



Properly Store and Manage Small Packages of Pesticides and Fertilizers
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Storing, containing and managing pesticides-fertilizers

This bulletin by the Minnesota Department of Agriculture (MDA) will provide more explanation of requirements for handling, storing and managing small package pesticide and fertilizer, which ranges in liquid or dry amounts from 55-gallons or 99-pounds (or less). Proper storage of small packages, disposal of rinsates, and handling of containers can significantly reduce environmental contamination or exposure. These proper measures will also prevent inspection violations.

Statutory authority

To regulate these agricultural and urban lawn chemicals, the MDA is given statutory authority under Minnesota Statute 18B.07, Subd. 2. Prohibited pesticide use. (a) A person may not use, store, handle, distribute, or dispose of a pesticide, rinsate, pesticide container, or pesticide application equipment in a manner:

- (1) that is inconsistent with a label or labeling as defined by FIFRA;
- (2) that endangers humans, damages agricultural products, food, livestock, fish, or wildlife; or
- (3) that will cause unreasonable adverse effects on the environment.

Minnesota Statute 18B.07, Subd. 4. Pesticide storage safeguards. A person may not allow a pesticide, rinsate, or unrinsed pesticide container to be stored, kept, or to remain in or on any site without safeguards adequate to prevent an incident. Pesticides may not be stored in an area with access to an open drain,

unless a safeguard is provided.

Minnesota Statute 18C.201, Subd. 1. Storage, handling, distribution, or disposal. A person may not store, handle, distribute, or dispose of a fertilizer, rinsate, fertilizer container, or fertilizer application equipment in a manner:

- (1) that endangers humans, damages agricultural products, food, livestock, fish, or wildlife;
- (2) that will cause unreasonable adverse effects on the environment;

Label language

When handling or storing small package pesticide products, it is important to read and follow the label. Labels provide specific product use, storage, handling, and disposal information. Improper handling of pesticides and fertilizers, or not following label directions, can result in enforceable action due to the potential risk and harm to people and the environment.

Below are some examples from pesticides commonly used on golf courses:

1. Trimec Classic herbicide (EPA Reg. # 2217-543, active ingredient 2, 4-D, MCPP, and Dicamba)

The label states in part:

PESTICIDE STORAGE: Store in original container in a locked storage area.

CONTAINER HANDLING: Non-refillable container. Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

2. Merit 75 WSP insecticide (EPA Reg. # 432-1318, active ingredient Imidacloprid)

The label states in part:

PESTICIDE STORAGE: Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed.

CONTAINER DISPOSAL: Non-refillable container. Do not reuse or refill this container.

3. Honor Intrinsic fungicide (EPA Reg. 7969-255, active ingredient Pyraclostrobin and Boscalid)

The label states in part:

PESTICIDE STORAGE:

DO NOT contaminate water, food, or feed by storage or disposal.

DO NOT store near food or feed.

CONTAINER DISPOSAL:

Non-refillable Container. DO NOT reuse or refill this container.

Inspection questions and observations:

Are pesticides stored separately from food, feed, or seed?

The MDA recommends a separation of at least one pallet width, or at least three feet, to separate pesticides from food, feed, and seed. Unless specified as prohibited on the label, products can be stored within the same room but in a manner to prevent cross contamination or co-mingling.

Violation: Pesticide was stored on top of grass seed bags; therefore, stored too close to or not separate from food, feed, or seed.

ORDER/Statement of Completion:

Store pesticides separately from food, feed, and seed.

Correction: The facility corrected the violation by moving the seed to a different building.

Right: Unacceptable storage of chemicals, fertilizers and seed.



Is the pesticide storage area free of open drains?

Pesticides must be stored in a manner to prevent their release in the event of an incident. An open drain potentially allows pesticide to escape into the environment and may cause unreasonable adverse effects.

Violation: Open drain in the pesticide storage area.

ORDER: Cease and desist use of storage area until drain is plugged or removed.

Statement of Completion: Provide a means of shutoff for drain in pesticide storage area, move pesticide into an adequate containment area, move the pesticide to another area, or plug the drain(s).



Above: Unacceptable storage in a pesticide room with an open drain.



Above: Acceptable storage with drain plugged to protect the environment

Are small package pesticides safeguarded as required by the label?

Store small package pesticides in a secure area that prevents people, pets, and wildlife from unauthorized access. Some labels require specific storage requirements. For example, many fumigants must be stored under lock and key, away from areas occupied by people, and may have storage placard requirements.

Violation: Improper storage.

ORDER/ Statement of completion: Store pesticides according to label directions.



*Left and Bottom:
Unacceptable storage.*

Both photos above show fumigant stored in violation of the label (in a building with people present and without proper placarding).

Store small package pesticides in a secure area that prevents people, pets, and wildlife from unauthorized access.





Above: An example of a great storage facility

Are wells safeguarded from pesticides in storage?

Individual pesticide containers with a capacity of 25 gallons, or 100 pounds or more must be stored at least 150 feet from a well, unless additional safeguards are provided. Information on additional safeguards which may reduce this set-back can be obtained from:

Greg Harding, MDA Facility Management Unit

Greg.Harding@state.mn.us.

651-201-6274

Pesticide storage areas with a total combined product volume of 56 gallons, or 100 pounds or more must be located at least fifty (50) feet from a well.

Are wells safeguarded from pesticide mixing and loading sites?

If the total or cumulative volume of small package pesticide containers located at the pesticide mix/load site is greater than 25 gallons, the pesticide containers must be located at least 150 feet from a well unless additional safeguards are provided. See above question/answer for more information.

Violation: Required setback between pesticide and well is less than required.

ORDER/Statement of completion: Setback of 150 feet or additional containment must be established.

Is pesticide disposal, rinsate use, and container disposal consistent with label directions?

Triple rinse all pesticide containers. Place the rinse water back into your application equipment and apply as directed by the label. DO NOT reuse pesticide containers. Dispose of triple rinsed containers according to label directions. To dispose of fertilizer bags properly, shake the bag vigorously and inspect it to be sure there is no residue left. Once the entire product has been removed, the fertilizer bag can be disposed of in the trash.

Violation: Improper disposal and/or rinsate.

ORDER to comply: Dispose of pesticides in a manner consistent with label directions.

ORDER to comply: Dispose of pesticide rinsate in a manner consistent with label directions.

ORDER to comply: Dispose of pesticide containers in a manner consistent with label directions.

Right: Acceptable container disposal. Properly rinsed containers stored prior to disposal.



Are empty containers used only for their intended purposes?

According to the label, pesticide containers cannot be used for other purposes. The potential for harm to food, feed, seed, and many other substances can be prevented by properly handling containers.

Violation: Reuse of pesticide container.

ORDER: Cease and desist using pesticide containers in manner inconsistent with label directions.



*According to the label,
pesticide containers
cannot be used for
other purposes.*

*Above and right:
Unacceptable re-use of
pesticide containers.*



Additional requirements must be met to store or use mini-bulk containers (greater than 55 gallons).

For more details: <http://www.mda.state.mn.us/Global/MDADocs/licensing/chemicals/minibulk.aspx>

Enforcement

Due to the potential health and environmental risks associated with the lack of proper storage, disposal, and container management, please be advised that documented non-compliance may result in additional enforcement, including financial penalties. Also, be advised that the violations shown above are commonly documented during routine inspections at golf courses.

For additional information and/or examples of small package storage requirements, refer to MDA's fact sheet, Pesticide and Fertilizer Storage: Small Package Requirements at:

<http://www.mda.state.mn.us/chemicals/~media/Files/chemicals/pesticides/smlpkg.pdf>

Thank You,

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Are you in compliance?

The MGCSA acknowledges and thanks the Minnesota Department of Agriculture for their help in providing educational materials specific to the golf industry. This private/public partnership benefits everyone involved. Professional turf managers keep up to date upon regulatory measures and our state agencies have assurances that the golf industry strives to meet public expectations.