YORK UNIVERSITY

TRANSPORTATION OF DANGEROUS GOODS

GUIDELINES AND PROCEDURES

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I DOHS MISSION STATEMENT

The mission statement of the Department of Occupational Health and Safety (DOHS) is to promote the highest standards of Occupational Health and Safety in the York Community with professionalism and objectivity.

II OBJECTIVES

The Transportation of Dangerous Goods (TDG) Guidelines and Procedures support York University’s Occupational Health and Safety Policy by:

- Informing supervisors about the requirements of the Transportation of Dangerous Goods Act and Regulations (Clear Language) so that they can take the required action to ensure compliance on the part of York University.
- Providing information to emergency response personnel in the event of a chemical spill when transporting dangerous goods.

III DEFINITIONS

As stated in the federal TDG Act (Transport Canada), dangerous goods are defined as “a product, substance or organism included by its nature or by the regulations in any of the classes listed in the schedule to the Act.”

IV APPLICATION

The TDG Act and Regulations apply to all handling, offering for transport, importing and transporting of dangerous goods.

V PROGRAM REVIEW

The York University Transportation of Dangerous Goods Guidelines and Procedures shall be reviewed once every two years in consultation with JHSC(s), H&S representative(s), FSE and CSBO.

VI STANDARDS AND REGULATIONS

Transportation of Dangerous Goods requirements are outlined in the TDG Act and Regulations (link below). These requirements are enforced by Transport Canada.

TDG Regulations (clear language):  http://www.tc.gc.ca/eng/tdg/clear-tofc-211.htm
There are other relevant legislations that may also apply. Refer to Appendix 2 for details.

**Exemptions**

There are circumstances where the Regulations do not apply, provided that the requirements below have been met including the small quantity exemption guidelines set out in the Regulation.

1. **Samples** (TDG Regulations, Section 1.19 (2):

These Regulations do not apply to samples of goods that the consignor reasonably believes to be dangerous goods, if

(a) The samples are in transport for the purposes of classifying, analysing, testing or demonstrating;

(b) The samples are believed not to contain explosives, infectious substances or radioactive materials;

(c) The gross mass of the samples is less than or equal to 10 kg;

(d) The samples are accompanied by a shipping document that, despite sections 3.5 and 3.6 of Part 3, Documentation, includes the name and address of the consignor and the words "test samples" or "échantillons d'épreuve";

(e) The samples are in a means of containment that is designed, constructed, filled, closed, secured and maintained so that under normal conditions of transport, including handling, there will be no accidental release of dangerous goods that could endanger public safety; and

(f) The means of containment has marked on it the words "test samples" or "échantillons d'épreuve" and the words are legible and displayed against a background of contrasting colour.

2. **Transportation between Two Properties** (TDG Regulations, Section 1.28):

These Regulations do not apply to dangerous goods, other than Class 1, Explosives, or Class 7, Radioactive Materials, that are in transport on a road vehicle between two properties owned or leased by the manufacturer or user of the dangerous goods if:

(a) the dangerous goods are transported a distance less than or equal to 3 km on a public road;

(b) the road vehicle has displayed on it: the placard for the primary class of the dangerous goods, or the DANGER placard

(c) the dangerous goods are in a means of containment that is designed, constructed, filled, closed, secured and maintained so that under normal conditions of transport, including
handling, there will be no release of the dangerous goods that could endanger public safety; and

(d) the appropriate provincial authority (local police) is advised of the nature of the dangerous goods in advance of the transport.

VII ROLES AND RESPONSIBILITIES

This section outlines the responsibilities within York University for implementation of the TDG Guidelines and Procedures.

1. York University Responsibilities

Through its departments, faculties and tenants, York University is responsible for ensuring that the University or other parties with whom it contracts for the shipping, packaging, receiving and transporting dangerous goods on the University’s behalf operate in accordance with the TDG Act and Regulations.

2. Departmental Responsibilities (See Appendix 1 for details)

   A. Classification of Dangerous Goods

      The shipper (consignor) is responsible for classifying all dangerous goods that are to be shipped. Goods classified by the manufacturer should be verified by the shipper. Where the composition of the products has been changed (e.g., mixtures of hazardous waste), the products may need to be reclassified. The carrier is responsible to ensure that the documentation matches the package.

   B. Packaging

      The shipper (consignor) is responsible for obtaining the proper packaging materials. If you are unsure of the class or the type of package required, you contact the manufacturer, consult the original shipping documentation, or contact DOHS.

      The outer package of dangerous goods must contain the following:
      - The Shipping Name listed in upper case letters
      - Hazard class label(s)
      - Identification number (UN number)
      - Packing group
      - Orientation label (for liquids only)
      - Standardized UN certification mark (automatically appears on UN certified packaging)
C. **Labelling and Placarding**

1. **By York Personnel (consignor)**

Shippers (consignors) of the dangerous goods are responsible for ensuring that all dangerous goods that are to be transported off campus, including hazardous waste, are properly labelled and that the appropriate placards are displayed on the vehicle in accordance with the requirements of the TDG Act and Regulations.

Note: For information on labels/placards or how to obtain them you can contact Science & PRB Stores. Refer to Section IX, on the General Information List for the contact phone numbers.

2. **By a Licensed Carrier**

If a licensed carrier such as a waste disposal company undertakes to label dangerous goods, including hazardous waste, and provide the appropriate placards on their vehicle for the purposes of transporting it as a dangerous good, they must sign the attached form entitled “Transportation of Dangerous Goods.” In signing this form, the carrier is indicating that they will transport such items in accordance with the TDG Act and Regulations. Refer to Section VIII for this form.

3. **Placarding of Independent Coupling Device**

Independent coupling devices connected to bulk containers (i.e., larger than 454 litres) of dangerous goods shall be placarded in accordance with TDG Act and Regulations unless otherwise identified under another law. For example, the nitrogen tank-coupling device on the Petrie Science Building loading dock must be appropriately placarded.

D. **Documentation of Dangerous Goods**

The shipper (consignor) is responsible for completing the shipping document. The carrier shall ensure that the documents match the package. Persons ordering and receiving dangerous goods shall ensure that shipping documents are sent by the suppliers where required by the TDG Act and Regulations and shall refuse shipments if not in compliance. Documents must be retained for at least two years.

E. **Documentation of Waste Manifests (consignor)**

Workers who arrange for the disposal of hazardous waste shall review the waste manifests to ensure they are completed in accordance with the TDG Act and Regulations. The Ministry of Environment has introduced an electronic system for completion of waste manifests, although paper manifests are still accepted. This system, the Hazardous Waste Information Network (HWIN), requires that each waste generating site be licensed annually with HWIN. Both Keele and Glendon campuses are so licensed and overseen by the HWIN administrator in the Department of Occupational Health and Safety (DOHS). If there are questions
regarding the HWIN system, the HWIN administrator in DOHS should be contacted for further information at 55491 or 416-736-5491.

For those departments using paper manifests for waste disposal, the following procedures shall be observed:

(i) The paper manifest is a 6 part document (see figure 1 below). The generator (York University) completes Part A and the carrier completes Part B.
(ii) Generator maintains Copies 1 and 2 (white and green).
(iii) Generator mails Copy 1 (white) to the Ministry of the Environment-Regional Office within three business days after the waste transfer.
(iv) Generator maintains Copy 2 (green) for his records.
(v) Carrier takes Copies 3, 4, 5, 6 to accompany waste transportation.
(vi) Receiver completes Section C of Copies 3, 4, 5, 6.
(vii) Receiver mails Copy 3 to MOE, Copy 4 to carrier, maintains Copy 5, and mails Copy 6 (brown) to generator.
(viii) Generator files both Copy 2 (green) and Copy 6 (brown) for his records for a minimum of 2 years. Specific instructions regarding the distribution of manifests are also described on the back of the manifest form.
(ix) Generator, York University department where the waste was originated and shipped, forwards a copy of the Copy 6 of the manifest to the HWIN administrator in DOHS.
(x) DOHS maintains central records of copies of Copy 6 for the whole university.

E. Training

A person that handles, offers for transport or transports dangerous goods must be trained in TDG and have a valid training certificate. Within each area or department that ships or receives dangerous goods, management shall identify individuals who require transportation of dangerous goods training. Arrangements for training can be made by contacting DOHS. Retraining is required every three years. A training certificate must be available for
inspection. If departments arrange for the TDG training of their employees directly through an external training agency, they must have the training certificates signed by the employer (DOHS). DOHS will also keep copies for the central file.

**Note:** **TDG training is not complete until the certificates are signed by the employer (DOHS).**

F. Reporting of Dangerous Occurrences

Dangerous occurrences are those events involving hazardous spills to the environment. These should be immediately reported by the shipper (consignor), carrier and/or receiver to the following:

- Department of Occupational Health and Safety
- York Security Services (after working hrs)
- Ontario Ministry of the Environment (MOE) Spills Action Centre
- Toronto Police Department *

*Note:* Although the MOE Spills Action Centre will usually call the local police in the event of a dangerous occurrence, York University is ultimately responsible for ensuring that the police have been notified. Therefore, confirm that the MOE Spills Action Centre will be calling the police or call them directly yourself.

York University service vehicles that regularly transport dangerous goods (e.g., CSBO vehicles) should be equipped with spill clean up kits. These kits should be large enough to control spills from entering storm and sanitary sewer systems from roadways. In the case of smaller scale spills, it should be noted that spill clean up kits or absorbent material are available at:

- DOHS office (ext.55491 or 416-736-5491)
- PRB Stores (ext.22265 or 416-736-2265)
- Farquharson Science Stores (ext.30570 or 416-736-0570)
- Petrie Science Stores (ext.55244 or 416-736-5244)

3. **Workplace-Specific Responsibilities**

A. **Campus Services & Business Operations (CSBO)**

CSBO is responsible for ensuring that employees from CSBO do not transport hazardous goods off campus unless they receive training on the Transportation of Dangerous Goods
and obtain a certificate of training. If possible, all hazardous waste should be picked up by licensed hazardous waste disposal companies. All distributors and manufacturers of dangerous goods should transport their goods directly to the required campus location.

B. Faculty of Science and Engineering & Faculty of Health

Shipping dangerous goods off campus from the Faculty of Science and Engineering and Faculty of Health should be initiated by TDG trained personnel. Science Stores personnel in Petrie Science and Farquharson Building are available for assistance if required.

C. Dangerous Goods Shipped to York University from Off Campus

The individual who receives dangerous goods from off campus is responsible for forwarding all shipping documents to Stores. Individuals may indicate in writing to the Head of Department that they will file the documents in their own office for a period of two years and make them available to Transport Canada when inspected.

These shipping documents are the combined Bill of Lading (photocopies acceptable) and/or Shippers Declarations (originals preferred).

D. Department of Occupational Health and Safety

The Department of Occupational Health and Safety (DOHS) is responsible for:

- Liaison with Transport Canada and the Ontario Ministry of the Environment on all matters related to the transportation of dangerous goods.
- Assisting where necessary in the classification of dangerous goods in accordance with the TDG Act and Regulations.
- Arranging training as well as retraining every three years regarding Transportation of Dangerous Goods responsibilities. It is the responsibility of the individual departments or faculties to notify DOHS when employees require such retraining.
- Maintaining copies of Training certificates.
- Maintaining central records of waste manifests (copy of Copy 6)

VIII TRANSPORTATION OF DANGEROUS GOODS FORM

Use this form when a licensed carrier undertakes the responsibility to label and provide the appropriate placard(s) on their vehicle for the purposes of shipping dangerous goods, including hazardous waste, off campus. The labelling and placarding must be in accordance with the TDG Act and Regulations.

<table>
<thead>
<tr>
<th>Name of</th>
<th>Class, Division and Description of Labels and Placards Provided</th>
<th>Signature</th>
</tr>
</thead>
</table>


<table>
<thead>
<tr>
<th>Carrier</th>
<th>Indicate if required by TDG Act and Regulations</th>
<th>Label</th>
<th>Placard</th>
</tr>
</thead>
<tbody>
<tr>
<td>e.g., ABC Company</td>
<td>5.1 Oxidizing Materials (Quantity)</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

IX  CONTACT LIST

1. Immediate Notification List

The following agencies should be immediately contacted in the case of a spill of dangerous goods:

<table>
<thead>
<tr>
<th>Name</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Occupational Health and Safety</td>
<td>Ext. 55491 or 416-736-5491</td>
</tr>
<tr>
<td>York Security Services (after working hrs)</td>
<td>Ext. 33333 or 416-736-5333</td>
</tr>
<tr>
<td>Ontario Ministry of the Environment Spills Action Centre</td>
<td>416-325-3000 or 1-800-268-6060</td>
</tr>
<tr>
<td>Toronto Police Service (not necessary if MOE will call them)</td>
<td>911</td>
</tr>
</tbody>
</table>

Once the appropriate agencies have been called and the spill has been controlled, a Dangerous Occurrence Report must be completed and sent to:

Transport Dangerous Goods (TDG)
Director General
Place de Ville, Tower C, 9th Floor
330 Sparks St.,
Ottawa, Ontario
K1A ON5
For 24-hour emergency spill reporting, you can also contact CANUTEC (Canadian Transport Emergency Centre) at 613-996-6666 or *666 on a cell phone. If unsure, contact DOHS for further assistance.

2. **General Information List**

The following parties/agencies can be contacted for further general information regarding the TDG Act and Regulations:

<table>
<thead>
<tr>
<th>Name</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Occupational Health and Safety</td>
<td>Ext. 55491 or 416-736-5491</td>
</tr>
<tr>
<td>Science Stores (Petrie &amp; Farquharson), FSE</td>
<td>Ext. 55244 &amp; 30570</td>
</tr>
<tr>
<td>PRB Stores</td>
<td>Ext. 22265</td>
</tr>
<tr>
<td>International Compliance Centre</td>
<td>1-888-977-4834</td>
</tr>
<tr>
<td>CANUTEC (Canadian Transport Emergency Centre)</td>
<td>613-992-4624</td>
</tr>
</tbody>
</table>

X. **Appendix 1-Responsibilities Table**

<table>
<thead>
<tr>
<th>RESPONSIBILITIES</th>
<th>SHIPPER (CONSIGNOR)</th>
<th>CARRIER</th>
<th>RECEIVER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classificatory Identification</td>
<td>YES</td>
<td>YES</td>
<td>-</td>
</tr>
<tr>
<td>Packaging</td>
<td>YES</td>
<td>YES</td>
<td>-</td>
</tr>
<tr>
<td>Marking/Labelling</td>
<td>YES</td>
<td>YES</td>
<td>*</td>
</tr>
<tr>
<td>Shipping Documents</td>
<td>YES</td>
<td>YES</td>
<td>**</td>
</tr>
<tr>
<td>Placarding</td>
<td>YES</td>
<td>YES</td>
<td>*</td>
</tr>
<tr>
<td>Loading/Unloading</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Reporting</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>ERAP (Emergency Response Assistance Plan)</td>
<td>YES</td>
<td>YES</td>
<td>-</td>
</tr>
<tr>
<td>Training</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
</tbody>
</table>

*Must remove safety marks when required  
**Document must be retained for 2 years except for the receiver

**Appendix 2- Additional Legislation**
a) ICAO (International Civil Aviation Organization) Technical Instructions for the Safe Transport of Dangerous Goods by Air.

b) IATA (International Air Transport Association) Dangerous Goods Regulations.


e) US DOT Reg.49 CFR (Shipping to US).

f) Human Pathogens and Toxins Act and Laboratory Biosafety Guidelines, Health Canada.

g) Environmental Protection Act.