Crop Damage Complaints Related to Dicamba Herbicides Raising Concerns

EPA and state agencies regulate pesticides to protect human health and the environment from unreasonable risk. Compliance concerns have arisen related to the use of certain registered pesticides. Specifically, reports of crop damage have been received that appear related to the use of herbicides containing the active ingredient dicamba. This Advisory replaces an Advisory issued in August of 2016 and provides information on the agricultural and compliance concerns raised by these ongoing incidents.

What is Dicamba?
Dicamba is an active ingredient contained in certain herbicides. Herbicides containing dicamba are registered for uses in agriculture, residential areas, and other sites to control broadleaf weeds and woody plants. Older product registrations include uses on cotton and soybeans but are restricted to preplant and postharvest burndown applications only. The product labels for those herbicides specify that restriction. Only the new registered products, described below, may be applied over-the-top of growing soybeans and cotton.

New Dicamba Herbicide Products
Late last year, EPA approved the conditional registration of three new dicamba herbicide products for use in-crop (over-top of growing crop plants) as a post-emergent application in Bollgard II XtendFlex cotton and Roundup Ready 2 Xtend soybeans, which are now available for use in the 2017 growing season:

- DuPont FeXapan Herbicide Plus VaporGrip Technology, EPA Registration Number 352-913;
- Engenia Herbicide, EPA Registration Number 7969-345; and
- XTENDIMAX with VaporGrip Technology, EPA Registration Number 524-617.

Agricultural Concerns
Despite the conditional approval of new dicamba products with drift reduction agents and further use restrictions set in place prior to the 2017 growing season, some states are reporting high numbers of dicamba complaints. By early July, we already had reports of hundreds of complaints received by state agencies in Arkansas, Missouri and Tennessee (a significant increase from last year). Both physical drift and volatilization of dicamba from the target application site have been reported. The underlying causes of the various damage reports are still being investigated.

Unlawful applications of dicamba products can result in residues on harvested crops and cause damage to and affect the yields of non-target crops. Depending on the ambient temperatures and growth stage, it can take 7 to 21 days for dicamba symptoms to appear. Classic symptoms of dicamba damage on non-
tolerant soybean cultivars exhibit cupping of leaves and, in some cases, puckering of leaves as well. Symptoms generally appear only on new leaves. Crops that have been reported as damaged include, but may not be limited to, cotton that is not dicamba-tolerant, ornamental crops, vegetable crops such as tomatoes, certain tree species, watermelon and grapes. Applicators are encouraged to keep detailed records of dicamba applications, including location, wind speed, and temperature at the time of application in the event a drift incident may occur in your area.

If you suspect crop damage has been caused by the off-target movement of dicamba, call your state Department of Agriculture or your state Pesticide Regulatory Agency. EPA is working directly with state lead agencies and is interested in reviewing any information obtained from investigations of possible crop damage related to the use of dicamba.

Compliance Concerns
Each of the new conditionally approved dicamba herbicide products have labeling that provides mandatory directions for use, restrictions and special precautions that must be followed. The labels of the new products require very specific and rigorous drift mitigation measures to further reduce the potential for exposure from spray drift including:

- no application from aircraft;
- no application when wind speed is over 15 mph;
- application only with approved nozzles at specified pressures; and
- buffer zones to protect sensitive areas when the wind is blowing toward them.

Except for the new conditionally registered dicamba products, application of a dicamba product during either the cotton or soybean crop growing season is unlawful under FIFRA.

Farmers must follow the requirements on the labels plus any additional restrictions that their states may have put in place. Certain states have imposed additional restrictions on the use of dicamba products and regulatory changes are taking place throughout the growing season. For instance, some states have imposed requirements via a state level mitigation or restriction. Check with state agencies prior to applying dicamba products, as the requirements regarding use this year are fluid and may have state-specific elements.

DISCLAIMER
This Compliance Advisory explains select provisions of EPA regulatory requirements using plain language. Nothing in this Compliance Advisory is meant to replace or revise any EPA regulatory provisions of any other part of the Code of Federal Regulations, the Federal Register, or the Federal Insecticide, Fungicide and Rodenticide Act. For up-to-date information about dicamba uses in your area, contact your state Department of Agriculture or your state Pesticide Regulatory Agency. For more information on agricultural pesticides and compliance, visit: https://www.epa.gov/agriculture. For more information on enforcement, visit: https://www.epa.gov/enforcement.