Hazardous Materials Shipping Description (Hazmat) and Emergency Response Database User Reference Guide

January 12, 2009

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Introduction (Return to Table of Content)

1. Purpose

The Hazardous Materials Shipping Description Data Base (HMSDDB) is comprised of hazardous materials regulatory shipping description information. The information has been drawn from the pertinent U.S., Canadian and International regulatory authorities. The data is formatted in discrete fields and labeled in such a manner that it can be programmatically identified and retrieved.

Commodity entries in the data base are those which have been assigned a series 48 STCC or 49 Hazardous Material Code. Appropriate U.S., Canadian, and International regulatory information bas been matched to each STCC product class description.

When using data base information, bear in mind that the shipper is responsible for properly classifying and describing hazardous materials. Generally the basic description, which includes the proper shipping name, hazard class, ID number and packing group (when required), should agree with that provided by the shipper. Discrepancies between a data base entry and a shipper prepared shipping paper should be settled in favor of the shipper's documentation.

The Hazardous Materials Shipping Description Data Base (HMSDDB) Guide provides information necessary for creating software to access and print data base entries. The guide consists of:

- A record layout showing where each data element for each commodity entry is located on data base records;
- A detailed description of data base elements; and
- An algorithm describing how various data base elements should be pieced together to create a proper shipping description.

Any questions or comments regarding the HMDB or HMDB Users Guide should be directed to:

Hazardous Materials Manager
Bureau of Explosives Department
Transportation Technology Center, Inc.
55500 DOT Road
Pueblo, CO 81001

2. Subscription Rules and Policies

Subscription to any of the Hazardous Material Shipping Description and/or Emergency Response database must submit to the Manager of Hazardous Materials at the Transportation Technology Center, Inc. the Hazmat/ER database application form.

3. Questions

For questions about the *Hazardous Materials Shipping Description and Emergency Response Database*, contact the Manager of Hazardous Materials at the Transportation Technology Center, Inc.

Section I. Procedure Guide

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The following is a step-by-step procedure for locating and using the HMDB information. The procedure is listed in the order that the data should appear on the shipping papers, in accordance with the Inter-Industry Task Group Standard Shipping Paper Format.

If a data field is blank or not present for a given commodity entry then either the information is not applicable for the commodity, or the AAR did not have the appropriate information to enter in the database.

A. CREATING SHIPPING DESCRIPTIONS FOR COMMODITIES TO BE MOVED WITHIN THE UNITED STATES (Return to Table of Content)

The Hazardous materials Shipping Description Database (HMDB) contains DOT shipping description information for the US Department of Transportation regulations. This information can be found on records with a Regulatory Authority (RA) value of “N” or “A”. The step-by-step procedure for locating and using HMDB information follows.

DOT REGULATIONS

1.) Search the database for records with the desired Haz Mat Code, the Regulatory Authority (RA) equal to US (N) or All (A), and the Record Label (RL) equal to A. This record contains a proper Shipping Name (PSN) for the commodity.

If the More Than One (MO) flag does not equal 0, then there is more than one PSN authorized by the U.S. Department of Transportation (DOT) for this commodity. Each set of records for each authorized PSN is numerically identified in the MO field. Select the appropriate PSN for the commodity.

2.) If the Special Proper Shipping Name Flag (SF) equals “S”, DOT allows the PSN words to appear on the shipping papers in any sequence.

3.) If the SF flag equals “M”, then one of the words on the record should be used to modify the PSN. Each of the words is separated by a “,”.

4.) If the Not Otherwise Specified (NS) flag equals N, select either the Technical Name (TN), or EPA Waste Stream Numbers (WSN) or EPA Waste Characteristics (EC). The TN, if present is located on records with the same Haz Mat Code, RA equals A, and RL equals C. There are some commodity entries in the database that do require TN but the TN record is not present in the database. In these instances, the TN must be entered from the shipping document. The WSN and EC may be located on the record with the same Haz Mat Code; RA equals U and RL equals D.

5.) If the Marine Pollutant Flag (MP) equals M, select the words “MARINE POLLUTANT”, and then select the Marine Pollutant Constituent (MPC). The MPC is located on records with the same Haz Mat Code, RA equal to A, and RL equal to H. Verify the MPC and quantity in each package with the information with the shipping document. If the MPC is part of the Proper Shipping Name it is not required to repeat it using the MPC entry from the database. Be advised that the MPC may not be present in the quantity required for the “MARINE POLLUTANT” entry.

6.) Search the database for the record with the same Haz Mat Code, RA equal to N, Occurrence Counter equal to 01, and RL equals E. Read data elements on the record.

7.) If the DOTHC equals CL, select “Combustible Liquid”; if the DOTHC equals OD, select ORM-D”; else select the existing DOTHC.

8.) Select the DOT UN/NA Identification Number (UN/NA-N).

9.) Select the Packing Group corresponding to the Packing Group (PK) code as follows:

PK Code	Packing Group
1	I
2	II
3	III
A	I, II or III
B	I or II
C	II or III
D	I or III

10.) If the Reportable Quantity Code (RQ) equals R, then select the Hazardous Substance Constituent (HSC). The HSC is located on records with the same Haz Mat Code, RA equal to A, and RL equal to G. Verify the HSC and quantity in each package with the information on the shipping document. If the HSC is part of the Proper Shipping Name it is not required to repeat it using the HSC entry. Be advised that the entry of the RQ notation and the HSC is not required if the amount in each package is less than the RQ amount.

11.) If the Poison Materials Indicator (PI) equals P, I or B, select either the statement “Poison”, or “Inhalation Hazard”, or “Poison - Inhalation Hazard”, respectively.

12.) If the Hazard Zone indicator (HZ) equals A, B, C or D, select either “Hazard Zone A”, “Hazard Zone B”, “Hazard Zone C” or “Hazard Zone D” respectively.

13.) If the Dangerous When Wet Indicator (DW) equals D, select the statement “Dangerous When Wet”.

14.) Additional Descriptive Information (ADI) if present may be selected next. ADI is located on records with the same Haz Mat code, RA equal to A and RL equal to I.

15.) Select the Primary Placard Notation corresponding to the DOT Primary Placard Notation (PPN-N) code.

16.) Select the Secondary Placard Notation corresponding to the DOT Secondary Placard Notation (SPN-N) code.

17.) Select the Hazard Placard Endorsement corresponding to the Hazard Placard Endorsement (PE) code.

B. CREATING SHIPPING DESCRIPTIONS FOR COMMODITIES TO BE MOVED FROM THE UNITED STATES TO CANADA (Return to Table of Content)

1.) Search the data base for records with the desired Haz Mat Code, the Regulatory Authority (RA) equal to US (U), and the Record Label (RL) equal to A. This record contains a Proper Shipping Name (PSN) for the commodity.

If the More Than One (MO) flag does not equal 0, then there is more than one PSN authorized by DOT for this commodity. Each set of records for each authorized PSN is numerically identified in the MO field. Select the appropriate PSN for this commodity.

2) If the Special Proper Shipping Name Flag (SF) equals S, DOT allows the PSN words to appear on the shipping papers in any sequence.

3) If the SF flag equals M, then one of the words on the record should be used to modify the PSN.

4) If the Not Otherwise Specified (NS) flag equals N, select either the Technical Name (TN), or EPA Waste Stream Numbers (WSN). The TN, if present, is located on records with the same Haz Mat Code, RA equal to A, and RL equal to C. The WSN if present, is located on the record with the same Haz Mat Code, RA equal to U, and RL equal to D. (There are some commodity entries where the PSN must be augmented by a TN or WSN, but the RL = C and RL =D records are not present. In these instances, the TN or WSN must be entered from the shipping document.)

5) If the Marine Pollutant Flag (MP) equals M, select the words "MARINE POLLUTANT", and then select the Marine Pollutant Constituent (MPC). The MPC is located on records with the same Haz Mat Code, RA equal to A, and RL equal to H. Verify the MPC and quantity in each package with the information with the shipping document. If the MPC is part of the Proper Shipping Name it is not required to repeat it using the MPC entry from the data base. Be advised that the MPC may not be present in the quantity required for the "MARINE POLLUTANT" entry.

6) Search the data base for the record with the same Haz Mat Code, RA equal to U, and RL equal to E, and for the record with the same Haz Mat Code, RA equal to C, and RL equal to E. Read all data elements on both records.

7) Select the DOT Hazard Class, corresponding to the DOT Hazard Class (DHC) code.

8) Select the DOT Secondary Hazard Class (if it exists), corresponding to the DOT Secondary Hazard Class (DSC) code.

9) Select the DOT UN/NA Identification Number (UN/NA-U).

10) If the Reportable Quantity Code (RQ) equals R, then select the Hazardous Substance Constituent (HSC). The HSC is located on records with the same Haz Mat Code, RA equal to A, and RL equal to G. Verify the HSC and quantity in each package with the information on the shipping document. If the HSC is part of the Proper Shipping Name it is not required to repeat it using the HSC entry. Be advised that the entry of the RQ notation and the HSC is not required if the amount in each package is less than the RQ amount.

11) If the Poison Material Indicator (PI) equals P, I or B, select either the statement "Poison", or "Inhalation Hazard", or "Poison - Inhalation Hazard", respectively.

12) Additional Descriptive Information (ADI) (if present) may be selected next. ADI is located on records with the same Haz Mat Code, RA equal to A, and RL equal to I.

13) If the US Origin - Canadian Destination Indicator (UO) equals U than select the Canadian PSN, Canadian Primary Classification (CPC), Canadian Subsidiary Classification (CSC), Canadian UN/NA Identification Number (UN/NA-C), and Canadian Primary Placard Notation (PPN-C). (Follow steps 1, 2, 3, 4, 5, 6, 7, 8, & 13 in Section C.)

14) If the Special Commodity Indicator (SC) equals S, select the statement "Special Commodity"; or

    If the Special Commodity Indicator (SC) equals P, select the statement "Special Commodity" for commodities in Packing Group I.

15) If the Emergency Response Plan Indicator (ER) equals E, then an Emergency Response Plan number and telephone number may need to appear on the shipping papers for this commodity shipment; or

    If the Emergency Response Plan Indicator (ER) equals P, then an Emergency Response Plan number and telephone number may need to appear on the shipping papers for this commodity shipment if its packing group designation is I.

16) If the US Origin - Canadian Destination Indicator (UO) does not equal U, then: select the Primary Placard Notation, corresponding to the DOT Primary Placard Notation (PPN-U) code, and select the Secondary Placard Notation, corresponding to the DOT Secondary Placard Notation (SPN-U) code.

17) Select the Hazard Placard Endorsement, corresponding to the Hazard Placard Endorsement (PE) code.

C. CREATING SHIPPING DESCRIPTIONS FOR COMMODITIES TO BE MOVED WITHIN CANADA (Return to Table of Content)

1) Search the data base for the record with the desired Haz Mat Code, the Regulatory Authority (RA) equal Canada (C), and the Record Label (RL) equal to A. This record contains a Proper Shipping Name (PSN) for the commodity.

   If the More Than One (MO) flag does not equal 0, then there is more than one PSN authorized by DOT for this commodity. Each set of records for each authorized PSN is numerically identified in the MO field. Select the appropriate PSN for this commodity.

2) If the Special Proper Shipping Name Flag (SF) equals S, Canadian regulations allow the PSN words to appear on the shipping papers in any sequence.

3) If the SF flag equals M, then one of the words on the record should be used to modify the PSN.

4) If the Not Otherwise Specified (NS) flag equals N, select the Technical Name (TN). The TN, if present, is located on records with the same Haz Mat Code, RA equal to A, and RL equal to C. (There are some commodity entries where the PSN must be augmented by a TN, but the RL = C record is not present. In these instances, the TN must be entered from the shipping document.)

5) Search the data base for the record with the same Haz Mat Code, RA equal to C, and RL equal to E. Read all data elements on the record.

6) Select the Canadian Primary Classification (CPC).

7) Select the Canadian Subsidiary Classification (CSC).

8) Select the Canadian UN/NA Identification Number (UN/NA-C).

9) If the Subsidiary Risk Indicator (SR) does not equal blank, then an SR statement may need to appear on the shipping papers, as follows:

SR Code	Subsidiary Risk
E	Potentially Explosive
I	Potentially Very Damaging To Eyes
B	Potentially Explosive and Potentially Very Damaging To Eyes
X	Potentially Explosive for commodities in packing group I
Y	Potentially Very Damaging To Eyes for commodities in Packing Group I
Z	Potentially Explosive and Potentially Very Damaging To Eyes for commodities in Packing Group I

10) Select the Packing Group corresponding to the Packing Group (PK) code as follows:

PK Code	Packing Group
1	I
2	II
3	III
A	I, II or III
B	I or II
C	II or III
D	I or III

11) If the Special Commodity Indicator (SC) equals S, select the statement "Special Commodity"; or

If the Special Commodity Indicator (SC) equals P, select the statement "Special Commodity" for commodities in Packing Group I.

12) If the Emergency Response Plan Indicator (ER) equals E, then an Emergency Response Plan number and telephone number may need to appear on the shipping papers for this commodity shipment; or

If the Emergency Response Plan Indicator (ER) equals P, than an Emergency Response Plan number and telephone number, may need to appear on the shipping papers for this commodity shipment if its packing group designation is I.

13) Additional Descriptive Information (ADI) may be selected next. ADI is located on records with the same Haz Mat Code, RA equal to A, and RL equal to I.

14) Select the Primary Placard Notation, corresponding to the Canadian Primary Placard Notation (PPN-C) code.

15) Select the Secondary Placard Notation, corresponding to the Canadian Secondary Placard Notation (SPN-C) code.

D. CREATING SHIPPING DESCRIPTIONS FOR COMMODITIES TO BE MOVED FROM CANADA TO THE UNITED STATES (Return to Table of Content)

1) Search the data base for records with the desired Haz Mat Code, the Regulatory Authority (RA) equal Canada (C), and the Record Label (RL) equal to A. This record contains a Proper Shipping Name (PSN) for the commodity.

   If the More Than One (MO) flag does not equal 0, then there is more than one PSN authorized by Canadian regulations for this commodity. Each set of records for each authorized PSN is numerically identified in the MO field. Select the appropriate PSN for this commodity.

2) If the Special Proper Shipping Name Flag (SF) equals S, Canadian regulations allow the PSN words to appear on the shipping papers in any sequence.

3) If the SF flag equals M, then one of the words on the record should be used to modify the PSN.

4) If the Not Otherwise Specified (NS) flag equals N, select the Technical Name (TN). The TN, if present, is located on records with the same Haz Mat Code, RA equal to A, and RL equal to C. (There are some commodity entries where the PSN must be augmented by a TN, but the RL = C record is not present. In these instances, the TN must be entered from the shipping document.)

5) If the Marine Pollutant Flag (MP) equals M, select the words "MARINE POLLUTANT", and then select the Marine Pollutant Constituent (MPC). The MPC is located on records with the same Haz Mat Code, RA equal to A, and RL equal to H.

6) Search the data base for the record with the same Haz Mat Code, RA equal to C, and RL equal to E. Read all data elements on the record.

7) Select the Canadian Primary Classification (CPC).

8) Select the Canadian Subsidiary Classifications (CSC).

9) Select the Canadian UN/NA Identification Number (UN/NA-C).

10) Select the Packing Group corresponding to the Packing Group (PK) code as follows:

PK Code	Packing Group
1	I
2	II
3	III
A	I, II or III
B	I or II
C	II or III
D	I or III

11) If the Reportable Quantity Code (RQ) equals R, then select the Hazardous Substance Constituent (HSC). The HSC may be located on records with the same Haz Mat Code, RA equal to A, and RL equal to G.

12) If the Poison Material Indicator (PI) equals P, I or B, select the statement "Poison".

13) Additional Descriptive Information (ADI) may be selected next. ADI is located on records with the same Haz Mat Code, RA equal to A, and RL equal to I.

14) If the Canadian Origin - US Destination Indicator (CO) equals C than select the U.S. PSN and DOT Hazard Classification. (Follow steps 1, 2, 3, 5, & 6 in Section A.)

15) Select the Primary Placard Notation, corresponding to the Canadian Primary Placard Notation (PPN-C) code.

16) Select the Secondary Placard Notation, from corresponding to the Canadian Secondary Placard Notation (SPN-C) code.

17) If the Special Commodity Indicator (SC) equals S, select the statement "Special Commodity"; or

    If the Special Commodity Indicator (SC) equals P, select the statement "Special Commodity" for commodities in packing group I.

18) If the Emergency Response Plan Indicator (ER) equals E, then an Emergency Response Plan number and telephone number may need to appear on the shipping papers for this commodity shipment; or

    If the Emergency Response Plan Indicator (ER) equals P, then an Emergency Response Plan number and telephone number may need to appear on the shipping papers for this commodity shipment if its Packing Group designation is I.

19) If the Subsidiary Risk Indicator (SR) does not equal blank, then an SR statement may need to appear on the shipping papers, as follows:

SR Code	Subsidiary Risk
E	Potentially Explosive
I	Potentially Very Damaging To Eyes
B	Potentially Explosive and Potentially Very Damaging To Eyes
X	Potentially Explosive for commodities in packing group I
Y	Potentially Very Damaging To Eyes for commodities in Packing Group I
Z	Potentially Explosive and Potentially Very Damaging To Eyes for commodities in Packing Group I

E. CREATING SHIPPING DESCRIPTIONS FOR COMMODITIES TO BE MOVED FROM OUTSIDE THE UNITED STATES AND CANADA(Return to Table of Content)

1) Search the data base for records with the desired Haz Mat Code, the Regulatory Authority (RA) equal International (I), and the Record Label (RL) equal to A. This record contains a Proper Shipping Name (PSN) for the commodity.

   If the More Than One (MO) flag does not equal 0, then there is more than one PSN authorized by International regulations for this commodity. Each set of records for each authorized PSN is numerically identified in the MO field. Select the appropriate PSN for this commodity.

2) If the Special Proper Shipping Name Flag (SF) equals S, International regulations allow the PSN words to appear on the shipping papers in any sequence .

3) If the SF flag equals M, then one of the words on the record should be used to modify the PSN.

4) If the Not Otherwise Specified (NS) flag equals N, select the Technical Name (TN). The TN, if present, is located on records with the same Haz Mat Code, RA equal to A, and RL equal to C. (There are some commodity entries where the PSN must be augmented by a TN, but the RL = C record is not present. In these instances, the TN must be entered from the shipping document.)

5) If the Marine Pollutant Flag (MP) equals M, select the words "MARINE POLLUTANT", and then select the Marine Pollutant Constituent (MPC). The MPC is located on records with the same Haz Mat Code, RA equal to A, and RL equal to H.

6) Search the data base for the record with the same Haz Mat Code, RA equal to I, and RL equal to E. Read all data elements on the record.

7) Select the IMO Classification (IHC).

8) Select the Packing Group corresponding to the Packing Group (PK) code as follows:

PK Code	Packing Group
1	I
2	II
3	III
A	I, II or III
B	I or II
C	II or III
D	I or III

9) Select the International UN Identification Number (UN-I).

10) Additional Descriptive Information (ADI) (if present) may be selected next. ADI is located on records with the same Haz Mat Code, RA equal to A, and RL equal to I.

Section II. Output Layout Structure

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1. Long File Version for US, Canada, and International Regulatory Agencies (3949 byte)

Field	Data Description	Position	Form	Column	Regulatory Agency	Regulation Reference
1	Hazardous Materials Response Code	7	A	1-7		Not applicable
2	STCC Number	7	A	8-14		Not applicable
3	Transaction Date	8	A	15-22		Not applicable
4	Transaction Time	6	A	23-28		Not applicable
5	Status Code	1	A	29-29		Not applicable
6	Effective Date	8	A	30-37		Not applicable
7	Header –1	2	A	38-39		Not applicable
8	Header – 2	3	A	40-42		Not applicable
9	Header – 3	4	A	43-46		Not applicable
10	Header – 4	5	A	47-51		Not applicable
11	15 Character Product Description	15	A	52-66		Not applicable
12	Alternative Number	2	A	67-68		Not applicable
13	Expiration Date	8	A	69-76		Not applicable
14	Product Shipping Alpha Description	250	A	77-326		Not applicable
15	Primary Hazard Class or Division	4	A	327-330	International	Section 5.4.1.4.1.3
16	N.O.S. Indicator	1	A	331-331	International	Section 5.4.1.4.3.1
17	Technical Name	125	A	332-456	International	Section 5.4.1.4.3.1
18	UN No.	6	A	457-462	International	Section 5.4.1.4.1.1
19	Packing Group	1	A	463-463	International	Section 5.4.1.4.1.5
20	Poison Materials Indicator	1	A	464-464	International	Not required
21	Primary Placard Notation	2	A	465-466	International	Not required-use US one
22	Proper Shipping Name (PSN)	125	A	467-591	International	Section 5.4.1.4.1.2
23	Primary Hazard Class or Division	4	A	592-595	Canada	Section 3.5(1)(c)(ii)
24	Subsidiary Hazard Class or Division	9	A	596-604	Canada	Section 3.5(1)(c)(iv)
25	Canadian Origin US Destination Flag	1	A	605-605	Canada	Section 10.1
26	Emergency Response Plan (ERP) Indicator	4	A	606-609	Canada	Section 3.6(1)

Field	Data Description	Position	Form	Column	Regulatory Agency	Regulation Reference
27	Primary Hazard Placard Notation	2	A	610-611	Canada	I don't think it is required. I emailed Bob Kirnan at CN for help.
28	Special Commodity Indicator	1	A	612-612	Canada	No longer required
29	Subsidiary Risk Indicator	1	A	613-613	Canada	No longer required
30	N.O.S. Indicator	1	A	614-614	Canada	Section 3.5(1)(c)(i)(A)
31	Secondary Hazard Placard Notation	2	A	615-616	Canada	I don't think it is required. I emailed Bob Kirnan at CN for help.
32	Technical Name	125	A	617-741	Canada	Section 3.5(1)(c)(i)(A)
33	UN No.	6	A	742-747	Canada	Section 3.5(1)(c)(v)
34	Packing Group	1	A	748-748	Canada	Section 3.5(1)(c)(vi)
35	Poison Materials Indicator	1	A	749-749	Canada	Not required in Canada
36	Proper Shipping Name (PSN)	125	A	750-874	Canada	Section 3.5(1)(c)(i)
37	U.S. Environmental Protection Agency (EPA) Waste Characteristic	3	A	875-877	US	172.203(c) & 172.203(k)(i) I don't think the field number is appropriate. It should be four . They are referring to those listed in Appendix A, page 208 bottom of column 1 beginning with D001. You need to get clarification from Paul Williams or the Committee
38	U.S. Environmental Protection Agency (EPA) Waste Stream No	18	A	878-895	US	172.203(c) & 172.203(k)(i)
39	Hazard Placard Endorsement	2	A	896-897	US	No regulatory requirement
40	Primary Hazard Class or Division	4	A	898-901	US	172.202(a)(3)
41	Subsidiary Hazard Class or Division	6	A	902-907	US	172.202(a)(3)
42	Hazard Zone	1	A	908-908	US	172.203(m)
43	N.O.S. Indicator	1	A	909-909	US	172.203(k)
44	Secondary Hazard Placard Notation	2	A	910-911	US	No regulatory requirement
45	Technical Name	125	A	912-1036	US	172.203(k)
46	UN or NA No	6	A	1037-1042	US	172.202(a)(1)
47	U. S. Origin Canada Destination Indicator	1	A	1043-1043	US	172.202(a)(3)

Field	Data Description	Position	Form	Column	Regulatory Agency	Regulation Reference
48	Packing Group	1	A	1044-1044	US	171.22 & 172.23
49	Poison Materials Indicator	1	A	1045-1045	US	172.203(m)
50	Primary Placard Notation	2	A	1046-1047	US	No regulatory requirement
51	Proper Shipping Name (PSN)	125	A	1048-1172	US	172.202(a)(3)
52	OT-55 Flag	1	A	1173-1173		OT-55
53	Dangerous When Wet	1	A	1174-1174		No longer a requirement for this information on the shipping papers
54	Reportable Quantity Flag	1	A	1175-1175		172.203(c)
55	Marine Pollutant Flag	1	A	1176-1176		172.203(l)
56	Hazardous Substance Name	125	A	1177-1301		172.203(c)
57	Marine Pollutant Name	125	A	1302-1426		172.203(l)
58	Primary Hazard Class or Division 2	4	A	1427-1430	Canada	I don't think Canada has a material with two primary hazards. Suggest Matt sorts the file for any materials with this element. Assigned
59	Special Proper Shipping Name Flag	1	A	1431-1431	Canada	No such requirement authorizes this.
60	Special Proper Shipping Name Flag	1	A	1432-1432	International	No such requirement authorizes this.
61	Special Proper Shipping Name Flag	1	A	1433-1433	US	No such requirement authorizes this.
62	Intermodal Indicator	1	A	1434-1434	Canada	Not applicable-
63	Intermodal Indicator	1	A	1435-1435	International	Not applicable

Field	Data Description	Position	Form	Column	Regulatory Agency	Regulation Reference
64	Intermodal Indicator	1	A	1436-1436	US	Not applicable
65	Approved Tank Car	2	A	1437-1438	Canada	Reserved for future
66	Approved Tank Car	2	A	1439-1440	US	Reserved for future
67	Alpha Description	250	A	1441-1690		Not applicable
68	Product Class Description	250	A	1691-1940		Not applicable
69	Secondary Placard Notation	2	A	1941-1942	International	Not required-use US one
70	Subsidiary Hazard Class or Division	9	A	1943-1951	International	Section 5.4.1.4.1.4
71	Deletion Date	8	A	1952-1959		Not applicable
72	Alternative Proper Shipping Name (PSN)	625	A	1960-2584	Canada	Required if Schedule 1, column 2 lists more than one PSN in roman type
73	Alternative Proper Shipping Name (PSN)	625	A	2585-3209	International	Required if Part 3—Dangerous Goods List and limited quantity exceptions, column 2 lists more than one PSN in upper case roman bold.
74	Alternative Proper Shipping Name (PSN)	625	A	3210-3834	US	Required if 172.101 Table, column 2 lists more than one PSN in roman or roman bold if using the Tariff
75	Product Class Descriptions	114	A	3835-3949		Not applicable

A. Data Element Descriptions for Long File Version (3949 byte) *(Return to Table of Content)*

Please note: (The term International or International Maritime Organization (IMO) are synonymous)

1. **Hazardous Material Response Code (7 Character Alpha)**

   The Hazardous Material Response Code is a unique seven (7) digit code used to classify a commodity or group of commodities. The first two digits of the HMRC are either 48 or 49. *48 – Hazardous Waste (these codes will never have a STCC number associated)*
   49 – Hazardous Material Response Code (these codes will always have an associated STCC number)

2. **STCC Number (7 Character Alpha)**

   The Standard Transportation Commodity Code (STCC) Number contains a product class STCC code that corresponds to the Hazardous Material Response Code (HMRC) (appears for 49-series only).

3. **Transaction Date (8 Character Alpha)**

   The Transaction Date is a code (CCYYMMDD) that indicates the date that this STCC number was added, expired or when the most recent change took place.

4. **Transaction Time (6 Character Alpha)**

   The Transaction Time is a code (HHMMSS) that indicates the time that the add, expire or change took place.

5. **Status Code (1 Character Alpha)**

   The Status Code is a code that indicates the type of transaction. This field may contain three (3) possible values; 1, 2, or 3.
   1 – Expire
   2 – Add
   3 - Change

6. **Effective Date (8 Character Alpha)**

   The Effective Date is a code (CCYYMMDD) contained the date that the STCC number is made effective.

7. **Header-1 (2 Character Alpha)**

   Header-1 is a code which indicates the Major Industry Group of all STCC numbers which begin with the same two (2) digits.

8. Header-2 (3 Character Alpha)

Header-2 is a code which indicates the Minor Industry Group of all STCC numbers which begin with the same three (3) digits.

9. Header-3 (4 Character Alpha)

Header-3 is a code which indicates the Industry of all STCC numbers which begin with the same four (4) digits.

10. Header-4 (5 Character Alpha).

Header-4 is a code which indicates the Product Class of all STCC numbers which begin with the same five (5) digits.

11. 15 Character Product Description (15 Character Alpha)

The 15 Character Product Description is a shortened version of the complete commodity description. This information is pulled from the Railinc STCC database automatically.

12. Alternative Number (2 Character Alpha)

The Alternative Number is the total number of additional Proper Shipping Names (PSN's) for Canada, International, and U.S. DOT.

13. Expiration Date (8 Character Alpha)

The Expiration Date is a code (CCYYMMDD) indicating the date that the record is to no longer be retained in the on-line file and thereby officially expires and is eligible to be used again. It is eligible to be used again 5 years after the record is initially marked for expiration. If the field is blank, the record has not been marked for expiration.

14. Proper Shipping Alpha Description (25 Character Alpha; repeated 10 times)

The Proper Shipping Alpha is the 25 Character description of the commodity as it is listed in the Alphabetic section of the Standard Transportation Commodity Code Publication. This information is pulled from the Railinc STCC database automatically.

15. Primary Hazard Class or Division (4 Character Alpha) *(International)*

The International Maritime Organization (IMO) Class contains the hazard class required by the IMO.

16. N.O.S. Indicator (1 Character Alpha) *(International)*

The Not Otherwise Specified (N.O.S.) Indicator is a flag to indicate that the International Proper Shipping Name must be augmented with a Technical Name.

N = The Proper Shipping Name must be augmented
Blank = not applicable

17. Technical Name (25 Character Alpha, repeated 5 times) *(International)*

If not blank, the field contains the Technical Name required to augment the NOS (not otherwise specified) flagged Proper Shipping Names. (See field 16) If blank and field 16 is flagged the information must be obtained from the original shipping paper.

18. UN No. (6 Character Alpha) *(International)*

The United Nations (UN) number is the UN identification number required by International regulations.

19. Packing Group (1 Character Alpha) *(International)*

1 = Packing group I
2 = Packing group II
3 = Packing group III
A = Packing groups I, II or III
B = Packing groups I or II
C = Packing groups II or III
D = Packing groups I or III
Blank – No Packing group

20. Poison Materials Indicator (1 Character Alpha) *(International)*

The Poison Materials Indicator is a code which indicates specific statements required for poisonous substances.

P = Poison (needs to be removed!!) (Note: not required in IMO regulations.)
I = Inhalation hazard
B = Poison Inhalation hazard
Blank = not applicable

21. Primary Placard Notation (2 Character Alpha) *(International)*

The Primary Placard Notation (Code) for IMO. See Appendix B for proper values. Although not required by IMO, the value entered is the same as US.

22. Proper Shipping Name (25 Character Alpha, repeated 5 times) *(International)*

The Proper Shipping Name is the name(s) of the hazardous material required by International regulations.

23. Primary Hazard Class or Division (4 Character Alpha) *(Canada)*

The Canadian Primary Hazard Class or Division that is required by Canada.

24. Subsidiary Hazard Class or Division (3 Character Alpha; repeated 3 times) *(Canada)*

There can be a maximum of three subsidiary hazard classes required by Canada can be assigned to a dangerous good.

25. Canada Origin US Destination Flag (1 Character Alpha) *(Canada)*

This field contains a flag to indicate those dangerous goods that require special shipping descriptions when being shipped from Canada to the United States, choose one of the following;

C = The commodity description must include special information
Blank = not applicable.

26. Emergency Response Plan "ERP" (4 Character Alpha) *(Canada)*

This field contains a flag to indicate that Canadian regulations may require that an Emergency Response Plan number and telephone number appear on the shipping paper. Choose one of the following;

E = ERP requirements may apply
P = ERP requirements may apply to Packing Group I commodities only.
Blank = not applicable

27. Primary Placard Notation (2 Character Alpha) *(Canada)*

The Primary Placard Notation contains a code corresponding to the Canadian primary placard notation for the commodity. See appendix A for valid codes and corresponding Primary Placard Notations.

28. Special Commodity Indicator (1 Character Alpha) *(Canada)* (Note: no longer a requirement in Canada.)

This field contains a flag to indicate that Canadian regulations designate "SPECIAL COMMODITY" on the shipping papers, choose one of the following;

S = The statement "SPECIAL COMMODITY" must appear on the shipping papers.
P = The statement "SPECIAL COMMODITY" must appear on the shipping papers for packing group I commodities.
Blank – not applicable

29. Subsidiary Risk Indicator (1 Character Alpha) *(Canada)* (Note: no longer a requirement in Canada.)

This field contains a codes corresponding to Canadian required information regarding Subsidiary Risks associated with the commodity, choose one of the following:

E = Potentially explosive
I = Potentially very damaging to eyes
X = Potentially explosive applies to Packing Group I only
B = Potentially explosive and potentially very damaging to eyes
Y = Potentially very damaging to eyes applies to Packing Group I only
Z = Potentially explosive and potentially very damaging to eyes applies to Packing Group I only
Blank = not applicable

30. N.O.S. Indicator (1 Character Alpha) *(Canada)??*

The Not Otherwise Specified (N.O.S.) Indicator is a flag to indicate that the Proper Shipping Name must be augmented with a Technical Name, EPA Characteristic, or Waste Stream Number.

N = The Proper Shipping Name must be augmented
Blank – not applicable

31. Secondary Placard Notation (2 Character Alpha) *(Canada)*

The Secondary Placard Notation is a code that corresponds to the Canadian secondary hazard placard notation for the commodity. See appendix A for valid codes and corresponding Primary Placard Notations.

32. Technical Name (25 Character Alpha; repeated 5 times) *(Canada)*

If not blank, the field contains the Technical Name required to augment the NOS (not otherwise specified) flagged Proper Shipping Names. (See field 30) If blank and field 30 is flagged the information must be obtained from the original shipping paper.

33. UN/NA No. (6 Character Alpha) *(Canada)*

The United Nations/North America (UN/NA) number is the UN/NA identification number required by Canada.

34. Packing Group (1 Character Alpha) *(Canada)*

1 = Packing Group I
2 = Packing Group II
3 = Packing Group III
A = Packing Groups I, II or III
B = Packing Groups I or II
C = Packing Groups II or III
D = Packing Groups I or III
Blank – No Packing Group

35. Poison Materials Indicator (1 Character Alpha) *(Canada)*

The Poison Materials Indicator is a code which indicates specific statements required for poisonous substances.

P = Poison (needs to be removed!!) (Note: not required by Canada)
I = Inhalation hazard
B = Poison Inhalation hazard
Blank = not ~~a poisonous substance~~ applicable *(Reason: since we are deleting P the current wording is now misleading.)*

36. Proper Shipping Name (25 Character Alpha; repeated 5 times) *(Canada)*

The Proper Shipping Name contains the hazardous materials shipping name(s) required by Canadian regulations.

37. EPA Waste Characteristic (1 Character Alpha, repeated 3 times) *(US)*

This field contains one to three codes corresponding to the EPA Waste Characteristic. This field must appear in association with EPA Waste Characteristic. This field must appear in association with the Proper Shipping Name, of some manifested hazardous wastes. Chose one of the following:

C = EPA Corrosivity
I = EPA Ignitability
R = EPA Reactivity
T = EPA Toxicity
Blank = not applicable

38. EPA Waste Stream Number (6 Character Alpha; repeated 3 times) *(US)*

This field contains one to three EPA Waste Stream Numbers, each within parenthesis, that is required with the Proper Shipping Name for certain manifested Hazardous Wastes. Enter nothing if not applicable.

39. Hazardous Placard Endorsement (2 Character Alpha) *(US)*

The US Hazardous Placard Endorsement contains a code that identifies required placard endorsement statements. Chose one of the following;
XA – Explosives
EP – Explosives and Poison Gas
DA – Dangerous
RM – Radioactive Material
GZ – Poison Gas Zone A
LZ – Poison PG I Zone A

40. Primary Hazard Class or Division (4 Character Alpha) *(US)*

The U.S. DOT Hazard Class is the hazard class assigned by the U.S.

41. Subsidiary Hazard Class or Division (3 Character Alpha; repeated 2 times) *(US)*

The U.S. DOT Secondary Class is the secondary or tertiary hazard class that applies to U.S. shipments.

42. Hazard Zone (1 Character Alpha) *(US)*

This field contains the DOT assigned Inhalation Toxicity Hazard Zone designation. Choose one of the following:

A = Hazard Zone A.
B = Hazard Zone B.
C = Hazard Zone C.
D = Hazard Zone D.
Blank = not applicable.

43. N.O.S. Indicator (1 Character Alpha) *(US)*

The Not Otherwise Specified (N.O.S.) Indicator is a flag to indicate that the US Proper Shipping Name must be augmented with a Technical Name, EPA Characteristic, or Waste Stream Number.

N = The Proper Shipping Name must be augmented
Blank = not applicable

44. Secondary Placard Notation (2 Character Alpha) *(US)*

The Secondary Hazard Placard Notation is a code that corresponds to the U.S. DOT secondary hazard placard notation for the commodity. (Note: SPN-N is a short file code.)

45. Technical Name (25 Character Alpha; repeated 5 times) *(US)*

If not blank, the field contains the Technical Name required to augment the Not Otherwise Specified (NOS) flag Proper Shipping Names. (See field 43) If this field is blank and field 43 is flagged the information must be obtained from the original shipping paper.

46. UN/NA No. (6 Character Alpha) *(US)*

The United Nations/North American (UN/NA) number is the UN/NA identification number required by U.S. DOT regulations.

47. US Origin Canada Destination Indicator (1 Character Alpha) *(US)*

This field contains a flag to indicate those commodities that require special shipping descriptions when being shipped from U.S. to Canada choose the following;

U = The commodity description must include special information.
Blank = Not applicable.

48. Packing Group (1 Character Alpha) *(US)*

1 = Packing Group I
2 = Packing Group II
3 = Packing Group III
A = Packing Groups I, II or III
B = Packing Groups I or II
C = Packing Groups II or III
D = Packing Groups I or III
Blank – No Packing Group

49. US DOT Poison Materials Indicator (1 Character Alpha) *(US)*

The Poison Materials Indicator is a code which indicates specific statements required by the U.S. for poisonous substances.

P = Poison (needs to be removed!!) (Note: not required in US regulations.)
I = Inhalation hazard
B = Poison Inhalation hazard
Blank = not ~~a poisonous substance~~ applicable *(Reason: since we are deleting P the current wording is now misleading.)*

50. Primary Placard Notation (2 Character Alpha) *(US)*

The Primary Placard Notation contains a code corresponding to the U.S. DOT primary placard notation (PPN-N) for the commodity.

51. US DOT Proper Shipping Name (25 Character Alpha; repeated 5 times) *(US)*

The Proper Shipping Name contains the hazardous materials shipping name(s) required by U.S. DOT regulations.

52. OT-55 Flag (1 Character Alpha) *(US)*

The Operations/Transportation-55 (OT-55) field is a flag used to identify those commodities for which Circular OT 55 "KEY TRAIN" AND "KEY ROUTES" apply. One of the following codes must be entered:

P = Poison inhalation
F = Flammable gas
E = Environmentally sensitive chemical
X = Class A Explosives or Class 1.1 and 1.2
R = Radioactive
Blank = OT-55 restrictions do not apply

53. Dangerous When Wet Indicator (1 Character Alpha) (Note: since the data is entered in the main menu it applies to all.)

The Dangerous When Wet Indicator was a code that used to indicate whether or not the US requires the commodity description statement "Dangerous When Wet" on shipping papers. The section in 49 CFR 172.203(J) no longer exist. There for there is no regulation requiring the shipping papers to display the text "Dangerous When Wet." As of 1/1/09 if any HMRC has this field with a "D" value it is for historic purposes only.

D = The commodity description requires the phrase "Dangerous When Wet".
Blank = not applicable

54. Reportable Quantity Flag (21 Character Alpha) *(US)*

The Reportable Quantity is a flag to indicate that the US EPA has assigned a Reportable Quantity to a chemical component of the commodity.

R = A Reportable Quantity has been assigned
Blank = No Reportable Quantity

55. Marine Pollutant Flag (1 Character Alpha) *(US)*

The Marine Pollutant Flag indicates whether U.S. DOT had designated the commodity as a Marine Pollutant.

M = The commodity is designated as a Marine Pollutant
Blank = The commodity has not been designated as a Marine Pollutant

56. US DOT Hazardous Substance Name (25 Character Alpha; repeated 5 times) *(US)*

The name of the hazardous substance constituent when the RQ indicator = R.

57. US DOT Marine Pollutant Name (25 Character Alpha; repeated 5 times)

The name of the appropriate chemical component when the Marine Pollutant indicator = M.

58. Canadian Primary Classification 2 (4 Character Alpha) *(Canadian)*

The Canadian Primary Classification 2 covers those situations where Canada has assigned two primary classifications to a dangerous good. (See field 23 for the other primary classification). (Note: I don't think this applies anymore. Matt: sort for the entries in this field.)

59. Canadian Special Proper Shipping Name Flag (1 Character Alpha) *(Canadian)*

The Canadian Special Proper Shipping Name Flag notifies the user of the following:

S = The PSN can appear in any sequence
M = Only one of the modifiers must be used
Blank = not applicable

60. IMO Special Proper Shipping Name Flag (1 Character Alpha)

The IMO Special Proper Shipping Name Flag notifies the user of the following:

S = The PSN can appear in any sequence
M = Only one of the modifiers must be used
Blank = not applicable

61. US DOT Special Proper Shipping Name Flag (1 Character Alpha) *(US)*

The U.S. DOT Special Proper Shipping Name Flag notifies the user of the following:

S = The PSN can appear in any sequence
M = Only one of the modifiers must be used
Blank = not applicable

62. Canadian Intermodal Indicator (1 Character Alpha) *(Canadian)*

The Canadian Intermodal Indicator indicates that the hazardous material description is the appropriate one to use for intermodal shipments.

I = The HAZMAT code is appropriate
Blank = It is not appropriate

63. IMO Intermodal Indicator (1 Character Alpha) *(International)*

The IMO Intermodal Indicator indicates that the hazardous material description is the appropriate one to use for intermodal shipments.

I = The HAZMAT code is appropriate
Blank = It is not appropriate

64. US DOT Intermodal Indicator (1 Character Alpha) *(US)*

The US DOT Intermodal Indicator indicates that the hazardous material description is the appropriate one to use for intermodal shipments.

I = The HAZMAT code is appropriate
Blank = It is not appropriate

65. Canadian Approved Tank Car (2 Character Alpha) *(Canadian)*

The Canadian Approved Tank Car indicator identifies a code specifying the minimum tank car specifications authorized to transport the material. When developed, Table I will be a look-up table containing codes identifying the acceptable tank cars. If this field is blank it indicates that there is no minimum specification tank cars required or as this point the information has not been entered.

66. US DOT Approved Tank Car (2 Character Alpha) *(US)*

The U.S. DOT Approved Tank Car indicator identifies a code specifying the minimum tank car specifications authorized to transport the material. When developed, Table I will be a look-up table containing codes identifying the acceptable tank cars. If this field is blank it indicates that there are no minimum specification tank cars required or as this point the information has not been entered.

67. Alpha Description (25 Character Alpha; 10 times)

An alternative Alpha description provided when the Proper Shipping Name and the Technical Name provide inadequate description for the material. This field is provided for publication of the Alpha index to the Hazardous Materials Directory and for file look-ups.

68. Product Class Description (25 Character Alpha, 10 times)

The Product Class Description of the STCC bridge. This is the exact description found in the STCC 6001 Publication.

69. Secondary Placard Notation I (2 Character Alpha) *(International)*

The Secondary Placard Notation (Code) for IMO. See appendix B for proper values. Although not required by IMO, the value entered is the same as US.

70. IMO Subsidiary Classification (3 Character Alpha; repeated 3 times) *(International)*

The IMO Subsidiary Classification is the secondary and tertiary hazards assigned by IMO.

71. Deletion Date (8 Character Alpha)

The Deletion Date indicates the effective date (CCYYMMDD) of the deletion of a hazardous material from the Master File.

The following Proper Shipping Name (PSN) descriptions are variable depending upon the number of additional PSN=s (Canadian, International and U.S. DOT). Each type will have a maximum of five additional PSN's.

72. Canadian Proper Shipping Name (125 Character Alpha, 5 times) *(Canadian)*

The Canadian Proper Shipping Name contains the additional hazardous materials shipping name(s) authorized by Canadian regulations.

73. IMO Proper Shipping Name (125 Character Alpha, 5 times) *(International)*

The IMO Proper Shipping Name contains the additional hazardous materials shipping name(s) authorized by International Maritime Organization regulations.

74. U.S. DOT Proper Shipping Name (125 Character Alpha, 5 times) *(US)*

The U.S. DOT Proper Shipping Name contains the additional hazardous materials shipping name(s) authorized by U.S. Department of Transportation regulations.

75. Product Class Descriptions (Continued) (25 Character Alpha, 6 times)

The Product Class Description of the STCC bridge. This is the exact description found in the STCC 6001 Publications.

2. Short File Version for US, Canada, and International Regulatory (80 byte)

(Return to Table of Content)

Field	Data Description	Positions	Format	Columns
1	STCC-FLAT-STCC	7	A	1 – 7
2	STCC-FLAT-RL	1	A	8
3	STCC-FLAT-RA	1	A	9
4	STCC-FLAT-MO	1	A	10
5	STCC-FLAT-OC	2	A	11 – 12
6	STCC-FLAT-DATE-YYMM	4	A	13 – 16
7	STCC-FLAT-DATE-MM	2	A	17 – 18
8	STCC-FLAT-DEW	6	A	19 – 24
9	STCC-FLAT-VARIABLES	47	A	25 – 71
10	STCC-FLAT-TC	1	A	72
11	STCC-FLAT- DATE-DD	2	A	73 – 74
12	STCC-FLAT-TIME	6	A	75 – 80

A. Data Element Descriptions for Short File Version *(Return to Table of Content)*

All Records			
Field Name	Position	Field Name	Position
STCC	1 - 7	RL	8
RA	9	MO	10
OC	11 - 12	DATE	13 - 16
DEW	17 - 22	TC	55

When RL = A and RA = A, N, C or I			
Field Name	Position	Field Name	Position
OT	23	SF	24
NS	25	MP	26
PSN	27 - 51		

When RL = D and RA = U			
Field Name	Position	Field Name	Position
WSN	23 - 28	WSN	29 - 34
WSN	35 - 40	EC	41
EC	42	EC	43

When RL = E and RA = N			
Field Name	Position	Field Name	Position
DOTHC	23 - 26	PK	27
UN/NA-N	28 - 33	PI	34
DW	35	PPN-N	36 - 37
SPN-N	38 - 39	UO	40
CO	41	DOTSC	42 - 44
DOTSC	45 - 47	HZ	48
(Reserved)	49	(Reserved)	50
RQ	51	PE	52 - 53
II	55	ATC-N	56 - 57

When RL = E and RA = C			
Field Name	Position	Field Name	Position
CPC	23 - 26	PK	27
UN/NA-C	28 - 33	PI	34
DW	35	PPN-C	36 - 37
SPN-C	38 - 39	UO	40
CO	41	CEC	42 - 44
CSC	45 - 47	CSC	48 - 50
RQ	51	SR	52
ER	53	SC	54
II	55	ATC-N	56 - 57
CPC-2	58 - 61		

When RL = E and RA = I			
Field Name	Position	Field Name	Position
IHC	23 - 26	PK	27
UN/NA-I	28 - 33	PI	34
DW	35	ISC	42 - 44
ISC	45 - 47	ISC	48 - 50
RQ	51	II	55

When RL = C and RA = A		When RL = G and RA = A	
Field Name	Position	Field Name	Position
TN	27 - 51	HSC	27 - 51
When RL = H and RA = A		**When RL = I and RA = A**	
Field Name	Position	Field Name	Position
MPC	27 - 51	ADI	27 - 51

When RL = M and RA = A			
Field Name	Position	Field Name	Position
PCSTCC4	23 - 26	PCSTCC DESC	27 - 51
PCSTCC3	52 - 54		

PPN-N, PPN-C, SPN-N AND SPN-C	
1A = PLACARDED CLASS 1.1A	4C = PLACARDED CLASS 1.4C
1B = PLACARDED CLASS 1.1B	4D = PLACARDED CLASS 1.4D
1C = PLACARDED CLASS 1.1C	4E = PLACARDED CLASS 1.4E
1D = PLACARDED CLASS 1.1D	4F = PLACARDED CLASS 1.4F
1E = PLACARDED CLASS 1.1E	4G = PLACARDED CLASS 1.4G
1F = PLACARDED CLASS 1.1F	4S = PLACARDED CLASS 1.4S
1G = PLACARDED CLASS 1.1G	5D = PLACARDED CLASS 1.5D
1J = PLACARDED CLASS 1.1J	6N = PLACARDED CLASS 1.6
1L = PLACARDED CLASS 1.1L	C3 = PLACARDED CLASS 3
2B = PLACARDED CLASS 1.2B	C9 = PLACARDED CLASS 9
2C = PLACARDED CLASS 1.2C	CA = PLACARDED CLASS 2.3
2D = PLACARDED CLASS 1.2D	CC = PLACARDED CLASS 8
2E = PLACARDED CLASS 1.2E	CD = PLACARDED DANGER
2F = PLACARDED CLASS 1.2F	CF = PLACARDED CLASS 2.1
2G = PLACARDED CLASS 1.2G	CN = PLACARDED CLASS 2.2
2H = PLACARDED CLASS 1.2H	CO = PLACARDED CLASS 5.1
2J = PLACARDED CLASS 1.2J	CP = PLACARDED CLASS 6.1
2K = PLACARDED CLASS 1.2K	CR = PLACARDED CLASS 7
2L = PLACARDED CLASS 1.2L	CS = PLACARDED CLASS 4.1
3C = PLACARDED CLASS 1.3C	CW = PLACARDED CLASS 4.3
3F = PLACARDED CLASS 1.3F	OC = PLACARDED CLASS 5.2
3G = PLACARDED CLASS 1.2G	SC = PLACARDED CLASS 4.2
3H = PLACARDED CLASS 1.3H	X1 = PLACARDED CLASS 1.1
3J = PLACARDED CLASS 1.3J	X2 = PLACARDED CLASS 1.2
3K = PLACARDED CLASS 1.3K	X3 = PLACARDED CLASS 1.3

3L = PLACARDED CLASS 1.3L	X4 = PLACARDED CLASS 1.4
4B = PLACARDED CLASS 1.4B	X5 = PLACARDED CLASS 1.5
CL = COMBUSTIBLE	N9 = either 3 CLASS 9 or MARKED "UN/NA NUMBER" 1
CM = CORROSIVE	NF = PGIII OR POISON 4
DA = DANGEROUS	NG = NONFLAMMABLE GAS
DW = DANGEROUS WHEN WE	NP = NO PLACARDS REQUIRE
FG = FLAMMABLE GAS	NS = SPONTANEOUSLY COMBUSTIBLE
FL = FLAMMABLE	OM = OXIDIZER
FS = FLAMMABLE SOLID	OP = ORGANIC PEROXIDE
MA = MARKED "UN/NA NUMBE	OX = OXYGEN
N1 = EXPLOSIVES 1.1	PA = POISON GAS 2
N2 = EXPLOSIVES 1.2	PB = POISON 5
N3 = EXPLOSIVES 1.3	PC = POISON GAS 2.3, ZONE C OR D
N4 = EXPLOSIVES 1.4	PL = POISON 2
N5 = EXPLOSIVES 1.5	PO = POISON GAS
N6 = EXPLOSIVES 1.6	RM = RADIOACTIVE

PE FIELDS	
XA - EXPLOSIVES	EP - EXPLOSIVES AND POISON GAS
DA - DANGEROUS	RM - RADIOACTIVE MATERIAL
GZ - POISON GAS ZONE A	LZ - POISON PG I ZONE A

Field Name	Length	Field Description	Valid Data Values
ADI Additional Descriptive Information	25	ADI field contains commodity description information, or other relevant information.	Alpha - Numeric, up to 25 characters in each field, (Maximum of 10 occurrences)
ATC-N Allowable Tank Cars	2	ATC-N field obtains values which will provide the user a list of minimum specification tank cars permitted for transportation of the material associated with that particular Haz Mat Code.	Alpha - Numeric, 2 characters. Blank - Most Car Types Permitted
CO Canadian Origin - US Destination Indicator	1	CO field is a flag to indicate those commodities that require special shipping descriptions when they are shipped from Canada to the US.	C = The commodity description must include special information when it is shipped across the Canadian - US Border. Blank - Not Applicable
CPC Canadian Primary Classification	4	CPC field contains the Canadian primary classification.	Alpha - Numeric, 1 to 4 characters, left justified.
CPC-2 Canadian Second Primary Classification	4	CPC-2 field contains the Canadian second primary classification.	Alpha - Numeric, 1 to 4 characters, left justified.
CSC Canadian Subsidiary Classification	3	CSC fields contain the Canadian subsidiary classification	Alpha - Numeric, 1 to 3 characters, left justified. (Maximum of 3 occurrences) Blank - Not Applicable
Date Date	4	Date field contains the year and month that the commodity entry was added or last modified	Numeric, YYMM (1 Occurrence on each record)

Field Name	Length	Field Description	Valid Data Values

DOTHC
DOT Hazard Class
	4	DOTHC field contains the U.S. DOT hazard class	Alpha - Numeric, 1 to 4 characters, left justified
			
			If DOTHC = CL, then
			Class = Combustible Liquid
			
			If DOTHC = OD, then
			Class = ORM-D
			
			Otherwise, Class = DOTHC Value

DOTSC DOT Secondary Class	3	DOTSC field contains the U.S. DOT secondary hazard class, if required	Alpha - Numeric, 1 to 3 characters, left justified (Maximum of 2 occurrences)
DW Dangerous When Wet Indicator	1	DW field is a flag to indicate that the commodity requires the statement “Dangerous When Wet” on shipping papers.	D = Commodity description may require the phrase “Dangerous When Wet” Blank - Not Applicable
EC EPA Waste Characteristics	1	EC field contains a code corresponding to EPA’s waste characteristic. The EC must appear, in association with the Proper Shipping Name, on some manifested hazardous wastes.	C = EPA Corrosivity I = EPA Ignitability R = EPA Reactivity T = EPA Toxicity (Maximum of 3 occurrences) Blank - Not Applicable
ER ERP Indicator	1	ER field is a flag to indicate that Canadian regulations may require that an Emergency Response Plant (ERP) number and telephone number appear on the shipping paper.	E = ERP requirements may apply P = ERP requirements may apply to Packing Group I commodities only Blank - Not Applicable

Field Name	Length	Field Description	Valid Data Values
HSC Hazardous Substance Constituent	25	HSC field contains the name of the appropriate chemical component(s) when the Reportable Quantity Code equals R.	Alpha - Numeric, up to 25 characters in each field. (Maximum of 5 occurrences) Blank - Not Applicable
HZ Hazard Zone	1	HZ field contains the DOT assigned Inhalation Toxicity Hazard Zone designation.	Alpha - Numeric, 1 character A = Hazard Zone A B = Hazard Zone B C = Hazard Zone C D = Hazard Zone D Blank - Not Applicable
IHC IMO Class	4	IHC field contains the hazard class required by IMO	Alpha - Numeric, 1 to 4 characters, left justified. If first character is A, B, C or D then; A = 3.1, 3.2 or 3.3 B = 3.1 or 3.2 C = 3.2 or 3.3 Otherwise = value
II Intermodal Indicator	1	II field is a flag to designate that this Haz Mat Code is appropriate for Intermodal shipments	I = The Haz Mat Code is appropriate for use in Intermodal shipments Blank - Not Applicable

Field Name	Length	Field Description	Valid Data Values
ISC International Subsidiary Classification	3	ISC fields contain the international subsidiary classification(s)	Alpha - Numeric, 1 to 3 characters, left justified. If first character is A, B, C or D then; A = 3.1, 3.2 or 3.3 B = 3.1 or 3.2 C = 3.2 or 3.3 Otherwise = value (Maximum of 3 occurrences) Blank - Not Applicable
MO More Than One PSN	1	MO field is a flag to indicate that the pertinent Regulatory Authority permits more than on Proper Shipping Name for the Commodity. Each Proper Shipping Name permitted by each authority, will be entered in the database for a given commodity	O = Regulatory Authority allows only one Proper Shipping Name for the commodity. I = The record contains the first of two or more Proper Shipping Names permitted for the commodity.
MP Marine Pollutant Indicator	1	MP field is a flag to indicate whether US DOT has designated the commodity as a “Marine Pollutant”.	M = The commodity has been designated as a Marine Pollutant Blank - Not Applicable
MPC Marine Pollutant Constituent	25	MPC field contains the name of the appropriate chemical component(s) when the Marine Pollutant Indicator Code equals M	Alpha - Numeric, up to 25 characters in each field (Maximum of 5 occurrences) Blank - Not Applicable
NS N.O.S. Indicator	1	NS field is a flag to indicate that the Proper Shipping Name must be augmented with a Technical Name, EPA Characteristic, or Waste Stream Number.	N = The Proper Shipping Name must be augmented Blank - Not Applicable

Field Name	Length	Field Description	Valid Data Values
OC Occurrence Counter	2	OC field contains a counter to indicate that the data on the record is a continuation of data from the previous record.	Numeric, 01 to 10
OT OT-55	1	OT field is a flag used to identify those commodities for which Circular OT-55 “Key Train” and “Key Routes” apply.	P = Poison Inhalation Hazard F = Flammable Gas E = Environmentally Sensitive Chemical X = Division 1.1 and 1.2 explosives Blank = OT-55 restrictions do not apply
PCSTCC DESC Product Class STCC Description	25	PCSTCC DESC field contains the Product Classification STCC Description which corresponds to the Haz Mat Code	Alpha - Numeric, up to 25 characters in each field (Maximum 10 occurrences)
PCSTCC3 Product Class STCC Last 3 Digits	3	PCSTCC3 field contains the last three digits of the product class STCC number for this commodity.	Numeric (One occurrence for each commodity)
PCSTCC4 Product Class STTC First 4 Digits	4	PCSTCC4 field contains the first four digits of the product class STCC number for this commodity.	Numeric (One occurrence for each commodity)
PE Hazardous Placard Endorsement	2	PE field contains a code that identifies required placard endorsement statements.	Alpha - Numeric, Blank - Not Applicable

Field Name	Length	Field Description	Valid Data Values
PI Poison Materials Indicator	1	PI field contains a code to indicate specific statements required for poisonous substances.	P = Poison I = Inhalation Hazard B = Poison Inhalation Hazard Blank - Not Applicable
PK Packing Group	1	PK fields contain codes corresponding to Canadian, International and DOT Packing Group designations.	1 = I 2 = II 3 = III A = I, II or III B = I or II C = II or III D = I or III Blank - No Packing Group
PPN-N / PPN-C Primary Placard Notation	2	PPN field contains a code corresponding to DOT primary placard notation (PPN-N) or Canadian primary placard notation (PPN-C) for the commodity	Alpha - Numeric, See PPN Data Field Table Blank - Not Applicable
PSN Proper Shipping Name	25	PSN field contains the hazardous materials shipping Name(s) required by the US, Canada and International regulations.	Alpha - Numeric, up to 25 characters in each field (Maximum of 5 occurrences) Blank - Not Applicable

Field Name	Length	Field Description	Valid Data Values
RA Regulatory Authority	1	RA field contains a character to indicate that the record contains information pertinent to either the United States, Canadian or International regulatory requirements or to all three authorities.	N = US C = Canada I = International A = Pertinent to all three authorities U = US
RL Record Label	1	RL field contains a character that identifies which groups of the various data fields are present in the record	A = OT, SF, NS, MP & PSN C = TN D = EPA Waste Stream Number, EPA Waste Characteristics E = Hazard Class, ID Number and other related information G = EPA Hazardous Substance Name H = Marine Pollutant Constituent I = Additional Descriptive Information M = Product Class Information

Field Name	Length	Field Description	Valid Data Values
RQ Reportable Quantity	1	RQ field is a flag to indicate that the US EPA has assigned a reportable quantity to a chemical component of the commodity.	R = Material has a reportable quantity (The RQ notation is not required if the amount in each container is less than the RQ for the material.) Blank - Not Applicable
SC Special Commodity Indicator	1	SC field is a flag to indicate that Canadian regulations designate the commodity a “special commodity”	S = The statement “Special Commodities” must appear on the shipping papers P = The statement “Special Commodity” must appear on the shipping papers for Packing Group I commodities Blank - Not Applicable
SF Special PSN Flag	1	SF field is a flag to indicate either that the sequence of Proper Shipping name words may vary, or that one of the modifying terms on the record should appear as part of the Proper Shipping Name.	S = The Regulatory Authority allows the Proper Shipping Name words to appear in any sequence M = One of the words on the record should be used with the Proper Shipping Name Blank - Not Applicable
SPN-C / SPN-N Secondary Hazard Placard Notation	2	SPN field contains a code corresponding to the DOT secondary hazard placards notation (SPN-N) or the Canadian secondary hazard placard notation (SPN-I) for the commodity	Alpha - Numeric, table has valid SPN codes. Blank - Not Applicable

Field Name	Length	Field Description	Valid Data Values
SR Subsidiary Risk Indicator	1	SR field contains codes corresponding to Canadian required information regarding subsidiary risk associated with the commodity	E = Potentially explosive I = Potentially very damaging to the eyes B = Potentially explosive and potentially very damaging to the eyes X = Potentially explosive applies to Packing Group I only Y = Potentially very damaging to the eyes, applies to Packing Group I only Z = Potentially explosive and potentially very damaging to the eyes, applies to Packing Group I only Blank - Not Applicable
STCC Haz Mat Code	7	STCC field contains the unique seven digit identification number assigned to the commodity by the AAR.	Numeric. (Occurs on each line of information for the commodity entry.)
TC Transaction Code	1	TC field contains a code for updating entries in the AAR database	1 = All records for this STCC entry have been deleted from the database since the last update 2 = The entry has been added to the database since the last update 3 = All records for this STCC entry have been modified since the last update

Field Name	Length	Field Description	Valid Data Values
TN Technical Name	25	TN field contains the information that must augment some NOS flagged Proper Shipping Names	Up to 25 Alpha - Numeric characters in each field (Maximum of 5 occurrences) Blank - Not Applicable
UN/NA-N, UN/NA-C, UN-I UN/NA Number	6	UN/NA field contains the UN/NA identification number required by DOT (UN/NA-N), Canada (UN/NA-C) and International (UN-I)	Alpha - Numeric Blank - Not Applicable
UO US Origin - Canadian Destination Indicator	1	UO field is a flag to indicate those commodities that require special shipping descriptions when they are shipped from the US to Canada	U = The commodity description must include special information when it is shipped across the US - Canadian border Blank - Not Applicable
WSN EPA Waste Stream Number	6	WSN field contains the EPA waste stream number that is required with the Proper Shipping Name for certain manifested hazardous wastes	Alpha - Numeric, within parenthesis (Maximum of 3 occurrences) Blank - Not Applicable

B. Record Description for Short File Version *(Return to Table of Content)*

Record Type "AC"

Field

1 Hazardous Material Response Code (1st element in Long File)

2 - 3 "AC" – Proper Shipping Name (Canadian)

4 1 if Additional Proper Shipping Names
0 if No Additional Proper Shipping Names

5 Number of "AC" Record Type Occurrences per Hazmat Code

6 Transaction Date YYYY / Year (3rd element in Long File)

7 Transaction Date MM / Month (3rd element in Long File)

8 Spaces

9 47 bytes sub divided as follows:
- 1st byte – OT55 Flag (52nd element in Long File)
- 2nd byte – Canadian Special Proper Shipping Name Flag (59th element in Long File)
- 3rd byte – NOS indicator (30th element in Long File)
- 4th byte – Marine Pollutant Flag (55th element in Long File)
- 5th byte through 29th byte – Proper Shipping Name Canadian (36th element in Long File and 72nd element in Long File, each "AC" record holds a 25 byte segment)
- 30th byte through 47th byte – SPACES

10 Transaction Code (5th element in Long File)

11 SPACES, program code commented - SPACES moved to field

12 SPACES, program code commented - SPACES moved to field

Record Type "AN"

Field

1 Hazardous Material Response Code (1st element in Long File)

2 - 3 "AN" – Proper Shipping Name (United States)

4 1 if Additional Proper Shipping Names
0 if No Additional Proper Shipping Names

5 Number of "AN" Record Type Occurrences per Hazmat Code

6 Transaction Date YYYY / Year (3rd element in Long File)

7 Transaction Date MM / Month (3rd element in Long File)

8 Spaces

9 47 bytes sub divided as follows:
- 1st byte – OT55 Flag (52nd element in Long File)
- 2nd byte – United States Special Proper Shipping Name Flag (61st element in Long File)
- 3rd byte – NOS Indicator (43rd element in Long File)
- 4th byte – Marine Pollutant Flag (55th element in Long File)
- 5th byte through 29th byte – Proper Shipping Name United States (51st element in Long File and 74th element in Long File, each "AN" record holds a 25 byte segment)
- 30th byte through 47th byte – SPACES

10 Transaction Code (5th element in Long File)

11 SPACES, program code commented - SPACES moved to field

12 SPACES, program code commented - SPACES moved to field

Record Type "AI"

Field

1 Hazardous Material Response Code (1st element in Long File)

2 - 3 "AI" – Proper Shipping Name (International)

4 1 if Additional Proper Shipping Names
0 if No Additional Proper Shipping Names

5 Number of "AI" Record Type Occurrences per Hazmat Code

6 Transaction Date YYYY / Year (3rd element in Long File)

7 Transaction Date MM / Month (3rd element in Long File)

8 Spaces

9 47 bytes sub divided as follows:
- 1st byte – OT55 Flag (52nd element in Long File)
- 2nd byte – International Special Proper Shipping Name Flag (60th element in Long File)
- 3rd byte – NOS Indicator (16th element in Long File)
- 4th byte – Marine Pollutant Flag (55th element in Long File)
- 5th byte through 29th byte – Proper Shipping Name International (22nd element in Long File and 73rd element in Long File, each "AI" record holds a 25 byte segment)
- 30th byte through 47th byte – SPACES

10 Transaction Code (5th element in Long File)

11 SPACES, program code commented - SPACES moved to field

12 SPACES, program code commented - SPACES moved to field

Record Type "CA"

Field

1 Hazardous Material Response Code (1st element in Long File)

2 - 3 "CA" – Technical Name

4 0

5 Number of "CA" Record Type Occurrences per Hazmat Code

6 Transaction Date YYYY / Year (3rd element in Long File)

7 Transaction Date MM / Month (3rd element in Long File)

8 Spaces

9 47 bytes sub divided as follows:
- 1st byte through 4th byte – SPACES
- 5th byte through 29th byte – Technical Name (International 17th element in Long File, Canadian 32nd element in Long File, United States 45th element in Long File)
- 30th byte through 47th byte – SPACES

10 Transaction Code (5th element in Long File)

11 SPACES, program code commented - SPACES moved to field

12 SPACES, program code commented - SPACES moved to field

Record Type "DU"

Field
1 Hazardous Material Response Code (1st element in Long File)
2 - 3 "DU" – EPA Waste Stream and EPA Waste Characteristics
4 0
5 Number of "DU" Record Type Occurrences per Hazmat Code
6 Transaction Date YYYY / Year (3rd element in Long File)
7 Transaction Date MM / Month (3rd element in Long File)
8 Spaces
9 47 bytes sub divided as follows:
- 1st byte through 6th byte – EPA Waste Stream 1 (38th element in Long File, first 6 bytes)
- 7th byte through 12th byte – EPA Waste Stream 2 (38th element in Long File, middle 6 bytes)
- 13th byte through 18th byte – EPA Waste Stream 2 (38th element in Long File, last 6 bytes)
- 19th byte – EPA Waste Characteristics 1 (37th element in Long File, first byte)
- 20th byte – EPA Waste Characteristics 2 (37th element in Long File, second byte)
- 21st byte – EPA Waste Characteristics 3 (37th element in Long File, third byte)
- 22nd byte through 47th byte – SPACES

10 Transaction Code (5th element in Long File)
11 SPACES, program code commented - SPACES moved to field
12 SPACES, program code commented - SPACES moved to field

Record Type "EC"

Field
1 Hazardous Material Response Code (1st element in Long File)
2 - 3 "EC" – Multiple Variable Distribution (Canadian)
4 0
5 Number of "EC" Record Type Occurrences per Hazmat Code
6 Transaction Date YYYY / Year (3rd element in Long File)
7 Transaction Date MM / Month (3rd element in Long File)
8 Spaces
9 47 bytes sub divided as follows:
- 1st byte through 4th byte – Canadian Primary classification (23rd element in Long File)
- 5th byte – Canadian Packing Group (34th element in Long File)
- 6th byte through 11th – Canadian UN/NA ID (33rd element in Long File)
- 12th byte – Canadian Poison Material Indicator (35th element in Long File)
- 13th byte – Dangerous When Wet (53rd element in Long File)
- 14th byte through 15th byte – Canadian Primary Placard Notification (27th element in Long File)
- 16th byte through 17th byte – Canadian Secondary Placard Classification (31st element in Long File)
- 18th byte - SPACES
- 19th byte – Canadian Organization US Destination Flag (25th element in Long File)
- 20th byte through 22nd byte – Canadian Subsidiary Classification 1 (24th element in Long File, first 3 bytes)

23rd byte through 25th byte - Canadian Subsidiary Classification 2 (24th element in Long File, middle 3 bytes)
26th byte through 28th byte - Canadian Subsidiary Classification 3 (24th element in Long File, last 3 bytes)
29th byte – Canadian Reportable Quantity Flag (54th element in Long File)
30th byte – Canadian Subsidiary Risk Indicator (29th element in Long File)
31st byte – Canadian ERP Indicator (26th element in Long File)
32nd byte – Canadian Special Commodity Indicator (28th element in Long File)
33rd byte – Canadian Intermodal Indicator (62nd element in Long File)
34th byte through 35th byte – Canadian Approved Tank Car (65th element in Long File)
36th byte through 39th byte– Canadian Primary Classification 2 (58th element in Long File)
40th byte through 47th byte - SPACES

10 Transaction Code (5th element in Long File)
11 SPACES, program code commented - SPACES moved to field
12 SPACES, program code commented - SPACES moved to field

Record Type "EN"

Field
1 Hazardous Material Response Code (1st element in Long File)
2 - 3 "EN" – Multiple Variable Distribution (United States)
4 0
5 Number of "EN" Record Type Occurrences per Hazmat Code
6 Transaction Date YYYY / Year (3rd element in Long File)
7 Transaction Date MM / Month (3rd element in Long File)
8 Spaces
9 47 bytes sub divided as follows:
1st byte through 4th byte – US DOT Hazard Classification (40th element in Long File)
5th byte – United States Packing Group (48th element in Long File)
6th byte through 11th – United States UN/NA ID (46th element in Long File)
12th byte – United States Poison Material Indicator (49th element in Long File)
13th byte – Dangerous When Wet (53rd element in Long File)
14th byte through 15th byte – Canadian Primary Placard Notification (27th element in Long File)
16th byte through 17th byte – United States Primary Placard Notification (50th element in Long File)
18th byte through 19th byte – United States Secondary Hazard Placard Notification (44th element in Long File)
20th byte through 21st byte - US Organization Canadian Destination Indicator (47th element in Long File)
22nd byte - SPACES
23rd byte through 25th byte – US DOT Secondary Class (41st element in Long File, first 3 bytes)
26th byte through 28th byte – US DOT Secondary Class (41st element in Long File, second 3 bytes)
29th byte – United States Hazard Zone (42nd element in Long File, first 3 bytes)
30th byte through 31st byte - SPACES
32nd byte – United States Reportable Quantity Flag (54th element in Long File)

33rd byte through 34th byte – United States Hazard Placard Endorsement (39th element in Long File)
35th byte - SPACES
36th byte through 37th byte – United States Intermodal Indicator (64th element in Long File)
38th byte through 39th byte – United States Approved Tank Car (66th element in Long File)
40th byte through 47th byte - SPACES

10 Transaction Code (5th element in Long File)
11 SPACES, program code commented - SPACES moved to field
12 SPACES, program code commented - SPACES moved to field

Record Type "EI"

Field
1 Hazardous Material Response Code (1st element in Long File)
2 - 3 "EI" – Multiple Variable Distribution (International)
4 0
5 Number of "EI" Record Type Occurrences per Hazmat Code
6 Transaction Date YYYY / Year (3rd element in Long File)
7 Transaction Date MM / Month (3rd element in Long File)
8 Spaces
9 47 bytes sub divided as follows:
1st byte through 4th byte – International IMO Class (15th element in Long File)
5th byte – International Packing Group (19th element in Long File)
6th byte through 11th – International UN/NA ID (18th element in Long File)
12th byte – International Poison Material Indicator (20th element in Long File)
13th byte – Dangerous When Wet (53rd element in Long File)
14th byte through 15th byte – International Primary Placard Notification (21st element in Long File)
16th byte through 17th byte – International Secondary Placard Classification (69th element in Long File)
18th byte through 19th byte - SPACES
20th byte through 22nd byte – IMO Subsidiary Classification 1 (70th element in Long File, first 3 bytes)
23rd byte through 25th byte - IMO Subsidiary Classification 2 (70th element in Long File, middle 3 bytes)
26th byte through 28th byte - IMO Subsidiary Classification 3 (70th element in Long File, last 3 bytes)
29th byte – International Reportable Quantity Flag (54th element in Long File)
30th byte through 32nd byte - SPACES
33rd byte – International Intermodal Indicator (63rd element in Long File)
34th byte through 47th byte - SPACES
10 Transaction Code (5th element in Long File)
11 SPACES, program code commented - SPACES moved to field
12 SPACES, program code commented - SPACES moved to field

Record Type "GA"

Field
1 Hazardous Material Response Code (1st element in Long File)
2 - 3 "GA" – Hazardous Substance Name
4 0
5 Number of "GA" Record Type Occurrences per Hazmat Code
6 Transaction Date YYYY / Year (3rd element in Long File)
7 Transaction Date MM / Month (3rd element in Long File)
8 Spaces
9 47 bytes sub divided as follows:
    1st byte through 4th byte – SPACES
    5th byte through 29th byte – Hazardous Substance Name (56th element in Long File)
    30th byte through 47th byte – SPACES
10 Transaction Code (5th element in Long File)
11 SPACES, program code commented - SPACES moved to field
12 SPACES, program code commented - SPACES moved to field

Record Type "HA"

Field
1 Hazardous Material Response Code (1st element in Long File)
2 - 3 "HA" – Marine Pollutant Name
4 0
5 Number of "HA" Record Type Occurrences per Hazmat Code
6 Transaction Date YYYY / Year (3rd element in Long File)
7 Transaction Date MM / Month (3rd element in Long File)
8 Spaces
9 47 bytes sub divided as follows:
    1st byte through 4th byte – SPACES
    5th byte through 29th byte – Marine Pollutant Name (57th element in Long File)
    30th byte through 47th byte – SPACES
10 Transaction Code (5th element in Long File)
11 SPACES, program code commented - SPACES moved to field
12 SPACES, program code commented - SPACES moved to field

Record Type "IA"

Field
1 Hazardous Material Response Code (1st element in Long File)
2 - 3 "IA" – Product Alpha Description
4 0
5 Number of "IA" Record Type Occurrences per Hazmat Code
6 Transaction Date YYYY / Year (3rd element in Long File)
7 Transaction Date MM / Month (3rd element in Long File)
8 Spaces
9 47 bytes sub divided as follows:
    1st byte through 4th byte – SPACES
    5th byte through 29th byte – Product Alpha Description (14th element in Long File)

30th byte through 47th byte – SPACES

10 Transaction Code (5th element in Long File)
11 SPACES, program code commented - SPACES moved to field
12 SPACES, program code commented - SPACES moved to field

Record Type "MA"

Field
1 Hazardous Material Response Code (1st element in Long File)
2 - 3 "MA" – Product Class Description
4 0
5 Number of "MA" Record Type Occurrences per Hazmat Code
6 Transaction Date YYYY / Year (3rd element in Long File)
7 Transaction Date MM / Month (3rd element in Long File)
8 Spaces
9 47 bytes sub divided as follows:
1st byte through 4th byte – STCC (2nd element in Long File, first 4 bytes)
5th byte through 29th byte – Product Class Description (68th element in Long File)
30th byte through 32nd byte – STCC (2nd element in Long File, last 3 bytes)
33rd byte through 47th byte – SPACES
10 Transaction Code (5th element in Long File)
11 SPACES, program code commented - SPACES moved to field
12 SPACES, program code commented - SPACES moved to field

Record Type "PA"

Field
1 Hazardous Material Response Code (1st element in Long File)
2 - 3 "PA" – Alpha Description
4 0
5 Number of "PA" Record Type Occurrences per Hazmat Code
6 Transaction Date YYYY / Year (3rd element in Long File)
7 Transaction Date MM / Month (3rd element in Long File)
8 Spaces
9 47 bytes sub divided as follows:
1st byte through 4th byte – SPACES
5th byte through 29th byte – Alpha Description (67th element in Long File)
30th byte through 47th byte – SPACES
10 Transaction Code (5th element in Long File)
11 SPACES, program code commented - SPACES moved to field
12 SPACES, program code commented - SPACES moved to field

3. Long File Version for Mexican Regulatory (1204 byte)

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Name	Starting Position	Length
Mexican Hazmat Code	Column 1	7 Bytes
Mexican STCC Code	Column 8	7 Bytes
Mexican Transaction Date	Column 15	8 Bytes
Mexican Transaction Time	Column 23	6 Bytes
Mexican Transaction Code	Column 29	1 Byte
Mexican Effective Date	Column 30	8 Bytes
Mexican Expiration Date	Column 38	8 Bytes
Mexican UN/NA	Column 46	6 Byes
Mexican Proper Shipping Name	Column 52	125 Bytes
Mexican Technical Name	Column 177	125 Bytes
Mexican Hazardous Substance Name	Column 302	125 Bytes
Mexican Marine Pollutant Name	Column 427	125 Bytes
Mexican Hazard Class	Column 552	4 Bytes
Mexican Packing Group	Column 556	1 Byte
Mexican Primary Placard Notification	Column 557	2 Bytes
Mexican Intermodal Indicator	Column 559	1 Byte
Mexican Poison Material Indicator	Column 560	1 Byte
Mexican Secondary Hazard Placard Notation	Column 561	2 Bytes
Mexican NOS Indicator	Column 563	1 Byte
Mexican Approved Tank Car	Column 564	2 Bytes
Mexican Special Proper Shipping Name	Column 566	1 Byte

Mexican Alternative Proper Shipping Name	Column 567	625 Bytes (5 x 125)
Mexican Subsidiary Hazard Classification	Column 1192	9 Bytes (3 x 3)
Mexican Marine Pollutant Flag	Column 1201	1 Byte
Mexican Reportable Quantity	Column 1202	1 Byte
Filler	Column 1203	2 Bytes

4. Short File Version for Mexican Regulatory (80 Bytes)

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Field	Data Description	Positions	Format	Columns
1	STCC-FLAT-STCC	7	A	1 – 7
2	STCC-FLAT-RL	1	A	8
3	STCC-FLAT-RA	1	A	9
4	STCC-FLAT-MO	1	A	10
5	STCC-FLAT-OC	2	A	11 – 12
6	STCC-FLAT-DATE-YYMM	4	A	13 – 16
7	STCC-FLAT-DATE-MM	2	A	17 – 18
8	STCC-FLAT-DEW	6	A	19 – 24
9	STCC-FLAT-VARIABLES	47	A	25 – 71
10	STCC-FLAT-TC	1	A	72
11	STCC-FLAT- DATE-DD	2	A	73 – 74
12	STCC-FLAT-TIME	6	A	75 – 80

A. Data Element Descriptions for Short File Version of Mexican Regulatory

(Return to Table of Content)

Record Type "AM"

Field

1 Hazardous Material Response Code (1st element in Long File)

2 - 3 "AM" – Proper Shipping Name (Spanish Text)

4 1 if Additional Proper Shipping Names
0 if No Additional Proper Shipping Names

5 Number of Record Type Occurrences (Column 4)

6 Transaction Date YYYY / Year (3rd element in Long File)

7 Transaction Date MM / Month (3rd element in Long File)

8 Spaces

9 47 bytes sub divided as follows:
- 1st byte – OT55 Flag (52nd element in Long File)
- 2nd byte – Mexican Special Proper Shipping Name Flag (New element, not available in Long File)
- 3rd byte – NOS Indicator (New element, not available in Long File)
- 4th byte – Marine Pollutant Flag (New element, not available in Long File)

5th byte through 29th byte – Proper Shipping Name Mexican
(New element, not available in Long File, each "AM" record holds a 25 byte segment)
30th byte through 47th byte – SPACES

10 Transaction Code (5th element in Long File)
11 SPACES, program code commented - SPACES moved to field
12 SPACES, program code commented - SPACES moved to field

Record Type "CM"

Field
1 Hazardous Material Response Code (1st element in Long File)
2 - 3 "CM" – Technical Name (Spanish Text)
4 0
5 Number of Record Type Occurrences (Column 4)
6 Transaction Date YYYY / Year (3rd element in Long File)
7 Transaction Date MM / Month (3rd element in Long File)
8 Spaces
9 47 bytes sub divided as follows:
1st byte through 4th byte – SPACES
5th byte through 29th byte – Technical Name (Spanish Text)
(New element, not available in Long File)
30th byte through 47th byte – SPACES
10 Transaction Code (5th element in Long File)
11 SPACES, program code commented - SPACES moved to field
12 SPACES, program code commented - SPACES moved to field

Record Type "EM"

Field
1 Hazardous Material Response Code (1st element in Long File)
2 - 3 "EM" – Multiple Variable Validation and Distribution (Mexican)
4 0
5 Number of Record Type Occurrences (Column 4)
6 Transaction Date YYYY / Year (3rd element in Long File)
7 Transaction Date MM / Month (3rd element in Long File)
8 Spaces
9 47 bytes sub divided as follows:
1st byte through 4th byte – Mexican Primary Classification
(New element, not available in Long File)
5th byte – Mexican Packing Group
(New element, not available in Long File)
6th byte through 11th – Mexican UN/NA ID
(New element, not available in Long File)
12th byte – Mexican Poison Material Indicator
(New element, not available in Long File)
13th byte – Dangerous When Wet (53rd element in Long File)
14th byte through 15th byte – Mexican Primary Placard Notification

(New element, not available in Long File)
16th byte through 17th byte – Mexican Secondary Placard Classification
(New element, not available in Long File)
18th byte through 19th byte - SPACES
20th byte through 22nd byte – Mexican Subsidiary Classification 1
(New element, not available in Long File)
23rd byte through 25th byte - Mexican Subsidiary Classification 2
(New element, not available in Long File)
26th byte through 28th byte - Mexican Subsidiary Classification 3
(New element, not available in Long File)
29th byte – Mexican Reportable Quantity Flag
(New element, not available in Long File)
30th byte through 32nd byte – SPACES
33rd byte – Mexican Intermodal Indicator
(New element, not available in Long File)
34th byte through 35th byte – Mexican Approved Tank Car
(New element, not available in Long File)
36th byte through 47th byte– SPACES

10 Transaction Code (5th element in Long File)
11 SPACES, program code commented - SPACES moved to field
12 SPACES, program code commented - SPACES moved to field

Record Type "GM"

Field
1 Hazardous Material Response Code (1st element in Long File)
2 - 3 "GM" – Hazardous Substance Name (Spanish Text)
4 0
5 Number of Record Type Occurrences (Column 4)
6 Transaction Date YYYY / Year (3rd element in Long File)
7 Transaction Date MM / Month (3rd element in Long File)
8 Spaces
9 47 bytes sub divided as follows:
1st byte through 4th byte – SPACES
5th byte through 29th byte – Hazardous Substance Name (Spanish Text)
(New element, not available in Long File)
30th byte through 47th byte – SPACES
10 Transaction Code (5th element in Long File)
11 SPACES, program code commented - SPACES moved to field
12 SPACES, program code commented - SPACES moved to field

Record Type "HM"

Field	
1	Hazardous Material Response Code (1st element in Long File)
2 - 3	"HA" – Marine Pollutant Name (Spanish Text)
4	0
5	Number of Record Type Occurrences (Column 4)
6	Transaction Date YYYY / Year (3rd element in Long File)
7	Transaction Date MM / Month (3rd element in Long File)
8	Spaces
9	47 bytes sub divided as follows: 1st byte through 4th byte – SPACES 5th byte through 29th byte – Marine Pollutant Name (Spanish Text) (New element, not available in Long File) 30th byte through 47th byte – SPACES
10	Transaction Code (5th element in Long File)
11	SPACES, program code commented - SPACES moved to field
12	SPACES, program code commented - SPACES moved to field

5. Emergency Response Information – English and Spanish Text Files

This record layout is the same for the English version and the Spanish version of the Emergency Response Information File. (Return to Table of Content)

Name	Starting Position	Length	Description
ANSI Carriage Control	Column 1	1 Byte	ANSI Carriage Control
Text	Column 2	79 Bytes	Descriptive Text for Section Type
Filler	Column 81	2 Bytes	SPACES
48/49 Series STCC	Column 84	7 Bytes	Hazmat Code
Sequential Line Number	Column 91	2 Bytes	Count of all Lines for a Hazmat Code Listed in the File
Section Type	Column 93	1 Byte	H = Header T = Text F = Fire Response N = Non Fire Response P = Personnel Protection E = Evacuation L = Environment (Land) W = Environment (Water) A = Environment (Air) M = First Aid Info C = Compatible PPE Construction Material
Sequential Line Number of Section	Column 94	2 Bytes	Sequential Line Number per Section Type (Blank Lines included)

Sequential Line Number of Section	Column 96	2 Bytes	Sequential Line Number per Section Type (Blank Lines not included)
UN/NA Number	Column 98	6 Bytes	United Nation / North America Number
Filler	Column 104	30 Bytes	SPACES

Section III. Available Production Files

1. Hazardous Material and Emergency Response Information Files (English Text Only)

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Current Production Files / English Text Only			
	Files	***Data Content***	***Comments***
Hazardous Material Files	**Long Master File** (Length = 3949)	English Text Data Only	Same file layout as defined per Mexican Hazmat Project 2005. US, Canadian, and International Regulatory Agency data only.
	Long Transaction File (Length = 3949)	English Text Data Only	Same file layout as defined per Mexican Hazmat Project 2005. US, Canadian, and International Regulatory Agency data only.
	Short Master File (Length = 80)	English Text Data Only	Same file layout as defined per Mexican Hazmat Project 2005. US, Canadian, and International Regulatory Agency data only.
	Short Transaction File (Length = 80)	English Text Data Only	Same file layout as defined per Mexican Hazmat Project 2005. US, Canadian, and International Regulatory Agency data only.
Emergency Response Information File	**Emergency Response Information Master File** (Length = 133)	English Text Data Only	Same file layout as defined per Mexican Hazmat Project 2005.
	Emergency Response Information Transaction File (Length = 133)	English Text Data Only	Same file layout as defined per Mexican Hazmat Project 2005.

2. Hazardous Material Additional Files (English and Spanish)

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Current Output Files / English and Spanish Text			
	Files	***Data Content***	***Comments***
Hazardous Material Files	**Long English / Spanish Master File** (Length = 5113)	English and Spanish Text Data combined in Same Record Layout	Combine **Long Master File** with **Mexican Master File** into one record layout as opposed to two separate files.
	Long English / Spanish Transaction File (Length = 5113)	English and Spanish Text Data combined in Same Record Layout	Combine **Long Transaction File** with **Mexican Transaction File** into one record layout as opposed to two separate files.
	Short English / Spanish Master File (Length = 80)	English and Spanish Text Data combined in same file	Combine the 13 record types in the **Short Master File** for US, Canadian, and International Regulatory Agencies with the 5 record types for the Mexican Regulatory Agencies in the **Short Spanish Master File** into one file.
	Short English / Spanish Transaction File (Length = 80)	English and Spanish Text Data combined in same file	Combine the 13 record types in the **Short Master File** for US, Canadian, and International Regulatory Agencies with the 5 record types for the Mexican Regulatory Agencies in the **Short Spanish Master File** into one file.
	Short Spanish Master File (Length = 80)	Spanish Text Data Only	Separate file with the 5 record types for the Mexican Regulatory Agency only
	Short Spanish Transaction File (Length = 80)	Spanish Text Data Only	Separate file with the 5 record types for the Mexican Regulatory Agency only
	Mexican Master File (Length = 1204)	Spanish Text Data Only	Separate file that contains the Mexican Regulatory Agency data that is the equivalent of the International, Canadian, and US data in the **Long Master File**.
	Mexican Transaction File (Length = 1204)	Spanish Text Data Only	Separate file that contains the Mexican Regulatory Agency data that is the equivalent of the International, Canadian, and US Agencies data in the **Long Transaction File**.

3. Emergency Response Information Files (Spanish)

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Current Output File (Spanish Text)			
	Files	***Data Content***	***Comments***
Emergency Response Information File	**Emergency Response Information Spanish Master File** (Length = 133)	Spanish Text Data Only	The Spanish text version of the **Emergency Response Information Master File**.
	Emergency Response Information Spanish Transaction File (Length = 133)	Spanish Text Data Only	The Spanish text version of the **Emergency Response Information Transaction File**.

Appendix

Appendix A: Valid Codes for Primary and Secondary Placard Notation for Canada Regulatory

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Canadian Only Codes	
1A = PLACARDED CLASS 1.1A	**4C** = PLACARDED CLASS 1.4C
1B = PLACARDED CLASS 1.1B	**4D** = PLACARDED CLASS 1.4D
1C = PLACARDED CLASS 1.1C	**4E** = PLACARDED CLASS 1.4E
1D = PLACARDED CLASS 1.1D	**4F** = PLACARDED CLASS 1.4F
1E = PLACARDED CLASS 1.1E	**4G** = PLACARDED CLASS 1.4G
1F = PLACARDED CLASS 1.1F	**4S** = PLACARDED CLASS 1.4S
1G = PLACARDED CLASS 1.1G	**5D** = PLACARDED CLASS 1.5D
1J = PLACARDED CLASS 1.1J	**6N** = PLACARDED CLASS 1.6
1L = PLACARDED CLASS 1.1L	**C3** = PLACARDED CLASS 3
2B = PLACARDED CLASS 1.2B	**C9 =** PLACARDED CLASS 9
2C = PLACARDED CLASS 1.2C	**CA** = PLACARDED CLASS 2.3
2D = PLACARDED CLASS 1.2D	**CC** = PLACARDED CLASS 8
2E = PLACARDED CLASS 1.2E	**CD** = PLACARDED DANGER
2F = PLACARDED CLASS 1.2F	**CF** = PLACARDED CLASS 2.1
2G = PLACARDED CLASS 1.2G	**CN** = PLACARDED CLASS 2.2
2H = PLACARDED CLASS 1.2H	**CO** = PLACARDED CLASS 5.1
2J = PLACARDED CLASS 1.2J	**CP =** PLACARDED CLASS 6.1
2K = PLACARDED CLASS 1.2K	**CR** = PLACARDED CLASS 7
2L = PLACARDED CLASS 1.2L	**CS** = PLACARDED CLASS 4.1
3C = PLACARDED CLASS 1.3C	**CW** = PLACARDED CLASS 4.3
3F = PLACARDED CLASS 1.3F	**OC** = PLACARDED CLASS 5.2
3G = PLACARDED CLASS 1.2G	**SC** = PLACARDED CLASS 4.2
3H = PLACARDED CLASS 1.3H	**X1** = PLACARDED CLASS 1.1
3J = PLACARDED CLASS 1.3J	**X2** = PLACARDED CLASS 1.2
3K = PLACARDED CLASS 1.3K	**X3** = PLACARDED CLASS 1.3
3L = PLACARDED CLASS 1.3L	**X4** = PLACARDED CLASS 1.4
4B = PLACARDED CLASS 1.4B	**X5** = PLACARDED CLASS 1.5

Appendix B: Valid Codes for Primary and Secondary Placard Notation for U.S. DOT Regulatory and used for International Regulatory

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CL = COMBUSTIBLE	**N9** = either 3 CLASS 9 or MARKED "UN/NA NUMBER" 1
CM = CORROSIVE	**NF** = PGIII OR POISON 4
DA = DANGEROUS	**NG** = NONFLAMMABLE GAS
DW = DANGEROUS WHEN WET	**NP =** NO PLACARDS REQUIRE
FG = FLAMMABLE GAS	**NS** = SPONTANEOUSLY COMBUSTIBLE
FL = FLAMMABLE	**OM** = OXIDIZER
FS = FLAMMABLE SOLID	**OP** = ORGANIC PEROXIDE
MA = MARKED "UN/NA NUMBER"	**OX** = OXYGEN
N1 = EXPLOSIVES 1.1	**PA** = POISON GAS 2
N2 = EXPLOSIVES 1.2	**PB** = POISON 5
N3 = EXPLOSIVES 1.3	**PC** = POISON GAS 2.3, ZONE C OR D
N4 = EXPLOSIVES 1.4	**PL** = POISON 2
N5 = EXPLOSIVES 1.5	**PO** = POISON GAS
N6 = EXPLOSIVES 1.6	**RM** = RADIOACTIVE

Appendix C: AAR Hazardous Material Response Code Classifications

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Division 1.1 (Explosive) ..... 4901001 thru 4901599
Division 1.2 (Explosive)..... 4901601 thru 4901999
Division 1.3 (Explosive)..... 4902001 thru 4902899
Division 1.4 (Explosive)..... 4903001 thru 4903799
Division 1.5 (Explosive)..... 4903801 thru 4903899
Division 1.6 (Explosive)..... 4903901 thru 4903999

Division 2.1 (Flammable Gas)..... 4905001 thru 4905999
Division 2.2 (Nonflammable Gas)..... 4904001 thru 4904999
Division 2.3 (Poisonous Gas)
PIH Hazard Zone A..... 4920101 thru 4920199
Other 2.3 Commodities..... 4920201 thru 4920899
* Division 2.4 (Corrosive Gas)..... 4920901 thru 4920999

Class 3 (Flammable Liquid)..... 4906001 thru 4912999

Combustible Liquid..... 4913001 thru 4915999

Division 4.1 (Flammable Solid)..... 4916701 thru 4917999
Division 4.2 (Spontaneously Combustible)..... 4916001 thru 4916299
Division 4.3 (Dangerous When Wet)..... 4916301 thru 4916699

Division 5.1 (Oxidizer)..... 4918001 thru 4918899
Division 5.2 (Organic Peroxide)..... 4918901 thru 4919799

Division 6.1 (Poisonous Materials)
PIH Hazard Zone A..... 4927001 thru 4927999
Packing Group III..... 4925001 thru 4926999
Other 6.1 Commodities..... 4921000 thru 4924999
Division 6.2 (Infectious Substance)..... 4928001 thru 4928999

Class 7 (Radioactive)..... 4929001 thru 4929999

Class 8 (Corrosive Material)..... 4930001 thru 4939999

Class 9 (Miscellaneous Hazmat) & ORM-D..... 4940001 thru 4968999

*** Note: Division 2.4 (Corrosive Gas) no longer exist but is in the list to indicate the range it was assigned to.**

Appendix D. Application Form for New Hazardous Materials or Hazardous Waste Materials Code

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Please answer all questions completely. Failure to include a MSDS will result in the application being returned as incomplete. Be sure to sign the form. If you have any questions regarding the proper execution of this form or require technical assistance regarding Hazardous Waste Response Codes 48 or 49 HazMat Codes, please contact Bureau of Explosive Hazardous Materials Manager at (719) 584-0720/FAX (719) 585-1895, or via email at BOE@aar.com. Return form to Transportation Technology Center, Inc, 55500 DOT Road, Pueblo, CO 81001. **Please print legibly.**

Company _____

Street Address _____

City _____ **State/Province** _____

Zip _____ **Telephone** _____ **Fax** _____

Email Address: _____

Individual's Name _____

Title _____

Signature _____

Information for Haz Mat Identification

1) DOT or TDG Proper Shipping Description:

_____

_____

2) Specify your reason for requesting this new code:

_____

_____

3) Please attach a Materials Safety Data Sheet (MSDS) which must include the complete U.S. DOT or Transportation Dangerous Goods (TDG) shipping paper description.)

4) Please provide the seven (7) digit Product Class (STCC 01 through 47) to which this Haz Mat code should bridge. ***(Note: This is not required for 48 Hazardous Waste Code requests.)***

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Appendix E. Subscription Pricing for Production Files

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Item	Production File Type	AAR Member and Non-Member Fee (USD)
1	Subscriptions to Hazardous Materials Shipping Descriptions data file and/or Emergency Response Information data file (fee charged per data file subscription)	$2,310 (member) $4,610 (non-member) $15,000 (when used for re-sale)

GLOSSARY (Return to Table of Content)

Emergency Response Information - hazard and response information for each hazardous material contained in either the train documentation or the Emergency Response Guidebook (ERG), to assist response personnel at hazardous material incidents.

Hazard class - the category of hazard assigned to a material. A class may be subdivided into divisions for clarity. A class may be expressed as a number or with words.

Hazardous material - a substance or material which the Secretary of Transportation has determined to be capable of posing an unreasonable risk to health, safety, and property when transported in commerce. The term “hazardous material” includes hazardous substances, hazardous wastes, elevated temperature materials (HOT or MOLTEN), and marine pollutants.

Hazardous material shipment - a hazardous material in rail cars, trailers, or containers in rail transportation. All hazardous material shipments require shipping papers. When moved in rail cars, trailers, or containers, hazardous material shipments may or may not be placarded or marked with an identification number.

Hazard zone - one of four levels of inhalation hazard (Hazard Zones A through D) assigned to gases, and one of two levels of hazard (Hazard Zones A and B) assigned to liquids that are poisonous/toxic by inhalation. For example, when the hazard zone is "A," it is shown on the shipping paper as "Zone A." Zone A is the most hazardous, and Zone D is the least hazardous.

N.O.S. - initials, found on shipping papers, which mean "Not Otherwise Specified."

Packing group - a grouping of hazardous materials according to the degree of danger:

- Packing Group I (shown as "PG I" or "I" on the shipping papers) indicates great danger.
- Packing Group II (shown as "PG II" or "II" on the shipping papers) indicates medium danger.
- Packing Group III (shown as "PG III" or "III" on the shipping papers) indicates minor danger.

Technical name - a recognized chemical name used in scientific and technical handbooks, journals, and texts to further identify a hazardous material.