Transportation of Dangerous Goods

Training Guide

SWAB MASTER LTD. – TRANSPORTATION OF DANGEROUS GOODS

What is the purpose of the TDG Act?

The purpose of the TDG Act and Regulations is to promote public safety when dangerous goods are being transported by road, rail, sea and air. For instance, if a transport vehicle carrying dangerous goods is involved in an accident, the placards on the vehicle and the dangerous goods documentation will help the emergency responders deal with the situation in the safest manner possible. The TDG regulations outline procedures ensuring dangerous goods are handled safely and in such a way to minimize the danger to life, property and the environment.

- A label will be attached and displayed on each container of dangerous goods.
- A bill of lading will accompany each shipment of dangerous goods (exemptions negate this area if the specified rules in the regulations are adhered to).

***Swab Master Ltd. requires a Fluid transfer report (waste manifest) to be used when shipping a dangerous good that is no longer used and is intended for treatment, disposal, or recycling. Most waste fluids contain produced water and therefore fall into Class 3 – Flammable Liquids - UN1267.

SWAB MASTER LTD. – TRANSPORTATION OF DANGEROUS GOODS

TDG Responsibilities for Swab Master Employees

Shipper (consignor): is the person who generates or sends the load of dangerous goods.

- Supply bill of lading.
- Identify the dangerous goods.
- Label the container.
- Supply the proper placards if the load is in bulk.
- He must load the goods properly and in accordance with physical properties.
- Retain a copy of the bill of lading.
- Report all spills to emergency phone numbers on the Fluid report/ bill of lading

Carrier (transporter): is the person who transports the dangerous goods.

- Ensure the proper placards are on the bill of lading and displayed on the Tank Truck
- Inspect the transport vehicle for leaks or potential problems.
- Carry a paper copy of the bill of lading and/or exemption.
- Retain a copy of the bill of lading.
- Report all spills to emergency phone numbers on the Fluid report/ bill of lading

Receiver (consignee): is the person to whom the goods are sent to or to who receive the goods.

- Must ensure the goods are in proper order and condition.
- Retain a copy of the bill of lading.

**All employees are to know and understand Alberta Transportation TDG requirements, as well as all Swab Master Policies and procedures for transportation and vehicle maintenance including Tank Truck information, and the Swab Master emergency response plan.

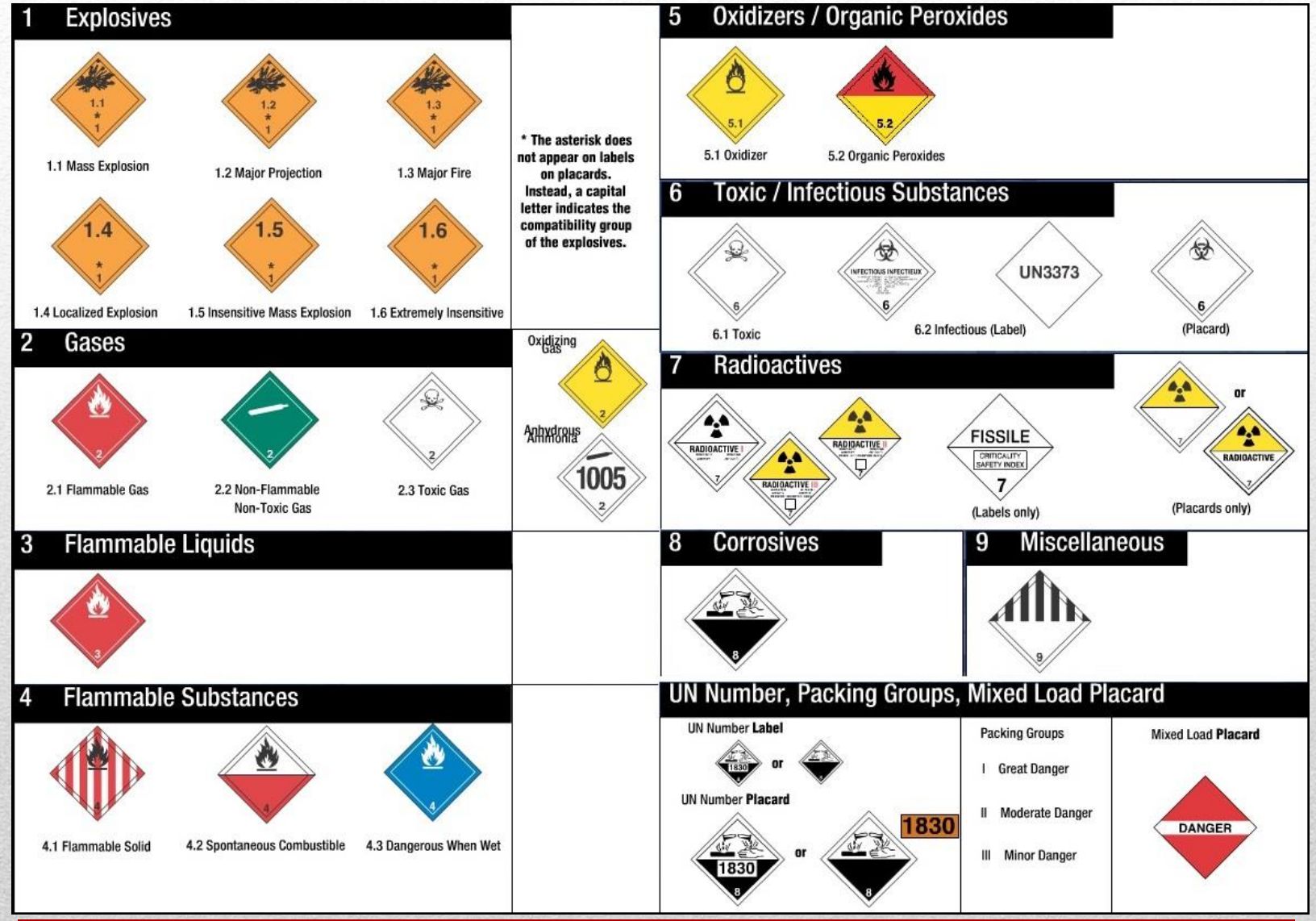
Safety Markings

Safety marks are the placards, labels and package markings which identify dangerous goods shipments. Anyone who offers for transport, transports or imports a means of containment that contains dangerous goods must display the safety marks required by the TDG Regulations.

Exemption
Exemptions only apply to the Bill of Lading, labeling of containers of dangerous good still apply, over a total capacity of 500 Kilograms of fuel has to be placarded.

Labels fall into one of the “nine classes” as seen on the next page.

Classification Guide



SWAB MASTER LTD. – TRANSPORTATION OF DANGEROUS GOODS

Class 1: Explosives

- 1.1 Substances or articles with a mass explosion hazard
- 1.2 Substances or articles with a fragment projection hazard, but not a mass explosion hazard
- 1.3 Substances or articles that have a fire hazard along with either a minor blast hazard or a minor projection hazard or both, but not a mass explosion hazard
- 1.4 Substances or articles that present no significant hazard—explosion effects are largely confined to the package and no projection or fragments of appreciable size or range are to be expected
- 1.5 Very insensitive substances that nevertheless have a mass explosion hazard like those substances in 1.1
- 1.6 Extremely insensitive articles with no mass explosion hazard

Class 2: Gases

- 2.1 Flammable gases
- 2.2 Non-flammable, non-toxic gases
- 2.3 Toxic gases

Class 3: Flammable Liquids

- Liquids with a closed-cup flashpoint of less than 60.5oC

Class 4: Flammable Solids, Substances Liable to Spontaneous Combustion, and Substances that on Contact with Water Emit Flammable Gases

- 4.1 Solids that under normal conditions of transport are readily ignitable and burn vigorously and persistently, or cause or contribute to fire through friction or from heat retained from manufacturing or processing
- 4.2 Substances liable to spontaneous combustion under normal conditions of transport, or to spontaneous heating and ignition when in contact with air
- 4.3 Water-reactive Substances, which consists of substances that emit a flammable gas at a rate greater than 1 L/kg of substance per hour or spontaneously ignite at any step in the test procedure.

SWAB MASTER LTD. – TRANSPORTATION OF DANGEROUS GOODS

Class 5: Oxidizing Substances and Organic Peroxides

- 5.1 Oxidizers – Substances that cause or contribute to the combustion of other
- material by yielding oxygen or other oxidizing substances.
- 5.2 Organic Peroxides – Compounds that contain the bivalent "-O-O-" structure,
- which makes them strong oxidizing agents, possibly liable

Class 6: Toxic Substances and Infectious Substances

- 6.1 Solids or liquids that are poisonous through inhalation of vapours, by skin contact, or by ingestion.
- 6.2 Organisms that are infectious or that are reasonably believed

Class 7: Radioactive Materials

- Radioactive materials, within the meaning of the Nuclear Safety and Control Act, with activities greater than 70 kBq/kg.

Class 8: Corrosives

- Substances that cause visible necrosis of skin or that corrode steel or non-clad aluminum.

Class 9: Miscellaneous Products, Substances, or Organisms

- Miscellaneous dangerous goods
- Substances that are environmentally hazardous
- Dangerous wastes

Placarding Guides

General Placarding Guidlines

Guideline	Dangerous Goods	Placards	UN Number
1	**Less than 500 kg of dangerous goods** - unless the shipment requires an ERAP* *(see #4)* - unless the shipment is a liquid or gas in a large** container *(see #5)*	*No*	*No*
2	**More than 500 kg of dangerous goods** - unless the shipment requires an ERAP* *(see #4)* - unless the shipment is a liquid or gas in a large container** *(see #5)*	**Yes**	*No*
3	**A mixed load of over 500 kg of dangerous goods** - unless the shipment requires an ERAP* *(see #4)* - unless the shipment includes a liquid or gas in a large container** *(see #5)*	**Yes** Class placards *OR* Danger Placard	*No*
4	**Shipment requiring an ERAP***	**Yes**	**Yes**
5	**Liquids or gases in a large** containers**	**Yes**	**Yes**

* In mixed loads, products requiring an **ERAP** (Emergency Response Assistance Plan) are placarded separately

** **Large container:** more than 450 litre capacity

Class 1 (Explosives)

Dangerous Goods – Class 1	Class Placard	UN Number
Any division*, more than 10 kg Exceptions for 1.4:	*Yes*	*No*
1.4 – less than 1,000 kg	*No*	*No*
1.4S – any quantity	*No*	*No*
Mixed load over 500 kg Exceptions for shipments with 1.5:	**Class Placard with lowest division* number**	*No*
1.2 with 1.5	**1.1 Placard**	*No*
1.4 with 1.5	**1.5 Placard**	*No*

* **Division** – the number following the period: **1.1**, **1.2**, **1.3**, **1.4**, **1.5**, **1.6**

Class 2 (Gases) – Oxidizers and Mixed Loads

Dangerous Goods – Class 2	Placard	UN Number
UN1072 oxygen, compressed UN1073 oxygen, refrigerated liquid UN3156 compressed gas, oxidizing, n.o.s. UN3157 liquefied gas, oxidizing, n.o.s.	Oxidizing Gas Placard	*Follow General Rules*
Mixed load over 500 kg Order of danger: (most dangerous to least dangerous):	Class Placard *PLUS* Class Placard for most dangerous gas	*No* *OR* UN Number for most dangerous gas (if required by Placarding Guidelines 1 or 2 at top left of this page)

SWAB MASTER LTD. – TRANSPORTATION OF DANGEROUS GOODS

Bill of Lading requires:

1. Date
2. Lading must be numbered
3. Name and address of consignor (shipper)
4. Name and address of consignee (receiver)
5. Name of the initial carrier
6. Description of the goods:
    a: Shipping name
    b: Primary classification
    c: Compatibility group (explosives only)
    d: Subsidiary classification
    e: The UN Number (Column 2 of the Dangerous Goods List)
    f: Letter B OR I from column III list schedule II
    g: Packing group exempt packing group “X”
        - Total mass or volume on each package
        - Number and size of containers
        - 24 hour emergency number

All persons who ship, transport or receive dangerous goods shall be trained in the basic rules of T.D.G. and shall be able to use the act and regulations consolidation that shall be available in the workplace

SWAB MASTER LTD. – TRANSPORTATION OF DANGEROUS GOODS

Dangerous Goods Checklist

Does the shipment contain dangerous goods?
If so, does the shipping document include:

- ❑ The date?
- ❑ Shippers name & address?
- ❑ Shippers 24-hour number?
- ❑ Quantity of dangerous goods and unit of measure? (metric)

Are the Dangerous Goods described by:

- ❑ Shipping name?
- ❑ Class? (primary class first and subsidiary in brackets)
- ❑ UN Number? (ie. UN1267)
- ❑ Packing group?

Is the description in the correct order:

- ❑ Shipping name first (shipping name, class, UN number, packing group) or
- ❑ UN Number first (UN number, shipping name, class, packing group

If required, does the shipping document contain:

- ❑ ERAP reference number and phone number?
- ❑ For radioactives, any other information required?

Does the package or container:

- ❑ Show any signs of leaks or damage?

Does the package or container display:

- ❑ A label for the primary risk?
- ❑ A label for each subsidiary risk?
- ❑ The shipping name?
- ❑ The UN Number?
- ❑ A certification safety mark, if required?

If placards are required:

- ❑ Are there at least 4 placards? And spares in case any are lost or damaged
- ❑ Does the UN number appear on or beside the placard? (if required)

Is my training certificate valid?

- ❑ Issued by my current employer?
- ❑ Issued within the past 3 years?
- ❑ Signed by me and my employer?

Optional Documents:

- ❑ A Permit for Equivalent Level of Safety
- ❑ A copy of the MSDS for the dangerous goods
- ❑ The ERP plan or a page from that document that applies to the dangerous goods.

Packing Groups

- There are 3 packing groups indicating the severity of the hazard involved
- Packing Group I – Great Danger
- Packing group II – Medium Danger
- Packing Group III – Minor Danger
- Packing groups appear in col. 4 of schedule 1 and as the name suggests, they specify the packing requirements for that chemical.

Outer Package Requirements

When shipping a product or samples via mail or courier, the following items must be attached to the outside of the box. All information can be found in schedule 1 of the regulations.

1. The Shipping Name as it appears in the regulations
2. Hazard class label(s)
3. Identification number (UN number)
4. Packing group
5. Orientation label (for liquids only when transported by air)
6. Standardized UN certification mark (Automatically appears on UN certified packaging)

Example of Dangerous Goods Safety Marks: Small Means of Containment

① Orientation label (optional)

② Primary class label

③ Standardized UN certification (according to standard)

④ Shipping name

⑤ UN number

⑥ Subsidiary class label

In this section we will learn how to properly complete a Fluid Transfer Report.

Lets say we are going to swab 14 wells for client XYZ Oil Corp. This is the information we need in the first section of the Fluid Transfer Report.

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www.swabmaster.com
P.O. Box 1210
Brooks, AB T1R 1C1

FLUID TRANSFER REPORT

CONSIGNOR INFORMATION		TICKET INFORMATION		
Company Name:	XYZ Oil Corporation	Field Ticket #:	12345	Tank #: T10
Address:	123 4th St West Calgary, AB T2P 1S3	Date:	November 2, 2015	Rig #: R5
		Drivers Name:	Stephen Harper	
Representative:	Donald Trump	Starting Location:	Brooks	
Contact Phone #	(403) 555 - 1234	Starting Gauge:	0 - Empty	

OIL COMPANY 24 HOUR EMERGENCY # 1-800-555-4321

SWAB MASTER 24 HOUR EMERGENCY # (403) 793-0033 24 HOUR TDG EMERGENCY # - CANUTEC: 1-613-996-6666

The Company Name, Address, Representative and Phone Number information can all be provided by the Consultant or from your Supervisor. Additionally, it can be obtained from the oil company website. If you are unable to find the information – contact the Swab Master Ltd. office for assistance, or Roz @ (403) 409-3531.

The Oil Company 24 Hour Emergency # must be included!

SWAB MASTER LTD. – TRANSPORTATION OF DANGEROUS GOODS

In section 2: Well information on the Fluid Transfer report you can write in each well and how much fluid was taken. You can also use this section as a sort of journal for each well.

In section 3: Non-Dangerous Goods Information, you can check this box if you are not hauling any dangerous goods. For example, water only. This shipment would not require any placards on the tank truck.

WELL INFORMATION

WELLS (LSD / UWI)	QTY: m³ / bbls	COMMENTS / FIELD
103/10-12-15-36W4	2.67 m3	2.67 Sign Missing
103/10-14-15-36W4	2.99 m3	2.99
103/10-12-16-36W4	1.43 m3	4.33 Sandy
103/12-12-15-36W4	2.11 m3	5.44
103/10-12-15-25W4	1.43 m3	6.87
103/10-12-15-26W4	1.64 m3	8.51 Sandy
103/10-12-15-30W4	1.06 m3	9.57 Sandy
103/10-12-18-26W4	0.55 m3	10.12
103/11-07-15-11W4	0.32 m3	10.44
103/01-13-15-12W4	0.90 m3	11.34

WELLS (LSD / UWI)	QTY: m³ / bbls	COMMENTS / FIELD
103/11-12-15-36W4	0.32m3	11.66
103/10-18-15-36W4	0.30 m3	11.92
To Dump	-------	0.5m3 left in tank
103/10-12-17-36W4	0.25 m3	
103/10-13-15-36W4	0.30 m3	
To Dump	-------	0.5m3 left in tank

NON-DANGEROUS GOODS INFORMATION

☑ *This shipment contains no dangerous goods as specified by the Transportation of Dangerous Goods Regulations*

Description of Contents: Produced water

ESTIMATED VOLUME: 0.5m3 m³ / bbls LIQUIDS: 90 % SOLIDS: 10 %

SWAB MASTER LTD. – TRANSPORTATION OF DANGEROUS GOODS

Section 4: Dangerous Goods Information, is where you check off the type of dangerous goods you are transporting and what residue was last contained in the tank. This section is very important. If you do not know what is being pumped into the tank you're operating – ASK SOMEONE!

In the example below – this tank is carrying Flammable produced water. All the appropriate TDG codes are already listed. You just need to check off what is being transported and what was contained in the tank.

DANGEROUS GOODS INFORMATION

CONTENTS:	RESIDUE LAST CONTAINED:
☑ UN 1267 PRODUCED WATER, *FLAMMABLE* , CLASS 3, Packing Group II	☑
☐ UN1267 PETROLEUM CRUDE OIL CLASS 3 Packing Group II	☐
☐ UN3494 PETROLEUM SOUR CRUDE OIL *FLAMMABLE TOXIC* CLASS 3 *(6.1)* Packing Group I ***(TOXIC BY INHALATION)***	☐
☐ UN2924 FLAMMABLE LIQUID, CORROSIVE, N.O.S., (MIXED OILFIELD PRODUCTION FLUIDS), CLASS 3 (8), Packing Group II ***(MAY RELEASE HAZARDOUS VAPOUR)***	☐
☐ OTHER _____	☐

ESTIMATED VOLUME: 0 m³ / bbls LIQUIDS: 0 % SOLIDS: 0 %

☑ FLUSHED ☐ CLEANED & PURGED

When you are done your job and you have taken the tank to Tervita or Newalta – be sure to check off FLUSHED. This way the next person using the tank knows that it has been emptied.

CLEANED & PURGED should only be checked off if the tank has been completely cleaned of all residue. For example, the tank was steam cleaned for a welding inspection.

SWAB MASTER LTD. – TRANSPORTATION OF DANGEROUS GOODS

Section 5: Fluid Transfer Information, deals with the transportation information. Where the fluid came from and where it's going.

You must have the Consignors name on this bottom section. It can be taken from the Consignor information in Section 1. Then the driver completing the Fluid Transfer must be the one to sign it.

FLUID TRANSFER INFORMATION

Fluid (and / or) Residue Hauled FROM: 103/10-13-15-36W4
(LOCATION or LSD)

Fluid (and / or) Residue Delivered TO: Tervita Brooks (FACILITY) 100/11-18-15-16W4 (LSD)

"I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, are properly classified and packaged, have dangerous goods safety marks properly affixed or displayed on them, and are in all respects in proper condition for transport according to the Transportation of Dangerous Goods Regulations"

Consignors Name: Donald Trump Drivers Signature: Stephen Harper

F 02000

OFFICE: White CLIENT: Yellow FIELD: Pink BOOK: Green

There are FOUR copies for each Fluid Transfer – so make sure you write firmly.
The WHITE original copy gets submitted to the office with the field ticket.
The YELLOW copy should be made available to the client at their request
The PINK copy can be submitted to any waste management site such as Tervita or Newalta.
The GREEN copy should stay in the booklet and with the tank truck at all times.

***** The following pages contain examples of completed fluid transfers. *****

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P.O. Box 1210
Brooks, AB T1R 1C1

FLUID TRANSFER REPORT

CONSIGNOR INFORMATION		TICKET INFORMATION	
Company Name:	Canadian Natural Resources Limited	Field Ticket #: 12345	Tank #: 6
Address:	2100, 855-2 ST. SW Calgary, AB T2P 4J8	Date: April 1, 2015	Rig #:
		Drivers Name:	Micky Mouse
Representative:	Joe Operator	Starting Location:	Brooks - Swab Master Yard
Contact Phone #	403-555-1212	Starting Gauge:	EMPTY

OIL COMPANY 24 HOUR EMERGENCY # 1-888-878-3700

SWAB MASTER 24 HOUR EMERGENCY # (403) 793-0033 24 HOUR TDG EMERGENCY # - CANUTEC: 1-613-996-6666

WELL INFORMATION

WELLS (LSD / UWI)	QTY: m³ / bbls	COMMENTS / FIELD	WELLS (LSD / UWI)	QTY: m³ / bbls	COMMENTS / FIELD

NON-DANGEROUS GOODS INFORMATION

☑ *This shipment contains no dangerous goods as specified by the Transportation of Dangerous Goods Regulations*

Description of Contents: _____

ESTIMATED VOLUME: Ø (m³) / bbls LIQUIDS: Ø % SOLIDS: Ø %

DANGEROUS GOODS INFORMATION

CONTENTS: RESIDUE LAST CONTAINED:

- ☐ UN 1267 PRODUCED WATER, *FLAMMABLE*, CLASS 3, Packing Group II ☐
- ☐ UN1267 PETROLEUM CRUDE OIL CLASS 3 Packing Group II ☐
- ☐ UN3494 PETROLEUM SOUR CRUDE OIL *FLAMMABLE TOXIC* CLASS 3 *(6.1)* Packing Group I ***(TOXIC BY INHALATION)*** ☐
- ☐ UN2924 FLAMMABLE LIQUID, CORROSIVE, N.O.S., (MIXED OILFIELD PRODUCTION FLUIDS), CLASS 3 (8), Packing Group II ***(MAY RELEASE HAZARDOUS VAPOUR)*** ☐
- ☐ OTHER _____ ☐

ESTIMATED VOLUME: _____ m³ / bbls LIQUIDS: _____ % SOLIDS: _____ %

☐ FLUSHED ☐ CLEANED & PURGED

FLUID TRANSFER INFORMATION

Fluid (and / or) Residue Hauled FROM: Swab Master Yard - Brooks (LOCATION or LSD)

Fluid (and / or) Residue Delivered TO: Alderson A1 Plant (FACILITY) 16-21-14-10 W4 (LSD)

"I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, are properly classified and packaged, have dangerous goods safety marks properly affixed or displayed on them, and are in all respects in proper condition for transport according to the Transportation of Dangerous Goods Regulations"

Consignors Name: Joe Operator Drivers Signature: Micky Mouse

OFFICE: White CLIENT: Yellow FIELD: Pink BOOK: Green

F 00362

In this example the driver, Mickey Mouse is taking the tank truck from the home base in Brooks to a CNRL location.

The tank contains no product and no residue.

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Brooks, AB T1R 1C1

FLUID TRANSFER REPORT

CONSIGNOR INFORMATION		TICKET INFORMATION	
Company Name: CANADIAN NATURAL RESOURCES LIMITED		Field Ticket #: 74685	Tank #: 5
Address: 2100, 855 - 2 ST. SW, CALGARY, AB T2P 4J8		Date: MAR. 3, 2016	Rig #: 2
		Drivers Name: JOE DRIVER	
Representative: TERRY HILLMOE		Starting Location: CNRL ALDERSON 1	
Contact Phone # 403-502-6279		Starting Gauge: 0 EMPTY	

OIL COMPANY 24 HOUR EMERGENCY # 1-888-878-3700
SWAB MASTER 24 HOUR EMERGENCY # (403) 793-0033 24 HOUR TDG EMERGENCY # - CANUTEC: 1-613-996-6666

WELL INFORMATION

WELLS (LSD / UWI)	QTY: m³ / bbls	COMMENTS / FIELD	WELLS (LSD / UWI)	QTY: m³ / bbls	COMMENTS / FIELD
01-01-15-12 W4	2.67	2.67 SIGN MISSING	10-07-15-11	0.32	11.66
07-01-15-12	0.32	2.99	06-07-15-11	0.26	11.92
06-01-15-12	1.34	4.33 SANDY	To Dump	—	0.5 m³ LEFT IN TANK.
05-01-15-12	2.11	5.44	06-18-15-11	1.77	2.27
10-01-15-12	1.43	6.87	07-18-15-11	2.35	4.62
01-12-15-12	1.64	8.51 SANDY	To Dump	—	0.5m³ LEFT
03-12-15-12	1.06	9.57 SANDY			
03-13-15-12	0.55	10.12			
01-13-15-12	0.32	10.44			
11-07-15-11	0.90	11.34			

NON-DANGEROUS GOODS INFORMATION

☑ This shipment contains no dangerous goods as specified by the Transportation of Dangerous Goods Regulations

Description of Contents: PRODUCED WATER

ESTIMATED VOLUME: 0.5 (m³) / bbls LIQUIDS: 90 % SOLIDS: 10 %

DANGEROUS GOODS INFORMATION

CONTENTS: RESIDUE LAST CONTAINED:

- ☐ UN 1267 PRODUCED WATER, *FLAMMABLE*, CLASS 3, Packing Group II ☐
- ☐ UN1267 PETROLEUM CRUDE OIL CLASS 3 Packing Group II ☐
- ☐ UN3494 PETROLEUM SOUR CRUDE OIL *FLAMMABLE TOXIC* CLASS 3 *(6.1)* Packing Group I ***(TOXIC BY INHALATION)*** ☐
- ☐ UN2924 FLAMMABLE LIQUID, CORROSIVE, N.O.S., (MIXED OILFIELD PRODUCTION FLUIDS), CLASS 3 (8), Packing Group II ***(MAY RELEASE HAZARDOUS VAPOUR)*** ☐
- ☐ OTHER ☐

ESTIMATED VOLUME: _____ m³ / bbls LIQUIDS: _____ % SOLIDS: _____ %

☐ FLUSHED ☐ CLEANED & PURGED

FLUID TRANSFER INFORMATION

Fluid (and / or) Residue Hauled FROM: SEE ABOVE WELL INFO (LOCATION or LSD)

Fluid (and / or) Residue Delivered TO: CNRL A1 PLANT (FACILITY) 16-21-14-10 W4 (LSD)

"I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, are properly classified and packaged, have dangerous goods safety marks properly affixed or displayed on them, and are in all respects in proper condition for transport according to the Transportation of Dangerous Goods Regulations"

Consignors Name: TERRY HILLMOE Drivers Signature: Joe Driver

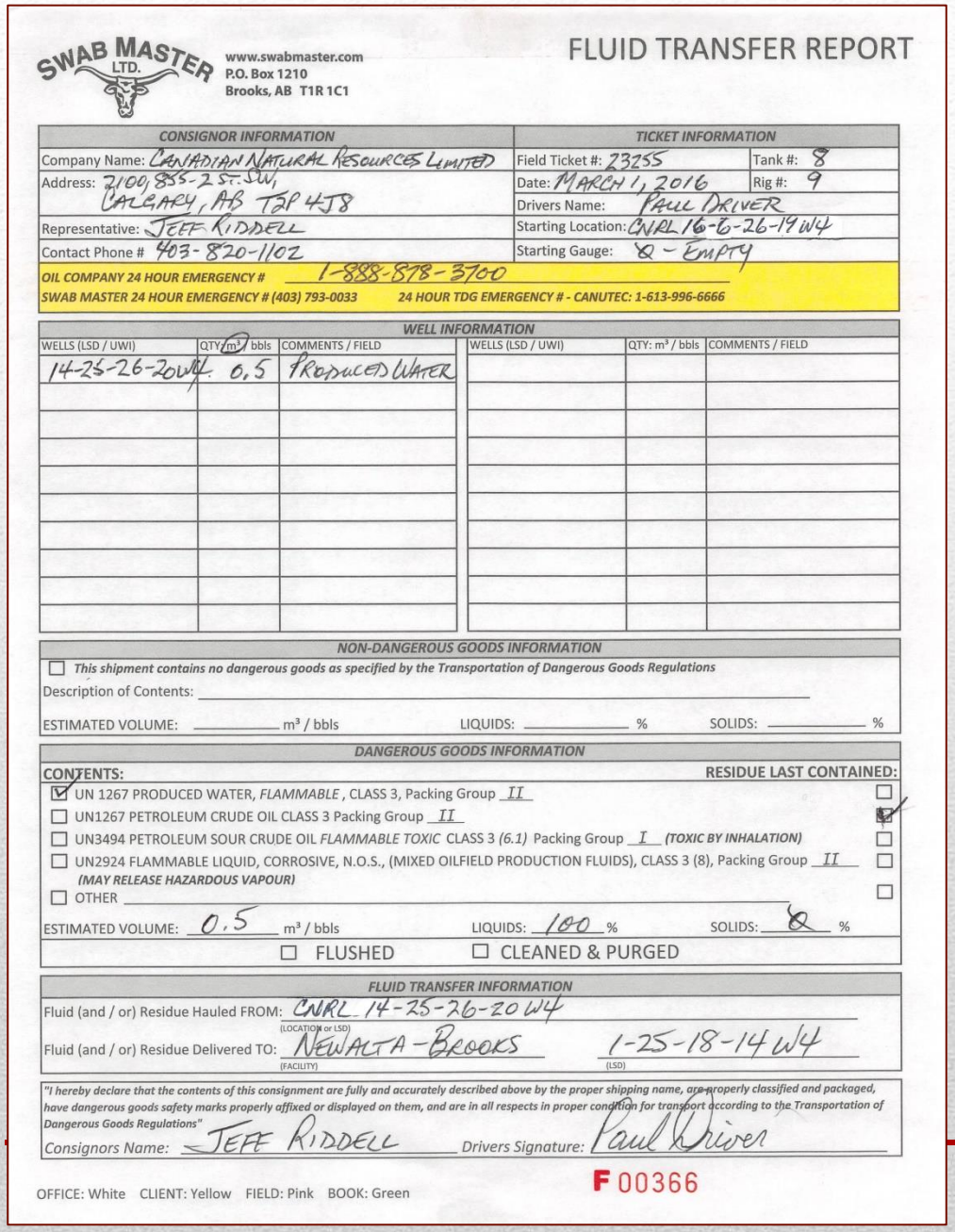
OFFICE: White CLIENT: Yellow FIELD: Pink BOOK: Green

F 00368

This example is a typical daily fluid transfer record. Joe Driver is taking the tank truck to swab 14 wells for CNRL.

The tank truck is being used to pump off non-dangerous produced water and has been dumped twice during the shift.

SWAB MASTER LTD. – TRANSPORTATION OF DANGEROUS GOODS



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www.swabmaster.com
P.O. Box 1210
Brooks, AB T1R 1C1

FLUID TRANSFER REPORT

CONSIGNOR INFORMATION		TICKET INFORMATION	
Company Name:	CANADIAN NATURAL RESOURCES LIMITED	Field Ticket #: 23255	Tank #: 8
Address:	2100, 855-2 ST. SW, CALGARY, AB T2P 4J8	Date: MARCH 1, 2016	Rig #: 9
		Drivers Name:	PAUL DRIVER
Representative:	JEFF RIDDELL	Starting Location:	CNRL 16-6-26-19 W4
Contact Phone #	403-820-1102	Starting Gauge:	0 - EMPTY

OIL COMPANY 24 HOUR EMERGENCY # 1-888-878-3700
SWAB MASTER 24 HOUR EMERGENCY # (403) 793-0033 24 HOUR TDG EMERGENCY # - CANUTEC: 1-613-996-6666

WELL INFORMATION

WELLS (LSD / UWI)	QTY: m³ / bbls	COMMENTS / FIELD	WELLS (LSD / UWI)	QTY: m³ / bbls	COMMENTS / FIELD
14-25-26-20W4	0.5	PRODUCED WATER			

NON-DANGEROUS GOODS INFORMATION

☐ This shipment contains no dangerous goods as specified by the Transportation of Dangerous Goods Regulations

Description of Contents: _____

ESTIMATED VOLUME: _____ m³ / bbls LIQUIDS: _____ % SOLIDS: _____ %

DANGEROUS GOODS INFORMATION

CONTENTS: RESIDUE LAST CONTAINED:

- ☑ UN 1267 PRODUCED WATER, *FLAMMABLE*, CLASS 3, Packing Group II ☐
- ☐ UN1267 PETROLEUM CRUDE OIL CLASS 3 Packing Group II ☑
- ☐ UN3494 PETROLEUM SOUR CRUDE OIL *FLAMMABLE TOXIC* CLASS 3 *(6.1)* Packing Group I ***(TOXIC BY INHALATION)*** ☐
- ☐ UN2924 FLAMMABLE LIQUID, CORROSIVE, N.O.S., (MIXED OILFIELD PRODUCTION FLUIDS), CLASS 3 (8), Packing Group II ***(MAY RELEASE HAZARDOUS VAPOUR)*** ☐
- ☐ OTHER _____ ☐

ESTIMATED VOLUME: 0.5 m³ / bbls LIQUIDS: 100 % SOLIDS: 0 %

☐ FLUSHED ☐ CLEANED & PURGED

FLUID TRANSFER INFORMATION

Fluid (and / or) Residue Hauled FROM: CNRL 14-25-26-20 W4 (LOCATION or LSD)

Fluid (and / or) Residue Delivered TO: NEWALTA - BROOKS (FACILITY) 1-25-18-14 W4 (LSD)

"I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, are properly classified and packaged, have dangerous goods safety marks properly affixed or displayed on them, and are in all respects in proper condition for transport according to the Transportation of Dangerous Goods Regulations"

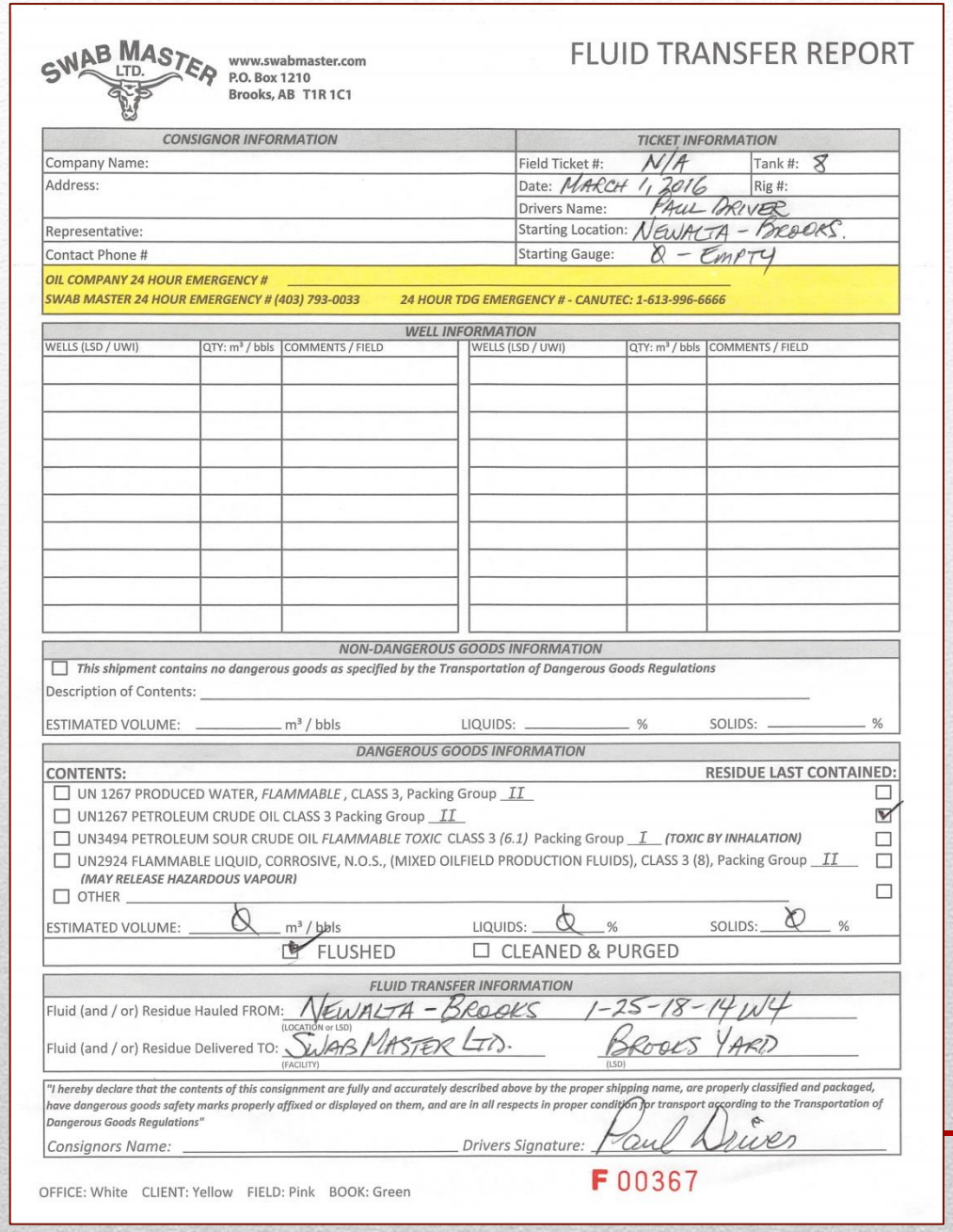
Consignors Name: JEFF RIDDELL Drivers Signature: Paul Driver

OFFICE: White CLIENT: Yellow FIELD: Pink BOOK: Green

F 00366

The example here shows Paul Driver taking tank truck number 8 from a CNRL location to be dumped at Newalta – Brooks.

SWAB MASTER LTD. – TRANSPORTATION OF DANGEROUS GOODS



SWAB MASTER LTD.
www.swabmaster.com
P.O. Box 1210
Brooks, AB T1R 1C1

FLUID TRANSFER REPORT

CONSIGNOR INFORMATION	TICKET INFORMATION		
Company Name:	Field Ticket #:	N/A	Tank #: 8
Address:	Date:	MARCH 1, 2016	Rig #:
	Drivers Name:	PAUL DRIVER	
Representative:	Starting Location:	NEWALTA – BROOKS.	
Contact Phone #	Starting Gauge:	0 – EMPTY	

OIL COMPANY 24 HOUR EMERGENCY # _____
SWAB MASTER 24 HOUR EMERGENCY # (403) 793-0033 24 HOUR TDG EMERGENCY # - CANUTEC: 1-613-996-6666

WELL INFORMATION

WELLS (LSD / UWI)	QTY: m³ / bbls	COMMENTS / FIELD	WELLS (LSD / UWI)	QTY: m³ / bbls	COMMENTS / FIELD

NON-DANGEROUS GOODS INFORMATION

☐ *This shipment contains no dangerous goods as specified by the Transportation of Dangerous Goods Regulations*

Description of Contents: _____

ESTIMATED VOLUME: _____ m³ / bbls LIQUIDS: _____ % SOLIDS: _____ %

DANGEROUS GOODS INFORMATION

CONTENTS:	RESIDUE LAST CONTAINED:
☐ UN 1267 PRODUCED WATER, *FLAMMABLE* , CLASS 3, Packing Group II	☐
☐ UN1267 PETROLEUM CRUDE OIL CLASS 3 Packing Group II	☑
☐ UN3494 PETROLEUM SOUR CRUDE OIL *FLAMMABLE TOXIC* CLASS 3 *(6.1)* Packing Group I ***(TOXIC BY INHALATION)***	☐
☐ UN2924 FLAMMABLE LIQUID, CORROSIVE, N.O.S., (MIXED OILFIELD PRODUCTION FLUIDS), CLASS 3 (8), Packing Group II ***(MAY RELEASE HAZARDOUS VAPOUR)***	☐
☐ OTHER _____	☐

ESTIMATED VOLUME: 0 m³ / bbls LIQUIDS: 0 % SOLIDS: 0 %

☑ FLUSHED ☐ CLEANED & PURGED

FLUID TRANSFER INFORMATION

Fluid (and / or) Residue Hauled FROM: NEWALTA – BROOKS (LOCATION or LSD) 1-25-18-14W4

Fluid (and / or) Residue Delivered TO: SWAB MASTER LTD. (FACILITY) BROOKS YARD (LSD)

"I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, are properly classified and packaged, have dangerous goods safety marks properly affixed or displayed on them, and are in all respects in proper condition for transport according to the Transportation of Dangerous Goods Regulations"

Consignors Name: _____ *Drivers Signature:* Paul Driver

OFFICE: White CLIENT: Yellow FIELD: Pink BOOK: Green

F 00367

This example shows Paul Driver bringing the flushed tank truck # 8 from Newalta – Brooks back to home base.

Emergency Reporting Guides

You must report immediately:

- if there is a leak or spill exceeding the amount shown in the Reporting Quantities table (below)
- if there is damage to a truck or large container that could result in a leak or spill exceeding the reporting quantities, or
- if, as a result of an incident, there is a need to transfer dangerous goods from one large container to another

Reporting Quantities

Class		You must report a leak or spill of:
1	Explosives	Any quantity that could pose a danger ***or*** more than 50 kg
2	Gases	Any quantity that could pose a danger ***or*** a sustained release of 10 minutes or more
3	Flammable Liquids	More than 200 litres
4	Flammable Solids, Spontaneously Combustible, Dangerous When Wet	More than 25 kg
5.1	Oxidizers	More than 50 kg or 50 litres
5.2	Organic Peroxides	More than 1 kg or 1 litres
6.1	Toxic Substances	More than 5 kg or 5 litres
6.2	Infectious Substances	Any quantity
7	Radioactives	Any quantity that could pose a danger
8	Corrosives	More than 5 kg or 5 litres
9	Miscellaneous	More than 25 kg or 25 litres

Emergency Contact Numbers can be found:

- On the bill of lading
- On the fluid transfer
- In the ERAP
- Online
- In our Safety Manual

You must notify immediately:

- your employer
- the owner of the vehicle
- the shipper, and
- the authorities listed in the Immediate Notification table

Emergency Reporting Guides - Continued

Immediate Notification

Province	Contact
Alberta	Local police ***and*** 1-800-272-9600
British Columbia	Local police ***and*** 1-800-663-3456
Manitoba	Local police or fire department ***and*** 204-945 4888
New Brunswick	Local police or 1-800-565-1633
Newfoundland and Labrador	Local police ***and*** 709-772-2083
Northwest Territories	867-920-8130
Nova Scotia	Local police or 1-800-565-1633 or 902-426 6030
Nunavut	Local police ***and*** 1-800-693-1666
Ontario	Local police
Prince Edward Island	Local police or 1-800-565-1633
Quebec	Local police
Saskatchewan	Local police or 1-800-667-7525
Yukon	867-667-7244

An ERAP or Emergency Response Assistance Plan is a plan that describes what is to be done in the event of a transportation accident involving certain higher risk dangerous goods. The ERAP is required by the Transportation of Dangerous Goods Regulations (TDGR) for dangerous goods that require special expertise and response equipment to respond to an incident. The plan is intended to assist local emergency responders by providing them with technical experts and specially trained and equipped emergency response personnel at the scene of an incident.

Please Refer to Element 6: Emergency Response Planning of the safety manual for more information

In Summary…

• Know what you are handling: Does your shipment contain hazardous materials or dangerous goods? Hazardous material shipments should only be handled by knowledgeable and trained staff.

• Prepare for emergencies. Keep spill supplies and emergency contact numbers on hand. Take time to review response and clean up procedures before you need them.

The following pages contain a complete & up-to-date listing of dangerous goods. While we don't transport the vast majority of these products, it is important to know how to use the listing and where it can be found.

Dangerous Goods List

Col 1 Shipping Name and Description	Col 2 UN Number	Col 3 Class	Col 4 Packing Group / Category	Col 5 Special Provisions	Col 6 Explosive Limit and Limited Quantity Index	Col 7 ERAP Index	Col 8 Passenger Carrying Ship Index	Col 9 Passenger Carrying Road or Rail Index	Col 10 Marine Pollutant
ACETONE	UN **1090**	**3**	**II**		1		Forbidden	5	
ACETYLENE, DISSOLVED	UN **1001**	**2.1**		38	0		75	Forbidden	
ACTIVATED CARBON *(see CARBON, ACTIVATED)*									
AIR, COMPRESSED, with not more than 23.5 per cent oxygen, by volume	UN **1002**	**2.2**			0.125			75	
ALCOHOLS, FLAMMABLE, TOXIC, N.O.S.	UN **1986**	**3 (6.1)**	**I** **II** **III**	16 16 16	0 1 5	1,000	Forbidden	Forbidden 1 60	• • •
ANHYDROUS AMMONIA; or **AMMONIA, ANHYDROUS**	UN **1005**	**2.3 (8)**			0	3,000	Forbidden	Forbidden	
ARSENIC	UN **1558**	**6.1**	**II**		0.5			25	
ASBESTOS, WHITE (chrysotile, actinolite, anthophyllite, tremolite) when not fixed in a natural or artificial binder material or included in a manufactured product	UN **2590**	**9**	**III**		5			200	
BATTERIES, WET, FILLED WITH ACID, electric storage	UN **2794**	**8**	**III**		5			30	
BATTERY FLUID, ACID	UN **2796**	**8**	**II**		1			1	
BIOLOGICAL SUBSTANCE, CATEGORY B	UN **3373**	**6.2**	**Category B**		0		4	4	
BLACK POWDER granular or as a meal; or **GUNPOWDER** granular or as a meal	UN **0027**	**1.1D**	**II**	76	10	75	10	Forbidden	
BUTANE *[may also be shipped as Liquefied Petroleum Gas]*	UN **1011**	**2.1**			0.125	3,000	Forbidden	Forbidden	
BUTYRIC ANHYDRIDE	UN **2739**	**8**	**III**		5			5	

SWAB MASTER LTD. – TRANSPORTATION OF DANGEROUS GOODS

Col 1 Shipping Name and Description	Col 2 UN Number	Col 3 Class	Col 4 Packing Group / Category	Col 5 Special Provisions	Col 6 Explosive Limit and Limited Quantity Index	Col 7 ERAP Index	Col 8 Passenger Carrying Ship Index	Col 9 Passenger Carrying Road or Rail Index	Col 10 Marine Pollutant
CALCIUM CARBIDE	UN **1402**	**4.3**	**I** **II**		0 0.5	1,000		Forbidden 15	
CALCIUM PEROXIDE	UN **1457**	**5.1**	**II**		1			5	
CALCIUM RESINATE	UN **1313**	**4.1**	**III**		5			25	
CARBON, ACTIVATED	UN **1362**	**4.2**	**III**		0			0.5	
CARBON DIOXIDE	UN **1013**	**2.2**			0.125			75	
CARTRIDGES, SIGNAL	UN **0054**	**1.3G**	**II**		25		10	Forbidden	
CARTRIDGES, SMALL ARMS	UN **0012**	**1.4S**	**II**		25				
CHLORINE	UN **1017**	**2.3 (8)**			0	500	Forbidden	Forbidden	P
CHLOROFORM	UN **1888**	**6.1**	**III**		5			60	
COMPRESSED AIR *(see AIR, COMPRESSED)*									
CORROSIVE LIQUID, N.O.S.	UN **1760**	**8**	**I** **II** **III**	16 16 16	0 1 5	3,000		0.5 1 5	• • •
DICHLOROMETHANE	UN **1593**	**6.1**	**III**		5			60	
DIESEL FUEL; FUEL OIL; GAS OIL or **HEATING OIL LIGHT**	UN **1202**	**3**	**III**	82, 88	30	See SP 82		60	

SWAB MASTER LTD. – TRANSPORTATION OF DANGEROUS GOODS

Col 1 Shipping Name and Description	Col 2 UN Number	Col 3 Class	Col 4 Packing Group / Category	Col 5 Special Provisions	Col 6 Explosive Limit and Limited Quantity Index	Col 7 ERAP Index	Col 8 Passenger Carrying Ship Index	Col 9 Passenger Carrying Road or Rail Index	Col 10 Marine Pollutant
ELEVATED TEMPERATURE, LIQUID, N.O.S.	UN **3257**	**9**	**III**		5			Forbidden	•
ELEVATED TEMPERATURE, SOLID, N.O.S.	UN **3258**	**9**	**III**		5			Forbidden	•
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	UN **3082**	**9**	**III**	16	5				•
ETHANOL more than 24 per cent ethanol, by volume	UN **1170**	**3**	**II** **III**		1 5			5 60	
ETHYLENE DICHLORIDE	UN **1184**	**3 (6.1)**	**II**		1			1	
ETHYL ETHER	UN **1155**	**3**	**I**		0		Forbidden	1	
EXPLOSIVE RIVETS *(see RIVETS, EXPLOSIVE)*									
GASOLINE; MOTOR SPIRIT; or **PETROL**	UN **1203**	**3**	**II**	82, 88	30	See SP 82	100	5	P
HELIUM, COMPRESSED	UN **1046**	**2.2**			0.125			75	
HYDROCHLORIC ACID	UN **1789**	**8**	**II** **III**		1 5	3,000		1 5	
INFECTIOUS SUBSTANCE, AFFECTING ANIMALS only	UN **2900**	**6.2**	**Category A**	84	0	See SP 84	0.05	0.05	
INFECTIOUS SUBSTANCE, AFFECTING HUMANS	UN **2814**	**6.2**	**Category A**	84	0	See SP 84	0.05	0.05	
ISOBUTANOL	UN **1212**	**3**	**III**		5			60	
LIQUEFIED PETROLEUM GASES	UN **1075**	**2.1**			0.125	3,000	65	Forbidden	•
LITHIUM BATTERIES	UN **3090**	**9**	**II**	34	0			5	
MERCURY	UN **2809**	**8**	**III**		5			35	
METHANOL	UN **1230**	**3 (6.1)**	**II**	43	1			1	

SWAB MASTER LTD. – TRANSPORTATION OF DANGEROUS GOODS

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METHYL ETHYL KETONE PEROXIDE, in solution with more than 9 percent by mass active oxygen		Forbidden							
METHYL MERCAPTAN	UN **1064**	**2.3 (2.1)**			0	500	Forbidden	Forbidden	P
MOLTEN SULPHUR *(see SULPHUR, MOLTEN)*									
NITROGEN, COMPRESSED	UN **1066**	**2.2**			0.125			75	
ORGANIC PEROXIDE TYPE C, LIQUID	UN **3103**	**5.2**	**II**	16, 38	0.025		Forbidden	5	
OXYGEN, COMPRESSED	UN **1072**	**2.2 (5.1)**			0.125	3,000	50	75	
POTASSIUM PEROXIDE	UN **1491**	**5.1**	**I**	38	0	1,000		Forbidden	
PROPANE *[may also be shipped as Liquefied Petroleum Gas]*	UN **1978**	**2.1**			0.125	3,000	65	Forbidden	
RADIOACTIVE MATERIAL, LOW SPECIFIC ACTIVITY (LSA-I) non-fissile or fissile excepted	UN **2912**	**7**		74	0	100			
RADIOACTIVE MATERIAL, TYPE A PACKAGE, non-special form, non-fissile or fissile excepted	UN **2915**	**7**		74	0				
RESIN SOLUTION, flammable	UN **1866**	**3**	**I** **II** **III**	 83 83	0.5 5 5		Forbidden	1 5 60	• • •
RIVETS, EXPLOSIVE	UN **0174**	**1.4S**	**II**		25				

Col 1	Col 2	Col 3	Col 4	Col 5	Col 6	Col 7	Col 8	Col 9	Col 10
Shipping Name and Description	UN Number	Class	Packing Group / Category	Special Provisions	Explosive Limit and Limited Quantity Index	ERAP Index	Passenger Carrying Ship Index	Passenger Carrying Road or Rail Index	Marine Pollutant
SELENIC ACID	UN **1905**	**8**	**I**		0	3,000		Forbidden	
SODIUM HYDROXIDE, SOLID	UN **1823**	**8**	**II**		1			15	
SODIUM HYDROXIDE SOLUTION	UN **1824**	**8**	**II**		1			1	
			III		5			5	
STRYCHNINE	UN **1692**	**6.1**	**I**		0	1,000		5	P
STYRENE MONOMER, STABILIZED	UN 2055	**3**	**III**		5			60	
SULPHURIC ACID, with more than 51 per cent acid	UN **1830**	**8**	**II**		1	3,000		1	
SULPHURIC ACID, with not more than 51 per cent acid	UN **2796**	**8**	**II**		1			1	
SULPHUR, MOLTEN	UN **2448**	**4.1**	**III**	32	0			Forbidden	
TARS, LIQUID, including road asphalt and oils, bitumen and cut backs	UN **1999**	**3**	**II**	89	5			5	•
			III	89	5			60	•
TOLUENE	UN 1294	**3**	**II**		1			5	

SWAB MASTER LTD. – TRANSPORTATION OF DANGEROUS GOODS

Special Provisions – Column 5

16. The technical name of the most dangerous substance related to the primary class must be shown, in parentheses, on the shipping document following the shipping name in accordance with clause 3.5(1)(c)(i)(A) of Part 3, Documentation. The technical name must also be shown, in parentheses, on a small means of containment or on a tag following the shipping name in accordance with subsections 4.11(2) and (3) of Part 4, Dangerous Goods Safety Marks.

17. These dangerous goods may be handled, offered for transport or transported under the UN number and shipping name UN1268, PETROLEUM DISTILLATES, N.O.S., PETROLEUM PRODUCTS N.O.S., DISTILLATS DE PÉTROLE, N.S.A. or PRODUITS PÉTROLIERS, N.S.A.

38. A person must not handle, offer for transport or transport these dangerous goods in a large means of containment if they are in direct contact with the large means of containment.

43. Despite section 2.1 of Part 2, Classification, these dangerous goods are assigned to this classification based on human experience.

82. These dangerous goods require an emergency response assistance plan in accordance with subsection 7.1(5) of Part 7, Emergency Response Assistance Plan.

84. The infectious substances identified in subsection 7.1(6) of Part 7, Emergency Response Assistance Plan, require an emergency response assistance plan.

88. Despite the quantity limits in column 9 of Schedule 1 for these dangerous goods, a road vehicle is not a passenger carrying road vehicle unless the passengers in it are transported for hire or reward.