

GUIDELINES FOR THE STORAGE AND HANDLING OF TREATED SEED

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Aussi Disponible en Français

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Introduction

The guidelines for the storage and handling of treated seed were developed by the industry for the use of the industry to demonstrate good stewardship of our products. Seed treatments and treated seed offer farmers an excellent, low risk approach to crop protection and enhancement.

A joint industry task force reviewed and assessed risks posed by either seed treatments or treated seed. Appropriate measures to manage those risks were developed. They represent good, realistic, easy-to-follow business practices.

The industry is encouraged to review the material and use those sections which apply to their operations. Guidelines vary based on the activity carried out on the business premises. These activities are split into: (a) Guidelines for premises that store treated seed; (b) Guidelines for premises that store or apply treatments to seed.

The guidelines are meant to apply specifically to pesticide treated seed. Seed enhancements of inoculants and polymers and other materials pose no significant risk, although these guidelines may be helpful in making operational decisions.

Consider these guidelines as a tool to make your operation efficient, environmentally-sound, and a good workplace. The effort should reap rewards in terms of more favourable insurance rates, happier employees, and peace-of-mind.

Guidelines

The following section contains the recommended measures to minimize risks identified in each category. These mandatory compliance guidelines are not meant to supercede existing mandatory local, provincial, and national standards for items such as building, electrical, safety, etc. Be aware that these standards change by jurisdiction. Failure to meet these could result in a business liability.

FACILITY SITING

The recommendations for facility siting by category are:

Seed Treating Facility

- New Construction - 50 metres from facility to closest neighboring property line.
- Existing Facilities/Additions to Existing Facilities - Facilities located closer than 50 metres from facility to closest neighboring property line should have the local fire department or municipality review the location of the facility in relation to surrounding properties for compliance with local regulations.
- Distance From Rivers, Lakes, Streams and/or Environmentally Sensitive Areas - 50 metres from facility to rivers, lakes, streams and/or environmentally sensitive areas. Facilities may be sited closer than 50 metres provided they practice frequent operational clean- up practices and have a plan for containing emergency response water including an evaluation of dyking requirements.

Treated Seed Storage

- New Construction - 25 metres from facility to closest neighboring property line.
- Existing Facilities/Additions to Existing Facilities - Facilities located closer than 25 metres from facility to closest neighboring property line should have the local fire department or municipality review the location of the facility in relation to surrounding properties for compliance with local regulations.
- Distance From Rivers, Lakes, Streams and/or Environmentally Sensitive Areas - 25 metres from facility to rivers, lakes, streams and/or environmentally sensitive areas. Facilities may be sited closer than 25 metres provided they practice frequent operational clean - up practices and have a plan for containing emergency response water including an evaluation of dyking requirements.

FACILITY & EQUIPMENT DESIGN & CONSTRUCTION

This section has been broken into the following areas:

- General Requirements
- Seed Treatment Storage
- Seed Treating Operations
- Treated Seed Storage (Bagged & Bulk)

The recommendations for facility/equipment design & construction have been listed accordingly in the following sections.

General Requirements

- Access To Facility - ensure access to facility is restricted to authorized personnel only. Signs should be posted at entrances.
- Emergency Access - at least two sides of the facility should have 10 metre free zone to allow for access by emergency response vehicles.
- Security - facility should be secured by lockable doors and windows.
- Access To Emergency Equipment - ensure access aisles to emergency equipment is kept clear.
- Storage Of Fuels - supplies of fuel or propane should be stored in a secure place outside of the facility and must comply with appropriate fire code.
- Isolation - all seed treatments and treated seed should be isolated from food, food products and equipment used for food processing/handling.
- Segregation - ensure that lunch room, washroom and office is separated from treating or storage area.
- Electrical Code - all electrical installations should conform to the appropriate electrical code and/or supplement.
- Lighting - lighting should be provided that will allow information off container labels to be readable.
- Battery Charging Areas - battery charging areas should be well ventilated and separated from all storage and processing areas.
- Monitored Fire Detection System - a monitored fire detection system should be installed in all treating and storage areas, when and where available.
- Exits - exits should be located in accordance with National Building Code requirements. Aisles to emergency exits must be kept clear at all times. Emergency exits must be clearly marked and posted with exit signs.

Seed Treatment Storage

- Floor - floors should be impervious to products stored and have a smooth finish with no floor drains. Floor drains can be used if they discharge to a separate containment system.
- Spill Containment - seed treatment storage area should have a 4-5" retaining curb around its perimeter to prevent spills of leaks from entering the outside environment. This is not required if only granular treatments are used.
- Liquid Tanks - should be stored inside the facility within a dike large enough to hold 110% of the largest tank.
- Granular Bulk Tanks - should be hopper bottom bins located on concrete surface. Tanks should be sealed to prevent contamination. Spilled materials must be clean up immediately. Tanks should be fitted with overflow protection.
- Ventilation - ventilation should be provided in accordance with occupational health & safety requirements.
- Wall Construction - walls of storage area shall meet appropriate fire and building code requirements.
- Heating System - open flame heaters should not be used to heat storage area. Ceiling furnaces must meet fire and building code requirements.
- Spill Cleanup – Spills should be cleaned up immediately and thoroughly and disposed of in an approved manner.

Seed Treating Operations

- Floor - floors should be impervious to products used and have a smooth finish with no floor drains. Floor drains can be used if they discharge to a separate containment system.
- Separation - seed treating area should be separated from seed treatment storage area.
- In-Process Liquid Storage - should be stored within a dike large enough to hold 110% of the largest tank/container.
- Ventilation - ventilation should be provided in accordance with occupational health & safety requirements.
- Wall Construction - walls of processing area shall meet appropriate fire and building code requirements.
- Heating System - open flame heaters should not be used to heat storage area. Ceiling furnaces must meet mandatory fire and building code requirements.
- Electrical Code - all installations should conform to the appropriate electrical code and/or supplement. If flammable products are used in the process, explosion proof wiring will be required by electrical code.
- Spill Cleanup – Spills should be cleaned up immediately and thoroughly and disposed of in an approved manner.

Mobile Seed Treating Operations

- Spill Containment - mobile seed treatment operations should have some manner of spill containment. This may be portable or designed into the treater.
- Spill Cleanup – Spills should be cleaned up immediately and thoroughly and disposed of in an approved manner.

Treated Seed Storage (Bagged)

- Floor - floors should be impervious to products stored and have a smooth finish with no floor drains. Floor drains can be used if they discharge to a separate containment system.
- Separation - treated seed storage area should be separated from seed treatment storage area.
- Ventilation - ventilation should be provided in accordance with occupational health & safety requirements.
- Wall Construction - walls of storage area shall meet appropriate fire and building code requirements.
- Heating System - open flame heaters should not be used to heat storage area. Ceiling furnaces must meet fire and building code requirements.
- Spill Cleanup - Spills should be cleaned up immediately and thoroughly and disposed of in an approved manner.

Treated Seed Storage (Bulk)

- Bin Foundation and Surface - bins should be anchored to a secure foundation. Areas under bins should be concrete, asphalt and have a smooth finish to allow for sweeping. In the event that areas under bins do not have a smooth finish, an effective method of removing spills should be used.
- Spill Cleanup – Spills should be cleaned up immediately and thoroughly and disposed of in an approved manner.
- Bin Construction - bins should have hopper bottoms to allow for complete clean out. Bins should be lockable to prevent theft and/or vandalism.
- Load In/Load Out Pads - a concrete or asphalt pad is recommended around areas where treated seed is loaded/unloaded from trucks to allow for clean-up of spill product. In the event concrete or asphalt pads are not available, an effective method of removing spills should be used.

GENERAL FACILITY OPERATIONS

This section contains the recommendations for facility operation.

General

- Smoking & Eating - smoking and eating should be restricted from treating and storage areas.
- Worker Hygiene - workers should practice good hygiene practices when involved in treating and/or storage operations.
- Product Segregation - all flammable products should be separated from oxidizing products (i.e., ammonium nitrate)
- Fire Extinguishers - fire extinguishers should be located in accordance with National Building Code Requirements.
- Storage Of Damaged Or Contaminated Product- an area should be designated in the facility for the storage of damaged and/or contaminated product.
- Product Stacking & Storage - products should be stored in a manner that avoids unsafe (i.e., leaning/unstable) piles. A minimum of 1 metre distance should be maintained between the top of stored products and overhead heating units.
- Housekeeping - a regular regimen of housekeeping is recommended for all areas.
- Bulk Tank Labels - all bulk tanks should be labelled in accordance with their contents.
- Material Safety Data Sheets(MSDS) - Material Safety Data Sheets should be available for all seed treatments and other products in the facility.

Safety Equipment

- Emergency Response/Spill Cleanup Equipment - (appropriate for product(s) used; located in a readily accessible location)
 - Respirator
 - Goggles
 - Broom/Shovel
 - Absorbent Materials (e.g. kitty litter)
 - Gloves
 - Clean-up Drum for contaminated product
- Safety Equipment - (appropriate for product(s) used)
 - Dust Mask
 - Goggles
 - Gloves
 - Respirator

Inspections

- Annual Safety Inspection- a documented annual safety inspection by the operator (or safety officer) is recommended for all storage/treating facilities and equipment.
- Periodic Inspections - periodic (e.g. monthly) inspections by the operator (or safety officer) are recommended for all seed treating operations.

GENERAL EMPLOYEE TRAINING

This section lists the recommended training programs for employees:

Recommended Training Programs

- Transportation of Dangerous Goods (TDG)
- Workplace Hazardous Materials Information System (WHMIS)
- Standard Operating Procedures
- Emergency Response Training
- First Aid/C.P.R.
- Safety Equipment Usage and Maintenance
- Fork-Lift Operation
- Occupational Health and Safety Rules

GENERAL DOCUMENTATION

This section contains the recommended documentation for seed treating and treated seed storage facilities:

- Regulatory Information (TDG, WHMIS)
- Standard Operating Procedures
- Emergency Response Plans
- Material Safety Data Sheets (MSDS)
- Required Licenses & Permits
- Inventory Records
- Inspections
- Employee Training Records

EMERGENCY RESPONSE PLANNING & PRACTICE

- Emergency Response Planning - all facilities should develop a plan for responding to emergencies such as major spills or fires. The plan should be developed in conjunction with the local emergency response officials.
- Emergency Response Practice - all facilities should practice their emergency response plan at least annually.
- Emergency Response Plan Filing- a copy of the emergency response plan should be kept by all people listed in the plan as well as local emergency response officials.

TRANSPORTATION OF DANGEROUS GOODS (TDG) REGULATIONS AND CLEAR LANGUAGE

Printed copies of the TDG Regulations (Clear Language), Gazette 1 are available from Transport Canada. The Regulations are also available on the Transport Canada web site at: <http://www.tc.gc.ca/tdg/clear/tofc.htm>.

Following is a summary of the Regulations that relate to treated seed:

0. The only seed treatment which remains TDG regulated is canola seed blended with Counter 5-G at a 50:50 blend ration. It is Class 6.1.
1. Regulations regarding load placarding, bag labelling, and shipping documentation regarding Class 6.1 goods remain the same under Clear Language as previously.
2. Farmer licensed vehicles are exempt from TDG regulation provided (a) goods carried are 1500 kg or less; (b) are transported a distance of 100 km or less; (c) are ...used for agricultural purposes; and (d) are not Class 1, Class 2.1 (flammable gases), Class 2.3 (toxic gases), Class 6.2 (infectious substances), Class 7 (radioactive materials).
3. A non-farm licensed vehicle transporting between retail outlet to residence of purchaser or place of consumption is exempt from TDG regulation provided (a) goods carried are 3000 kg or less; and (b), (c), and (d) similar to above.

Seed designated as “waste” product

Treated seed in class 6.1 that is destined for disposal remains regulated under Class 6.1 for disposal purposes. Unregulated treated seed with an active ingredient concentration greater than 100 mg per kg is regulated under Class 9 if the active ingredient is listed in Appendix 5, Part 2 of the Regulations.

SUMMARY OF THE CURRENT DISPOSAL OPTIONS FOR TREATED SEED

The following options have been reviewed by waste management authorities from across Canada and are presented as the current practical disposal options for treated canola. Table 1 summarizes the current recognized disposal options in Western Canada.

Planting and Desiccation:

This method of disposing of treated canola seed is very effective in reducing inventories of non-saleable seed. This option can be completed with regular farming implements by seeding the waste at a rate of up to 3 times the regular seeding rate. The green matter is then plowed under prior to maturity.

Environmental liability remains with the waste generator if the land use is restricted because of insecticide residues. Few farmers will help companies carry out this disposal method; hence, substantially increasing the cost. Finding suitable land is also difficult. This method cannot be used to dispose of seed blended with granular insecticide.

Burial at an Approved Landfill (Approved for Solid Hazardous Waste):

Landfilling is a very common method of waste disposal and is closely monitored and regulated by each province. Landfilling lowers the risk to the generator as each landfill must meet specific provincial regulations to operate these facilities.

These are two approved hazardous waste landfills in Canada – one in Ryley, Alberta and one in Sarnia, Ontario. The Sarnia facility will accept hazardous waste from anywhere in Canada. The Ryley facility can only accept waste from Alberta, as hazardous waste cannot be imported in Alberta for disposal. This means all provinces other than Alberta face higher freight costs to dispose of treated seeds in Sarnia. The waste generator is responsible for waste treated seed once in the landfill as per the “Cradle to Grave” philosophy, outlined in the TDG regulation. Since waste is not destroyed, environmental liability remains with the generator forever. A legal document must be drafted to protect the generator against any future land fill remediation costs being allocated back to the generator.

Waste is picked up at the generator’s site, transported by a Waste Broker or Waste Hauler that is properly licensed to haul hazardous waste to an approved landfill. Product is off-loaded, dumped in a holding cell within the land fill and buried. This is a very simple method of disposal as the product can be disposed of in its current form “bag and all”. The method is cost-effective for waste generated in Alberta as transportation costs are low.

Incineration:

Environmental liability is virtually eliminated because waste is burned into a non-toxic ash. The hazardous waste facility located in Swan Hills, Alberta can accept treated seed from all provinces. Incineration is a very easy method of disposal as waste is picked up and incinerated in its current form, but it is very expensive (up to \$1,000 per tonne).

SaniGreen Process:

Seed enters the Sanigreen process in its original form (i.e. Intellectual Property is secure in original bags). The process transforms seed into unrecognizable, non-viable and non-

germinating organic matter with only a relatively minute residual of chemical treatment. A series of filters (Pre-filter, HEPA and Carbon) within the process ensures environmental compliance as well as Kyoto Accord compliance. Extensive testing on processed treated seed confirms that the final organic matter has only a minute chemical residual – well below regulated levels. Upon destruction of the seed a Certificate of Destruction is issued and thus ends the generators Cradle-to-Grave environmental liability all the while protecting Intellectual Property. The final stage of treatment involves the organic matter being spread on hydrocarbon contaminated soil in landfarms. The organic matter promotes microbial activity and thus assists in bringing the soil back to its original condition.

Waste seed, treated with approved treatments from all provinces can be picked up or delivered to the Sanitec Canada facilities located in Regina, Saskatchewan. Saskatchewan Environment regulates and monitors the entire process. The SaniGreen process is a cost effective environmentally-friendly solution to waste treated seed disposal issues.

Other Options That Have Been Reviewed by the Seed Treatment Industry:

Decontamination and Ethanol production:

Does not solve short-term disposal problem and requires large volumes of seed to sustain processing due to economics.

Landfilling in the U.S.:

Not recommended due to Superfund legislation (liability concerns for waste generators).

Treated seed as a fuel for power plants in the U.S.:

Not possible due to U.S. standards limiting lindane and the amount of lindane that can be incinerated.

Crushing and decontamination of treated seed:

This option was considered; however, at this time it is only a concept. Feasibility studies are currently being conducted and potential investors are being contacted.

Temporary/long term storage:

Keeping in mind that treated seed is not waste until it is no longer useful and destined for disposal, generators can wait for other options to develop. Storage will allow the generators to wait for other more environmentally sound disposal options. Due to removal of specific insecticides from the market and/or changes in storage and disposal regulations, it may be more restrictive and more expensive to dispose of this material in the future. Provincial regulatory authorities should be contacted to ensure compliance with any regulatory requirements.

Composting:

This option involves placing seed in piles and allowing microbes to break down the treated seed into organic product (also theoretically reduces lindane content). There is currently experimental work being conducted on composting; however, regulators in each province have not accepted this method as a solution to disposal of seed treated with insecticide (hazardous waste considerations). They have accepted this method as a disposal option for seed treated with a fungicide only. Work by compost companies continues in the research stage. Provincial

regulatory authorities should be contacted to ensure compliance with any regulatory authorizations.

Table 1: Western Canada Disposal Options by Province of Origin

| Seed Treatment | Hazardous Waste (TCLP) | Origin Of Waste | Swan Hills Incinerator | Hazardous Waste Landfill (Sarnia, ON) | Regular Landfill | Hazardous Waste Landfill (Ryley, AB) |
|--|---|-----------------|------------------------|---------------------------------------|---|---|
| Seed blended with Counter or Furdan | YES: terbufos or carbofuran insecticide | MB SK AB | YES YES YES | YES YES YES | No, can't accept haz. waste No. can't accept haz. waste No. can't accept haz. Waste | No. Can't import No. Can't import YES |
| Seed containing Lindane | YES lindane Insecticide | MB SK AB | YES YES YES | YES YES YES | No, can't accept haz. waste No. can't accept haz. waste No. can't accept haz. Waste | No. Can't import No. Can't import YES |
| Seed treated with TDG Non-reg chemical | NO. Fungicides only | MB SK AB | YES YES YES | YES YES YES | YES YES YES | YES YES YES |

Before selecting any disposal option, contact provincial regulatory agencies to ensure compliance with current regulatory requirements (see attached list)

Provincial Regulatory Contacts for Treated Seed Disposal

- Alberta** Janet McLean, Program Manager (780) 427-9888 janet.mclean@gov.ab.ca or Tony Fernandes, Hazardous Waste Manager (780) 427-0636 antonio.fernandes@gov.ab.ca
Alberta Environmental Protection
- Saskatchewan** Chuck Bosgoed (306) 787-6205 CBosgoed@serm.gov.sk.ca
Saskatchewan Environment and Resource Management
- Manitoba** Don Labossiere (204) 945-7094 dlabossier@gov.mb.ca
Manitoba Environment
- Ontario** George Rocoski (416) 314-4165 rocoskge@ene.gov.on.ca
Ontario Ministry of Environment
- New Brunswick** Simone Godin or Rejean Doiron (506)444-4599 simone.godin@gnb.ca or rejean.doiron@gnb.ca
New Brunswick Ministry of Environment and Local Government
- Nova Scotia** Gerard Chisholm (902) 424-2539 chishogr@gov.ns.ca
Nova Scotia Ministry of Environment and Labour
- Prince Edward Island** Glenda MacKinnon-Peters (902) 368-5047 gcmackinnon-peters@gov.pe.ca
PEI Fisheries, Aquaculture & Environment

British Columbia

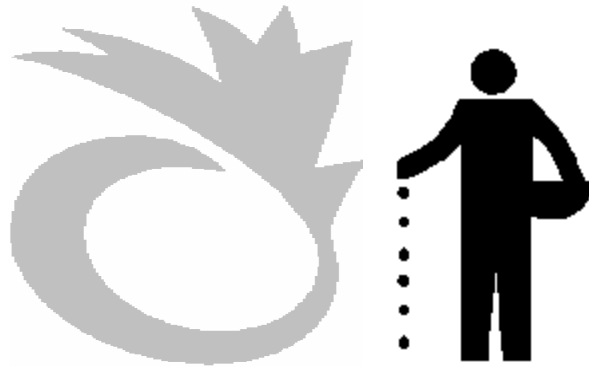
The Special Waste Regulation under the Waste Management Act is the main tool used in British Columbia to manage special or hazardous waste. There are no special waste landfills or incinerators in B.C. Any Disposal through planting would be subject to the *Waste Management Act* if a contaminated site were created. Liability would accrue to the polluter. Storage of a special waste in B.C. may require a storage permit. Please contact regulatory authorities in B.C.

Kul Bindra (250) 387-3648 Kul.Bindra@gems4.gov.bc.ca
Special Waste Specialist
B.C. Environment

Quebec

For information regarding pesticide waste management requirements in Quebec, please contact:

Isabelle Gorse (418) 521-3920 (ext. 4808) isabelle.gorse@mef.gouv.qc.ca
Division des pesticides
Ministère de l'Environnement
Fax (418) 528-1035



TEMPLATES

for reference only

Training Reference Guide

TRANSPORTATION OF DANGEROUS GOODS

References to training requirements in the Transport Canada TDG Regulations (Clear Language), can be found under Section 6, pp. 170-175.

You can find the TDG regulations on the internet at www.tc.gc.ca.

In summary, this section continues the requirement that employees who handle or transport dangerous goods be trained or under the direct supervision of a person who is trained. The onus is still on the employer to determine whether or not an employee is adequately trained to perform their duties. Adequate training is outlined under Section 6.2 of the Regulations. This section also covers the responsibilities of the self-employed.

The major change from the current Regulations is the additional information required on a training certificate.

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS)

The Workplace Hazardous Materials Information System (WHMIS) is a national information system designed to provide relevant safety and health information about hazardous workplace materials to Canadian workers. Information on WHMIS and its application can be viewed at www.hc-sc.gc.ca under Health Canada. The key elements of WHMIS are the provision of material safety data sheets (MSDSs), labeling of containers of hazardous materials and worker education programs.

The training of employees in WHMIS is the responsibility of employers. This requirement is administered by the 13 provincial, territorial and federal agencies responsible for Occupational, Safety and Health (OSH). For information on employer obligations for worker education and training programs, please contact the OSH agency for your jurisdiction:

<http://info.load-otea.hrdc-drhc.gc.ca/~oshweb/provcoen.shtml>

Alberta

Alberta Labour, Workplace Health, Safety and Strategic Services

Telephone: (780) 415-8690

Fax: (780) 427-0999

<http://www3.gov.ab.ca/hre/whs/>

British Columbia

Workers' Compensation Board

Telephone: (604) 273-2266

Fax: (604) 279-7410

<http://www.worksafebc.com/>

Manitoba

Department of Labour, Workplace Safety and Health Division

Telephone: (204) 945-3602

Fax: (204) 945-4556

<http://www.gov.mb.ca/labour/safety/index.html>

New Brunswick

Workplace Health Safety and Compensation Commission

Telephone: (506) 453-2597

Fax: (506) 453-3618

<http://www.whscc.nb.ca/>

Newfoundland

Department of Environment and Labour Labour Branch, Occupational Health and Safety

Telephone: (709) 729-5548

Fax: (709) 729-6639

<http://www.gov.nf.ca/labour/labour/OHS/ohs.asp>

Northwest Territories and Nunavut

Workers Compensation Board

Telephone: (867) 920-3888

Fax: (867) 873-4596

<http://www.wcb.nt.ca/home.htm>

Nova Scotia

Department of Labour, Occupational Health and Safety

Telephone: (902) 424-4941

Fax: (902) 424-3239

<http://www.gov.ns.ca/enla/ohs/>

Ontario

Ministry of Labour, Occupational Health and Safety Branch

Telephone: (416) 326-7400

Fax: (416) 326-7406

<http://www.gov.on.ca/LAB/ohs/ohse.htm>

Prince Edward Island

Workers' Compensation Board

Telephone: (902) 368-5680

Fax: (902) 368-5705

<http://www.wcb.pe.ca/>

Quebec

Commission de la santé et sécurité du travail

Telephone: (418) 643-5850

Fax: (418) 266-4669

<http://www.csst.qc.ca/>

Saskatchewan

Department of Labour, Occupational Health and Safety Division

Telephone: (306) 787-3662

Fax: (306) 787-7036

<http://www.labour.gov.sk.ca/safety/INDEX.HTM>

Yukon

Workers' Compensation Health and Safety Board

Telephone: (867) 667-5645

Fax: (867) 393-6279

<http://wcb.yk.ca/>

If your query relates to WHMIS controlled products used, handled, stored or disposed of in a federally-regulated* workplace, you should contact:

Human Resources Development Canada

Labour Program

Tel.: (819) 953-0215

<http://www.hrdc-drhc.gc.ca/>

Federally regulated industries include: air transport; banking; bridges and tunnels; broadcasting; communications; federal crown corporations; the federal public service; **feed, flour and seed mills; grain elevators; long shoring; energy and mining; pipelines; postal contractors; rail transport; interprovincial road transport; and water transport.*

STANDARD OPERATING PROCEDURES

Employers should develop Standard Operating Procedures for operations relevant to their work site to ensure the safety of all personnel. The following list provides examples of some areas where SOPs could be developed:

- Receiving products
- Shipping products
- Fork lift operations
- Spill clean-up and reporting
- Storage of damaged goods
- Receiving of damaged goods
- Safe work permits
- Containment inspection and maintenance
- Fire procedures
- First aid procedures
- Handling and storing goods regulated under TDG and National Fire Code Regulated Goods

Although not an exhaustive list, once employers develop their respective Standard Operating Procedures, they should also undertake to ensure that each employee reviews and understands them before undertaking any new jobs. Training may consist simply of a 'hands-on' demonstration by the manager, where appropriate.

Managers should develop and maintain employee training records which indicate the type of training, when training is complete, and sign off beside each training procedure once completed.

EMERGENCY RESPONSE TRAINING

Employees are responsible for training their employees in the event of an emergency. An Emergency Response Planning Template has been attached for your use and can serve as a guide when determining the appropriate employee training required in the event of an emergency.

FIRST AID/C.P.R. TRAINING

Most Occupational Health and Safety regulations require employers to ensure that there are sufficient first aid supplies on site, an adequate number of employees trained in first aid/C.P.R., and a process for reporting injuries. Companies should review the current Occupational Health and Safety legislation in their respective provinces to ensure they are in compliance with the safety requirements. (For website addresses in your province, refer to the list under WHMIS in these templates.)

NOTE: St. John Ambulance is one of many organizations that offer first aid and CPR training. For more information on training in your area you can visit their website at www.sja.ca.

SAFETY EQUIPMENT USAGE AND MAINTENANCE

Employees should all be familiar with the proper usage and maintenance of safety equipment. Instructions should be made available to employees on the specific handling, usage and maintenance of all safety equipment on site. It's also important that access to safety and emergency equipment be maintained at all times.

Employers may want to consider conducting regular inspections to ensure that emergency equipment such as fire equipment, fire detectors, and personal protective equipment is in working order. They should also include inspections of exits and emergency routes (i.e., ensuring they are clear).

OCCUPATIONAL HEALTH AND SAFETY RULES (OHS)

All employers should obtain and review the current provincial and/or federal Occupational Health and Safety Act and Regulations.

Occupational Health and Safety in federal works and businesses is governed by Part II of the Canada Labour Code (CLC). This legislation is intended to prevent accidents and injury to health arising out of employment. Federal Occupational Safety and Health Regulations can reviewed at www.hrdc-drhc.gc.ca under labour (Federal Labour Legislation/Part II of the Canada Labour Code/Aviation Occupational Safety and Health Regulations)

Each province has its own respective OHS Act and Regulations. Their primary intent is to protect both employers and employees against health and safety hazards on the job. Website addresses for respective province can be found under the WHMIS section.

Employers should consult these sites and review the requirements for their province.

FORK-LIFT OPERATIONS

An attached template provides an inspection check list for fork-lift operators.
Fork-lift training courses are often offered by fork-lift manufacturers.

| Fork Lift #: | | Completed by: | | |
|--------------------------------|-------|---------------|-------|-------|
| DESCRIPTION | DATE: | DATE: | DATE: | DATE: |
| 1. Fuel level | | | | |
| 2. Hour meter reading | | | | |
| 3. Tires | | | | |
| 4. Fire Extinguisher | | | | |
| 5. Horn | | | | |
| 6. Lights | | | | |
| 7. Back-up signal | | | | |
| 8. Brakes | | | | |
| 9. Steering | | | | |
| 10. Controls | | | | |
| 11. Masks | | | | |
| 12. Engine idle | | | | |
| 13. Overhead guard | | | | |
| 14. Fuel leaks | | | | |
| 15. Condition of forks | | | | |
| 16. Hydraulic fluid level | | | | |
| 17. Radiator | | | | |
| 18. Battery | | | | |
| 19. Change oil at _____ hr. | | | | |
| Comments: | | | | |

Employee Training Record Template

Maintaining good records helps to ensure employees are kept current on all training. An attached template can serve as a guide for employers as it relates to their employee training records.

Employee Training Record Summary

Agency Name:

Employee:

Agency Address:

Employee No:

| TRAINING | DATE TRAINING COMPLETED | RESULTS (Pass or Fail) | EMPLOYEE INITIALS | NEXT SCHEDULED DATE | REQUIRED TRAINING FREQUENCY |
|---|-------------------------|------------------------|-------------------|---------------------|-----------------------------|
| 1. WHMIS/MSDS | | | | | |
| 2. General Operating Rules | | | | | |
| 3. TDG | | | | | |
| 4. Fork Lift Training | | | | | |
| 5. O.H. & S. | | | | | |
| 6. Emergency Response | | | | | |
| 7. First Aid Training | | | | | |
| 8. Safe Operating Procedures | | | | | |
| a) Receiving Products | | | | | |
| b) Shipping Products | | | | | |
| c) Fork Lift Operations | | | | | |
| d) Spill Clean-up and Reporting | | | | | |
| e) Storage of damaged goods | | | | | |
| f) Receiving of damaged goods | | | | | |
| g) Safe work permits | | | | | |
| h) Containment maintenance | | | | | |
| i) Handling/Storage TDG and National Fire Code regulated products | | | | | |

Storage & Handling Of Seed Treatments & Treated Seed

Emergency Response Planning Template

FACILITY NAME:

ADDRESS:

PHONE NUMBER:

EMERGENCY TELEPHONE NUMBERS:

| POSITION | NAME | DAY | NIGHT |
|-----------------------|------|-----|-------|
| Facility Manager | | | |
| Assistant Manager | | | |
| Physician | | | |
| Fire Department | | | |
| RCMP | | | |
| Poison Control Centre | | | |
| Hospital | | | |
| Dept. of Environment | | | |
| Other | | | |
| | | | |
| 24-Hour Contact # | | | |

CANUTEC 24-HOUR SERVICE. CALL COLLECT (613) 996-6666

NOTE:

CANUTEC provides information and communications assistance in case of transport emergencies involving dangerous goods. Its product information bank has been prepared primarily for transport emergencies, but it can also provide response information for non-transport emergencies involving dangerous goods.

REPORTING:

Emergencies involving hazardous goods must be reported promptly to the nearest regional or provincial environmental emergency office as well as local fire or police.

EMERGENCY RESPONSE PLAN UPDATE:

Local fire departments should be invited to inspect your storage or treating facility at least once a year. They should be familiar with your Emergency Response Plan and should be given, in advance, information on qualities, locations, and types of hazardous material in the facility. The Emergency Response Plan should be updated after every significant change and at least annually. This should be noted as below:

POST CONTENTS STORED IN FACILITY OR GIVE COPY TO FIRE DEPT.

DATE OF LAST E.R.P.: _____

FACILITY MANAGER: _____
(Signature) (Date)

FIRE DEPT.
OFFICIAL: _____
(Signature) (Date)

NAME OF FIRE DEPARTMENT: _____

NEXT SCHEDULED REVIEW OR UPDATE: _____

0. AGENCY NOTIFICATION: (List the names and the telephone numbers of agencies and contact persons that need to be notified should a spill or fire involving pesticide treated seed or seed treatment products occur. Include railroads if rails may be blocked).

NAME

PHONE NUMBER

| | |
|--|--|
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

1. SURROUNDING OCCUPANCIES & LAND USE: (Describe surrounding land use in all four directions for one mile radius. For example, North: grazing land to ¼ mile, commercial district ¼ - ½ mile, residential zone ½ - 1 mile. Hospital located at 5th and Main. Complete diagram of layout of facility.

NORTH

SOUTH

EAST

WEST

2. LOCATION OF EMERGENCY EQUIPMENT & SUPPLIES:

DUST MASK

RUBBER BOOTS

RESPIRATOR

GOGGLES

BROOM / SHOVEL

ABSORBENT MATERIAL

GLOVES

CLEAN-UP DRUM FOR CONTAMINATED PRODUCT

OTHER

3. LOCATION AND TYPES OF WATER SUPPLIES: (hydrant, ponds, irrigation canals, fresh or salt water, etc.). Verify hydrant thread capability and water pressure and flow rates.

4. LOCATION AND CONTENTS OF FIRST AID KIT:

BANDAGES (ELASTIC, GUAZE, ETC.)

PEROXIDE

SAFETY PINS/TWEEZERS/SCISSORS

ADHESIVE TAPE

ANTIBIOTIC OINTMENT

EYE DRESSING KIT (PADS, OINTMENT, DROPS, ETC.)

AMMONIA INHALANTS

OTHER

5. RISK ANALYSIS

A. DATE OF LAST ASSESSMENT: _____

. COMPANY: _____

C. FACILITY ADDRESS: _____

. OCCUPANCY: _____

A. BUSINESS PHONE NUMBERS: _____

B. SECURITY SYSTEM TYPE: _____

C. EMERGENCY ACCESS: _____

D. FIRE LANE: _____

E. HOURS OF OPERATION: _____

Site Plans should be prepared at this point; one of the site specific, and one of the surrounding area in a one-mile radius. i.e. need a specific map of facility (include dimensions of facility and indoor layout of shed) and a more general map with a one-mile radius and a list of the area residents with phone numbers.

Specific map includes:

- . location of propane powered vehicle
- . flammable, etc goods (class II/III etc.) TDG Class
- . doors, aisles, fire extinguishers, first aid station, eye wash station

7. MAJOR HAZARDS AT THIS FACILITY (Include propane storage and types of hazardous materials. Also include a list that could be found year round.)

| DANGEROUS GOODS | MAXIMUM AMOUNT KGS | NUMBER OF PALLETS |
|------------------------|---------------------------|--------------------------|
| Explosives | | |
| Gases | | |
| Flammable Liquids | | |
| Flammable Solids | | |
| Oxidizing Material | | |
| Poisonous Infectious | | |
| Radioactive | | |
| Corrosive | | |
| Miscellaneous | | |

The fire department must receive an updated copy of this document annually.

8. OTHER MAJOR HAZARDS THAT CAN BE FOUND AT THIS SITE ARE:
(Consider gas release, pressure build up, heat, explosion).

9. ON-SITE RESOURCES:

| ON-SITE RESOURCES | DETAILS |
|---|----------------|
| Sprinkler | |
| Hydrant Flow | |
| Reservoirs (approx. gallons) | |
| Response Equipment (list to be in the plan) | |
| Site Communications | |
| First Aid Equipment (List is in Kits and the plan) | |
| Other Emergency Services | |

10. SERVICES PROVIDED THROUGH MUTUAL AID AND EMERGENCY ORGANIZATIONS.

a). Fire Equipment

Locations: _____

b). Spill Containment Equipment (dyking, absorbents, pumps, etc.)

c). Laboratory/Analytical Service

d). Chemical Hazard Safety Information or Expertise

e). Other Emergency Equipment or Expertise (i.e. Haz MatTech)

11. ASSIGNED POSITIONS OF EMERGENCY RESPONSE PERSONNEL

a). Communications Officer:

Name: _____

Address: _____

Phone Numbers: _____

b). Emergency Control Chief:

Name: _____

Address: _____

Phone Numbers: _____

c). First Aid Chief and Technical Support:

Name: _____

Address: _____

Phone Numbers: _____

d). Responders:

Name: _____

Address: _____

Phone Numbers: _____

e). List members of the Emergency Planning Committee:

12. PROVINCIAL REGULATORY CONTACTS FOR TREATED SEED DISPOSAL

| PROVINCE | NAME | ORGANIZATION | PHONE | E-MAIL |
|----------------------|----------------------------------|--|----------------------------------|--|
| British Columbia | Kul Bindra | B.C. Environment | (250) 387-3648 | Kul.Bindra@gems4.gov.bc.ca |
| Alberta | Janet McLean Tony Fernandes | AB Environment Protection | (780) 427-9888 (780) 427-0636 | janet.mclean@gov.ab.ca antonio.fernandes@gov.ab.ca |
| Saskatchewan | Chuck Bosgoed | Sask. Environ. & Resource Mgmt. | (306) 787-6205 | cbosgoed@serm.gov.sk.ca |
| Manitoba | Don Labossiere | Manitoba Environment | (204) 945-7094 | dlabossier@gov.mb.ca |
| Ontario | George Rocoski | Ontario Ministry of Environment | (416) 314-4165 | rocuskge@ene.gov.on.ca |
| Quebec | Isabelle Gorse | Ministère de l'Environnement | (418) 521-3920 (Ext. 4808) | isabelle.gorse@mef.gouv.qc.ca |
| Nova Scotia | Gerard Chisholm | Ministry of Environment and Labour | (902) 424-2539 | chishogr@gov.ns.ca |
| New Brunswick | Simone Godin or Rejean Doiron | Ministry of Environment and Local Government | (506) 444-4599 | simone.godin@gnb.ca or rejean.doiron@gnb.ca |
| Prince Edward Island | Glenda MacKinnon-Peters | Fisheries, Aquaculture & Environment | (902) 368-5047 | gcmackinnon-peters@gov.pe.ca |

13. STAFF TRAINING PROGRAM CHECKLIST

| PROGRAM | NAME OF STAFF | DATE TRAINED |
|---|---------------|--------------|
| Transportation of Dangerous Goods | | |
| Workplace Hazardous Material Info. System | | |
| Standard Operating Procedures | | |
| Emergency Response Training | | |
| First Aid / C.P.R. | | |

| | | |
|--------------------------------------|--|--|
| Safety Equipment Usage & Maintenance | | |
| Fork-Lift Operation | | |
| Occupational Health & Safety Rules | | |

14. ALL ITEMS LISTED BELOW MUST BE CHECKED IN ORDER TO FULLY COMPLETE THIS E.R.P.

- ★ Emergency Telephone number list (on plan)
(24-hour numbers included)
posted beside each phone _____
- ★ Emergency telephone list (posted at site) _____
- ★ Wallet cards with emergency numbers for staff
including responsibilities _____
- ★ Designated Control Chief
(understands his/her responsibilities) _____
- ★ Communications Officers
(understand their responsibilities) _____
- ★ First Aid Chief (designated and understand his/her
Responsibilities) _____
- ★ Technical Support Security (designated and
understand their responsibilities) _____
- ★ Clean-up team on site and understand their
responsibilities _____
- ★ Mutual Aid/Assistance contacts _____
- ★ 24-hour phone identified (nearest to site) _____
- ★ Water Supplies identified _____
- ★ Diagrams completed properly _____

- ★ Fire Chief has visited site and has received a copy of the plan _____
- ★ Complete list of industries and others who could be affected by an occurrence _____
- ★ Complete media contact listing _____
- ★ Posted fire department access routes _____
- ★ Assessed requirements to contain a spill _____
- ★ Checked into alternate communication equipment _____
- ★ Designated and posted emergency exits in large facilities _____
- ★ Have set up meeting location for post-evacuation _____
- ★ Held emergency response training on procedures _____
- ★ Annual review of plan _____
- ★ Log of training sessions and personnel training _____
- ★ Annual emergency response drill _____
- ★ Monthly maintenance check completed on protection equipment and first aid supplies _____
- ★ Monthly check on alarms and fire extinguishers, sprinklers, and eyewash stations _____
- ★ A plan to be kept off site for alternate access:
The plan is located at: _____

_____ Phone #

Distribute plan to:

- 0. All responding fire departments
- 0. Manager
- 0. Police
- 0. Personnel who desire a copy and are on the plan or committee
- 1. Regional Response Cleanup Chief