

## HOW WILL THE REVISIONS TO Ch Ag 29 AFFECT CRANBERRY GROWERS?

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The first major revision to Wisconsin's rules on pesticide use and control will take effect on May 1, 1990. These changes were the subject of over two years of work. The revision process was highlighted by cooperation from and between many groups that previously had been at odds over pesticide issues. The result of this new sense of cooperation is a rule that addresses real world problems, with real world solutions and common sense.

So, how will these rules affect cranberry growers in their day to day operations? Probably the largest change will be in the area of chemigation. The rule includes a new section that describes what a grower needs to do to be able to use chemigation, which for this rule means the application of pesticides through irrigation systems. The rule provisions do not apply to the application of fertilizers, though it would be wise to use the same system designs to avoid contaminating water supplies with fertilizers too. The chemigation standards in the rule offer alternatives for backflow protection, and the other system safeguards that must be in place.

In general, if you choose to use chemigation and your source of water is a well you will need to protect the well with a reduced pressure principle type backflow preventor. This has actually been required by the state well code for a number of years. Systems that rely on surface water as their source of irrigation water will not need a reduced pressure principle type backflow preventor, a lower level of protection can be provided. This lower level of protection is based on installing two check valve assemblies in series or one loop with a gooseneck loop. The loop serves as equivalent to one of the check valves. Before using any chemigation system, this year or in the future, including existing systems, you will need to register the system with the Department of Agriculture, Trade and Consumer Protection. To register the system you need to include the following information:

- 1) the name and address of the operator/owner of the system;
- 2) the location of the field being chemigated;
- 3) the type of water supply for the system;
- 4) the type of backflow protection used, including the manufacturers name, model number, serial number, size and location of the backflow preventor. If you are using a portable unit indicate that it is portable.

You will not have to renotify the department on an annual basis. Once a field is registered it will be presumed that chemigation will be used in the future. Also there is not a fee for registration. You do not need to register with other state agencies either, we will share the information that they want. The only time another department would be involved is if a system used water from a potable water system, such as a municipal supply, a situation that is unlikely to occur in agricultural operations. Other protective devices are needed to shut down the system in the event that a component of the system fails. These devices must: close the supply line if the injection unit fails; shut off the injection unit if the injection line or supply line fails; and shuts the entire system down if the flow pressure is so low that application rates are effected. The system designer can

select the specific devices that will be used, the code does not list or require specific devices.

The code also contains a requirement for chemigation system operators to prepare operation/observation plans. The plans must be at the site when chemigation is taking place, and must be available at the grower's office or residence at all other times. The plan must include an accounting of sensitive areas that need special attention when operating the system. Sensitive areas include public right of ways or roads within 100 feet of the target area, and residences, camps, schools, parks, public areas, etc. within 300 feet of the target area. The plan must describe what actions will be taken to prevent drift or overspray onto sensitive areas. The plan must list the flush time for the system, describe how to calibrate the system and check the calibration of the system when it is operating, how the operator will monitor wind speed and direction and what clothing or safety equipment must be worn by the operator when visiting the site. The site must be visited at least once every hour it is operating and the operator must be present when the system is in a sensitive area identified in the plan, or at other times identified in the plan.

Chemigation sites must be posted during chemigation. The site can be permanently posted if the grower desires. The signs for chemigation posting must be white with clearly legible, contrasting letters and symbols. The signs must have letters at least 2.5" in height and say: KEEP OUT at the top and immediately below show a stop sign symbol at least 8" across with the word STOP in the sign. Below the stop sign the words; PESTICIDES BEING APPLIED IN IRRIGATION WATER, must be shown. The signs must be up during chemigation and remain up until treated areas are dry. Areas need to be posted if they are within 100' of a road or public right of way or within 300' of a sensitive area. Signs must be placed at ordinary points of access, with at least one sign for every 1/4 mile of border.

Provisions for general posting have been clarified, and to the extent possible we have tried to create provisions that will also comply with new federal requirements for worker protection. A field must be posted if the pesticide applied has a specified re-entry TIME interval. The signs must white with red letters. The letters must be 2.5" in height. The signs must state, DANGER - AREA TREATED WITH PESTICIDES - DO NOT ENTER, or contain similar words or symbols. As with the chemigation signs the general signs may be permanently posted. If a compound is applied using chemigation that has a re-entry interval, then two signs would be needed. One sign for chemigation and the other for the re-entry interval. The areas that need posting are fields within 100' of a road or public right of way or within 300' of a sensitive area. The signs must stay up until the re-entry interval is over. Make sure that you check the product label carefully since any more stringent provision of the label must also be followed. For instance if the label says the exact time for re-entry must be on the sign, then you will have to add that information.

Mixing and loading of pesticides has become a very important area of pesticide use. Studies in Wisconsin and other states have found significant environmental and health problems surrounding these activities. The revised rules require that commercial application operations to employ only certified and licensed persons to mix and load pesticides. For private applicators, only certified persons will be allowed to mix or load restricted use compounds. It is possible to be certified only as commercial mixer/loader of pesticides but we recommend that persons seriously consider obtaining certification in an appropriate applicator category.

The new rules also will require installation of improved mixing loading sites (spill containment pads) at some locations. Effective on May 1, 1990 anyone

who mixes or loads pesticides (including impregnated fertilizers) within 100' of a well or surface water must do that mixing or loading over an improved site. If you are farther away than 100' then you may need an improved site depending on how much pesticide active ingredient you mix or load in a year. The rule defines a pesticide mixing/loading site as any single site or sites within 1/2 mile of each other that are owned or controlled by the person using the pesticides, at which more than 1500 pounds of active ingredients are mixed or loaded. Not included in this 1500 pound total are any products mixed or loaded in the field of application. If you are a farm operation mixing or loading for on farm use, and you exceed the 1500 pound threshold, then you will need to have an improved site by 1/1/93. The delayed date is to allow time for the development of portable mixing/loading pads, some of which are appearing on the market now. Other sites over the 1500 pound level will need improved sites by 1/1/91.

So, what is an improved site? If liquid pesticides are mixed or loaded then the site must be a paved, curbed site of concrete or asphalt, or be a synthetic material approved in writing by the department. The area that is paved or lined must be large enough to contain at least 125% of the volume of the largest tank that will be mixed or loaded into and must be at least 1500 gallons if any equipment over 1000 gallons are used. The area can drain into a below grade sump, but the sump must contain automatic pumping equipment to pump any spills to an above ground container. It is not legal to store any spills or rinsate from pesticide mixing loading pads below grade. If non-liquid pesticides are used, including impregnated fertilizers, then the improved site can be a tarp or non curbed paved areas. The tarp must be made of compatible material for the compounds being mixed or loaded. Please remember that effective immediately with the May 1, 1990 effective date that any mixing or loading within 100' of a well or surface water must be performed over an improved site.

The revised rule also contains a cross reference to the backflow prevention requirements of the state plumbing code. It is a violation of the pesticide law to use an unprotected water source to mix or load pesticides. Backflow protection is extremely important to protecting you and your families water supply. Probably the easiest way to comply is to always fill containers only by using an effective air gap. An effective air gap is one where the outlet used to fill a container is above the flood level rim of the container a distance equal to at least twice the inside diameter of the outlet. For filling a tank with a 1" hose this means keeping the hose end out of the tank, and at least 2" above the top of the tank.

The rule clearly sets out that any spill must immediately be contained and cleaned up. Taking prompt action to clean up spills is required everywhere, not just at improved sites. The rule also contains a clarification concerning pesticide overspray or significant drift. The final rule contains a note which describes what significant drift is. Drift is significant if the drift is readily visible, or results in harm to non target plants, animals or persons, or could conceivably cause harm to non target plants, animals or persons. The hearing record clearly indicated that overspray, anywhere should be a top priority of the department for enforcement action, and should not be tolerated in any circumstance.

As we noted at the start of this article this is a major revision to the rules we all must follow when using pesticides. We realize that a number of questions will arise with the implementation of these rules. We are very appreciative of the help and advice that has been provided by members of the Cranberry Growers Association. Finally, if you have questions on the revisions to Ch Ag 29 or other issues, please contact us at (608) 266-2295, or contact your local field inspector. We'll try to help.

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