

1. General

1.1 Section Includes

- 1.1.1 This Section specifies the requirements for the safe storage and handling of fuels and other hazardous, toxic or dangerous material as well as the container registration procedures and the reporting and cleanup of accidental spills of such substances.

1.2 Related Sections

- 1.2.1 Section 01 33 00 – Submittal Procedures.
- 1.2.2 Section 03 30 00 – Cast-in-Place Concrete.

1.3 References

- 1.3.1 Health Canada/Workplace Hazardous Materials Information System (WHMIS).
- Material Safety Data Sheets (MSDS).
- 1.3.2 National Fire Code of Canada (2005).
- 1.3.3 Transportation of Dangerous Goods Act (TDG Act) 1999.
- 1.3.4 Transportation of Dangerous Goods Regulations (T.19.01-SOR/2003-400).
- 1.3.5 Government of Newfoundland and Labrador Regulation 58/03, The Storage and Handling of Gasoline and Associated Products Regulations, 2003
- 1.3.6 Occupational Health and Safety Act, Government of Newfoundland and Labrador.

1.4 Definitions

- 1.4.1 Dangerous Goods: products, substance, or organism that is specifically listed or meets hazard criteria established in Transportation of Dangerous Goods Regulations.
- 1.4.2 Hazardous Material: product, substance or organism that is used for its original purpose; and that is either dangerous goods or a material that may cause adverse impact to environment or adversely affect the health of persons, animals, or plant life when released into the environment.
- 1.4.3 Hazardous Waste: any hazardous material that is no longer used for its original purpose and that is intended for recycling, treatment or disposal.
- 1.4.4 Workplace Hazardous Materials Information System (WHMIS): Canada-wide system designed to give employers and employees information about hazardous materials used in the workplace. Under WHMIS, information on hazardous materials is provided on container labels, material safety data sheets (MSDS) and worker

education programs. WHMIS is put into effect by combination of federal and provincial laws.

1.5 Submittals

1.5.1 Provide submittals in accordance with Section 01 33 00 – Submittal Procedures.

1.5.2 Product Data

- Submit product data in accordance with Section 01 33 00 – Submittal Procedures.
- Submit to the Departmental Representative current Material Safety Data Sheet (MSDS) for each hazardous material required prior to bringing hazardous material on site.

1.6 Delivery, Storage and Handling

1.6.1 Coordinate the storage of hazardous materials with the Departmental Representative and abide by internal requirements for labelling and storage of materials and wastes.

1.6.2 Store and handle hazardous materials and wastes in accordance with applicable federal and provincial laws, regulations, codes and guidelines.

1.6.3 Waste oils and lubricants shall be retained in a tank or closed container, approved for that purpose.

1.6.4 Creosote treated timber is not permitted for use on this site.

1.6.5 Toxic or dangerous substances such as form release agents, fuels, concrete additives (including super-plasticisers), and other such substances, shall be transported, stored, and handled with all necessary precautions so as to prevent any spillage from occurring. Drip pans shall be used at locations where such liquids are being drawn off in order to contain any minor spills, and as a safety measure for containment of a significant spillage.

1.6.6 Store and handle flammable and combustible materials in accordance with current National Fire Code of Canada requirements.

1.6.7 Keep minimal amounts of flammable and combustible liquids such as gasoline, kerosene and naphtha for ready use.

- Store flammable and combustible liquids in approved safety containers bearing the Underwriter's Laboratory of Canada or Factory Mutual seal of approval.
- Storage of quantities of flammable or combustible liquids exceeding 45 litres for work purposes requires the written approval of the Departmental Representative.

1.6.8 The Contractor shall ensure that fuels and hazardous materials are handled only by personnel who are trained and certified in handling these materials in accordance with manufacturer's instructions and government regulations. The Contractor will be

required to verify personnel qualifications as they pertain to this item and provide written confirmation of same to the Departmental Representative.

- 1.6.9 Refuelling operations shall be supervised at all times. Under no circumstances shall any refuelling procedure be left unattended by the operator for any length of time.
- 1.6.10 Handling and fuelling procedures shall be carried out in a manner that ensures prevention of contamination of soil or water.
- 1.6.11 Observe smoking regulations, smoking is prohibited in areas where hazardous materials are stored, used or handled.
- 1.6.12 Clearly legible signage shall be erected indicating fuel and dangerous materials storage areas.
- 1.6.13 Do not use flammable liquids having a flashpoint point below 38 degrees C, such as naphtha or gasoline as solvents or cleaning agents.
- 1.6.14 Store flammable and combustible waste liquids for disposal in approved containers located in safe, ventilated area. Keep quantities to a minimum.
- 1.6.15 Storage requirements for quantities of hazardous materials and wastes in excess of 5 kg for solids, and 5 litres for liquids:
 - Store hazardous materials and wastes in closed and sealed containers.
 - Label containers of hazardous materials and wastes in accordance with WHMIS.
 - Store hazardous materials and wastes in containers compatible with that material or waste.
 - Segregate incompatible materials and wastes.
 - Ensure that different hazardous materials or hazardous wastes are not mixed.
 - Store hazardous materials and wastes in secure storage area with controlled access.
 - Maintain clear egress from storage area.
 - Store hazardous materials and wastes in location that will prevent them from spilling into the environment.
 - Have appropriate emergency spill response equipment available near the storage area, including personal protective equipment.
 - Maintain an inventory of hazardous materials and wastes, including the product name, quantity and date when storage began.
- 1.6.16 Ensure personnel have been trained in accordance with Workplace Hazardous Materials Information System (WHMIS) requirements.

- 1.6.17 Fuelling or servicing of mobile equipment shall not be allowed within 100 m of a watercourse, water body, or designated wetland, except within a refuelling site approved by the Departmental Representative where conditions allow for the containment of accidentally spilled fuels.
- 1.6.18 Oils, greases, gasoline, diesel, hydraulic and transmission fluids or other fuels or dangerous materials shall be stored at least 100 m (horizontal distance) from any water course, water body or designated wetland.
- 1.6.19 Waste oils and lubricants shall be disposed of by a company licensed by the Government Services Centre for the handling and disposal of waste oil products.

1.7 Transportation

- 1.7.1 Transport hazardous materials and wastes in accordance with federal Transportation of Dangerous Goods Act, Transportation of Dangerous Goods Regulations, and applicable provincial regulations.
- 1.7.2 If hazardous waste is generated on site:
- Coordinate transportation and disposal with Departmental Representative.
 - Ensure compliance with applicable federal, provincial and municipal laws and regulations for generators of hazardous waste.
 - Use licensed carrier authorized by provincial authorities to accept subject material.
 - Prior to shipping material obtain written notice from intended hazardous waste treatment or disposal facility that it will accept material and that it is licensed to accept this material.
 - Label containers with legible, visible safety marks as prescribed by federal and provincial regulations.
 - Ensure that trained personnel handle, offer for transport, or transport dangerous goods.
 - Provide photocopy of shipping documents and waste manifests to Departmental Representative.
 - Track receipt of completed manifest from consignee after shipping dangerous goods. Provide a photocopy of completed manifest to Departmental Representative.
 - Report discharge, emission, or escape of hazardous materials immediately to Departmental Representative and appropriate regulatory authorities.

2. Products

2.1 Materials

- 2.1.1 Only bring on site quantities of hazardous materials required to maintain ongoing performance of the work.
- 2.1.2 Maintain MSDS in proximity to where materials are being stored and used. Communicate these locations to personnel who may have contact with hazardous materials.

3. Execution

3.1 Equipment Servicing Procedures

- 3.1.1 All equipment maintenance shall be carried out by using suitable field collection equipment in a manner which ensures all waste material is collected and suitably disposed of.
- 3.1.2 The Contractor shall ensure that all equipment is mechanically sound to avoid leaks of grease, oil, diesel, gasoline, and hydraulic and transmission fluids.
- 3.1.3 Fuelling, servicing or washing of equipment shall not be allowed within 100 m of a watercourse, water body or designated wetland, except within a refuelling site approved by the Departmental Representative where conditions allow for the containment of accidentally spilled fuels.
- 3.1.4 The Contractor shall remove from the work area and properly store all waste oil, filters, containers or other such debris until which time they can properly be disposed of by a company licensed by the Government Services Centre for the handling and disposal of waste oil products.

3.2 Spill Reporting and Cleanup Procedures

- 3.2.1 The Contractor shall take all necessary precautions to prevent the spillage, misplacement or loss of fuels and other hazardous materials.
- 3.2.2 Any spillage of less than 70 litres shall be immediately cleaned up by the Contractor and reported promptly to the Departmental Representative.
- 3.2.3 The Contractor shall abide by the following measures in the event of the detection of a fuel or hazardous material spill of 70 litres or more:
 - Make every effort to stop leakage and contain contaminant flow.
 - Immediately upon detection, report the spill location and size to the Canadian Coast Guard spill report number at 709-772-2083, the Department of Environment and Lands, and to the Departmental Representative.

- Follow up with a full written report containing information on the cause of the spill, remedial action taken, damage or contamination estimate, and any further action to be taken.
- Remove contaminant from the spill site by absorbent, pumping, burning, or whatever method is appropriate and acceptable to the Departmental Representative. Clean-up the affected area in accordance with the requirements of the Government Services Centre and then dispose of contaminated debris at an approved waste disposal site.
- Take all necessary action to ensure that the incident does not recur.

3.2.4 The Contractor shall apply the following criteria in reaching decisions on contaminant and clean-up procedures:

- Minimize danger to persons.
- Minimize pollution to watercourses and wetlands.
- Minimize the size of the area affected by the spill.
- Minimize the degree of disturbance to the area and watercourses during clean-up.

3.2.5 The Contractor shall dispose of any soil contaminated by small leaks of oil or lubrication fluids from equipment in a manner approved by the Departmental Representative and in accordance with the criteria of the Government Services Centre.

3.2.6 The Contractor shall have on site a suitable quantity of absorbent material which can be accessed quickly and effectively in the event of any hydrocarbon spill. The Contractor shall advise all fuel handling staff of its location and provide instruction on its proper and effective application.

3.3 Disposal

3.3.1 Dispose of hazardous waste materials in accordance with applicable federal and provincial acts, regulations and guidelines.

3.3.2 Recycle hazardous wastes for which there is approved, cost effective recycling process available.

3.3.3 Send hazardous wastes to authorized hazardous waste disposal or treatment facilities.

3.3.4 Burning, diluting or mixing hazardous wastes for the purpose of disposal is prohibited.

3.3.5 Disposal of hazardous materials into waterways, storm or sanitary sewers, or in municipal solid waste landfills is prohibited.

3.3.6 Dispose of hazardous wastes in a timely fashion in accordance with applicable regulatory agencies.

3.3.7 Minimize the generation of hazardous waste to maximum extent practicable. Take necessary precautions to avoid mixing clean and contaminated wastes.

4. Measurement and Basis for Payment

4.1 Measurement for Payment

4.1.1 This item will not be measured for payment.

4.2 Basis for Payment

4.2.1 No separate or direct payment will be made for work under this Section, which will be considered incidental to work under this Contract. Costs will be deemed to be included in the unit and lump sum prices quoted in the Schedule of Quantities and Prices.