

Appendix F - Fuel Handling & Fuel Spill Response Training Course Outlines

COURSE OUTLINE

OBJECTIVES

By the time you finish this course, you will:

- know your responsibilities
- recognize the labels and placards which identify dangerous goods
- be able to use the Handbook for reference
- use a checklist before offering or accepting dangerous goods for transport
- have a list of products showing the shipping name, classification and PIN
- meet the training requirements for TDG

CONTENT

Introduction

- background and purpose of the Regulations
- training and certification
- enforcement
- definition of terms
- shipper's, carrier's and consignee's responsibilities

Classification

- 9 classes of dangerous goods
- divisions, packing groups, subsidiary classification
- shipping names, PINs
- reference list of common products

Packaging

- UN packaging and "safe packaging"
- re-packaging after spill or leak

Safety Marks

- location, replacement, removal
- labels, markings, signs and placards

Documentation

- information required on shipping document
- multiple delivery documents
- location and distribution of documents
- "empty" containers
- waste manifest

Dangerous Occurrences

- definition of "dangerous occurrence"
- reporting and taking emergency measures

Special Requirements

- inter-modal and trans-border shipments
- exemptions and permits
- consumer commodities and limited quantities
- explosives, radioactives and PCBs

NAME Bob Gallant
 COMPANY WMC International LTD
 ADDRESS 22 GUADALUPE RD
NHEAN ON POSTAL CODE K2E 6A2
 PHONE 613 727 3937 FAX 613 727 3970
 DATE ORDERED 21 Oct 98 DATE REQUIRED 26 Oct 98

COMPANY _____
 ADDRESS _____
 POSTAL CODE _____
 PHONE _____ FAX _____
 MAIL COURIER/OTHER _____ PURCHASE ORDER _____
 CAC 137

CODE TDG - TRANSPORTATION OF DANGEROUS GOODS

		UNIT PRICE	QUANTITY	PRICE
1000	The TDG Manager™ (TDG Act and Regulations with Users Guide)	\$214.95	<u>1</u>	
1001	TDG Manager Update Service - 1 year	70.00		
1015	TDG Act and Regulations—CD ROM Version 1.0 (Introductory Price) NEW!	249.00		
1020	TDG Act and Regulations - Consolidated Edition	124.95		
1021	TDG Act and Reg's Update Service - 1 year	70.00		
1022	TDG Act and Reg's Update Service - 2 years	130.00		
3010	TDG Training (Instructor's) Package: English ☐ French ☐	494.00		
3040	TDG Training Video: English ☒ French ☐ NEW!	100.00	<u>1</u>	
3030	TDG Handbook (Shippers, Receivers and Handlers): English ☒ French ☐	7.95	<u>12</u>	
	1-25 \$7.95 26-99 \$7.45 100+ \$6.95			
1040	TDG "Self-Teach" Training Program	27.95	<u>1</u>	
1030	TDG Employer's Guide to the "Self-Teach" Training Program	16.00	<u>1</u>	
3045	TDG Video - "A Day in the Life of TDG"™	165.00		
1054	TDG Quick Check™ Compliance Posters (Laminated, 22"x36")	27.95		
1051	TDG Quick Check™ Compliance Posters (Poster Paper, 12"x18")	7.95		
1052	TDG Quick Check™ (Peel & Stick, 11"x8 1/2")	3.50	<u>12</u>	
1050	TDG Classification Guide and Checklist (Full Colour, 8 1/2"x11")	2.75	<u>12</u>	
1066	TDG/WHMIS Wallet Reference Card (Laminated)	0.90		
9050	"Self-Teach" Training Program for Shippers of Dangerous Goods by Air NEW!	45.00		
9050	IATA Dangerous Goods Regulations (for Transport by Air)	135.00		
3050	North American Guide to Initial Emergency Response NEW!	12.50	<u>2</u>	

WHMIS - WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM

2010	WHMIS Instructor's Package: English ☐ French ☐	\$494.00		
2030	WHMIS Employer's Guide - Compliance Guidelines and Regulations	98.95		
2035	WHMIS Handbook: English ☐ French ☐ (100+ \$4.75)	5.50		
2040	WHMIS "Self-Teach" Training Program	27.95		
2045	WHMIS Employer's Guide to the "Self-Teach" Training Program	16.00		
2054	WHMIS Quick Check™ Compliance Posters (Laminated, 20"x28")	27.95		
2051	WHMIS Quick Check™ Compliance Posters (Laminated, 14"x17")	12.95		
2055	WHMIS Quick Check™ (3 Hole Punched, 8 1/2"x11")	2.75		
9055	WHMIS MSDS Binder (3 inch, solid poly construction)	27.95		

OTHER MATERIALS

6000	Service Station Attendant's "Self-Teach" Safety Training Program	18.50		
6020	Employer's Guide to the Service Station Attendant's Safety Training Program	16.00		
7040	Confined Space Pre-Entry "Self-Teach" Program	24.95		

+ 15% HARMONIZED SALES TAX APPLIES TO THESE ITEMS
 7% GST ON ALL OTHER ITEMS

SUB-TOTAL	
S&H 5%	
GST (7%)	
HST (15%)	
TOTAL	



"Proudly serving
 our customers
 since 1985"

Product descriptions on back of order form.
 Danco provides complete training and consulting services.
 All prices F.O.B. Dartmouth. Satisfaction Guaranteed.
 Payment due upon receipt of order.
 Prices effective Feb 05, 1998.

FIRST START SAFETY INTERNATIONAL

First Start Safety International (FSSI) provides effective, innovative solutions in the field of Loss Control and Environment . We have a broad, diversified experience base in assisting clients in all disciplines.

FSSI takes great pride in implementing a practical, "User-Friendly" approach to problem solving, that focuses on ease of implementation, compliance, employee involvement, and complimentary to daily operations.

I have high-lighted a sampling of the services available from FSSI that guarantee solutions tailored to meet your requirements, while enhancing operations and production. There are many more available! FSSI has assisted companies of all sizes in areas that include construction, mineral exploration, manufacturing, government, health care, transportation and aviation.

Projects include work in Canada, U.S.A., Argentina, Brazil, Chile, French Guiana, Australia, Philippines, Nicaragua. This is quite an expanded profile, from a company that has it's roots in the construction industry in Nova Scotia!

FSSI SERVICES

MANAGING CONTRACTOR SAFETY

Monitoring, auditing contractor safety performance is an important aspect of effective project planning. FSSI has an effective solution that is working today in 17 countries to manage some 200 contractors.

TRAINING

FSSI is able to offer a broad range of training services. Traditional and regulatory training such as WHMIS, Transportation of Dangerous Goods, Confined Space are available.

Specialized programs are also available to cover a wide range of safety issues. These include Helicopter Safety, Survival Training, Fuel Spill Response, Wilderness Medicine, Driver Training and Appraisal, All Terrain Vehicles, Accident Investigation. FSSI can quickly develop a program to meet any of your training requirements.

AUDIT

FSSI can conduct audits on all or part of your operations in the areas of Health, Safety, Security, and Environment. We provide a detailed report, and unlike most audit protocols, we include recommended solutions based on audit results! This may include GAP ANALYSIS, a detailed program to improve your performance in a specific area or over-all, or assisting you with a customized audit-protocol for your internal use.

CRISIS MANAGEMENT &RESPONSE

FSSI has experience in the development of Crisis Response Plans for many environments. This includes fire, natural disaster, major personnel losses from injury or fatalities, aviation and environmental emergencies, and finally, security. FSSI can review existing plans, conduct risk assessment on a particular area, or facilitate the preparation of your Crisis Response Plan

ENVIRONMENTAL MANAGEMENT SYSTEM

Many senior executives believe that negative environmental impacts will be the leading cause of business failure . FSSI is ready to provide a comprehensive, workable Environmental Management System that will be effective, ensure compliance, and demonstrate responsible environmental leadership.

“SAFETY IS LIFE” is the simple philosophy at FSSI and guides all our activities. To contact

Ph 1 613 850 7160

1 613 248 2298

Fax 248 2299

E mail Bob.Gallant@wmc.com.au

Bob Gallant
President

NEED:

TEG Act and Regulations
 North American Emergency Response Guide Book
 IAT Regulations

* 3 years certification for transportation of dangerous goods
 ⇒ 2 years copy of shipping document kept for

Note: Contact Atlantic Publications
 to obtain TEG Act and Regulations on CD, PDF
 also scanner needed to put format into
 computer files.

NEED: extra TEG Handbooks
 large waterproof classification guide

* 200 gal. capacity on Delta

1998



GEOSCIENCE
FORUM
YELLOWKNIFE • CANADA

November 25-27, 1998
Yellowknife, Northwest Territories

- * General Safety Guidelines to be included in
also to be posted in ^{fuel spill contingency plan} visible place. ✓ ✓
- * Safety orientation supplied for new employees, and
✓ update returning personnel. ✓
- * Written safety check lists:
3 part check list: 1) fuel transfer into deck
2) safety check of load
3) fuel transfer into storage ✓



IN TRANS

- ⇒ spill by loading delta from bulk tank
 - valve malfunction.
 - overfill
 - check hoses, couplings

DURING TRANSPORT

- ⇒ tank dislodgement due to poor anchor to bed of delta
- ⇒ truck off road, rupturing bladder
- ⇒ truck through the ice
- ⇒ lightning on truck before causing fire

AT DELIVERY SITE

valve/coupling/hose malfunction
 overfill
 human error in response due to location

fire after spill.
 freezing of lines (transferring causing blockage - possible water in fuel)

STORAGE ON SITE

DURING TRANSPORT

- ⇒ shut down delta
- ⇒ assess situation
- ⇒ report to contact by sat phone, HF radio
- ⇒ containment if possible prior to reporting
or extinguish small fires.
- ⇒ survival gear if necessary to abandon delta

⇒



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(403) 920-8130

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4. $\angle C = 90^\circ$, $\angle A = 30^\circ$, $\angle B = 60^\circ$.

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Δμοιρτζιζ'β'δ', 73αΔ°Γ
 Δ'β'εΔC: (403) 920-8240
 Δ'β'ε'δ': (403) 873-9318

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ᐅᑦᓴᑦᐅᑦᓄᑦ: (403) 920-6060
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MANIFEST – MANIFESTE

THIS MANIFEST CONFORMS TO ALL FEDERAL AND PROVINCIAL TRANSPORT AND ENVIRONMENTAL LEGISLATION INCLUDING A MANIFEST
CE MANIFESTE EST CONFORME AUX LÉGISLATIONS FÉDÉRALE ET PROVINCIALE SUR L'ENVIRONNEMENT ET LE TRANSPORT RÉGLEMENTÉ UN MANIFESTE

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SHIPPER'S DECLARATION FOR DANGEROUS GOODS/ATTESTATION DE L'EXPÉDITEUR DE MARCHANDISES DANGEREUSES

Shipper/Expéditeur

Air Waybill No./No. de la L.T.A. _____

Page _____ of _____ Pages Page _____ sur _____

Shipper's Reference Number _____
No de référence de l'expéditeur
(Optional/Facultatif)

Consignee/Destinataire



Two completed and signed copies of this Declaration must be handed to the operator.
Remettre au transporteur deux exemplaires remplis et signés de la présente attestation.

WARNING: Failure to comply in all respects with the applicable Dangerous Goods Regulations may be in breach of the applicable law, subject to legal penalties. This Declaration must not, in any circumstances, be completed and/or signed by a consolidator, a forwarder or an IATA cargo agent.

AVERTISSEMENT: Tout manquement à la Réglementation IATA pour le transport de marchandises dangereuses peut constituer une violation de la loi et entraîner des sanctions. Cette attestation ne peut en aucun cas être remplie ou signée par un groupeur, un transitaire ou un agent de fret de l'IATA.

TRANSPORT DETAILS/RENSEIGNEMENTS SUR LE TRANSPORT

This shipment is within the limitations prescribed for (delete non-applicable)
La présente expédition est conforme aux conditions du transport par (biffer la case inutile)

Airport of Departure
Aéroport de départ

PASSENGER AND
CARGO AIRCRAFT
AVION
PASSAGER
OU CARGO

CARGO
AIRCRAFT
ONLY
AVION
CARGO

Airport of Destination:
Aéroport de destination

Shipment type (delete non-applicable)/
Type d'expédition (biffer la case inutile)

NON-RADIOACTIVE

RADIOACTIVE

NATURE AND QUANTITY OF DANGEROUS GOODS (see sub-Section 8.1 of IATA Dangerous Goods Regulations)

NATURE ET QUANTITÉ DES MARCHANDISES DANGEREUSES (Voir article 8.1 de la Réglementation IATA pour le transport des marchandises dangereuses).

Dangerous Goods Identification
Identification des marchandises dangereuses

Proper Shipping Name	Class or Division	UN or ID No.	Packing Group	Subsidiary Risk	Quantity and Type of Packing	Packing Instructions	Authorization
Désignation de Chaque Article	Classe ou Division	No. UN ou ID	Ensemble D'emballage	Risque Secondaire	Quantité Type D'emballage	Instructions D'emballage	Autorisation

Additional Handling Information/Renseignements supplémentaires sur la manutention

packed in accordance with I.C.A.O. Regulations/Emballage effectué conformément aux instructions techniques de l'O.A.C.I. ☐ Yes/Oui ☐ No/Non

I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labelled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Je déclare que la présente expédition est intégralement et précisément désignée, classifiée, emballée, marquée et étiquetée/placardée et qu'elle peut être transportée conformément aux règlements internationaux et gouvernementaux.

Name/Title of Signatory
Nom et fonction du signataire

Place and Date
Lieu et date

Signature
(see warning above)
(voir l'avertissement ci-dessus)

PROPERTIES OF PETROLEUM

Gaseous and volatile liquid elements are highly flammable and toxic

Crude petroleum which is weathered, is not flammable

As spilled petroleum becomes weathered, it emulsifies and forms a mousse like consistency. This material adheres to rocks and other objects creating a slippery hazard.

TYPES OF PERSONAL PROTECTIVE EQUIPMENT

Approved Face and Eye Protection

Approved Footwear

Respiratory Protection

Approved Hearing Protection

Approved Head Protection

Oil Resistant Gloves

Approved Life Jackets or Personal

Flotation Devices (PFD)

Protective Outerwear

Insulated Inner Clothing

DECONTAMINATION OF PERSONAL PROTECTIVE EQUIPMENT

Wipe off any contaminant

Inspect your PPE

Do not dispose of PPE

Replace or repair damaged PPE

Wear your PPE properly

WORKING ENVIRONMENT

Common injury causes

Terrain

Poor weather conditions

Hypothermia

Heat exhaustion

Heatstroke

Wildlife

Buddy System

There are three simple rules:

1. Keep your buddy in sight at all times
2. Always be able to communicate with your buddy verbally or with universal hand signals
3. Watch your buddy for signs of fatigue or exposure to cold/heat

Universal Hand Signals

SIGNAL

MEANING

Hand clutching throat

Out of Air
Can't breath

Hands on top of head

Need Assistance

Thumbs up

Okay
I'm alright
I understand

Thumbs down

No
Negative

Grip partner's wrist or
place both hands around
partner's waist

Leave area
immediately

Characteristics of Petroleum Products

- 1. General Hazards**
- 2. MSDS**
- 3. Properties**
- 4. Vapours**
- 5. Controlled sites**
- 6. Confined Space**
- 7. Hydrogen Sulphide**
- 8. Fire and Explosion**
- 8. Fire & Explosion**

Petroleum products that could spill in transit are:

Light to volatile oils, such as gasoline

**Moderate to heavy oils, like diesel,
lubricating oils, and bunker**

COMMON ROUTES OF EXPOSURE

Inhalation - act of drawing fumes or vapours into the lungs

Aspiration - act of breathing petroleum products - in liquid form into the lungs

Ingestion - can occur when food or cigarettes are handled with contaminated hands

Skin Contact - usually the main exposure to oil cleanup operations.

SYMPTOMS OF EXPOSURE

**Dulled sense of
smell**

Dizziness

Headaches

Eye irritation

**Diminished sense
of responsibility**

Nausea

Mental Confusion

**Shortness of
breath**

**Loss of
consciousness**

**Everyone has different tolerance
levels. If you are bothered by a
petroleum vapour seek medical
attention**

CONTROLLED SITES

Do not cross any barrier unless authorized

Encourage spectators to keep clear of the area and the hazards involved

Inform trained personnel if you suspect unauthorized people are on the work site.

SAFETY PRECAUTIONS

Work upwind from oiled areas.

Do not assume that gases and vapours are harmless because they lack odour.

Do not enter confined spaces until tested and posted safe for entry.

Use approved respirators according to directions provided.

DO'S AND DON'TS AT SPILL SCENE

Do not light a fire - comforting maybe but can be a source of ignition for oily clothing, waste and other debris

Do not smoke - has the potential of explosion

Do not carry matches or lighters

Do not bring electronic equipment or flashlights onto spill scene unless using intrinsically safe equipment