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Safety Watch: Standard expands respiratory protection

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The Occupational Safety and Health Administration (OSHA) usually comes to mind when we think about worker safety, and we only consider the EPA when it comes to environmental regulations. But with pesticide applications, the EPA does double duty.

The Worker Protection Standard (WPS) is an EPA regulation that protects agricultural workers, pesticide applicators and handlers, focusing on safety training, personal protective equipment (PPE), restricted-entry intervals and other strategies to reduce pesticide exposure.

Originally issued in 1992, the EPA made significant revisions to the standard in 2015. Most of those changes became effective Jan. 2, 2017, and one of the biggest differences is in the area of respiratory protection.

Pesticide applicators and handlers, including farm owners and their immediate family, must comply with the WPS requirements for respirator training, medical evaluation and fit testing when they apply any pesticide for agricultural use that requires a respirator on the label.

The WPS knits together some elements of OSHA regulations with standards developed by the National Institute for Occupational Safety and Health (NIOSH) related to PPE use. While OSHA grants employers with 10 or fewer employees and family farms some exceptions, this is not the case with EPA's WPS regulations.

Betsy Buffington, an Extension Program Specialist with the Pesticide Safety Education Program at Iowa State, notes, "No one who uses WPS-labeled pesticides is completely exempt from the WPS requirements."

The WPS applies to both general-use and restricted-use pesticides and protects the people who apply pesticides as well as those who work in areas where pesticides have been applied, including farms, forests, nurseries and greenhouses.

This change has caused many questions from producers about how to comply with the new standards on respirator use.

"Many producers are just learning about the new WPS requirement for a medical

evaluation, fit testing and respirator training before using a respirator," Buffington says.

The first step is the medical evaluation, and the EPA uses the same format as OSHA. The process, not unlike a sports physical, is to determine that a worker is healthy enough to use a respirator. Contact a provider at an occupational health clinic or your regular healthcare provider to see if they can conduct this examination.

Following the medical exam, the operator or employee should be fit-tested for a respirator. A fit test checks the seal of a tight-fitting respirator — including disposable particulate-filtering masks — to ensure the wearer is well protected from inhaling pesticides or other contaminants. Some occupational health clinics also do respirator fit-testing that complies with the OSHA standard.

Finally, training is required to ensure workers know how to maintain, use, clean up and store the respirator required for the specific type of pesticide being used. Training can be done online or in person, but a record of completion must be kept.

All records must be kept for two years, and fit tests should be conducted at least annually.

Laura Castro, the Pesticide Regulatory Specialist at the Iowa Department of Agriculture says, "Compliance with respiratory protection requirements may be more challenging for small agricultural operations because they have limited time and resources to devote to health and safety."

Because of this, the Iowa Department of Agriculture is developing a WPS website with resources for all applicators so that they can more easily comply with the new regulations.

Castro notes a number of commonly used pesticides require respirators. Some examples include BASF's new dicamba formulation Engenia, Agrisolutions 912 Herbicide, Solera Paraquat Concentrate and HELM Agro HELMQUAT 3SL.

Some pesticides require a respirator only for certain uses; for instance, the label of Avid 0.15EC Miticide/Insecticide says: "For shadehouse and greenhouse uses, applicators and other handlers must wear a dust/mist-filtering NIOSH-approved respirator with any R, P, or HE filter."

Buffington emphasizes a close reading of the label to understand the requirements. There are three things to look for:

- if a respirator is listed under PPE requirements;
- if the product has an agricultural use requirements box, which designates it as covered by the WPS;
- and finally, if the product is being used for a WPS purpose, rather than non-WPS uses such as rights-of-way applications.

"Everybody needs to comply with respirator requirements if one is listed in the required PPE section, so be sure to read your pesticide label because some approved uses may

differ in PPE requirements," Castro says. "There are no exemptions based on operation size: Everybody is covered, including self-employed individuals and private farmers."

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