EPA's Pesticide Registration Notices (PRNs) on Resistance Management PPDC Meeting Nov. 3, 2016 – Session 7e

Background

Many pesticides have gradually lost their effectiveness over time because pests have developed resistance, a significant decrease in sensitivity to a pesticide, which reduces the field performance of these pesticides. The agency is concerned about resistance issues and believes that managing the development of pesticide resistance, in conjunction with alternative pest-management strategies and Integrated Pest Management (IPM) programs, is an important part of sustainable pest management. To address the growing issue of resistance and prolong the useful life of pesticides, the agency has initiated a more widespread effort that is aimed at combating and slowing the development of pesticide resistance. On June 3, 2016, the agency concurrently released and requested public comment on two draft Pesticide Registration Notices (PRNs) related to pesticide resistance. The public comment closed on September 1, 2016. The two PRNs include:

- 1. PRN 2016-X: Draft Guidance for Pesticide Registrants on Pesticide Resistance Management Labeling. PRN 2016-X revises and updates PRN 2001-5, which is the agency's current guidance for pesticide resistance management labeling. This PRN applies to all agricultural pesticides except plant-incorporated protectants (PIPs), which are covered by a separate guidance issued by the Biopesticides and Pollution Prevention Division (BPPD). The updates in PRN 2016-X focus on pesticide labels and are aimed at improving information about how pesticide users can minimize and manage pest resistance.
- 2. PRN 2016-XX: Draft Guidance for Pesticide Registrants on Herbicide Resistance
 Management Labeling, Education, Training, and Stewardship. PRN 2016-XX applies only
 to herbicides. This PRN communicates the Agency's current thinking and proposes an
 approach to address herbicide-resistant weeds by providing guidance on labeling,
 education, training, and stewardship for herbicides undergoing registration review or
 registration. It is part of a holistic, proactive approach to slow the development and
 spread of herbicide-resistant weeds, and to prolong the useful lifespan of herbicides and
 related technology. The Agency is focusing on guidance for herbicides first because they
 are the most widely used agricultural chemicals, no new herbicide mechanism of action
 has been developed in the last 30 years, and the number of herbicide-resistant weed
 species and acres infested with resistant weeds have increased rapidly in recent years.

Current Status

The Agency is in the process of reviewing and addressing the public comments we received on these PRNs.

- 1. The Agency received 19 comment letters on the pesticide labeling PRN (2016-X) from non-governmental organizations (NGOs), grower groups, professional scientific societies, registrants, resistance action committees (RACs), and USDA. The main themes included the following:
 - A. General agreement that additional information on resistance management on labels would be useful especially the routine inclusion of a pesticide's Mode of Action group as set by the various RACs.
 - B. A few RACs disagreed with some of the suggested label statements in the guidance, particularly for fungicides and insecticides. EPA is in the process of evaluating if and how these label statements should be altered based on these comments.
 - C. Some commenters expressed concern and confusion on: (1) whether non-agricultural pesticides are covered and (2) whether all of the guidance in this PRN is mandatory for registrants or pesticide users. EPA is in the process of reviewing these comments and will clarify these issues in the final version of the PRN.
- 2. The Agency received 27 comment letters on the herbicide resistance management PRN (2016-XX) from NGOs, crop groups, professional societies, registrants, RACs, and USDA. The main themes included the following:
 - A. General agreement that pesticide labels should provide additional resistance management information. A few commenters, however, did not agree that extensive resistance management language is appropriate for labels.
 - B. The Agency proposed three categories of concern (low, medium, high) based on the potential for weeds to develop herbicide resistance. The three categories proposed different approaches for resistance management in regards to labeling, education, training, and stewardship guidance. Most commenters recommended that all herbicides be grouped into a single category and treated as if there is high concern for resistance.
 - C. Many commenters were against having the registrants provide additional information to the user/grower (e.g. a separate lists of resistant weeds, additional reporting of resistant weeds, or resistance management plans).

Next Steps

The Agency is evaluating the public comments and expects to finalize both PRNs in late 2016. Also, the Agency plans to implement herbicide resistance measures for existing chemicals during registration review, and to implement herbicide resistance measures for new herbicides and new uses at the time of registration.