



EPA TARGETS PESTICIDE SPRAY DRIFT

EDEN PRAIRIE, Minn. (DTN) - Everyone understands that some spray particles or vapor can drift off-target. Farmers, in particular, know the importance of keeping droplets at home: Pesticides are expensive, they're important for product efficacy and if they escape there is risk of damage to a neighbor's property.

However, since pesticide labels have no consistent drift guidelines, the EPA will soon adopt a new general drift statement for all pesticide labels, a process that first began in 2001.

"The current situation has long been deemed problematic, because drift recommendations vary from product to product, and labels are too inconsistent," said Bill Jordan, EPA senior policy adviser on the Pesticide Program Dialogue Committee spray drift workgroup.

Proposed drift guideline statements, for farm and consumer use, were released for public comment in 2009. Upon reviewing more than 34,000 comments that contained extreme and opposite views, the EPA workgroup decided to also examine state drift guidelines.

"We found useful language, as 28 states have drift regulations on the books," Jordan said.

Proposed Statement

The revised statement reads: "Do not apply this product in a manner that results in spray (or dust) drift that harms people or any other non-target organisms or sites." Jordan said the EPA views this statement as one that allows for some drift.

"We know some drift is a consequence of pesticide application. It doesn't make it unlawful, but what it does say is that pesticide applicators are responsible to control the amount of drift in such

a way that it does not cause harm," Jordan added.

He said the current schedule for the new pesticide registration notice on drift labeling is before the end of 2011. The industry would have about two years for product labels to include the new language.

"We don't see this statement as being a real problem, as most people use pesticides responsibly," Jordan said. "We're aiming for a common-sense standard."

Such a broad statement, especially one that includes the word "harm," is a concern, because it exposes applicators to criminal liability, said Carmen Haworth, public policy counsel with the Agricultural Retailers Association.

"The word 'harm' is not defined by a statute, which allows for open interpretation and potential fines or even jail time. This type of statement doesn't help applicators learn anything about the product, which is the purpose of most statements on a label," she said. "We are continuing to provide guidance to the EPA on this statement, and we hope to keep this language off the label."

Testing Product Drift

Another EPA drift reduction effort -- in cooperation with the USDA Agricultural Research Service, universities and agribusinesses -- is the Drift Reduction Technology (DRT) Project.

Researchers are using wind tunnels at Texas A&M University, at EPA's Research Triangle Park facility in North Carolina and at the University of Nebraska West Central Research and Extension Center in North Platte (where two new tunnels are being built) to test various nozzles and pesticide solutions. They are using different spray pressures and wind speeds to optimize ground and aerial applications.

"The goal is to build DRT recommendations to

be included on product labels -- everything from proper nozzles, sprayer modifiers (hoods, shields) and spray solution modifiers (drift control products/deposition aids) to buffer zone guidelines when spraying near bodies of water or sensitive crops," said Bob Wolf, application technology specialist at Kansas State University.

Wind tunnel testing uses lasers and high-speed cameras to capture all the droplet sizes in a spray pattern.

"The challenge with this testing is to make sure we find the right balance between drift control and adequate coverage to maintain product efficacy," he said. "So the nozzle that reduces drift the most will probably not be the recommended nozzle unless it also maintains control efficacy."

Wolf said preliminary results with this system are phenomenal.

"For example, some interesting early tests show that different drift control products, especially polymer-based additives, impact droplet size in dramatically different ways, which may alter weed control efficacy. We're also seeing that some formulations of glyphosate have more driftable fines than others," he added.

Ongoing research will help finalize these recommendations for growers.


On the horizon, droplet issues will become more of a challenge as new 2,4-D and dicamba-resistant crops enter the marketplace in three to four years.

"There's a lot of educational groundwork ahead to remind growers of the drift volatility of these herbicides," he said.

Source: DTN


DROP SIZE CLASSIFICATION

AIXR TeeJet® (AIXR)

	PSI										
	15	20	25	30	35	40	50	60	70	80	90
AIXR110015	XC	XC	VC	C	C	C	C	M	M	M	M
AIXR11002	XC	XC	XC	VC	VC	C	C	C	C	M	M
AIXR110025	XC	XC	XC	XC	VC	VC	C	C	C	C	C
AIXR11003	XC	XC	XC	XC	VC	VC	C	C	C	C	C
AIXR11004	UC	XC	XC	XC	XC	XC	VC	VC	C	C	C
AIXR11005	UC	XC	XC	XC	XC	XC	VC	VC	C	C	C
AIXR11006	UC	XC	XC	XC	XC	XC	VC	VC	VC	C	C




AIC TeeJet (AIC)

	PSI										
	30	35	40	45	50	55	60	70	80	90	100
AI110015	UC	XC	XC	XC	XC	XC	VC	VC	VC	C	C
AI11002	UC	UC	XC	XC	XC	XC	VC	VC	VC	VC	C
AI110025	UC	UC	XC	XC	XC	XC	XC	VC	VC	VC	C
AI11003	UC	UC	XC	XC	XC	XC	XC	VC	VC	VC	C
AI11004	UC	UC	XC	XC	XC	XC	XC	VC	VC	VC	C
AI11005	UC	UC	XC	XC	XC	XC	XC	VC	VC	VC	VC
AI11006	UC	UC	UC	XC	XC	XC	XC	XC	VC	VC	VC
AI11008	UC	UC	UC	UC	XC	XC	XC	XC	VC	VC	VC
AI11010	UC	UC	UC	UC	XC	XC	XC	XC	XC	VC	VC
AI11015	UC	UC	UC	UC	XC	XC	XC	XC	XC	VC	VC




Turbo TeeJet Induction (TTI)

	PSI												
	15	20	25	30	35	40	50	60	70	80	90	100	
TTI110015	UC	UC	UC	UC	UC	UC	UC	XC	XC	XC	XC	XC	
TTI11002	UC	UC	UC	UC	UC	UC	UC	UC	XC	XC	XC	XC	
TTI110025	UC	UC	UC	UC	UC	UC	UC	UC	XC	XC	XC	XC	
TTI11003	UC	UC	UC	UC	UC	UC	UC	UC	XC	XC	XC	XC	
TTI11004	UC	UC	UC	UC	UC	UC	UC	UC	XC	XC	XC	XC	
TTI11005	UC	UC	UC	UC	UC	UC	UC	UC	XC	XC	XC	XC	
TTI11006	UC	UC	UC	UC	UC	UC	UC	UC	XC	XC	XC	XC	



Air Induction Turbo TwinJet (AITTJ60)

	PSI										
	20	25	30	35	40	50	60	70	80	90	100
AITTJ60-11002	XC	XC	VC	VC	VC	C	C	C	C	C	M
AITTJ60-110025	XC	XC	VC	VC	VC	C	C	C	C	C	M
AITTJ60-11003	UC	XC	XC	XC	VC	VC	C	C	C	C	C
AITTJ60-11004	UC	XC	XC	XC	VC	VC	C	C	C	C	C
AITTJ60-11005	UC	XC	XC	XC	XC	VC	VC	C	C	C	C
AITTJ60-11006	UC	XC	XC	XC	XC	VC	VC	C	C	C	C



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