

PRN 2001-X

Draft: Spray & Dust Drift Label Statements for Pesticide Products

DRAFT PESTICIDE REGISTRATION (PR) NOTICE 2001-X

Notice To: Manufacturers, Producers, Formulators, and Registrants of Pesticide Products

Attention: Persons Responsible for the Registration of Pesticide Products

Subject: Spray and Dust Drift Label Statements for Pesticide Products

This Notice sets forth the U.S. Environmental Protection Agency's (EPA or Agency) guidance for labeling statements for controlling spray drift and dust drift from application sites and for implementing these statements for risk mitigation. The purpose of this new labeling guidance is to provide pesticide registrants, applicators, and other individuals responsible for pesticide applications with improved and more consistent product label statements for controlling pesticide drift in order to be protective of human health and the environment. This Notice also includes EPA's position on drift, a rationale for the label statements, and an implementation plan.

I. Scope And Purpose

a. Affected Products And Uses

This PR Notice applies to all pesticide products labeled for use outdoors that can be applied as sprays or dusts, including applications with ground hydraulic, airblast, aerial, chemigation, handheld, or backpack equipment, except for products stated below. Application sites for affected products include, but are not limited to, agricultural crops, forestry, rights-of-way, recreational areas, lawns, and home gardens.

While most of the science and regulatory emphasis has been on off-target drift of sprays, the Agency recognizes that applications of dust formulations also drift. Many of the same concerns and principles apply to products that are applied as dusts. The Agency's use of the term "spray drift" in this notice also applies to drift of dust formulations unless stated otherwise.

This notice does not to apply to:

- i. products labeled solely for indoor use;
- ii. products labeled for outdoor use which are applied in a form other than a spray or dust, such as a granular formulation;
- iii. fumigant products, due to their different physical state and behavior (vapor rather than liquid or solid particles); and
- iv. mosquito adulticide products labeled solely for use in public health programs. These and certain other products will require special consideration for appropriate labeling.

Many states and tribes have restrictions and policies for controlling spray drift, including requirements of no-spray zones for certain or all pesticides, maximum spray release heights, and allowing applications only during certain wind speeds. EPA does not intend for its new guidance to conflict with or supersede more stringent restrictions by states or tribes or which may currently be on product labels.

b. **Applicable Definitions**

The Agency's current focus on pesticide spray drift is within relatively short distances (up to 1½ mile) from the application site in which most deposition occurs. However, EPA recognizes that under certain circumstances lower levels of pesticides may drift considerably farther. For the purpose of this draft notice, EPA limits the meaning of the term "spray (or dust) drift" to the following definition:

"Spray or dust drift is the physical movement of pesticide droplets or particles through the air at the time of pesticide application or soon thereafter from the target site to any non- or off-target site. Spray drift shall not include movement of pesticides to non- or off-target sites caused by erosion, migration, volatility, or windblown soil particles that occurs after application or application of fumigants unless specifically addressed on the product label with respect to drift control requirements."

This definition is based on a definition of spray drift composed by participants of the National Coalition on Drift Minimization, which include representatives from federal (including EPA and the U. S. Department of Agriculture) and state agencies and tribes, pesticide and equipment manufacturers, university scientists, and others, who have focused their attention on enhancing pesticide applicator education, application research, and regulatory initiatives to foster reductions in spray drift.

The Agency recognizes that pesticide vapor and the off-target movement of pesticides by other means, not included in this definition, can nevertheless present substantial risks to humans and the environment. EPA generally addresses these routes of exposure and associated risk at the individual pesticide level through its regulatory programs.

EPA defines the term "no-spray zone" (also known as "buffer zone") for the purposes of this notice as follows:

"A no-spray zone is an area in which direct application of the pesticide is prohibited; this area is specified in distance between the closest point of direct pesticide application and the nearest boundary of a site to be protected, unless otherwise specified on a product label."

For example, a no-spray zone of 100 feet to protect a specified site would require the applicator to leave a distance of 100 feet between the point of spray application and the nearest boundary of the specified protected site.

In summary, through this PR Notice, EPA provides its guidance to applicants and registrants of pesticide product registrations for appropriate labeling statements for controlling spray and dust drift. This approach represents EPA's interpretation of the labeling language generally appropriate to implement the requirements of 40 CFR Part 156 and section 2(q) of FIFRA, which if not met the Agency may find a product to be misbranded and may take appropriate enforcement and/or regulatory action. EPA

generally expects to follow this approach in its individual licensing actions. This guidance does not itself impose any binding requirements. The requirement to adopt the approach provided here would be imposed in the context of individual licensing actions. And, EPA may depart from the guidance where circumstances warrant and without prior notice. Accordingly, changes to these statements or additional statements may be warranted for certain products depending on uses, product hazard potential, and other considerations, and may be proposed by the applicant or registrant or by the Agency in conjunction with any application for registration or amended registration. The Agency also provides here its underlying position on spray drift and how it plans to implement these and other label statements for new and currently registered pesticides.

II. Background

EPA has been working to improve the underlying science of pesticide spray drift, its understanding of the science, and the most effective means to control or mitigate spray drift. These and other related efforts are discussed below and in the publication "For Your Information-Spray Drift of Pesticides," December 1999 ([Reducing Pesticide Drift](#)).

a. EPA's Concern About Off-target Spray Drift

Pesticide spray drift has been and continues to be of concern to EPA in its responsibility to ensure that pesticide use does not cause unreasonable adverse effects to human health and the environment. **Each year, states receive about 2,500 complaints of drift from individuals.** These complaints are investigated and, if appropriate, enforcement action is taken ([1999 AAPCO Pesticide Drift Enforcement Survey](#)) Other reports of drift incidents are reported to EPA under adverse reporting requirements, the National Pesticide Telecommunications Network ([NPTN 1999 Annual Report \(PDF\)](#), (36 pp, 5.36 MB, [About PDF](#))[EXIT](#)) and to agriculture insurers. The Agency believes many incidents are unreported.

b. Drift Labeling Statements Prior To This Notice

At the time of registration and reregistration, EPA has and currently requires various product label statements for preventing or controlling spray drift. EPA has required more detailed label statements, including the use of no-spray zones and maximum application heights, for certain products, especially those which can be applied aurally. Additionally, agricultural products to which worker protection regulations (40 CFR, Part 170) apply bear labeling which includes the required statement "Do not apply this product in a way that will contact workers or other persons either directly or through drift." This PR Notice does not alter this worker protection requirement and is not expected to guide in circumstances where other label statements are more stringent than the guidance in this Notice. The Agency and many other stakeholders believe product labeling for spray drift control should be improved and standardized to the degree possible to provide applicators with more consistent and appropriate directions for controlling drift. Such changes are consistent with the requirements of 40 CFR Part 156 and section 2 (q) of FIFRA.

c. **Data Availability**

Under 40 CFR part 158, EPA may require data on drift to support the registration or reregistration of certain products. In recent years, the Agency has received a new collection of studies conducted by a group of registrants, named the "Spray Drift Task Force" (SDTF), to satisfy generic data requirements (see [PR Notice 90-3](#), dated April 6, 1990, entitled "Announcing the Formation of an Industry-Wide Spray Drift Task Force"). Also, the SDTF in collaboration with EPA and USDA co-developed AgDRIFT, a new model, to provide estimates of spray drift deposition under different pesticide application and meteorological conditions. The Agency reviewed these new studies, AgDRIFT, and other scientific reports from the open literature and a data set from Germany. EPA's conclusions from its review of this collection of data and the utility of AgDRIFT were peer reviewed in 1997 and 1999 by independent scientific experts, including the FIFRA Scientific Advisory Panel (SAP). These independent scientists generally agreed with the Agency's conclusions regarding the data and the usefulness of AgDRIFT. EPA intends to use its conclusions from the review of these data, new data it may receive, and AgDRIFT or other appropriate models in its assessments of pesticides.

d. **Collaborations With Stakeholders**

EPA has communicated with other federal, state, and tribal government agencies and other stakeholders, including registrants, pesticide applicators, and equipment manufacturers, to gain a better understanding of their needs and concerns regarding pesticide application and the control of spray drift. The Agency has also discussed with regulatory authorities of other countries their approaches to assessing and regulating off-target spray drift. The Agency has carefully considered the concerns and suggestions expressed by these stakeholders in formulating this notice.

III. EPA'S Position on Pesticide Drift

The Agency has the responsibility to ensure that the use of pesticides will not cause unreasonable adverse effects to human health and the environment. Those involved in pesticide application decisions have an important responsibility to protect people, domestic animals, wildlife, and the environment from pesticide exposures and potential harm from drift. States, tribes, and EPA have responsibilities to carry out enforcement to ensure compliance with pesticide use requirements.

EPA's position on pesticide drift is that applicators must not allow pesticide spray or dust to drift from the application site and contact people, animals, and certain sensitive sites, including structures people occupy at any time and the associated property, parks and recreation areas, nontarget crops, aquatic and wetland areas, woodlands, pastures, or rangelands. The Agency believes this is prudent public policy. It sets high but appropriate standards for applicators to protect people and the environment. Applicators must consider and use necessary application practices and measures required by states or tribes in addition to mandatory drift control measures that are stated on product labels. EPA believes the suggested labeling in this Notice will reduce risks associated with pesticide drift without a significant reduction in product efficacy.

Accordingly, EPA believes that these label statements will help ensure that the requirements of FIFRA are met and, specifically, that pesticides are used in a manner that does not result in "unreasonable adverse effects on the environment."

The Agency's understanding of drift and available means to control it has significantly improved; however, EPA recognizes there will always exist controllable and uncontrollable factors which lead to drift, potential exposures, and risks of harm. The factors that contribute to drift are unique to each application and depend on weather, the application site, application equipment, and applicator behavior. EPA takes very seriously the potential adverse impact drift can have on human health and the environment. For these reasons, labeling for applicators must be clear and enable enforcement authorities, including states, tribes, and EPA, to take action when appropriate.

EPA recognizes that some de minimus level of drift would occur from most or all applications as a result of the uses of pesticides. The Agency believes the approach set forth here will not have an undue impact on agriculture or other uses of pesticides. EPA believes many responsible applicators already take added measures to control drift. This position and new labeling will clarify expectations for applicators and set definitive standards for application practices. For many years EPA and many states and tribes have had requirements or policies prohibiting drift. Wording to this effect (e.g., "Do not allow drift." and "A person may not apply a pesticide when wind speed exceeds 10 miles per hour.") appears on many pesticide product labels and/or in state laws (see Theodore A. Feitshans, *An Analysis of State Pesticide Drift Laws*, San Joaquin Agricultural Law Review, vol. 9(1), 1999). Enforcement authorities have carried out their actions to enforce such language in a reasonable manner. That position and label wording prohibiting drift are at least as, if not more, restrictive than the position and new wording expressed in this notice.

The Agency believes that the new labeling statements provides improvements over current labeling which is inconsistent or inadequate and for many products unclear to applicators and others. Use of the new statements, or some variation, by registrants for all affected products will provide a level of consistency among product labels. The statements also address for each application method specific application requirements that are key to drift mitigation. These application requirements are based on the Agency's conclusions of the supporting science of drift. And, the Agency has written the labeling statements in a manner that it believes the meaning is clear and enforceable and allows flexibility for the use of new application technology. These are labeling characteristics that meet the interests expressed by stakeholders as mentioned above.