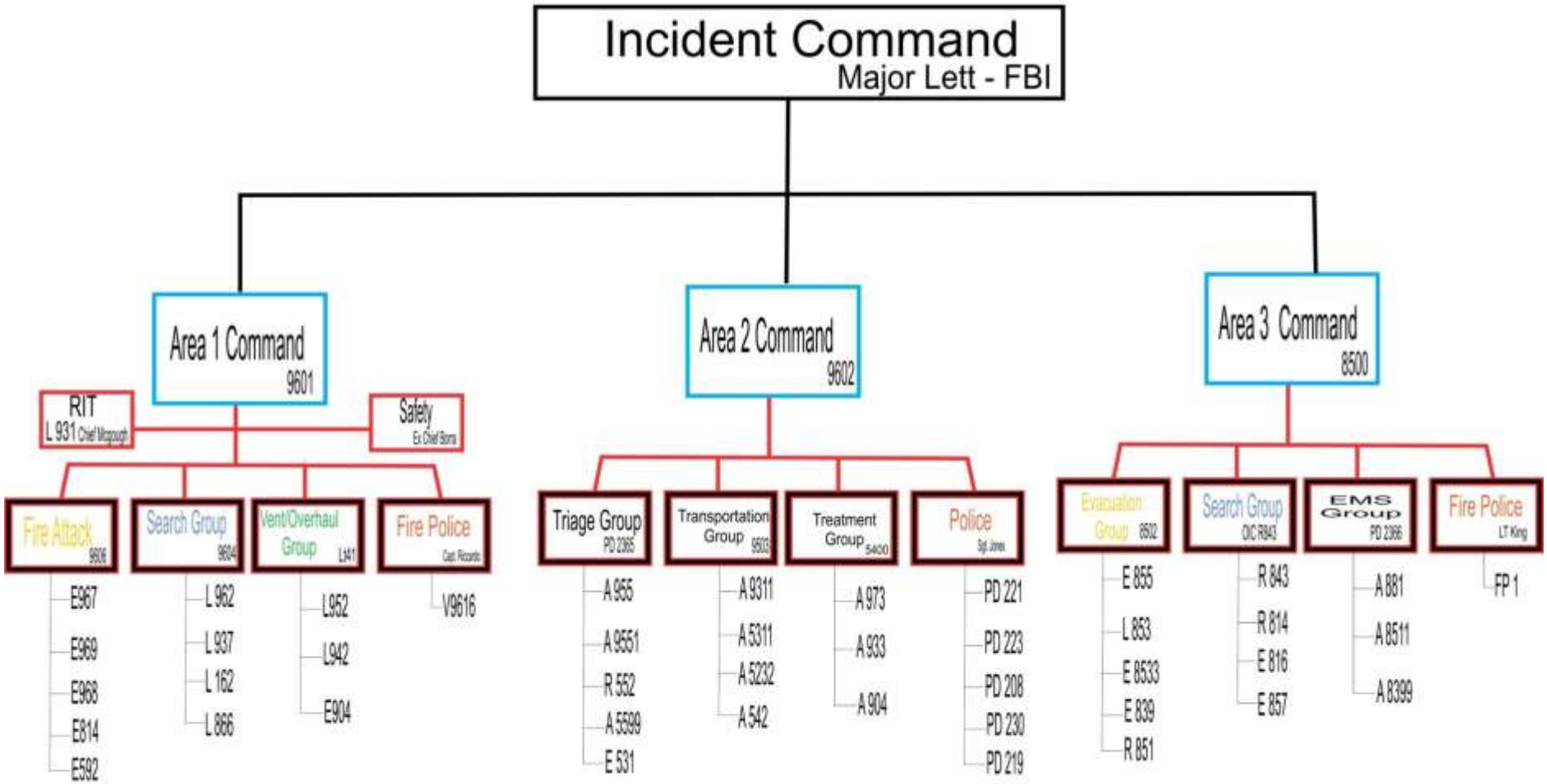
A. Incident Command System:

- **Area Command** – is a unified command broken off in different geographical area.

- Quadrant 1, 2, 3, 4, 5 – each being coordinated by an Area Commander – who reports to the IC.

Each Area Command will operate like its own Incident with the Area Commander reporting to overall IC.

Example of Area Command



Each area may have different needs and may be broken down differently by the Area commander.

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PROBATIONARY DRILL

Management and Command

B. The Multiagency Coordination System, which defines the operating characteristics, management components and organizational structure of supporting entities.

These incident require assistance from agencies outside public safety, like private sector. (Example: Heavy equipment, toilets, tents, food, just to name a few) These operations need to be coordinated.

This is where the Fire Service was lacking, but is getting better since the implementation of the Battalion and County EOC's.

WESTBURY FIRE DEPARTMENT

PROBATIONARY DRILL

B. MultiAgency Coordination System:

The Multiagency Coordination System is used to:

- Support Incident Management Policies and Priorities
- Facilitate resource allocation decisions based on Incident Management priorities
- Coordinate incident-related information
- Coordinate interagency and intergovernmental issues regarding the incident management policies, priorities and strategies.

This is where Emergency Operations Centers (EOC's) come into play, to help coordinates this very effectively. They are usually off sight away from all the confusion and have all the resources to get the job done.

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PROBATIONARY DRILL

Emergency Operations Centers:

The EOC typically consist of members from organizations with direct incident management responsibilities or with incident management support or resource responsibilities.

EOC's organization & staffing includes:

- Coordination
- Communication
- Resource Dispatching & Tracking
- Information collection, analysis and distribution

WESTBURY FIRE DEPARTMENT

PROBATIONARY DRILL

Management and Command

C. The Public Information System, includes the processes, procedures and system for communicating timely and accurate information to the public during these events.

The public always needs to be kept informed to prevent assumption or mass panic.

Most fire department already use the “Public information Officer” PIO which is a component of ICS and is a very effective tool in keeping the press away from an incident.

WESTBURY FIRE DEPARTMENT

PROBATIONARY DRILL

C. Public Information System:

The Public Information Officer (PIO) is considerer a member of the Command Staff – can report Directly to the IC.

- The PIO advises the IC on all public information matters, including media and public inquires, emergency public information and warning, rumor monitoring and control, media monitoring, and other functions required to coordinate, clear with proper authorities and disseminate accurate and timely information relating to the incident

- The PIO operates under a Joint Information System at a Joint Information Center. This is where information about the incident can be shared freely with leader and or media.

There may be multiple Joint Information Center through out a incident.

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PROBATIONARY DRILL

Joint Information Centers (JIC) :

JIC include representatives of all players in managing the response. This may include jurisdictions, agencies, private entities or nongovernmental organizations.

JIC have procedures and protocols for communicating and coordinating effectively with other JIC

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PROBATIONARY DRILL

2. Preparedness:

Effective incident management begins with a host of preparedness activities, *well in advance of any potential incident, this includes*:

- Planning, training & exercises
- Personnel qualification & certification standards
- Equipment acquisition & certification standards
- Publication management process & activities
- Mutual aid agreement & Emergency Management Assistance Compacts

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PROBATIONARY DRILL

2. Preparedness:

Unlike ICS where if the Upper management fails the incident fails, with Preparedness the success or failure fall with the local jurisdiction.

How well the lowest level in the plan prepares ultimately decide the success of the operation.

The more prepared the **Members** are the more prepared the **agency** will be.

The more prepared the **Agency** is the more prepared **Battalion** will be.

The more prepared the **Battalion** is the more prepared the **County** will be.

The more prepared the **County** is the more prepared the **State** will be.

The more prepared the **State** is the more prepared the **Federal Government** will be.

As you can see although we are at the bottom of the food chain, we as members help decide the fate of a commands success.

Understand how the command system works is one of the 1st steps.

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PROBATIONARY DRILL

2. Preparedness:

Although it is important for Members to prepare themselves, the best results in **Managing preparedness** falls within the **Jurisdictions**.

Jurisdictions must develop several types of plans including:

- **Emergency Operation Plans** explaining how the jurisdiction will respond to emergencies.
- **Procedures** which include overviews, standards operating procedures or other critical information needed for a response.
- **Preparedness Plan** which describes how training needs will be identified and met, how resources will be obtained through mutual aid agreements and the equipment required for the hazards a the jurisdiction may face.
- **Corrective Action and Mitigation Plan** which includes activities required to implement procedures based from lessons learned for actual incidents or training exercises.
- **Recovery Plan** which describes the action to be taken to facilitate long term recovery.

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PROBATIONARY DRILL

2. Preparedness:

Under NIMS – the federal government calls for Personal Qualification and Certifications based on the National Standard of Emergency Response Personnel.

The standards will include training, experience, credentialing and physical and mental fitness.

Personnel who are certified to support **interstate** incidents will be required to meet this National qualification & certification standard.

Certification will also be required for equipment also – the equipment must fall within national equipment standards, guidelines and protocols.

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PROBATIONARY DRILL

2. Preparedness:

Another Key component in preparedness is **Mutual Aid Agreements** and **Emergency Management Assistance Compacts** (EMAC). These provide a means for one jurisdiction to provide additional resources or support another jurisdiction. (give or receive)

Although the fire service is up to speed with mutual aid agreements, they are lacking with EMAC. This is coming to agreements with vendors such as, emergency lighting generators, water, food, portable bathroom facilities, which could be needed at large scale incident.

The last component of preparedness is publication management. This fall within the federal government, they will start to manage a wide range of publication, conventions etc for qualification information and training courses for best practices.

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PROBATIONARY DRILL

3. Resource Management:

Resource Management involves 4 primary tasks:

- Establishing system for describing, inventorying, requesting and tracking resources
- Activating those systems prior to, during and after an incident
- Dispatching resources prior to, during and after an incident
- Deactivating or recalling resources during or after an incident.

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PROBATIONARY DRILL

3. Resource Management:

Effective Resource management can be achieved by:

- Advance planning – organizations working together before an incident and developing a plan to manage and use resources between organizations
- Resource identification and ordering -method to identify, order, mobilize and track resources
- Use of agreements – developing pre-incident agreements for provide needed resources
- Effective management – use validate practices to assure resources can be actually be achieved.

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PROBATIONARY DRILL

3. Resource Management:

Basically its recognizing what you may need and allows you to know how to get it when it is needed.

A national data base inventorying available resources has been established by NIMS and is maintained by the

Department of Homeland Security – Integration Center.

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PROBATIONARY DRILL

4. Support Technologies

Support technologies deal with a common operating window that is accessible across jurisdictions and agencies.

(willingness to meet the same objectives)

It also provides for common communications and data standards.

This includes computers, radios that can operate interagency, and cellular phone.

From **learned** large scale incidents, the 500 Freq. was born and will only be operated for emergency management. No matter where you go across the county, you'll be able to communicate with operating agencies. *Nassau County has been active on system since 2010?*

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PROBATIONARY DRILL

5. Ongoing Management & Maintenance :

NIMS needs to be an on going process and not pulled out when needs.

When utilized on everyday incidents, it becomes be more familiar when needed to at the that larger scale incidents.

Familiarity will make the large scale events more fluent & successful.

Plans put into effect need to be tested and edited as resources within jurisdiction change.

Plans need to reviewed periodically to see if they are still going to be effective today.

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PROBATIONARY DRILL

SAMPLE: FEMA NIMS IS-700 Test Questions:

1. **Which entity provides a structure for developing and delivering incident-related coordinated messages by developing, recommending, and executing public information plans and strategies?**

   A. Joint Information Operation
   B. Joint Information Base
   C. Joint Information System
   D. Joint Information Center

WESTBURY FIRE DEPARTMENT

PROBATIONARY DRILL

SAMPLE: FEMA NIMS IS-700 Test Questions:

1. **Which entity provides a structure for developing and delivering incident-related coordinated messages by developing, recommending, and executing public information plans and strategies?**

C. Joint Information System

by the Public Information officer
from the Joint Information Center

WESTBURY FIRE DEPARTMENT

PROBATIONARY DRILL

SAMPLE: FEMA NIMS IS-700 Test Questions:

2. Select the TRUE statement:

A. In a complex incident within a State, an Area Commander would request resources directly from DHS and FEMA.

B. Frequently jurisdictions and agencies self-dispatch resources in anticipation
of a need at the incident scene.

C. Prior to requesting assistance through intrastate mutual aid, a State must first ask the Federal Government for resources.

D. Typically requests for resources flow from the on-scene incident command through the local and State Emergency Operations Centers to the Federal Government.

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PROBATIONARY DRILL

SAMPLE: FEMA NIMS IS-700 Test Questions:

2. Select the TRUE statement:

A. In a complex incident within a State, an Area Commander would request resources directly from DHS and FEMA.

B. Frequently jurisdictions and agencies self-dispatch resources in anticipation of a need at the incident scene.

C. Prior to requesting assistance through intrastate mutual aid, a State must first ask the Federal Government for resources.(false)

D. Typically requests for resources flow from the on-scene incident command through the local and State Emergency Operations Centers to the Federal Government.

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PROBATIONARY DRILL

SAMPLE: FEMA NIMS IS-700 Test Questions:

3. Select the NIMS term that is defined as 'the architecture to support coordination for incident prioritization, critical resource allocation, communications systems integration, and information coordination.'

A. Command and Control Center
B. Multiagency Coordination System
C. Incident Management Team
D. Incident Operations Network

WESTBURY FIRE DEPARTMENT

PROBATIONARY DRILL

SAMPLE: FEMA NIMS IS-700 Test Questions:

3. Select the NIMS term that is defined as 'the architecture to support coordination for incident prioritization, critical resource allocation, communications systems integration, and information coordination.'

B. Multiagency Coordination System

WESTBURY FIRE DEPARTMENT

PROBATIONARY DRILL

SAMPLE: FEMA NIMS IS-700 Test Questions:

4. Exercises should:

- **Include multidisciplinary, multijurisdictional incidents.**
- **Include participation of private-sector and nongovernmental organizations.**
- **Cover aspects of preparedness plans, including activating mutual aid and assistance agreements.'**

A. Be repeated until performance is at an acceptable level.

B. Contain a mechanism for incorporating corrective actions.

C. Have consequences for inadequate performance.

D. Be based on the most catastrophic scenario that could affect the community.

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PROBATIONARY DRILL

SAMPLE: FEMA NIMS IS-700 Test Questions:

4. Exercises should:

- **Include multidisciplinary, multijurisdictional incidents.**
- **Include participation of private-sector and nongovernmental organizations.**
- **Cover aspects of preparedness plans, including activating mutual aid and assistance agreements.'**

B. Contain a mechanism for incorporating corrective actions.

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PROBATIONARY DRILL

SAMPLE: FEMA NIMS IS-700 Test Questions:

5. Interoperability:

A. Requires nongovernmental and private-sector organizations to purchase standardized communication equipment.

B. Primarily involves creating automated systems that allow for the sharing of sensitive incident information.

C. Is the ability of emergency management/response personnel to interact and work well together.

D. Involves oversight by the Federal Communications Commission for assigning emergency frequencies.

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PROBATIONARY DRILL

SAMPLE: FEMA NIMS IS-700 Test Questions:

5. Interoperability:

C. Is the ability of emergency management/response personnel to interact and work well together.

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PROBATIONARY DRILL

SAMPLE: FEMA NIMS IS-700 Test Questions:

6. The Joint Information System is:

A. The automated system used by the Situation Unit within the Planning Section to synthesize information and produce reports.

B. The framework for organizing, integrating, and coordinating the delivery of public information.

C. A 24/7 multiagency watch center that provides Federal prevention, protection, and preparedness coordination.

D. A set of guidelines and protocols for sharing sensitive and classified information during an incident response.

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PROBATIONARY DRILL

SAMPLE: FEMA NIMS IS-700 Test Questions:

6. The Joint Information System is:

B. The framework for organizing, integrating, and coordinating the delivery of public information.

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PROBATIONARY DRILL

SAMPLE: FEMA NIMS IS-700 Test Questions:

7. This structure is the physical location at which the coordination of information and resources to support incident management (on-scene operations) activities normally takes place.

A. Joint Command Post
B. Incident Command Post
C. Emergency Operations Center
D. Strategic Operations Center

WESTBURY FIRE DEPARTMENT

PROBATIONARY DRILL

SAMPLE: FEMA NIMS IS-700 Test Questions:

7. This structure is the physical location at which the coordination of information and resources to support incident management (on-scene operations) activities normally takes place.

C. Emergency Operations Center

WESTBURY FIRE DEPARTMENT

PROBATIONARY DRILL

SAMPLE: FEMA NIMS IS-700 Test Questions:

8. The Public Information Officer:

A. Serves as a press secretary for the Agency Executive or Senior Official during the incident.

B. Directs the Joint Information Center operation with the Emergency Operations Center.

C. Interfaces with the public and media and/or with other agencies regarding incident-related information requirements.

D. Controls messaging and limits the independence of other organizations participating in the incident.

WESTBURY FIRE DEPARTMENT

PROBATIONARY DRILL

SAMPLE: FEMA NIMS IS-700 Test Questions:

8. The Public Information Officer:

C. Interfaces with the public and media and/or with other agencies regarding incident-related information requirements.

WESTBURY FIRE DEPARTMENT

PROBATIONARY DRILL

SAMPLE: FEMA NIMS IS-700 Test Questions:

9. To better serve their constituents, elected and appointed officials should do the following, EXCEPT FOR:

A. Understand laws and regulations in their jurisdictions that pertain to emergency management and incident response.

B. Help to establish relationships (including mutual aid agreements and assistance agreements) with other jurisdictions and, as appropriate, with nongovernmental organizations and the private sector.

C. Provide guidance to their jurisdictions, departments, and/or agencies, with clearly stated policies for NIMS implementation.

D. Assume the role of incident commander for all incidents and direct the on-scene technical operations from the Emergency Operations Center.

WESTBURY FIRE DEPARTMENT

PROBATIONARY DRILL

SAMPLE: FEMA NIMS IS-700 Test Questions:

9. To better serve their constituents, elected and appointed officials should do the following, EXCEPT FOR:

D. Assume the role of **incident commander for all incidents** and direct the on-scene technical operations from the Emergency Operations Center.

WESTBURY FIRE DEPARTMENT

PROBATIONARY DRILL

SAMPLE: FEMA NIMS IS-700 Test Questions:

10. The act of directing, ordering, or controlling by virtue of explicit statutory, regulatory, or delegated authority at the field level is referred to as:

A. Direction
B. Coordination
C. Command
D. Leadership

WESTBURY FIRE DEPARTMENT

PROBATIONARY DRILL

SAMPLE: FEMA NIMS IS-700 Test Questions:

10. The act of directing, ordering, or controlling by virtue of explicit statutory, regulatory, or delegated authority at the field level is referred to as:

C. Command

WESTBURY FIRE DEPARTMENT

PROBATIONARY DRILL

SAMPLE: FEMA NIMS IS-700 Test Questions:

11. ICS encourages jurisdictions to use common terminology.
Common terminology:

A. Applies exclusively to the naming of facilities used by the Command Staff.
B. Is unique terminology that responders use when managing incidents.
C. Encourages the use of radio codes to communicate efficiently at incident site.
D. Uses plain English to allow personnel from different agencies to work together.

WESTBURY FIRE DEPARTMENT

PROBATIONARY DRILL

SAMPLE: FEMA NIMS IS-700 Test Questions:

11. ICS encourages jurisdictions to use common terminology.
Common terminology:

D. Uses plain English to allow personnel from different agencies to work together.

WESTBURY FIRE DEPARTMENT

PROBATIONARY DRILL

SAMPLE: FEMA NIMS IS-700 Test Questions:

12. Who is the individual responsible for all incident activities, including the development of strategies and tactics and the ordering and release of resources?

A. Emergency Operations Center Manager
B. Incident Commander
C. Operations Section Chief
D. Agency Executive or Senior Official

WESTBURY FIRE DEPARTMENT

PROBATIONARY DRILL

SAMPLE: FEMA NIMS IS-700 Test Questions:

12. Who is the individual responsible for all incident activities, including the development of strategies and tactics and the ordering and release of resources?

B. Incident Commander

WESTBURY FIRE DEPARTMENT

PROBATIONARY DRILL

SAMPLE: FEMA NIMS IS-700 Test Questions:

13. Which organization has line authority to oversee the management of multiple incidents being handled by separate Incident Command organizations?

A. Area Command
B. Multiagency Command
C. United Command
D. Joint Command

WESTBURY FIRE DEPARTMENT

PROBATIONARY DRILL

SAMPLE: FEMA NIMS IS-700 Test Questions:

13. Which organization has line authority to oversee the management of multiple incidents being handled by separate Incident Command organizations?

A. Area Command

WESTBURY FIRE DEPARTMENT

PROBATIONARY DRILL

SAMPLE: FEMA NIMS IS-700 Test Questions:

14. A basic premise of the NIMS and National Response Framework (NRF) is that:

A. Effective response relies on the readiness of response partners to self-dispatch to an incident scene.

B. Incidents should be managed at the lowest jurisdictional level possible.

C. Unity of effort and command results when responding jurisdictions and agencies are willing to relinquish their authorities.

D. Preparedness is inherently a government responsibility and does not require participation from nongovernmental organizations.

WESTBURY FIRE DEPARTMENT

PROBATIONARY DRILL

SAMPLE: FEMA NIMS IS-700 Test Questions:

14. A basic premise of the NIMS and National Response Framework (NRF) is that:

B. Incidents should be managed at the lowest jurisdictional level possible.

WESTBURY FIRE DEPARTMENT

PROBATIONARY DRILL

SAMPLE: FEMA NIMS IS-700 Test Questions:

15. Incident managers begin planning for the demobilization process:

A. As soon as possible to facilitate accountability of the resources.
B. When incident activities shift from response to recovery.
C. Right before the first resources are ready to be released.
D. After being requested by the Emergency Operations Center.

WESTBURY FIRE DEPARTMENT

PROBATIONARY DRILL

SAMPLE: FEMA NIMS IS-700 Test Questions:

15. Incident managers begin planning for the demobilization process:

A. As soon as possible to facilitate accountability of the resources.

WESTBURY FIRE DEPARTMENT

PROBATIONARY DRILL

SAMPLE: FEMA NIMS IS-700 Test Questions:

16. Which position is responsible for the direct management of all incident-related tactical activities?

A. Operations Section Chief
B. Finance/Administration Section Chief
C. Logistics Section Chief
D. Planning Section Chief

WESTBURY FIRE DEPARTMENT

PROBATIONARY DRILL

SAMPLE: FEMA NIMS IS-700 Test Questions:

16. Which position is responsible for the direct management of all incident-related tactical activities?

A. Operations Section Chief

WESTBURY FIRE DEPARTMENT

PROBATIONARY DRILL

SAMPLE: FEMA NIMS IS-700 Test Questions:

17. Unified Command:

A. Requires that employees report to several different Incident Commanders, each representing each jurisdiction.

B. Assigns a single Incident Commander to assume unity of command and make decisions for all jurisdictions.

C. Enables all agencies with responsibility to manage an incident together by establishing a common set of incident objectives and strategies.

D. Obligates all responsible agencies to pool their resources without consideration to the terms of mutual aid and assistance agreements.

WESTBURY FIRE DEPARTMENT

PROBATIONARY DRILL

SAMPLE: FEMA NIMS IS-700 Test Questions:

17. Unified Command:

C. Enables all agencies with responsibility to manage an incident together by establishing a common set of incident objectives and strategies.

WESTBURY FIRE DEPARTMENT

PROBATIONARY DRILL

SAMPLE: FEMA NIMS IS-700 Test Questions:

18. Homeland Security Presidential Directive 5 (HSPD-5) requires all Federal departments and agencies to:

A. Create NIMS strike teams that can manage incident operations if a local government fails to comply with NIMS.

B. Establish a panel that will evaluate activities at the State, tribal, and local levels to ensure compliance with NIMS.

C. Make adoption of NIMS by State, tribal, and local organizations a condition for Federal preparedness assistance (through grants, contracts, and other activities).

D. Implement NIMS as the doctrine for how best to organize and manage all routine, day-to-day department/agency operations.

WESTBURY FIRE DEPARTMENT

PROBATIONARY DRILL

SAMPLE: FEMA NIMS IS-700 Test Questions:

18. Homeland Security Presidential Directive 5 (HSPD-5) requires all Federal departments and agencies to:

C. Make adoption of NIMS by State, tribal, and local organizations a condition for Federal preparedness assistance (through grants, contracts, and other activities).

WESTBURY FIRE DEPARTMENT

PROBATIONARY DRILL

SAMPLE: FEMA NIMS IS-700 Test Questions:

19. The credentialing process involves an objective evaluation and documentation of an individual's:
Current certification, license, or degree,
Training and experience, and

A. Competence or proficiency.
B. Security clearance level.
C. Supervisory expertise.
D. Compensation amount.

WESTBURY FIRE DEPARTMENT

PROBATIONARY DRILL

SAMPLE: FEMA NIMS IS-700 Test Questions:

19. The credentialing process involves an objective evaluation and documentation of an individual's:
Current certification, license, or degree,
Training and experience, and

A. Competence or proficiency.

WESTBURY FIRE DEPARTMENT

PROBATIONARY DRILL

SAMPLE: FEMA NIMS IS-700 Test Questions:

20. HSPD-5 required the Secretary of Homeland Security to establish a mechanism for ensuring the ongoing management & maintenance of NIMS. The Secretary established the National Integration Center (NIC) to perform all of the following functions EXCEPT:

A. Facilitating the establishment and maintenance of a documentation and database system related to qualification, certification, and credentialing of emergency management/response personnel and organizations.

B. Inventorying and tracking all national resources and assets available for deployment in incidents managed using NIMS.

C. Promoting compatibility between national-level standards for NIMS and those developed by other public, private, and professional groups.

D. Developing assessment criteria for the various components of NIMS, as well as compliance requirements and timelines.

WESTBURY FIRE DEPARTMENT

PROBATIONARY DRILL

SAMPLE: FEMA NIMS IS-700 Test Questions:

20. HSPD-5 required the Secretary of Homeland Security to establish a mechanism for ensuring the ongoing management & maintenance of NIMS. The Secretary established the National Integration Center (NIC) to perform all of the following functions EXCEPT:

B. Inventorying and tracking all national resources and assets available for deployment in incidents managed using NIMS.

WESTBURY FIRE DEPARTMENT

PROBATIONARY DRILL

SAMPLE: FEMA NIMS IS-700 Test Questions:

21. In an Incident Command System organization, the term 'General Staff' refers to:

A. Any combination of personnel resources assembled to support a specific mission or operational need with common communications and a designated leader.

B. Generalists who are assigned to support Section Chiefs with functions such as administrative matters and documentation of incident events.

C. A person assigned by a cooperating agency or nongovernmental/private organization who has been delegated authority to make decisions affecting that agency's or organization's participation in incident management activities.

D. Incident management personnel organized according to function (i.e., Operations Section Chief, Planning Section Chief, Logistics Section Chief, and Finance/Administration Section Chief) and who report directly to the Incident Commander.

WESTBURY FIRE DEPARTMENT

PROBATIONARY DRILL

SAMPLE: FEMA NIMS IS-700 Test Questions:

21. In an Incident Command System organization, the term 'General Staff' refers to:

D. Incident management personnel organized according to function (i.e., Operations Section Chief, Planning Section Chief, Logistics Section Chief, and Finance/Administration Section Chief) and who report directly to the Incident Commander.

WESTBURY FIRE DEPARTMENT

PROBATIONARY DRILL

SAMPLE: FEMA NIMS IS-700 Test Questions:

22. Which of the following statements is FALSE?

A. NIMS is applicable across the full spectrum of potential incidents, regardless of cause, size, location, or complexity

B. NIMS is based on best practices collected from all levels of responders.

C. NIMS integrates best practices into a comprehensive, standardized framework.

D. NIMS specifies how resources will be allocated among jurisdictions.

WESTBURY FIRE DEPARTMENT

PROBATIONARY DRILL

SAMPLE: FEMA NIMS IS-700 Test Questions:

22. Which of the following statements is FALSE?

D. NIMS specifies how resources will be allocated among jurisdictions.

WESTBURY FIRE DEPARTMENT

PROBATIONARY DRILL

SAMPLE: FEMA NIMS IS-700 Test Questions:

23. The National Response Framework (NRF) presents the guiding principles that:

A. Provide the structure and mechanisms to ensure effective Federal support of State, tribal, and local related activities.

B. Are singly focused on improving Federal homeland security agencies' response to catastrophic natural hazards and terrorist-related incidents.

C. Supersede the National Incident Management System's framework when Federal agency and departments are assisting in a response.

D. Mandate specific operational plans for local responders to use when managing a wide range of incidents.

WESTBURY FIRE DEPARTMENT

PROBATIONARY DRILL

SAMPLE: FEMA NIMS IS-700 Test Questions:

23. The National Response Framework (NRF) presents the guiding principles that:

B. Are singly focused on improving Federal homeland security agencies' response to catastrophic natural hazards and terrorist-related incidents.

WESTBURY FIRE DEPARTMENT

PROBATIONARY DRILL

SAMPLE: FEMA NIMS IS-700 Test Questions:

24. Mutual aid agreements and assistance agreements provide:

A. Steps for ensuring the continuity of government at the local, tribal, and State levels following a catastrophic incident.
B. Strategies for restoring critical infrastructure that affects multiple sectors and jurisdictions across specified geographical areas.
C. Mechanisms to quickly obtain emergency assistance in the form of personnel, equipment, materials, and other associated services.
D. Lists of specialized codes for facilitating communication among responders representing different departments, agencies, and jurisdictions.

WESTBURY FIRE DEPARTMENT

PROBATIONARY DRILL

SAMPLE: FEMA NIMS IS-700 Test Questions:

24. Mutual aid agreements and assistance agreements provide:

C. Mechanisms to quickly obtain emergency assistance in the form of personnel, equipment, materials, and other associated services.

WESTBURY FIRE DEPARTMENT

PROBATIONARY DRILL

SAMPLE: FEMA NIMS IS-700 Test Questions:

25. Select the statement below that best describes one benefit of NIMS.

A. Creation of a comprehensive tactical plan for operational incident management that can be used for every incident.

B. Establishment of standardized organizational structures that improve integration among jurisdictions and disciplines.

C. Funding for additional staff and other resources to address operations that are not NIMS compliant.

D. Development of comprehensive strategies for addressing the management of international events.

WESTBURY FIRE DEPARTMENT

PROBATIONARY DRILL

SAMPLE: FEMA NIMS IS-700 Test Questions:

25. Select the statement below that best describes one benefit of NIMS.

B. Establishment of standardized organizational structures that improve integration among jurisdictions and disciplines.

WESTBURY FIRE DEPARTMENT

PROBATIONARY DRILL

SAMPLE: FEMA NIMS IS-700 Test Questions:

26. Select the TRUE statement about the Incident Action Plan.

A. Establishes the overall incident objectives, strategies, and tactics.
B. Covers the entire incident from start to finish.
C. Must be a written document that is distributed to all responders.
D. Presents detailed cost accounting for all incident resources.

WESTBURY FIRE DEPARTMENT

PROBATIONARY DRILL

SAMPLE: FEMA NIMS IS-700 Test Questions:

26. Select the TRUE statement about the Incident Action Plan.

A. Establishes the overall incident objectives, strategies, and tactics.

WESTBURY FIRE DEPARTMENT

PROBATIONARY DRILL

FEMA – NIMS IS-700

- It's important to know IS-700
- It lays the groundwork of all the other ICS
- All Firefighter/EMS/PD need to Know IS 100, IS 200 & IS 800

  and is a requirement to be in this dept. CD- #62

WESTBURY FIRE DEPARTMENT

PROBATIONARY DRILL

This are links to take course and complete the test at end.

IS – 700 : Introduction to National Incident Management System

IS – 800 : Introduction to National Response Framework

IS – 100 : Introduction to Incident Command System

IS – 200 : Incident Command System – Single Resource & Initial Actions

Certificate of completion will be emailed to you – Print and drop in Instructors mail box.
Reminder all 4 are required to be removed from probation and id to be done on your time.