FIRE FIGHTERS GUIDANCE NOTE # 6-30

ISSUE: PESTICIDE STORAGE AND PESTICIDE STORAGE FIRES

MOE Fire Department Notification Requirements

The Ontario Ministry of the Environment (MOE) has amended a regulation made under the Pesticides Act. Section 112 of O. Reg. 63/09 requires that persons who store certain pesticides provide annual notice to the local fire department in the jurisdiction in which the pesticide is stored on an MOE supplied form indicating that pesticides are stored on the site. The form provides the local fire department with information about the identity of the pesticides, where the pesticides are located within the facility, conditions of storage and the identity of the person responsible for the pesticides.

The regulation applies to pesticide storage locations such as manufacturers and formulators of pesticides, MOE licensed vendors who sell pesticides and MOE licensed operators of a pest control business. Some pesticide storage locations such as golf courses, farms, municipal works departments and utility operations are not covered by O. Reg. 63/09 and do not require MOE operator licenses.

Pesticide classification is different from standard Dangerous Goods (UN) or Workplace Hazardous Materials Information System (WHMIS) classifications normally referenced by fire departments at dangerous goods incidents. More information on pesticide classification is available from MOE.

It is recommended that when an MOE Fire Department Pesticide Notification Form is received by the local fire department that they coordinate a site inspection to assist these facilities with a fire safety plan. MOE Pesticides Specialists are available to accompany local fire departments on joint inspections of pesticide facilities upon request.

Some pesticide manufacturers and some large vendors already have these fire pre-plans in place based on standards from the "CropLife Canada Manufacturing Code" and the "Agrichemical Warehousing Standards Association (AWSA)". The sites would be classed as manufacturing or farm retailers and agricultural distributors. There are approximately 4 sites in Ontario that follow the CropLife Canada Manufacturing Code and 254 sites in Ontario that comply with the standards of the AWSA. Those sites store inventory in compliance the Ontario Fire Code and National Fire Code according to the hazard of the product. Included in these standards is the requirement for a site to prepare an Emergency Response Plan along with the storage layout and quantities of

the hazardous and non-hazardous products in the warehouses. A yearly sign off by the local Fire Chief is required for them to meet these industry standards.

Fire departments should also consider inspections of other facilities that may store pesticides such as farms, golf courses, public utilities, etc.

Fire Department Pre-Plans for Pesticide Storage Fires

It is recommended that fire departments develop a fire pre-plan for each pesticide storage site and that a “Controlled Burn” strategy be considered by fire departments for fires that have spread into pesticide materials at these locations. This should be discussed with the owner and the insurance company providing coverage for that property.

Retail vendors who are selling ‘domestic’ pesticides will be limited in the type of pesticides available and therefore limited quantities would probably be found as part of a larger home improvement retail business. Due to the limited quantities at these retail locations, there may not be a need for a detailed pre-plan that would apply to the larger manufacturing or warehousing operations.

LIFE SAFETY CONCERNS

- Protection of first responders and the public is a major concern with fires involving pesticides.
- The management of airborne contaminants at ground level hinges on the temperature of combustion, and the exit temperature from a structure. Where fires have been allowed to burn at high temperatures, the risk has been lowered significantly.
- First responders at an incident involving pesticides must be protected with self-contained breathing apparatus and standard turn-out gear at a minimum.

FIRE CONTROL CONSIDERATONS

- Where an incident cannot be addressed at the incipient (initial) stage, and where it is possible to ventilate and let burn, this approach should be given serious consideration.
- If a facility is fully involved or free burning, life safety is greatly enhanced by remaining outside the structure upwind of smoke and exhaust gases while the pesticides structure burns itself out.

ENVIRONMENTAL CONCERNS

- Environmental damage, resulting from fires involving pesticides, increases in proportion to the volume of water used in an attempt to control and extinguish the fire.
- The resulting effluent is normally heavily contaminated with toxic compounds and is extremely difficult to contain with diking (other than very heavy clay soils).
- Products of incomplete combustion, due to low temperature burns, tend to be substantially more toxic and less stable than the original compounds.
- Air quality during a pesticide fire, at or near ground level, will deteriorate dramatically as the combustion temperature is reduced. A combustion temperature of 982° Celsius, for example, provides complete thermal decomposition of pesticides with resulting emissions of primarily carbon and water. At this temperature, all contaminants are carried high into the atmosphere where dispersion ensures that toxic levels at or near ground level does not occur.

Please see attached MOE Form “Fire Department Pesticide Storage Notification” on the next page.

Additional information is available from the following websites:

http://www.ene.gov.on.ca/en/contact/regionalmap.php A contact list for MOE Regional and District Offices. Ask to be directed to the Pesticide Specialists.

http://www.croplife.ca

http://www.awsacanada.com

Fire Department Pesticide Storage Notification

Ontario Ministry of the Environment

Fire Department Pesticide Storage Notification
(For reference in case of an emergency)

Ontario Regulation 63/09 under the *Pesticides Act* requires that:

- Any person who stores a Class 1 pesticide **MUST** give a written notice annually to the fire department responsible for the area in which the pesticide is stored.
- Every manufacturer[1], licensed operator or licensed vendor who stores a Class 2, 3, 4, 5, 6, 7, or 8 pesticide **MUST** give a written notice annually to the fire department responsible for the area in which the pesticide is stored.

This form, when completed and **forwarded to the local fire department**, serves as the notification required under Section 112 of O. Reg. 63/09 under the *Pesticides Act*. **Retain a copy for your records.** Please notify the fire department if any of the information below changes.

Part A

Name of Fire Department (to which notification is being made)			Date
Address of Fire Department			Fire Department Telephone No.(s) Emergency No.
City	Prov.	Postal Code	Business No. (non-emergency)
Business Name			Operator[2] or Vendor[3] Licence Number *(if applicable)*
Address *(street number and name or 911 emergency identification number & street name)*			
City	Province		Postal Code
Business Telephone No.			Business Fax No.
Name of Person Responsible[4] for the Storage of Pesticides *(please print)*			After Hours Contact Telephone No.
Name of Alternate Contact *(please print)*:			After Hours Contact Telephone No.

This business has a fire pre-plan on file with the local fire department under the CropLife Canada Certified Manufacturing Code or Agricultural Warehousing Standards Association audit program. **Yes__ No__.** If yes, continue to Part B only.
If No, please describe the specific location of pesticide storage and conditions of storage (e.g. separate or attached facility, temporary or permanent structure, access to facility, location of nearby buildings and water sources, etc.) on the diagram of the storage area(s) in the section on the reverse side of this form. Continue to Part B and C.

Part B.
Pursuant to Section 112 of O. Reg. 63/09 under the *Pesticides Act*, I am providing annual notification to the local fire department that the following pesticides are stored at the address indicated on this form.

In storage (check all that apply)	Pesticide Federal Class	Federal Description	Ontario Classification under O. Reg. 63/09
	Manufacturing	For use in the manufacture of a pest control product or a product regulated under the *Fertilizers Act*.	(Class 1)
	Commercial or Restricted	For use in commercial activities that are specified on the label or the restricted class when the label specifies essential conditions respecting the display, distribution or limitations on the use of, or qualifications of persons who may use the product.	(Class 2, 3 or 4)
	Domestic	To be distributed primarily to the general public for personal use in or around their homes	(Class 4, 5, 6, 7 or 8)

1. A manufacturer means a person who carries on business respecting the:
   i. Formulation of a Class 1 pesticide into another pesticide,
   ii. Manufacturing of a pesticide into a product,
   iii. Incorporation of a pesticide into a product,
   iv. Packaging or distribution of a pesticide or product containing a pesticide.
2. Operator means: the person(s) who has the control and management of an extermination business.
3. Vendor means: a person that is the holder of a General vendor licence allowing for the sale of any pesticide to an authorized person or the holder of a Limited vendor licence allowing for the sale of domestic pesticides to an authorized person.
4. Person responsible means: a certified outlet representative of a General vendor licence holder; or a person who is the owner or person having the charge, management or control of storage of a pesticide at a manufacturing or formulation plant; or a person having the charge, management or control of storage or display of a pesticide as a holder of a Limited vendor licence.

Part C

Pesticide Storage Location(s)

Please provide a diagram indicating the location(s) of pesticide storage within the facility, access points, and location of nearby buildings and water sources.