

# Best Management Practices

## *helping aquatic species at risk* Fuel and Pesticide Storage

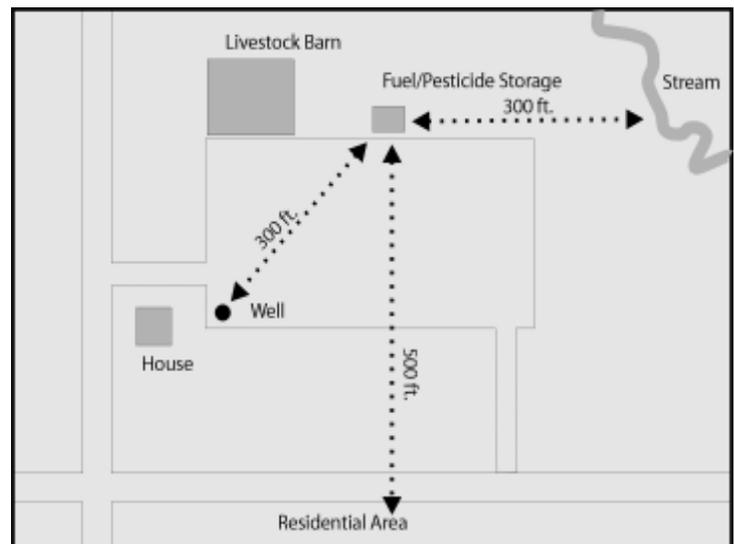
The Sydenham River in southwestern Ontario is the only major watershed which lies completely within the Carolinian Life Zone and is relatively undisturbed by industrial development. This has made the river a biological treasure. The Sydenham River supports an incredible variety of aquatic life, or what we call biodiversity. At least 82 species of fish and 34 species of freshwater mussels have been found here, making it one of the most species rich watersheds in all of Canada. Several species in the Sydenham River are found nowhere else in Canada, and some remain at only a few locations globally. Many of these species at risk have been nationally listed as endangered, threatened, or of special concern by the Committee on the Status of Endangered Wildlife in Canada. You can help too. By adopting Best Management Practices (BMPs), you can help protect the Sydenham River and its tributaries. This series of fact sheets will assist you in deciding which BMPs are right for your property.

Fuels and Pesticides stored on the farmstead can create serious hazards if they are not stored and handled correctly. They can be a danger to the user, their family, neighbours and the environment.

Rivers and water supplies can be seriously contaminated by improper storage of chemicals such as fuels and pesticides. Fish and other organisms are susceptible to chemical spills. Organisms are destroyed and spawning areas are impacted by spills. The Sydenham River is home to threatened fish species such as the spotted gar, eastern sand darter, and the northern madtom. When oil enters the river, it coats the gills of the fish and impairs their respiration processes. Organisms like mayflies, caddisflies, and other aquatic insects that the fish feed on also are affected by chemical spills, further limiting the survival abilities of the fish. By ensuring that the pesticides and fuels stored on your property are located where contamination potential is minimized, you can protect the quality of the water for wells and rivers and help protect the habitat for the aquatic species in the river.

Fuel and Pesticides should be stored in a structure that will prevent spills and contamination. Several features are necessary in such a facility to ensure safety.

- Technical advice and grants may be available to assist in implementing Best Management Practices on your property.
- If your project involves work in or near a watercourse, you may require a Fill, Construction or Alteration to watercourse permit from the Conservation Authority.
- Call before you begin your project.



*“Working Towards Healthy Watersheds”*

## Pesticide Storage

For storage of pesticides, according to the Pesticides Act, the features necessary for the structure include:

- the structure must be located a minimum of 60 m from any residential buildings
- locate at a minimum distance of 90 m from any water bodies, wells, and woodlands
- do not store livestock feed in the same location as pesticides
- a "Warning Chemical Storage" sign must be posted on all doors. These are available at local Ontario Ministry of Agriculture and Food and Ontario Ministry of the Environment offices.
- storage must be ventilated
- doors must lock
- floor must be impermeable, sealed and curbed, with no floor drains in order to contain spills
- in the storage building, have absorbent materials such as sawdust, kitty litter, or soil handy to absorb any spills that do occur
- keep chemicals in the original labelled container
- have protective and respiratory equipment readily available
- include an updated list of all stored chemicals
- post emergency numbers. The 24 hr Spills Action Centre number is 1-800-268-6060.

If you have any questions or concerns about pesticides storage and handling, contact your local Ministry of the Environment office.

## Fuel Storage

Fuel leaks are extremely dangerous to the environment and humans as well as difficult and expensive to clean up. Fuels move very quickly through the soil. When a spill occurs, the fuel can quickly reach the groundwater, and by doing so, can contaminate well water. As the fuel breaks down, the contaminants can travel in the groundwater for a long distance, affecting many other users of that source. The process of cleaning and restoring the groundwater is a difficult and costly matter.

For storage of fuels, the following is necessary:

For an above-ground tank:

- the tank must be made of steel and be protected with a coating that prevents rust
- locate tank at least 3 m away from any building
- locate tank at least 7.5 m away from any source of ignition
- locate tank at least 0.9 m away from any other fuel tanks
- locate tank at least 90 m from a well
- the area around the tank must be diked to contain at least 110% of the tank volume. Rainwater should be removed from this area to maintain the full capacity in case of a spill occurrence
- fuel must be pumped from the top of the tank to avoid leakage from gravity fed systems
- to reduce evaporation losses, the tank should be painted white

For an underground tank, the structure must be located:

- at least 90 m from well,
- at least 1 m from a building, and
- at least 0.6 m from another fuel tank

\* All fuel tanks must be installed and serviced by a registered contractor

## Handling

Chemicals such as fuels and pesticides should always be handled carefully for health and safety reasons as well as for environmental safety reasons. To minimize the potential of contamination from spills, the chemicals should be mixed and loaded on a concrete curbed area that will contain any spill. This area should be located at a minimum of 90 m from wells and water sources. The label directions should be read and followed. These labels will also indicate the appropriate protective clothing that should be worn when handling the chemicals. An anti-backflow device and/or a 15 cm air gap above the sprayer tank will prevent contamination of the water source from drainage of the spray into the water source. The pesticides that are applied should be applied more than 60 m away from a well and 9 m away from a watercourse.



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