



Implementation Guide Rail Carrier Shipment Information

EDI 404

Hazardous Waste/Hazardous Recyclable Materials

Version 8050

CN has a secure MFT server <https://mftedi.cn.ca/> or we can push to an FTP server if you require. CN also connects with all major VAN's (Value Added Networks) and interconnects can be made available.

CN Contact

The **EDI Onboarding team** email address is EDIMGR@cn.ca. You can also visit us at www.cn.ca.

Basic EDI 404 (Rail Bill of Lading) Requirements

The enclosed documentation covers information required to handle carload traffic of Hazardous Waste/Hazardous Recyclable Materials.

Waste Shipment EDI 404 (Rail Bill of Lading) Requirements

CN recommends EDI shippers to be within 2 versions of the current EDI Standard X12 Standard Version/Release 8050/RAIL

Sample EDI Transmission with required data for the EDI 404 Transaction Set on traffic Hazardous Waste/Hazardous Recyclable Materials.

EDI 404 Hazardous Waste/Hazardous Recyclable Materials data highlighted in bold red.

ISA*00* *00* *ZZ*GENERIC *02*CN *250105*1339*U*00805*006298413*0*P*>
GS*SR*GENERIC*CN*20250105*1336*98826*X*008050
ST*404*988260001
BX*00*R*PP*1257*CN*K*B*N***10*N*2
BNX*S**S
M3*R*20250105*1336*ET
N9*BM*1257**20250105*1336
N7*CGTX*12345*83560*N*****RR
M7*12345
M12*61
F9**WATSON*SK
D9**FREEPORT*TX
N1*SH*GENERIC CARLOAD INC
N3*123 FIRST ROAD
N4*WATSON*SK*S0K 4V0*CA
PER*IC*CONTACT NAME*TE*123-123-1234*EM*JOHNDOE@GENCAR.COM
N1*CN*GENERIC CONSIGNEE CO
N3*12 SMITH STREET
N4*FREEPORT*TX*12345*US
PER*IC*CONTACT NAME*TE*555 555 1234
N1*PF*GENERIC CARLOAD INC
N3*123 FIRST ROAD
N4*WATSON*SK*S0K 4V0*CA
N1*XU*CUSTOMS BROKER INC
N3*123 MAIN ST
N4*PORT HURON*MI*48060*US
R2*CN*S*SUPER
R2*UP*1
LX*1
L5*1*WASTE ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,*4860198*T
L5*1*N.O.S.
L0*1***83560*N***1*CLD
X1***C*****1*1671200.0
LS*LH1
LH1*C4*1*UN3077**4860198*KG*83560***III
LH2*9*P
LH3*WASTE ENVIRONMENTALLY*C*NOS
LH3*HAZARDOUS SUBSTANCE,*C*NOS
LH3*SOLID, N.O.S.*C*NOS
LFH*TEC*(NICKLE SULPHIDE)
LFH*ADI*SCHEDULED TO ARRIVE*25/01/19
LEP*(K171)
LHR*MDN*UL01157-8
LHR*F3*01
LHR*MA*715311
PER*HM*offeror company name or contract number*TE*1 800 424 9300
PER*CN*offeror company name or contract number*TE*1 613 996 6666
N1*SH*GENERIC CARLOAD INC

N3*123 FIRST ROAD
N4*WATSON*SK*S0K 4V0*CA
PER*RP**TE*123-123-1234
N1*HZ*GENERIC CARLOAD INC
N3*123 FIRST ROAD
N4*WATSON*SK*S0K 4V0*CA
PER*RP**TE*123-123-1234
N1*HX*CANADIAN NATIONAL RYS
N3*234 DONALD STREET
N4*WINNIPEG*MB*R3C 4B4*CA
N1*HX*UNION PACIFIC RR CO
N3*P.O. BOX 502453
N4*SUPERIOR*WI*63150*US
N1*HW*GENERIC CONSIGNEE CO
N3*12 SMITH STREET
N4*FREEPORT*TX*12345*US
PER*RP**TE*555-555-1234
LE*LH1
LH6*JOHN Q SHIPPER
XH*USD*N*595
SE*71*988260001
GE*1*98826
IEA*1*006298413

ISA*00* *00* *ZZ*GENERIC *02*CN *250105*1339*U*00805*006298413*0*P*>

Ref. Des.	Name	Data Element	Attributes
ISA01	Authorization Information Qualifier	I01	ID 2/2
ISA02	Authorization Information (Ten spaces)	I02	AN 10/10
ISA03	Security Information Qualifier	I03	ID 2/2
ISA04	Security Information (Ten spaces)	I04	AN 10/10
ISA05	Interchange ID Qualifier	I05	ID 2/2
ISA06	Interchange Sender ID (GENERIC - fill out field with spaces)	I06	AN 15/15
ISA07	Interchange ID Qualifier (If RR SCAC use 02)	I05	ID 2/2
ISA08	Interchange Receiver ID (CN - fill out field with spaces)	I07	AN 15/15
ISA09	Interchange Date (YYMMDD)	I08	DT 6/6
ISA10	Interchange Time (HHMM)	I09	TM 4/4
ISA11	Repetition Separator (Suggest “^”)	I65	1/1
ISA12	Interchange Control Version Number (Value 00803)	I11	ID 5/5
ISA13	Interchange Control Number (a control number assigned by sender)	I12	N0 9/9
ISA14	Acknowledgment Requested (0 = none requested) (1 = requested)	I13	ID 1/1
ISA15	Usage Indicator (P = Production) (T = Test)	I14	ID 1/1
ISA16	Component Element Separator (Suggest “:”)	I15	1/1

GS Segment: Functional Group Header

GS*SR*GENERIC*CN*20250105*1336*98826*X*008050

Ref. Des.	Name	Data Element	Attributes
GS01	Functional Identifier Code (SR = Rail Carrier Shipment Information)	479	ID 2/2
GS02	Application Sender's Code (Customer's sender ID)	142	AN 2/15
GS03	Application Receiver's Code (CN = Canadian National)	124	AN 2/15
GS04	Date (YYYYMMDD)	373	DT 8/8
GS05	Time (HHMMSS)	337	TM 4/8
GS06	Group Control Number (Assigned number originated and maintained by the sender)	28	N0 1/9
GS07	Responsible Agency Code (X = Accredited Standards Committee X12)	455	ID 1/2
GS08	Version / Release / Industry Identity	480	AN 1/12

ST Segment: Transaction Set Header

To indicate the start of a transaction set and to assign a control number.

ST*404*988260001

Ref. Des.	Name	Data Element	Attributes
ST01	Transaction Set Identifier Code (404 = Rail Carrier Shipment Information (Bill of Lading))	143	ID 3/3
ST02	Transaction Set Control Number (Sequential control number generated by Customer)	329	AN 4/9

BX Segment: General Shipment Information

BX*00*R*PP*1257*CN*K*B*N*10*N*2**

Ref. Des.	Name	Data Element	Attributes
BX01	Transaction Set Purpose Code (00 = Original)	353	ID 2/2
BX02	Transportation Method/Type Code (R = Rail)	91	ID 1/2
BX03	Shipment Method of Payment (PP = Prepaid)	146	ID 2/2
BX04	Shipment ID Number (1257)	145	AN 1/30
BX05	Standard Carrier Alpha Code (CN = CN Rail)	140	ID 2/4
BX06	Weight Unit Code (K = kilograms)	188	ID 1/1
BX07	Shipment Qualifier (B = Bill of Lading for Individual Shipment)	147	ID 1/1
BX08	Section Seven Code (N=not in effect)	226	ID 1/1
BX11	Customs Documentation Handling Code (10=Proforma entered – B13 Not Required)	501	ID 2/2
BX12	Confidential Billing Request Code (N=not applicable)	199	ID 1/1
BX13	Goods and Services Tax Reason Code (2=Outbounds Goods and Services Tax Declaration to USA only)	714	ID 1/1

BNX Segment: Rail Shipment Information**BNX*S**S**

Ref. Des.	Name	Data Element	Attributes
BNX01	Shipment Weight Code (S = Shipper Certified Scale Weight)	460	ID 1/1
BNX03	Billing Code (S = Single Shipment Billing)	11	ID 1/1

M3 Segment: Release

Indicates whether shipment is to be released for movement when the transmission is received or will be released through other means.

M3*R*20250105*1336

Ref. Des.	Name	Data Element	Attributes	
M301	Release Code (R = Release with Shipment Information)	132	ID	1/1
M302	Release Date (CCYYMMDD)	373	DT	8/8
M303	Release Time (HHMM, 24-hour clock 0001-2359 or HHMMSS or HHMMSSD or HHMMSSDD H=hours 00-23 M=minutes 00-59 S=seconds 00-59 DD=decimal seconds in tenths and hundredths 00-99)	337	TM	4/8

N9 Segment: Extended Reference Information

Allows Reference Numbers to be sent to CN. At least one N9 containing a Bill of Lading number must be included. This number will be included on all other documents such as Freight Invoice and Remittance/Payment.

N9*BM*125720250105*1336**

Ref. Des.	Name	Data Element	Attributes	
N901	Reference Number Qualifier (BM = Bill of Lading number)	128	ID	2/3
N902	Reference Number (Max 15 characters for B/L # (BM))	127	AN	1/30
N904	Date (CCYYMMDD, required for B/L (BM))	373	DT	8/8
N905	Time (HHMM, 24-hour clock 0001-2359 or HHMMSS or HHMMSSD or HHMMSSDD H=hours 00-23 M=minutes 00-59 S=seconds 00-59 DD=decimal seconds in tenths and hundredths 00-99)	337	TM	4/8

N7 Segment: Equipment Details

N7*CGTX*12345*83560*N***RR**

Ref. Des.	Name	Data Element	Attributes	
N701	Equipment Initial	206	AN	4/4
N702	Equipment Number	207	AN	1/15
N703	Weight	81	R	1/8
N704	Weight Qualifier (N = Net Weight)	187	ID	1/2
N711	Equipment Description Code (RR = Railcar)	40	ID	2/2

M7 Segment: Seal Numbers

M7*12345

Ref. Des.	Name	Data Element	Attributes	
M701	Seal Number	225	AN	2/15

M12 Segment: In-bond Identifying Information

M12*61

Ref. Des.	Name	Data Element	Attributes	
M1201	Customs Entry Type Code (61=Immediate Transportation)	581	ID	2/3

F9 Segment: Origin Station

Indicates the origin of the shipment, the point from which it is shipped. The spelling should be in accordance with that listed in the Standard Point Location Code (SPLC) standard available from the National Motor Freight Tariff Association (USA) or the National Transportation Agency (Canada). CN can provide spellings for your stations.

F9WATSON*SK**

Ref. Des.	Name	Data Element	Attributes	
F902	Origin Station	19	AN	2/19
F903	State or Province Code	156	ID	2/2

D9 Segment: Destination Station

Indicates the destination of the shipment, the point at which it will be unloaded or where the transportation responsibility reverts to the consignee. The spelling should be in accordance with that listed in the Standard Point Location Code (SPLC) standard available from the National Motor Freight Tariff Association (USA) or the National Transportation Agency (Canada). CN can provide spellings for your stations.

D9FREEPORT*TX**

Ref. Des.	Name	Data Element	Attributes	
D902	Destination Station	19	AN	2/19
D903	State or Province Code	156	ID	2/2

N1 Segment: Party Identification

Associated to the N3 and N4 segments below. N1, N3 and N4 segments are repeated for the Consignee and any other Additional Parties to the shipment.

**N1*SH*GENERIC CARLOAD INC
 N3*123 FIRST ROAD
 N4*WATSON*SK*S0K 4V0*CA
 N1*CN*GENERIC CONSIGNEE CO
 N3*12 SMITH STREET
 N4*FREEPORT*TX*12345*US
 N1*PF*GENERIC CARLOAD INC
 N3*123 FIRST ROAD
 N4*WATSON*SK*S0K 4V0*CA
 N1*XU*CUSTOMS BROKER INC
 N3*123 MAIN ST
 N4*PORT HURON*MI*48060*US**

Ref. Des.	Name	Data Element	Attributes	
N101	Entity Identifier Code (SH = Shipper) (CN = Consignee) (PF = Payer of Freight) (XU = US Customs Broker)	98	ID	2/3
N102	Name	93	AN	1/35

N3 Segment: Party Location

Ref. Des.	Name	Data Element	Attributes	
N301	Address Information	166	AN	1/30

N4 Segment: Geographic Location

Ref. Des.	Name	Data Element	Attributes	
N401	City Name	19	AN	2/30
N402	State or Province Code	156	ID	2/2
N403	Postal Code	116	ID	3/15
N404	Country Code	26	ID	2/3

***For North American countries, use the ISO-3166 Alpha-2 character code.*

PER Segment: Administrative Communications Contact

PER*IC*CONTACT NAME*TE*123-123-1234*EM*JOHNDOE@GENCAR.COM
 PER*IC*CONTACT NAME*TE*555 555 1234

Ref. Des.	Name	Data Element	Attributes	
PER01	Contact function code (IC = Information contact)	366	ID	2/2
PER02	Name	93	AN	1/35
PER03	Communication number qualifier (TE=telephone) (EM = email)	365	ID	2/2
PER04	Communication number	364	AN	1/80
PER05	Communication Number Qualifier	365	ID	2/2
PER06	Communication Number	364	AN	1/80

**Note: Information Contact (IC) information is required for the Shipper (N101=SH) to provide contact for the person submitting the EDI404, and must include both a telephone number (TE) and an email address (EM)
 The value entered in the PER02/03 should be the preferred method of contact.**

R2 Segment: Route Information

One R2 segment for each railroad in the route. CN can provide route information for your shipments (i.e.: Railroad SCAC's and junctions).

**R2*CN*S*SUPER
 R2*UP*1**

Ref. Des.	Name	Data Element	Attributes	
R201	Standard Carrier Alpha Code (SCAC) (CN = Canadian National)	140	ID	2/4
R202	Routing Sequence Code (S=Origin Carrier, Shipper's Routing (Rail) (1=1st Carrier After Origin Carrier)	133	ID	1/2
R203	Junction Name (Contains R260 junction)	19	AN	2/30

****When multiple iterations of the R2 segment are present, the R203 is required on each, except for the final.**

LX Segment: Transaction Set Line Number

LX*1

Ref. Des.	Name	Data Element	Attributes	
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LX01	Assigned Number (Number assigned for differentiation within a transaction set)	554	N0	1/6
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L5 Segment: Description, Marks, and Numbers

CN can provide Standard Transportation Commodity Codes (STCC) for your commodities. The commodity code is required only on the first L5 segment. Additional L5 segments can be used to provide additional description of lading.

**L5*1*WASTE ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,*4860198*T
L5*1*N.O.S.**

Ref. Des.	Name	Data Element	Attributes	
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L501	Line Number	213	N0	1/6
L502	Commodity Description	79	AN	1/50
L503	Commodity Code (7 digit Standard Transportation Commodity Code (STCC))	22	AN	1/30
L504	Commodity Code Qualifier (T = Standard Transportation Commodity Code (STCC))	23	ID	1/1

L0 Segment: Line Item - Quantity and Weight

L0*1*83560*N***1*CLD**

Ref. Des.	Name	Data Element	Attributes	
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L001	Lading Line Item Number	213	N0	1/6
L004	Weight	81	R	1/8
L005	Weight Qualifier (N = Net Weight)	187	ID	1/2
L008	Lading Quantity	80	N0	1/5
L009	Packaging Form Code (CLD = Carload)	211	ID	3/3

X1 Segment: Export License

Mandatory for transborder shipments

X1*C*****1*1671200.0**

Ref. Des.	Name	Data Element	Attributes
X103	Export License Status Code (C = complete)	51	ID 1/1
X110	Lading Quantity	80	N0 1/5
X111	Lading Value	148	R 2/9

LS Segment: Loop Header

LS*LH1

Ref. Des.	Name	Data Element	Attributes
LS01	Loop Identifier Code	447	AN 1/6

LH1 Segment: Hazardous Identification Information

LH1*C4*1*UN30774860198*KG*83560***III**

Ref. Des.	Name	Data Element	Attributes
LH101	Unit or Basis for Measurement Code (C4 = Carload)	355	ID 2/2
LH102	Lading Quantity	80	N0 1/5
LH103	UN or NA Identification Code	277	ID 6/6
LH105	Commodity Code	22	AN 1/30
LH106	Unit or Basis for Measurement Code (KG = kilograms)	355	ID 2/2
LH107	Quantity	380	R 1/15
LH110	Packing Group Code	254	ID 1/3

LH2 Segment: Hazardous Classification Information

LH2*9*P

Ref. Des.	Name	Data Element	Attributes
LH201	Hazardous Classification	215	ID 1/30
LH202	Hazardous Class Qualifier (P=Primary)	983	ID 1/1

LH3 Segment: Hazardous Material Shipping Name Information

LH3*WASTE ENVIRONMENTALLY*C*NOS
LH3*HAZARDOUS SUBSTANCE,*C*NOS
LH3*SOLID, N.O.S.*C*NOS

Ref. Des.	Name	Data Element	Attributes	
LH301	Hazardous Material Shipping Name	224	AN	1/25
LH302	Hazardous Material Shipping Name Qualifier	984	ID	1/1
	Qualifier indicating the source (regulatory) of the proper shipping name. (C = Canadian Shipping Name)			

LFH Segment: Free-form Hazardous Material Information

Provides additional information related to the shipment of the regulated product.

LFH*TEC*(NICKLE SULPHIDE)
LFH*ADI*SCHEDULED TO ARRIVE*24/01/19

Ref. Des.	Name	Data Element	Attributes	
LFH01	Hazardous Material Information Qualifier (TEC=technical name or chemical group name) (ADI = Additional descriptive information not required by regulation but desired to accompany the movement by the shipper)	808	ID	3/3
LFH02	Hazardous Material Shipment Information	809	AN	1/25

LEP Segment: EPA Required Data

To specify the Environmental Protection Agency (EPA) information relating to shipments of hazardous material.

LEP*(K171)

Ref. Des.	Name	Data Element	Attributes	
LEP01	EPA Waste Stream Number Code	806	ID	4/6
	Code specifying the waste stream number applicable to the movement of hazardous waste as determined by government regulations.			

LHR Segment: Hazardous Material Identifying Reference Numbers

To transmit specific hazardous material reference numbers.

LHR*MDN*UL01157-8
LHR*F3*01
LHR*MA*715311

Ref. Des.	Name	Data Element	Attributes	
LHR01	Reference Identification Qualifier (MDN = Hazardous Waste Manifest Document Number) (F3 = Submission Number) (MA = Ship Notice/Manifest Number)	128	ID	2/3
LHR02	Reference Identification	127	AN	1/80

PER Segment: Administrative Communications Contact

PER*HM*offeror company name or contract number*TE*1 800 424 9300
PER*CN*offeror company name or contract number*TE*1 613 996 6666

Ref. Des.	Name	Data Element	Attributes	
PER01	Contact Function Code (HM=primary 24-hour Hazardous Material Contact emergency phone number) (CN=Canadian Hazardous Material Contact 24-hour emergency phone number)	366	ID	2/2
PER02	Name If the emergency response telephone number shown in PER04 is an emergency provider (e.g., Canutec), the PER02 must identify the company (offeror) by name or contract number.	93	AN	1/35
PER03	Communication Number Qualifier (TE=Telephone)	365	ID	2/2
PER04	Communication Number	364	AN	1/80

N1 Segment: Party Identification

Within the LH1 Loop

Used to identify the **Canadian** 'consignor' ('SH' shipper or 'CN' consignee) as required by Transport Canada regulations (TDG 3.5 (1)(a)).

N1*SH*GENERIC CARLOAD INC
N3*123 FIRST ROAD
N4*WATSON*SK*S0K 4V0*CA
N1*HZ*GENERIC CARLOAD INC
N3*123 FIRST ROAD
N4*WATSON*SK*S0K 4V0*CA
N1*HX*CANADIAN NATIONAL RYS
N3*234 DONALD STREET
N4*WINNIPEG*MB*R3C 4B4*CA
N1*HX*UNION PACIFIC RR CO
N3*P.O. BOX 502453
N4*SUPERIOR*WI*63150*US
N1*HW*GENERIC CONSIGNEE CO
N3*12 SMITH STREET
N4*FREEPORT*TX*12345*US

Ref. Des.	Name	Data Element	Attributes
N101	Entity Identifier Code (SH = Shipper) (HZ = Hazardous Waste Generator) (HX – Transporter of Hazardous Waste) (HW = Designated Hazardous Waste Facility)	98	ID 2/3

N102	Name	93	AN 1/35
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N3 Segment: Party Location

Ref. Des.	Name	Data Element	Attributes
N301	Address Information	166	AN 1/30

N4 Segment: Geographic Location

Ref. Des.	Name	Data Element	Attributes
N401	City Name	19	AN 2/19
N402	State or Province Code	156	ID 2/2
N403	Postal Code	116	ID 3/9
N404	Country Code	26	ID 2/3

PER Segment: Administrative Communications Contact

PER*RPTE*123-123-1234**
PER*RPTE*123-123-1234**
PER*RPTE*555-555-1234**

Ref. Des.	Name	Data Element	Attributes
PER01	Contact function code (RP = Responsible person)	366	ID 2/2
PER03	Communication number qualifier (TE=telephone)	365	ID 2/2
PER04	Communication number	364	ID 1/80

LE Segments: Loop Trailer

LE*LH1

Ref. Des.	Name	Data Element	Attributes
LE01	Loop Identifier Code	447	AN 1/6

LH6 Segment: Hazardous Certification

Provides the name of the person who prepared, and certifies to its accuracy, the documentation of the regulated commodity as required by Transport Canada regulations (TDG 3.6.1) and US Federal Regulations (49CFR 172.204).

The certification must be made by an individual who is the consignor or by an individual acting on behalf of the consignor and must set out that individual's name.

LH6*JOHN Q SHIPPER

Ref. Des.	Name	Data Element	Attributes
LH601	Name	93	AN 1/60

XH Segment: Pro Forma - B13 Information

XH*USD*N*595

Ref. Des.	Name	Data Element	Attributes	
XH01	Currency Code	100	ID	3/3
XH02	Related Company Indication Code (N = transaction between unrelated companies)	645	ID	1/1
XH03	Special Charge or Allowance Code (595 = Proforma Invoice)	150	ID	3/3

SE Segment: Transaction Set Trailer**SE*74*988260001**

Ref. Des.	Name	Data Element	Attributes	
SE01	Number of Included Segments (Includes ST and SE segments)	96	N0	1/10
SE02	Transaction Set Control Number (Repeated from ST segment ST02)	329	AN	4/9

GE Segment: Functional Group Trailer**GE*1*98826**

Ref. Des.	Name	Data Element	Attributes	
GE01	Number of Transaction Sets Included	97	N0	1/6
GE02	Group Control Number (Repeated from GS segment GS06)	28	N0	1/9

IEA Segment: Interchange Control Trailer**IEA*1*006298413**

Ref. Des.	Name	Data Element	Attributes	
IEA01	Number of included Functional Groups	I16	N0	1/5
IEA02	Interchange Control Number (Same number as ISA13)	I12	N0	9/9