

## PRE-PUBLICATION NOTICE

On September 30, 2024, Michael S. Regan, the EPA Administrator, signed the following document:

Action: **Final Rule**  
Title: **Pesticides; Agricultural Worker Protection Standard;  
Reconsideration of the Application Exclusion Zone Amendments**  
FRL #: **8528-05-OCSP**  
Docket ID #: **EPA-HQ-OPP-2022-0133**

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For further information about the docket and, if applicable, instructions for commenting, please consult the ADDRESSES section in the front of the Federal Register document.

## **ENVIRONMENTAL PROTECTION AGENCY**

### **40 CFR Part 170**

**[EPA-HQ-OPP-2022-0133; FRL-8528-05-OCSP]**

**RIN 2070-AK92**

### **Pesticides; Agricultural Worker Protection Standard; Reconsideration of the Application Exclusion Zone Amendments**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Final rule.

**SUMMARY:** The Environmental Protection Agency (EPA or Agency) is finalizing revisions to the application exclusion zone (AEZ) requirements in the Agricultural Worker Protection Standard (WPS). EPA has determined that several aspects of the AEZ provisions, such as those regarding the applicability of the AEZ and distance determination criteria, should be revised to reinstate previous requirements that better protect public health and limit exposure for those who may be near ongoing pesticide applications. To restore these protections, EPA is finalizing the AEZ rule proposed on March 13, 2023, as proposed without change.

**DATES:** This final rule is effective **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*]**. The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*]**.

**ADDRESSES:** The docket for this action, identified by docket identification (ID) number EPA-HQ-OPP-2022-0133, is available online at <https://www.regulations.gov>. Additional information about dockets generally, along with instructions for visiting the docket in-person, is available at <https://www.epa.gov/dockets>.

**FOR FURTHER INFORMATION CONTACT:** Carolyn Schroeder, Pesticide Re-Evaluation Division (7508M), Office of Pesticide Programs, Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, D.C. 20460-0001; telephone number: (202) 566-2376; email address: *schroeder.carolyn@epa.gov*.

**SUPPLEMENTARY INFORMATION:**

**I. Executive Summary**

*A. Does this action apply to me?*

You may be potentially affected by this action if you work in or employ persons working in crop production agriculture where pesticides are applied. The following list of North American Industrial Classification System (NAICS) codes is not intended to be exhaustive, but rather provides a guide to help readers determine whether this document applies to them.

Potentially affected entities may include:

- Agricultural Establishments (NAICS code 111000);
- Nursery and Tree Production (NAICS code 111421);
- Timber Tract Operations (NAICS code 113110);
- Forest Nurseries and Gathering of Forest Products (NAICS code 113210);
- Farm Workers (NAICS codes 11511, 115112, and 115114);
- Pesticide Handling on Farms (NAICS code 115112);
- Farm Labor Contractors and Crew Leaders (NAICS code 115115);
- Pesticide Handling in Forestry (NAICS code 115310);
- Pesticide Manufacturers (NAICS code 325320);
- Farm Worker Support Organizations (NAICS codes 813311, 813312, and 813319);
- Farm Worker Labor Organizations (NAICS code 813930); and
- Crop Advisors (NAICS codes 115112, 541690, 541712).

If you have questions regarding the applicability of this action to a particular entity, consult the person listed in the **FOR FURTHER INFORMATION CONTACT** section.

*B. What is the Agency's authority for taking this action?*

This action is issued under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), 7 U.S.C. 136 through 136y, particularly sections 136a(d), 136i, and 136w.

*C. What action is the Agency taking?*

EPA is finalizing the AEZ rule that was proposed on March 13, 2023 (88 FR 15346; FRL-8528-03-OCSPP) (hereinafter “2023 Proposed Rule”; Ref. 1), as proposed and without change. In so doing, the Agency is revising certain AEZ requirements of the WPS that were amended by EPA in a final rule published on October 30, 2020 (hereinafter “2020 AEZ Rule”; Ref. 2). As further explained in Unit II.A.4., the effective date of the 2020 AEZ Rule was stayed pursuant to a court order; that is, the 2020 AEZ Rule has not gone into effect. This rulemaking, once in effect, replaces the requirements that were published under the 2020 AEZ Rule but never went into effect.

Specifically, EPA is rescinding three of the amendments outlined in the 2020 AEZ Rule and reinstating the related AEZ requirements as published in a final rule on November 2, 2015 (hereinafter “2015 WPS”; Ref. 3), with certain modifications. The following three amendments from the 2020 AEZ Rule are being rescinded:

1. *The area where the AEZ applies.* This rule rescinds language from the 2020 AEZ Rule that limited the applicability of the AEZ to the agricultural employer's property. As such, with this rule, applications must be suspended whenever someone is within the AEZ, regardless of whether that person is on or off the agricultural establishment.

2. *The exception to application suspension requirements for property easements.* Under



this rule, applications must be suspended whenever someone is within an AEZ, even if they are not employed by the establishment and in an area subject to an easement that prevents the agricultural employer from temporarily excluding those individuals from that area.

*3. The distances from the application equipment in which entry restrictions associated with ongoing ground-based pesticide applications apply.* Under this rule, the AEZ distance is 100 feet for ground-based fine spray applications and 25 feet, generally, for ground-based applications using medium or larger droplet sizes.

EPA is also amending the AEZ provisions in the 2015 WPS as follows:

*1. Clarifies when suspended applications may be resumed.* This rule specifies that applications that were suspended due to individuals entering an AEZ may be resumed after those individuals have left the AEZ. As a result, this rule supersedes EPA's previous interpretive guidance on resuming applications in circumstances when individuals off-establishment are in the AEZ (see Unit VI.B.; Refs. 4 through 6).

*2. Provides an exemption allowing owners and their immediate family to remain within the AEZ in certain scenarios.* Under this rule, farm owners and members of their immediate family may shelter within closed structures within an AEZ during pesticide applications, provided that the owner has instructed the handlers that only the owner's immediate family are inside the closed shelter and that the application should proceed despite their presence. Handlers may proceed with applications under these circumstances.

*3. Replaces the volume median diameter (VMD) criteria with droplet size classification standards.* Under this rule, the standard that will be used as the droplet size criterion when making AEZ distance determinations based on droplet size is the technical standard established by the American Society of Agricultural Engineers (ASAE). ASAE was renamed the American Society of Agricultural and Biological Engineers (ASABE) in 2005, which is also endorsed by

the American National Standards Institute (ANSI). Although ASABE is now the organization of record for these standards, the specific size standard reflects the name of the organization that existed at the time that the standard was established.

Each of these changes is explained in more detail in Unit IV.

*D. Why is the Agency taking this action?*

EPA reexamined the 2020 AEZ Rule consistent with Executive Order 13990 (Ref. 7), and in response to a factual error that EPA discovered in the 2020 AEZ Rule's preamble while compiling the administrative record for litigation (see Unit II.A.4 and Unit II.A.5.). As a result of EPA's reexamination of the 2020 AEZ Rule, the Agency determined that certain amended AEZ requirements in the 2020 AEZ Rule should be rescinded, with several protections from the 2015 WPS regulatory text being reinstated. EPA determined that reinstatement of these protections from the 2015 WPS will be more effective at reducing potential exposures from ongoing pesticide applications and promote public health for all populations and communities near agricultural establishments. In addition, EPA's analysis supporting the 2015 WPS shows that these protections will better support the Agency's efforts to reduce disproportionate risks associated with agricultural pesticide exposures that currently fall on populations and communities with a history of environmental justice concerns, particularly agricultural employees (*i.e.*, workers and handlers), the employees' families, and the communities that live near establishments that use pesticides (Ref. 3). Reinstating the regulatory text for certain AEZ requirements from the 2015 WPS will be associated with minimal cost to the regulated community, as described in Unit III. These revisions are consistent with FIFRA's mandate to protect health and the environment against unreasonable risk to humans or the environment, taking into account the economic, social, and environmental costs and benefits.

*E. What are the estimated incremental impacts of this action?*

EPA assessed the potential incremental economic impacts of this action, as compared to both the 2015 WPS and the 2020 AEZ Rule. EPA used this approach because the 2015 WPS has continued to provide the operative regulatory language for the AEZ requirements during the court-ordered stay of the 2020 AEZ Rule (see Unit II.A.4.). As compared to the 2015 WPS, EPA determined that the 2020 AEZ Rule had minimal impacts (see Unit III.A.). Similarly, EPA found that the impact of the changes in this final rule on agricultural establishments is likely to be small relative to the 2020 AEZ Rule (see Unit III.B.). EPA's analysis addresses other implications of this action as well (see Unit III.C.).

## **II. Context and Goals for this Rulemaking**

### *A. Context for this rulemaking*

#### *1. The WPS.*

EPA implements FIFRA's mandate to limit adverse effects on human health in part through the WPS regulation codified at 40 CFR part 170. The WPS is a uniform set of requirements for workers, handlers, and their employers that are generally applicable to all agricultural pesticides and are incorporated onto agricultural pesticide labels by reference. The WPS is intended to reduce the risk of illness and injury to agricultural workers and pesticide handlers who may be exposed to pesticides while working. The WPS requirements are generally applicable to pesticides used in crop production agriculture and made applicable to certain pesticide products through FIFRA's pesticide product registration process by inclusion of a statement requiring WPS compliance on the product label. The WPS requirements complement the product-specific labeling restrictions and are intended to minimize occupational exposures generally. When a registered pesticide label includes a statement requiring compliance with the WPS, any failure to comply with the WPS when using a pesticide is a violation of FIFRA.

The risk reduction measures of the WPS may be characterized as being one of three

types: information, protection, and mitigation. To ensure that employees will be informed about exposure to pesticides, the WPS requires that workers and handlers receive training on general pesticide safety, and that employers provide access to information about the pesticides with which workers and handlers may have contact. To protect workers and handlers from pesticide exposure, the WPS prohibits the application of pesticides in a manner that exposes workers or other persons, generally prohibits workers and other persons from being in areas being treated with pesticides, and generally prohibits workers from entering a treated area while a restricted-entry interval (REI) is in effect (with limited exceptions that require additional protections). In addition, the rule protects workers by requiring employers to notify them about areas on the establishment treated with pesticides through posted and/or oral warnings. The rule protects handlers by ensuring that they understand proper use of and have access to required personal protective equipment (PPE). Finally, the WPS has provisions to mitigate exposures if they do occur by requiring the employer to provide workers and handlers with an ample supply of water, soap, and towels for routine washing and emergency decontamination. The employer must also make transportation available to a medical care facility if a worker or handler may have been poisoned or injured by a pesticide and provide health care providers with information about the pesticide(s) to which the person may have been exposed.

## *2. History of the AEZ requirements.*

In 2015, EPA promulgated a final rule that comprehensively revised the WPS for the first time since 1992 (Ref. 8). The 2015 WPS added several pesticide-related safety measures and strengthened elements of the existing regulation in areas including training, notification, pesticide safety and hazard communication information, and use of PPE. The 2015 WPS also implemented updated requirements for providing supplies for routine washing and emergency decontamination.

Under the WPS established in 1992 (57 FR 38101, August 21, 1992 (FRL-3374-6)), the pesticide handler's employer and the pesticide handler were required to ensure that no pesticide is applied in a manner that may contact, either directly or through drift, any agricultural worker or other person, other than an appropriately trained and equipped pesticide handler involved in the application (Ref. 8). This prohibition is often referred to as the "Do Not Contact" provision and is applicable in all situations, without limitations on distance or location of the individuals. This particular provision was carried over into the 2015 WPS revisions and has remained unchanged (Ref. 3).

Among other changes to improve public health and to build upon the existing protections of the 1992 WPS, the 2015 WPS established AEZ requirements for outdoor production application to reinforce the existing "Do Not Contact" provision and to enhance overall compliance with safe application practices intended to protect agricultural workers and bystanders from pesticide exposure from sprays and drift (Ref. 3). The AEZ is an area surrounding the point(s) of pesticide discharge from the application equipment that must generally be free of all persons during pesticide applications. The AEZ moves with the application equipment while the application is ongoing and ceases to exist around the equipment once the pesticide application ends. After the application has been completed or the application equipment has moved on to a new area, entry restrictions associated with treated areas go into effect.

The 2015 WPS requirement at 40 CFR 170.505(b) required pesticide handlers (applicators) making a pesticide application to temporarily suspend the application if any worker or other person, other than trained and equipped handlers assisting in the application, was within the AEZ. The 2015 WPS revisions further required a handler to suspend an application if a worker or other person was in any portion of the AEZ, on or off the establishment. These

restrictions were intended to bolster the protections afforded by the “Do Not Contact” provision, promote an application approach aimed at reducing incidents in which people in areas adjacent to pesticide applications could be affected by either direct contact or drift, and establish a well-defined area from which people generally must be excluded during ongoing applications. The AEZ requirement was one of the many public health protection tools incorporated into the 2015 WPS rule to emphasize one of the key safety points in both the WPS and on pesticide labels: do not spray people.

As outlined in the 2015 WPS, the size of the AEZ was dependent largely on the application method used. For aerial, air blast, fumigant, smoke, mist, and fog applications, as well as sprays using a spray quality (droplet spectrum) of smaller than medium (defined as VMD of less than 294 microns), the area encompassed 100 feet from the application equipment in all directions. For other applications sprayed from a height of greater than 12 inches from the planting medium using a spray quality (droplet spectrum) of medium or larger (defined as VMD of 294 microns or greater), the area encompassed 25 feet from the application equipment in all directions. For all other applications, there was no AEZ.

### *3. The 2020 AEZ Rule modifying the AEZ provisions of the 2015 WPS.*

On October 30, 2020, EPA published revisions to the AEZ provisions under the WPS (Ref. 1). The 2020 AEZ Rule would have modified the AEZ requirements to limit the AEZ to an agricultural employer's property where an agricultural employer can lawfully exercise control over employees or bystanders who may be within the AEZ during an application, and would have simplified the criteria for determining the AEZ distances for ground spray applications. In addition, clarifications were made on when applications may resume after being suspended due to someone entering the AEZ, as well as providing an exemption for farm owners and their immediate family so that they would not have to leave their homes or another enclosed structure

when it is located within an AEZ. The 2020 AEZ Rule revisions did not include any changes to the “Do Not Contact” provision in the WPS, which still prohibited applying pesticides in a manner that may result in contact either directly or through drift. The rule was set to go into effect on December 29, 2020; however, the effective date was stayed by the court.

#### *4. Actions under judicial review.*

As explained in the *Federal Register* of May 16, 2022 (87 FR 29673; FRL-9803-01-OCSPP), two civil actions were filed in the U.S. District Court for the Southern District of New York (S.D.N.Y.) on December 16, 2020, challenging the 2020 AEZ Rule (now consolidated as case number 1:20-cv-10642). Additionally, two petitions for review were filed in the U.S. Second Circuit Court of Appeals on December 17, 2020 (case numbers 20-4174 and 20-4203), which have been held in abeyance pending the proceedings in the district court.

On December 28, 2020, S.D.N.Y. issued an order granting plaintiffs’ request for a temporary restraining order (TRO) and injunctive relief (Ref. 9). The court's order stayed the December 2020 effective date of the 2020 AEZ Rule and enjoined all EPA authorities who would otherwise take action to make the 2020 AEZ Rule effective from doing so. Following the December 2020 order, S.D.N.Y. issued several additional orders consented to by both EPA and the plaintiffs, further extending the preliminary injunction and staying all proceedings in the case (e.g., Ref. 10). As a result, the 2020 AEZ Rule has never gone into effect.

#### *5. EPA’s reconsideration of certain 2020 AEZ Rule amendments.*

Concurrent with the ongoing litigation, the 2020 AEZ Rule was included among several EPA actions identified for review in accordance with Executive Order 13990 (Refs. 7 and 11). In the course of reviewing both the 2015 WPS and 2020 AEZ Rules in accordance with Executive Order 13990, EPA found that some of the 2020 revisions to the AEZ requirements (specifically, the 2020 AEZ Rule's simplification of AEZ distance requirements and the limitation of the

applicability of the AEZ requirements to the agricultural establishment's boundaries) are inconsistent with the objectives of protecting against unreasonable adverse effects on human health and the environment and limiting exposure to dangerous chemicals and pesticides for all populations, including those who may experience disproportionate burden or risks such as workers, handlers, and those who live, work, or play on or near agricultural establishments. The Agency determined that the 2020 changes did not effectively balance the potential social and economic costs associated with limiting the AEZ requirements to areas under the owner's control and simplifying the distance criteria for ground-based spray applications (Ref. 1).

Furthermore, while preparing the administrative record for litigation, EPA discovered a factual error contained in the preamble of the 2020 AEZ Rule regarding the scope of AEZ content within EPA-approved trainings. Specifically, the preamble to the 2020 AEZ Rule states that "EPA-approved trainings since 2018 . . . have also incorporated EPA's 2016 guidance on how to apply pesticides near establishment borders and provide information on various measures applicators or handlers can take to prevent individuals from being contacted by spray or through drift," and listed examples of such measures (Ref. 2). This assertion in the 2020 AEZ Rule was in error. While all EPA-approved trainings are in compliance with the WPS because they address the minimum requirements of the AEZ (40 CFR 170.501), after reevaluating the rule, EPA has determined that some of the trainings it has approved since 2018 only contain a partial set of the topics provided in guidance regarding best pesticide application practices near the borders of an establishment and on potential measures that can be used to prevent contact through drift (Refs. 4 through 6). Therefore, the reliance on this inaccurate assumption provides further reason to reinstate the 2015 WPS requirements regarding the applicability of AEZs off the establishment and within easements.

#### *B. Goals of this Rulemaking*



With this final rule, EPA is restoring protections originally established in the 2015 WPS that were amended by the 2020 AEZ Rule. By reestablishing the AEZ distances from the 2015 WPS and reinstating the applicability of the AEZ off-establishment and in easements, the rule will protect the health of all who may be within the vicinity of an ongoing pesticide application. Since agricultural workers, their families, and communities living near agricultural establishments may represent populations of environmental justice concern, the rulemaking also supports EPA's broader efforts to reduce the disproportionate burden of pesticide exposure on certain communities. Reducing such disproportionate burdens was a goal of both the 2015 WPS and Executive Order 13990 (Refs. 3 and 7).

EPA also seeks to improve the clarity of the AEZ regulation with this action. Hence, this rule retains the clarification from the 2020 AEZ Rule that specifies that suspended applications may resume once no one is in the AEZ. As discussed in more depth in Unit V.E., that clarification will supersede EPA's previous interpretive guidance ("2016/2018 Guidance") on resuming applications in situations where people off the agricultural establishment are in the AEZ (Refs. 4 through 6). EPA anticipates that eliminating the 2016/2018 Guidance and relying instead on the plain language of the regulation will make the AEZ requirements clearer and support their implementation and enforcement.

To further clarify the AEZ requirements, EPA is finalizing new amendments to the criteria used to define droplet sizes and thus to determine AEZ distances. The 2015 WPS used a VMD value of 294 microns to distinguish between "fine" and "medium" or larger droplets, and thus to determine whether the AEZ should be 25 or 100 feet. The specific VMD value was derived from the original version of the ASABE standard, which is often referenced in nozzle manufacturers' selection guides. However, the ASABE standard has been revised several times, and ASABE no longer defines "medium" by a single numerical VMD value, but rather by a

range. Moreover, applicators in the field often determine droplet size by selecting the appropriate nozzle according to its ASABE rating. EPA is therefore finalizing its proposal to define droplet sizes as “medium” or larger by incorporating the ASABE standard itself. The ASABE standard is familiar to and well understood by the regulated community.

Additionally, EPA aims with this rule to provide some regulatory relief for family-operated farms where it does not increase exposure risk to workers and bystanders. Therefore, this action finalizes the exemption for immediate family members under specific scenarios to remain within the AEZ, reducing management complexities for farming families.

### **III. Economic Analysis**

#### *A. 2015 WPS Baseline Assessment*

Since the 2020 AEZ Rule has not been implemented due to the court-ordered stay discussed in Unit II.A.4., the 2015 WPS has continued to provide the operative regulatory language for the AEZ requirements during the current stay and any future extensions of the stay. Therefore, the Agency has determined that there will be no new impacts from the portions of this rule reinstating the 2015 WPS provisions that make the AEZ applicable beyond the boundaries of an agricultural establishment and within easements on the agricultural establishment.

Additionally, this rule reinstates the 2015 WPS criteria and factors for determining AEZ distances at 40 CFR 170.405(a) for ground spray applications, except for language around VMD as a determining factor (see Unit IV.C.). The Agency does not anticipate any new costs or impacts due to reinstating this regulatory language since the 2015 WPS remains in effect. Removing VMD from the AEZ criteria and instead using droplet size classifications (*i.e.*, “medium” as defined by the ASABE; see Unit VII.) is expected to provide a clear, practical, and easy approach for determining AEZ and enclosed space distances. EPA anticipates that this revision will improve compliance with other AEZ requirements and make it easier to enforce

these provisions by eliminating any need to determine whether an application is over or under the specified VMD of 294 microns, as required by the 2015 WPS.

EPA is also maintaining certain revisions that were presented in the 2020 AEZ Rule, such as the provision that clarifies that pesticide applications that were suspended due to individuals entering an AEZ may be resumed after those individuals have left the AEZ, and the exemption that allows farm owners and members of their immediate family (as defined in 40 CFR 170.305) to shelter within closed structures within an AEZ during pesticide applications, provided that the owner has instructed the handlers that only the owner's immediate family are inside the closed shelter and that the application should proceed despite their presence (further described in Units IV.B.2. and V.F.). The revision that clarifies when suspended applications may resume better aligns with EPA's intent in the 2015 WPS. While this clarification does not result in any impacts compared to the intent of the 2015 WPS, it does nullify the 2016/2018 Guidance, the impacts of which are further described in Unit III.C.

Finalizing an immediate family exemption means that owners and their immediate family members do not have to leave their homes that are within an AEZ if the doors and windows remain closed. By retaining the immediate family exemption, some applications will be simpler and less burdensome than the 2015 WPS since fewer applications would need to be suspended on family farms. The impact is likely small, as the change would only apply to immediate family members of the farm owner who are inside a structure and within the AEZ. These changes are consistent with the intent of the AEZ in the 2015 WPS, particularly with regard to the immediate family exemptions that are applicable to other portions of the 2015 WPS. Maintaining these clarifications and flexibilities provide some regulatory relief that was sought after promulgation of the 2015 WPS without increasing exposure risks to workers or bystanders.

#### *B. 2020 AEZ Rule Baseline Assessment*

The 2020 AEZ Rule was initiated in response to feedback from members of the agricultural community, including the U.S. Department of Agriculture (USDA), state pesticide regulatory agencies, several agricultural interest groups, and a limited number of public comments. These comments raised concerns about the complexity and enforceability of the AEZ requirements after the 2015 WPS was promulgated. For the 2020 AEZ Rule, EPA qualitatively described the benefit of the rule as a reduction in the complexity of applying a pesticide (Ref. 12). The benefits described were not monetary; revising the requirements would have reduced the complexity of arranging and conducting pesticide applications and enforcing the provisions. The benefits of the 2020 AEZ Rule would have resulted in some reduced management complexity both on and off establishment, because there would have been fewer situations where the AEZ would have applied had the rule gone into effect (*i.e.*, the AEZ would not have been applicable off the establishment or for individuals within an easement on the establishment). EPA did not discuss any costs, or increased risk from pesticide exposure, in the 2020 AEZ Rule's supporting documents due its reliance on the “Do Not Contact” requirement that establishes the responsibility of the applicator to prevent pesticides from contacting people either directly or through drift. This is in part because the “Do Not Contact” provision (further described in Unit II.A.2.) is applicable in all situations, without limitations on distance or the individual’s location respective to the application.

Compared to the 2020 AEZ Rule, the changes in this rulemaking will result in the AEZ encompassing a greater area and applying in more situations. Had the 2020 AEZ Rule been implemented, the 2020 AEZ Rule would have applied only in situations where people can be directed by the owner of the establishment, while this rulemaking would apply in all situations, regardless of whether people may not be under the direction of the owner, such as individuals off the establishment or within easements. To effectively implement the changes in this rule

compared to the 2020 AEZ Rule, owners and handlers may need to communicate more frequently with those nearby the establishment or within easements to ensure that nobody is within the AEZ and may require an application to be suspended or rescheduled. However, with the 2020 AEZ Rule as a baseline, the impact of these changes on agricultural establishments is likely to be small. Conversely, having the AEZ be applicable in all directions, regardless of whether an individual is on or off the establishment, may simplify applications in the sense that the handler does not need to apply different requirements to different situations.

In addition, the 2020 AEZ Rule sought to establish a simplified 25-foot AEZ for all ground-based spray applications above 12 inches, regardless of the droplet size. This rule reinstates the 2015 WPS criteria and factors for determining AEZ distances at 40 CFR 170.405(a) for ground spray applications, except for language around VMD as a determining factor (as further explained in Units IV.C. and V.C.). If the 2020 AEZ Rule had gone into effect, this action may have resulted in more complex application strategies because the different AEZ distances may have come into play more often and owners and handlers would have had to consider more carefully the various application and nozzle characteristics. However, restoring the droplet size criteria back to the 2015 WPS language (*i.e.*, medium droplets as a threshold) results in increased protection from applications using fine sprays that are more susceptible to spray drift compared to the 2020 AEZ Rule. Additionally, EPA's decision to not reinstate VMD as a criterion and instead rely on the ASABE standard's definition of "medium" droplet size better reflects how applicators in the field determine droplet size (by selecting the appropriate nozzle according to its ASABE rating). The change should make it easier for applicators to understand the original requirements regarding how to achieve specific droplet classifications and how to implement the appropriate AEZ based on that information. As a result, the impact of these changes in droplet size criteria is expected to be small compared to the 2020 AEZ Rule.

As previously noted, EPA is retaining certain changes made by the 2020 AEZ Rule, such as the provision that clarifies that pesticide applications that were suspended due to individuals entering an AEZ may be resumed after those individuals have left the AEZ, and the exemption that allows farm owners and members of their immediate family (as defined in 40 CFR 170.305) to shelter within closed structures within an AEZ during pesticide applications, provided that the owner has instructed the handlers that only the owner's immediate family are inside the closed shelter and that the application should proceed despite their presence (further described in Units IV.B.2. and V.F.). These changes are consistent with the intent of the AEZ in the 2015 WPS, particularly with regard to the immediate family exemptions that are applicable to other portions of the 2015 WPS. Retaining these clarifications and flexibilities in this rule provides some regulatory relief that was sought in the 2020 AEZ Rule without increasing exposure risks to workers or bystanders.

Compared to the 2020 AEZ Rule, the requirements of this rule regarding individuals off the establishment and within easements are more protective of workers and bystanders when implemented rather than relying on the "Do Not Contact" requirement as the only protective measure when individuals are outside of the owner's control, as under the 2020 AEZ Rule.

Public comments submitted to the docket during the 2015 WPS rulemaking included examples of incidents where workers were exposed to pesticide applications from neighboring establishments as well as from the establishment where they were working. EPA continues to receive reports of incidents like those provided in past comments, despite the "Do Not Contact" requirement and the expectation that applicators and handlers must not spray pesticides in a manner that may result in contact with individuals. As noted in the 2015 WPS, out of 17 incidents identified in the comments, only one could have been prevented if the AEZ was limited to the boundaries of the agricultural establishment, as would have been established had the 2020

AEZ Rule gone into effect. EPA's analysis at the time indicated that the AEZ, if complied with, could have prevented at least four of the incidents reported in the 2015 WPS comments, and possibly as many as 12, depending on the actual distances between the workers and application equipment (Ref. 3). While the Agency is unable to quantify the number of incidents that could be reduced by the AEZ, the AEZ requirements serve as an important supplement to the "Do Not Contact" requirements and are expected to reduce the total number of exposures if implemented correctly and consistently.

### *C. Additional Considerations for the Final Rule*

While this final rule does not impose additional requirements beyond what the 2015 WPS requires, stakeholders also requested that EPA codify 2016/2018 Guidance stating that applicators could resume applications when people off the establishment were in the AEZ, provided they first suspended the application and then evaluated the situation to ensure that no contact would occur (Refs. 4 through 6). While EPA determined not to codify the 2016/2018 Guidance (for reasons explained in Unit V.E.), stakeholders highlighted a potential burden to handlers: pesticide applications may be more difficult in areas where vehicles can pass through the AEZ. EPA considered but chose not to adopt an exception for some vehicles passing through an AEZ. An exception for some vehicles could create additional risks to vehicle occupants, as described in Units V.B. and V.E. There is no additional burden relative to the 2015 WPS in choosing not to adopt the exception, because the 2015 WPS contained no exception to the requirement to suspend the application when someone is in the AEZ (except for properly trained and equipped handlers involved in the application). The 2016/2018 Guidance simply clarified when suspended applications could resume. Therefore, EPA concluded that the benefits of including an exception for some vehicles were outweighed by potential risks to vehicle occupants passing through the AEZ. Although the exception would reduce the complexity of an

application when some vehicles pass through an AEZ, the benefits are unlikely to be substantial in most cases.

Under this final rule, as in the 2015 WPS, suspending an application is required when a vehicle enters the AEZ. A vehicle could only enter the AEZ when the field is adjacent to a road, a portion of the road is within the AEZ (after considering any ditches or turnrows between the field and the road), and a vehicle is passing through the AEZ during an application at the edge of the field nearest the road. In most cases, the burden could be managed by the applicator suspending the application as the vehicle approaches the AEZ and resuming the application once the vehicle has left the AEZ, which could increase the time to complete the task as an applicator would suspend and resume application. In many rural areas where heavy traffic is unlikely, cases of vehicles passing through the AEZ during an application may be infrequent. In some cases, such as when a heavily trafficked road is adjacent to an agricultural establishment, it may be difficult for the applicator to suspend and resume applications between passing vehicles. In these cases, applicators may be able to change the timing of application to a time when there is less traffic or alter the application in such a way as to have a smaller AEZ (*i.e.*, choosing a product that allows larger droplet size, which might require changing the pesticide applied). If none of these approaches are feasible, the owner or handler could be unable to treat the area of the agricultural establishment bordering the road. Owners could use another, potentially less cost-effective pest control method in this area, cease pest control in this area, or stop production in the area entirely. The latter options could imply a substantial impact on the affected area of the field where a vehicle could pass through an AEZ. The relative impact will be larger on smaller or narrow fields that border a busy road, as a larger portion of the field would be affected. EPA is unable to quantify how many growers would be substantially affected considering that growers typically manage multiple fields, but substantial impacts to a farm as a whole are likely to be



rare.

#### **IV. Proposed Changes to the AEZ Requirements**

On March 13, 2023, EPA published a proposed rule (2023 Proposed Rule) that reconsidered the 2020 AEZ Rule requirements in response to Executive Order 13990 (Ref. 1). The Agency proposed to rescind three amendments from the 2020 AEZ Rule and reinstate the corresponding requirements from the 2015 WPS (see Unit IV.A.). The Agency also proposed three amendments to improve the clarity of the AEZ provisions and provide some regulatory relief to family-operated farms. Two of these amendments were provisions from the 2020 AEZ Rule that the Agency proposed to retain, as they do not increase risk for workers and bystanders (see Unit IV.B.). The third was a new provision to clarify the meaning of the “medium” droplet size (see Unit IV.C.). The proposed amendments are outlined in this unit.

##### *A. Rescind Provisions from the 2020 AEZ Rule*

The Agency proposed to rescind the following amendments from the 2020 AEZ Rule and reinstate the corresponding 2015 WPS Rule requirements.

###### *1. The area where the AEZ applies.*

EPA proposed to revise the AEZ provision at 40 CFR 170.505(b) requiring that pesticide handlers “suspend the application” if a worker or other person (other than a trained and equipped handler) is in the AEZ. The 2020 AEZ Rule added a clause limiting the applicability of the suspension requirement to the agricultural employer’s property, such that the AEZ would no longer cover bystanders on adjacent establishments. As a result, had the 2020 AEZ Rule gone into effect, it would have relied solely upon the “Do Not Contact” requirement in the WPS as the method of protecting people on adjacent properties. EPA proposed to reinstate the 2015 WPS regulatory text requiring pesticide handlers to suspend applications if any worker or other person, other than appropriately trained and equipped handlers involved in the application, enters an

AEZ, regardless of whether those people are on or off the establishment. EPA also proposed to make conforming revisions to the handler training requirements at 40 CFR 170.501(c)(3)(xi), and the exemptions at 40 CFR 170.601(a)(1)(vi) to reflect the applicability of the AEZ both on and off the establishment.

*2. The exception to application suspension requirements for property easements.*

EPA proposed to remove language from 40 CFR 170.405(a)(2)(ii), 40 CFR 170.505(b)(1)(ii), and 170.505(b)(2)(ii) that made the AEZ requirements inapplicable in easements. The 2020 AEZ Rule would have created an exception for agricultural employers and handlers, wherein they would not have been required to suspend pesticide applications if an individual not employed by the establishment was within an AEZ but in an area subject to an easement, where the agricultural employer may not be able to restrict entry. EPA proposed to reinstate the 2015 WPS regulatory text that requires pesticide handlers to suspend applications if any worker or other person, other than appropriately trained and equipped handlers involved in the application, enters an AEZ, regardless of whether they are in an area subject to an easement.

*3. The distances from the application equipment in which entry restrictions associated with ongoing pesticide applications apply.*

EPA proposed to reinstate the 2015 WPS criteria and factors for determining AEZ distances at 40 CFR 170.405(a) for ground spray applications, except for language around a VMD as a determining factor (see Unit IV.C.). The 2020 AEZ Rule would have eliminated the criteria for determining the AEZ distances based on droplet size, establishing a single 25-foot AEZ for all ground-based spray applications made from a height greater than 12 inches from the soil surface or planting medium, irrespective of droplet size. EPA proposed to reinstate the 2015 WPS regulatory text, which specifies an AEZ distance of 100 feet for sprays using a spray quality (droplet spectrum) of smaller than medium, and a 25-foot AEZ for ground applications

sprayed from a height greater than 12 inches from the soil surface or planting medium using a spray quality (droplet spectrum) of medium or larger.

*B. Retain Provisions from the 2020 AEZ Rule*

EPA proposed to retain two provisions from the 2020 AEZ Rule that did not increase exposure risk to workers and bystanders. These provisions sought to improve the clarity of the AEZ requirements and to provide some regulatory relief for family-operated farms.

*1. Clarification on when suspended applications could be resumed.*

In the 2020 AEZ Rule, EPA revised 40 CFR 170.505(b) to clarify that applications that had been suspended because individuals were in the AEZ could be resumed after those individuals had left the AEZ. EPA proposed to retain this revision.

*2. Exemption allowing owners and their immediate family to remain within the AEZ in certain scenarios.*

EPA proposed to retain the immediate family exemption at 40 CFR 170.601. In the 2020 AEZ Rule, EPA added an exemption that allows farm owners and members of their immediate family (as defined in 40 CFR 170.305) to shelter within closed structures within an AEZ during pesticide applications, provided that the owner has instructed the handlers that only the owner's immediate family are inside the closed shelter and that the application should proceed despite their presence. The exemption also permits handlers to proceed with an application when owners or their immediate family members remain inside closed buildings, housing, and structures, provided that the owner has expressly instructed the handler that only the owner and/or their immediate family members remain inside the closed building and that the application can proceed despite the owner and their immediate family members' presence inside the closed building. It does not permit non-family members to remain within the closed structure.

*C. Replace the VMD Criteria with the ASABE Droplet Size Classification Standards*

In addition to rescinding and retaining the provisions from the 2020 AEZ Rule discussed in Units IV.A. and IV.B., EPA proposed to incorporate the droplet size categories of all versions of the ASAE Standard 572 (S572) (Refs. 13 through 16) by reference in 40 CFR 170.405, to give meaning to the “medium” droplet size criterion (for more information on the incorporation by reference, see Unit VII.). The 2015 WPS used a VMD value of 294 microns to distinguish between fine spray applications and spray applications using medium or larger droplet sizes; this VMD value was the determining criterion for AEZ distances. The VMD criterion reflected an older version of S572, which used the value of 294 microns to define “medium” (Ref. 13). However, S572 has been revised several times (see Unit VII.; Refs. 14 through 16). While the categorization of “medium” droplet sizes has remained largely constant, the specific VMD values that were the basis for the criteria in the 2015 WPS requirements have changed. Moreover, applicators in the field often determine droplet size by selecting the appropriate nozzle according to its S572 rating. EPA therefore proposed to replace VMD with an incorporation by reference to S572 for droplet size, which defines droplet size categories for the classification of spray nozzles, relative to specified reference fan nozzles. The S572 classifications and categories are generally well understood by the regulated community and are referenced in several places, including on pesticide product labels as updated through EPA’s Registration Review process, as well as in nozzle manufacturers’ selection guides to assist applicators in determining which nozzles and spray characteristics will produce various droplet sizes that are consistent with the S572 classifications.

To maintain consistency in the requirements between outdoor production applications and applications associated with enclosed space production, EPA also proposed to remove VMD as a criterion for entry restriction distances during enclosed space production pesticide applications, instead using the same droplet size standards as those used for outdoor production.

## **V. Public Comments and EPA Responses**

The public comment period for the 2023 Proposed Rule closed on May 13, 2023. EPA received feedback from 25 commenters (28 submissions total) specific to the 2023 Proposed Rule. USDA submitted additional comments during the public comment period. Some of the 25 comments discussed the AEZ as a general principle while others focused on specific requirements.

### *A. General Comments on the AEZ*

#### *1. Comments.*

Several agricultural business stakeholders, as well as state lead agencies represented by the National Association of State Departments of Agriculture (NASDA), expressed general opposition to the AEZ requirements, characterizing them as complex, burdensome for growers and handlers, and duplicative of existing protections (*e.g.*, label requirements and “Do Not Contact”). They stated that the need for the AEZ is not supported by incident data.

Several farmworker advocacy organizations, along with numerous state Attorneys General and one state lead agency commented that the AEZ is necessary to protect human health, including that of farmworkers, bystanders, and surrounding communities. They characterized the AEZ as consistent with EPA’s responsibilities under FIFRA, as well as EPA policies and principles of environmental justice and children’s health. To support their statements, commenters cited studies, incident data, and anecdotal evidence of pesticide exposures to workers and bystanders beyond that which EPA considered for the 2015 WPS. One commenter presented a series of photographs and maps demonstrating the proximity of agricultural fields to schools and playgrounds. Commenters also noted that pesticide exposure incidents are underreported.

#### *2. Response.*

EPA disagrees with commenters who suggested that the AEZ requirements are duplicative or unjustified by incident data. The Agency considers the AEZ necessary to address incidents of contact from agricultural pesticide applications. As EPA determined during its analysis for the 2015 WPS, “Do Not Contact,” on its own, has been insufficient to protect workers and bystanders; handlers require a guideline (Ref. 3). Although EPA published amendments to the AEZ requirements in 2020, the Agency maintained that some sort of guideline is necessary. Furthermore, commenters on this action and the proposal that was finalized as the 2020 AEZ Rule (2019 Proposed Rule) identified several incidents that might have been prevented by correct implementation of the AEZ requirements. EPA’s review of data from the Sentinel Event Notification System for Occupational Risks-Pesticides (SENSOR-pesticides), the National Pesticide Information Center (NPIC), EPA’s Incident Data System, and state surveillance systems identified others, including incidents in the years after the AEZ requirements went into effect and incidents involving sensitive populations (Refs. 17 through 20). For example, in June 2023, after the public comment period for the 2023 Proposed Rule closed, 12 workers in Oregon appear to have been exposed to an application less than 25 feet from a tractor applying pesticides in a neighboring field (Ref. 19). Of the 12 workers, 10 had adverse health effects and one was hospitalized. Similarly, in California in 2016, 2018, and 2019, state surveillance data captured incidents of agricultural pesticides contacting passing school buses (Ref. 18). While much incident data lacks specific details about the distance to application equipment, it supports the need for handlers to be aware of their surroundings and suspend applications when workers and bystanders are nearby; in other words, it supports the general approach of the AEZ requirements. Moreover, EPA agrees with commenters that exposure incidents are underreported. As described in the economic analysis for the 2015 WPS, health care providers may not always report incidents of pesticide exposure because there is no

universal reporting requirement or central reporting point (Ref. 21). In addition to these barriers for health care providers, EPA acknowledges that the literacy, language, legal, economic, and immigration status of agricultural workers creates challenges for those who wish to access the health care that would be a primary route for reporting pesticide incidents. Due to underreporting and limitations in the information collected, there may have been incidents supporting the need for an AEZ that pesticide surveillance systems did not capture. While the Agency is unable to quantify the number of incidents that may have been prevented by correct implementation of the AEZ requirements, the information from incidents that EPA has reviewed and the Agency's understanding of factors contributing to underreporting generally support the necessity of an AEZ as an additional administrative control measure for handlers in support of protecting public health.

EPA agrees with commenters that the AEZ is consistent with its obligations under FIFRA, Agency policy, and executive orders on environmental justice and children's health (Refs. 7, 22 and 23). EPA's analysis of the 2015 WPS showed that the regulation would reduce risks that fall disproportionately on populations of environmental justice concern, such as workers, handlers, and their families and nearby communities. EPA reexamined the 2020 AEZ Rule in accordance with Executive Order 13990, which identifies environmental justice as an Administration priority, and found that the 2020 AEZ Rule reduced key protections established by the 2015 WPS (Ref. 7). Therefore, EPA is finalizing this rule to reinstate those provisions and restore protections. Similarly, although this action is not expected to have a disproportionate impact on children, EPA is persuaded by the specific examples that commenters provided, as well as its own findings from incident data, that the AEZ could reduce the potential for children to be exposed to pesticides.

*B. Area Where the AEZ is Applicable and Exception for Easements*

*1. Proposed rule.*

EPA proposed to reinstate the 2015 WPS regulatory text requiring pesticide handlers to suspend applications if any worker or other person, other than appropriately trained and equipped handlers involved in the application, enters an AEZ, regardless of whether they are on or off the establishment or in an area subject to an easement.

*2. Final rule.*

EPA has finalized as proposed the area where the AEZ requirements are applicable, and removed the exception for easements that would have been established under the 2020 AEZ Rule.

*3. Comments.*

Several Attorneys General, farmworker advocacy organizations, a state lead agency, and two members of the public commented in support of the proposal to reinstate the applicability of the AEZ requirements off-establishment and in easements. These commenters stated that the AEZ must extend off-establishment to protect the health of farmworkers, farmworker families, and surrounding communities, since pesticide drift does not automatically stop at the establishment boundaries. Similarly, one organization and several Attorneys General noted that the proposal to reinstate the applicability of AEZ requirements in easements protects essential utility and postal workers, among others.

Commenters in support of reinstating this requirement cited studies, incident data, and anecdotes from both before and after the 2015 WPS rulemaking to demonstrate that people near agricultural establishments, not just on them, are at risk from pesticide exposure. Children and populations of environmental justice concern may live or spend time near agricultural fields (for example, in migrant farmworker housing or childcare centers). Therefore, commenters also suggested that requiring AEZ protections to extend off the establishment and into easements is



consistent with executive orders, EPA policies, and general principles of children's health and environmental justice.

One commenter noted that the "Do Not Contact" requirement does not stop at the establishment boundaries. They suggested that the applicability of the AEZ requirements off-establishment supports "Do Not Contact" and would improve compliance.

NASDA and several agricultural business stakeholders opposed requiring AEZs to be applicable in all areas near an ongoing application, including off the establishment and in easements. Many of these commenters noted that establishment owners, agricultural employers, and handlers cannot control the movement of people off-establishment or in easements, and that pesticide applications are time-sensitive. They suggested that the requirement to suspend for individuals within an AEZ off the establishment could delay applications until the optimal application time had passed, resulting in less effective applications and lost yield. Similarly, one commenter suggested that off-establishment AEZ requirements could restrict access to farm roads and facilities for long periods, disrupting local economies. These commenters indicated that the requirements would particularly affect fields with easements, fields bordering roads and houses, and aerial applications.

Some commenters suggested that off-establishment AEZ requirements could result not only in delayed applications but also in permanent setbacks. USDA, agricultural business stakeholders, and a member of the public suggested that owners might choose to leave parts of their land unsprayed rather than repeatedly suspend the application. They identified fields bordering busy roads, fields bordering housing, and areas with limited visibility (such as orchards) as situations where setbacks might be more likely. Setbacks would lead to lost yield. Commenters stated that the impact of leaving land unused would be greatest for smaller farms.

Several agricultural business stakeholders raised legal concerns with the applicability of

the AEZ off-establishment. Two commenters suggested that owners, employers, and handlers who attempted to restrict entry to or activities on areas not on their property but within the AEZ could face legal liability. Another commenter expressed the same concern over easements, noting that easements grant a right of access to certain parties.

While not opposing the applicability of the AEZ off-establishment or in easements, one state lead agency noted that handlers may struggle to make determinations about whether people are in the AEZ when the AEZ extends past the property line. They encouraged EPA to hold the agricultural employer or a licensed applicator responsible for implementation of this provision.

Several commenters discussed how AEZ requirements that apply off-establishment will affect communication among handlers and others in agricultural areas. USDA expressed concern that handlers would have to engage in burdensome communication with people off-establishment, while two advocacy organizations suggested that extending AEZ requirements off-establishment would encourage positive, proactive communication among neighbors about upcoming applications.

#### *4. Response.*

EPA agrees with commenters who assert it is necessary for the AEZ requirements to apply off-establishment and in easements to protect human health, including that of communities of environmental justice concern (such as workers, handlers, and their families) and sensitive populations, such as children. As noted in the preamble to the 2015 WPS, out of 17 incidents of pesticide exposure identified in the comments, only one could have been prevented if the AEZ were limited to the boundaries of the agricultural establishment. EPA's analysis indicated that the AEZ could have prevented at least four of the incidents reported in the comments on the 2015 WPS, and possibly as many as 12 (Ref. 3).

EPA also agrees with commenters who state that for the AEZ requirements to effectively

supplement the “Do Not Contact” provision, the AEZ must extend beyond the boundary of the establishment as the “Do Not Contact” provision does. The AEZ regulation provides an additional requirement for handlers such that their applications do not contact people either directly or through drift. That requirement should be equally useful to handlers complying with “Do Not Contact” whether the AEZ is on- or off-establishment. Incident data from NPIC, SENSOR-pesticides, state surveillance, and EPA’s incident data system suggests generally that the need for this requirement is ongoing (Refs. 17 through 20). For example, pesticide surveillance systems continue to capture exposure incidents involving people on off-establishment roads, such as the incidents involving contact to school buses referenced in Unit V.A.2. EPA found examples of incidents involving contact to people on roads even after the AEZ went into effect. For instance, in 2018, Washington State surveillance captured an incident in which a man driving to work was contacted by an airblast application 30 to 40 feet away (Ref. 20). This incident and the school bus incidents referenced above are meant to serve only as examples, not to establish trends; but they provide additional support for EPA’s finding in the 2015 WPS that the AEZ is necessary to supplement “Do Not Contact” beyond the boundary of the establishment.

EPA disagrees with commenters who suggested that AEZ requirements applicable beyond the boundary of the establishment and in easements are equivalent to permanent setbacks in all or even most cases. There are several means by which agricultural employers and handlers can limit the need to suspend their applications due to the movement of people off-establishment and in easements. They may choose to adjust the type of pesticide application such that the AEZ is only 25 feet, selecting a product that allows for medium or coarser droplets. Alternatively, employers and handlers may choose to provide advanced notification of planned applications to ensure no one is in the AEZ or choose to complete the application at a time when there are fewer

people present in the area (although the requirement to suspend an application if people are in the AEZ remains). Moreover, as discussed in further detail in Unit III.C., these alternatives are likely only necessary in select, infrequent circumstances.

In the same way, EPA is not persuaded that the applicability of the AEZ requirements off-establishment and in easements causes unreasonable delays to applications, restricts access to farm facilities for long periods of time, or places an undue burden of communication on owners, employers, and handlers. The AEZ moves with the application equipment and exists only while the application is ongoing. As discussed in Unit III.B., EPA anticipates that the economic impacts of the requirements off-establishment and in easements are likely small in most cases, even as compared to the 2020 AEZ Rule. Furthermore, the “Do Not Contact” requirement has always been applicable beyond the boundary of the establishment, so the AEZ requirement adds minimal (if any) burden to what was already required in many situations before 2015. Owners, employers, and handlers can also reduce any potential disruption to the application by adjusting application type or timing or by providing advance notification, as discussed in the previous paragraph.

Commenters’ concerns that the AEZ puts owners, employers, and handlers in legal jeopardy by forcing them to restrict access to or activities on others’ property appear to reflect a misunderstanding of the AEZ requirements. The AEZ does not require that owners, employers, or handlers restrict access to others’ property. The “keep out” requirement at 170.405(a)(2) (where the agricultural employer is prohibited from allowing or directing any worker or other person to enter or remain in the AEZ,) is only applicable on the agricultural establishment and within the boundaries of the AEZ or treated area. Similarly, the AEZ does not force owners, employers, or handlers to control the activities of people off-establishment. If someone is in the AEZ off-establishment (for example, if a neighbor pulls into their home’s driveway and into the

AEZ), the requirement is for the handler to suspend the application until the person leaves the AEZ. Therefore, EPA is not placing an affirmative duty on agricultural establishment owners or handlers to restrict the movement of people outside the boundaries of the agricultural establishment or creating potential legal liability for owners or handlers.

Similarly, EPA is not persuaded by comments stating that the AEZ requirements put agricultural employers in legal jeopardy by forcing them to restrict access to easements on the agricultural establishment. If an AEZ overlaps with part of an easement on the agricultural establishment, the agricultural employer is required to ensure that no one enters that AEZ; however, they are not required to keep people out of the easement entirely. As the AEZ exists only immediately around the application equipment and during the application, any limitations to easement access would be small in scope and temporary. Furthermore, if someone in an easement were within the AEZ, the handler would only have to suspend the application to comply with the AEZ requirements. Therefore, EPA is not placing an affirmative duty on handlers or owners to control the actions of persons in easements and in turn, is not creating potential legal liability for owners or handlers in extending the AEZ into easements.

Overall, EPA maintains that even if the AEZ provisions cause minor disruption to agricultural operations or necessitate some additional communication, the benefits of the AEZ extending to workers and bystanders off-establishment outweigh the burden on the regulated community. Continued reports of incidents since the 2015 WPS went into effect highlight the need for compliance with the AEZ requirements to protect human health. As discussed in Unit III.B., EPA anticipates that the applicability of the AEZ requirements off-establishment and in easements will likely have only a small impact in most cases as compared to the 2020 AEZ Rule. Furthermore, EPA reiterates that the requirements to suspend the application for individuals off-establishment and in easements have been in place since the 2015 WPS and thus do not represent

new costs for the regulated community.

With respect to the comment stating that handlers may struggle to determine whether people are in the AEZ when it extends off-establishment, the Agency reiterates that handlers already bear responsibility under the WPS for ensuring that pesticides do not contact people beyond the boundaries of the establishment. The AEZ indicates *how* to avoid contact, setting minimum required distances for suspending the application. However, it should also be noted that there is no restriction in the rule limiting responsibility to the handler. The decision to hold liable the owner of the establishment or a certified applicator is made on a case-by-case basis.

EPA plans to issue guidance to support establishment owners, agricultural employers, and handlers in complying with AEZ requirements related to applications near the boundaries of the establishment and easements. In this compliance assistance guidance, EPA will consider including suggestions on communication, as well as strategies that limit the need for such communication (*e.g.*, changing the path or timing of the application).

*C. Distance Requirements and Replacing the VMD criteria with the ASABE Droplet Size Classification Standards*

*1. Proposed rule.*

EPA proposed to reinstate the 2015 WPS regulatory text, which specifies a distance of 100 feet for sprays using a spray quality of smaller than medium, and a 25-foot AEZ for ground applications sprayed from a height greater than 12 inches from the soil surface or planting medium using a spray quality of medium or larger.

EPA also proposed to replace the VMD criteria with the ASABE droplet size classification standards, for both indoor and outdoor production (Refs. 13 through 16).

*2. Final rule.*

EPA has finalized as proposed the AEZ distances and droplet size criteria. EPA has

finalized its proposal to replace VMD criteria with the ASABE droplet size classification standard, as proposed, for both indoor and outdoor production.

### *3. Comments.*

Several agricultural business stakeholders opposed the AEZ distances in the 2023 Proposed Rule, as well as the use of droplet size as the criterion to determine the size of the AEZ. These commenters advocated for the use of product-specific distances, as EPA has established for pesticides that require buffer zones; or for the use of factors besides droplet size to control drift, such as spray pressure, wind direction, and wind speed.

Some farmworker advocacy organizations, though generally supportive of the 2023 Proposed Rule, questioned whether the size of the AEZ is sufficiently protective of human health. These stakeholders cited studies and state incident data that found drift from airblast applications at distances greater than 100 feet, as well as anecdotal reports of continued exposures.

Other farmworker advocacy organizations, as well as several Attorneys General, commented in support of the AEZ distance requirements in the 2023 Proposed Rule, stating that they are necessary to protect human health. One commenter cited anecdotes, enforcement cases, and incident data of farmworkers and community members within 100 feet of an ongoing application who were contacted by pesticides. Several commenters referenced studies demonstrating that smaller droplets drift farther than larger ones, reasoning that finer-droplet sprays require larger AEZs.

Two farmworker advocacy organizations also commented in support of using the ASABE standards for droplet size to determine the size of the AEZ. They remarked that the ASABE standards are well understood by the regulated community because they are used to rate spray nozzles, which could reduce the complexity of implementing the rule and improve

compliance. A farm bureau also expressed support for use of the ASABE standards, though opposing the distance requirements. Another farmworker advocacy organization noted that the ASABE standards are not well understood by farmworkers and asked that this information be provided to workers in a language they understand.

#### *4. Response.*

While EPA appreciates the data and studies cited by commenters, the Agency has determined that re-establishing the AEZ distances from the 2015 WPS is the best approach.

Studies cited in response to this action and in response to the 2020 AEZ Rule (Refs. 24 through 28), as well as information contained in the administrative record for the 2015 WPS rule, show that pesticide applications using sprays with droplets smaller than medium are prone to drift greater than 25 feet. Therefore, EPA has determined that a 100-foot AEZ for sprays with droplets smaller than medium is needed to protect workers or bystanders near these fine-spray applications.

With respect to comments urging an AEZ distance of greater than 100 feet for certain application types, EPA notes, firstly, that the WPS does not function in isolation. The AEZ is intended to serve as a baseline protection measure when product labels do not provide greater protections. When labels are more protective, they take precedence. For example, rather than the AEZ, which exists only during the application, soil fumigants may have label-mandated buffer zones that begin during the application and remain after the application has concluded. These buffers may be up to half a mile wide. In this way, EPA already supplements the AEZ distances with product label-specific instructions in cases where there is a particular, increased risk.

Second, in this rulemaking, EPA reconsidered AEZ distances only with respect to application type. To reconsider the distances themselves would require a new evaluation of the human health and economic impacts of the AEZ requirements, as well as their enforceability.



EPA finds the current human health and economic impacts analyses detailed in this final rule to be sufficient for establishing AEZ distances. Finally, the 100-foot distance is familiar to stakeholders, having been the operative AEZ distance for certain applications since 2015. This distance is also consistent with previous protective distances for nursery production under the 1992 WPS (Ref. 8). Familiarity and consistency aid compliance.

Though EPA appreciates that some commenters have considered the range of techniques available to reduce drift, the Agency is similarly not persuaded by commenters' request for further product- or application-specific protections in lieu of the AEZ. As discussed above, the WPS and labeling requirements work in tandem: the WPS is a more general, uniform set of standards for pesticide safety while the labeling requirements provide more tailored protections based on the specifics of each chemical and application method. A uniform AEZ is consistent with that approach. Moreover, while EPA is aware of the many methods and technologies to reduce drift, it agrees with one state lead agency's comment that not all pesticide handlers are highly trained and equipped certified applicators. There is need for a supplement to "Do Not Contact" that serves all handlers, regardless of training or experience.

EPA agrees with commenters who asserted the ASABE standards are well understood by regulated community. EPA believes that the incorporation of the ASABE standard into the rule will allow handlers to quickly and easily determine AEZ size, reducing the complexity of implementation, since the standard is often referenced in nozzle manufacturers' selection guides. EPA also anticipates that this revision will improve compliance with other AEZ requirements and make it easier to enforce these provisions by eliminating any need to determine the VMD.

In developing its compliance assistance guidance, EPA will consider providing clarity around the ASABE droplet size standard as needed.

#### *D. Clarification on Resuming Suspended Applications*

*1. Proposed rule.*

In the 2020 AEZ Rule, EPA added text clarifying that applications that had been suspended because individuals were in the AEZ could be resumed after those individuals had left the AEZ. EPA proposed to retain the clarification under this action.

*2. Final rule.*

EPA has finalized as proposed the clarification on resuming applications.

*3. Comments.*

NASDA, agricultural business stakeholders, and several farmworker advocacy stakeholders supported the proposal to clarify when suspended applications could resume. Commenters agreed that the language provides necessary clarity. A farmworker advocacy organization suggested that by providing certainty to handlers, the clarification would improve compliance with “Do Not Contact.” NASDA qualified its support, indicating that the clarification should only apply on-establishment.

While not opposing this provision, one state lead agency noted that pesticide handlers may not be certified applicators or even native English speakers. As such, handlers may not have language skills to ask bystanders to leave the AEZ so that the application can resume or the training to adjust the application path. The state agency recommended that the rule be further clarified so that an employer or certified applicator is held responsible for resuming applications.

*4. Response.*

Although EPA always intended for suspended applications to resume once persons have left the AEZ, EPA agrees with commenters that the regulation is clearer when this is made explicit. EPA hopes that the provision also improves compliance. EPA disagrees that the clarification should only apply to applications within the agricultural establishment’s boundaries, for the reasons outlined in Unit V.B.

While EPA recognizes the comment stating that handlers are not always certified applicators or native English speakers, the Agency believes that all handlers should have the skills necessary to suspend the application when people enter the AEZ and resume it after they leave. Handlers already bear responsibility under the WPS for ensuring that pesticides do not contact people; the AEZ complements implementation of the “Do Not Contact” provision by providing a minimum distance at which they must suspend the application.

It should be noted that there is no restriction in the rule limiting responsibility to the handler. The decision to hold liable the owner of the establishment or a certified applicator are made on a case-by-case basis. In its compliance assistance guidance, EPA will consider including best practices to support agricultural employers and various handlers with the new clarification on resuming applications.

#### *E. EPA’s 2016/2018 Guidance on Resuming Suspended Applications*

##### *1. Proposed rule.*

In Units II.B.3. and II.C.3. of the 2023 Proposed Rule, EPA requested input on the adequacy of procedures laid out in previous interpretive guidance documents (two from 2016 and one from 2018) for resuming applications in situations where the AEZ extends off-establishment or into easements (Refs. 4 through 6). These procedures allow pesticide handlers to resume applications when people off-establishment or in easements are in the AEZ, provided handlers first suspend the application and then evaluate conditions to ensure there will be no contact. The 2016/2018 Guidance provides a number of best application practices handlers could use to evaluate conditions, ranging anywhere from asking people to move from the AEZ until the application equipment has moved on to assessing wind direction and other weather conditions to determine that the application will not blow toward bystanders. Because the 2023 Proposed Rule specifies that applications (whether on- or off-establishment) can only resume once people have

left the AEZ, it nullifies the 2016/2018 Guidance.

*2. Final rule.*

EPA has finalized as proposed the clarification regarding when suspended applications may resume. Procedures from EPA's 2016/2018 Guidance are nullified by this action.

*3. Comments.*

USDA and agricultural business stakeholders commented in support of the procedures from the 2016/2018 Guidance, maintaining that they accommodate economic and logistical needs without posing additional risk to workers and bystanders. Commenters suggested that, if applicators were not able to resume applications as indicated in the 2016/2018 Guidance, applications along busy roads and near houses or farm facilities would be frequently disrupted. Additionally, USDA described difficulties for ground-based applicators in orchards or vineyards even with the flexibilities of the 2016/2018 Guidance. If visibility is poor, these handlers "might not even see people passing [off-establishment] who are within the AEZ and would only have the option to make applications under conditions that ensure no pesticide contact."

USDA suggested that, in the absence of the 2016/2018 Guidance, establishment owners would be forced to set back from their property lines, foregoing part of their yield. They laid out a hypothetical estimating the potential impact of 50-foot setbacks on an agricultural operation. USDA also noted that guidance does not have the force of regulation and can be inconsistently enforced, or else revoked. To prevent potential losses and avoid inconsistencies, USDA suggested codifying language similar to the 2016/2018 Guidance in this rule that permits handlers to resume applications after they have evaluated and determined that people outside of the establishment's boundaries will not be contacted by the pesticide application, either directly or through drift.

A farmworker advocacy organization commented in opposition to the procedures from

the 2016/2018 Guidance, stating that they posed an unreasonable risk to bystanders. This commenter suggested that the 2016/2018 Guidance contradicts the common-sense interpretation of the requirement that applications must be suspended when “any worker or other person...is in” the AEZ. They also noted that the 2016/2018 Guidance procedures rely heavily on the discretion of the handler; under the 2016/2018 Guidance, the handler determines case by case whether contact will occur, how to prevent contact, and when it was safe to resume the application. In contrast, if the handler could not resume the application until people have left the AEZ, regardless of whether they were on- or off-establishment, the only determination they had to make was whether people were within 25 or 100 feet. Referencing EPA’s analysis from the 2015 WPS and decision to supplement “Do Not Contact” with an AEZ, the commenter maintained that there is a need to simplify handlers’ decision-making, rather than rely exclusively on their judgment; and that allowing handlers broad discretion increases the risk of bystander exposure.

Similarly, the state lead agency noted that pesticide handlers are not always highly trained certified applicators. As a result, some handlers may not have the skills to evaluate whether environmental conditions allow them to safely resume applications, or the knowledge to choose an appropriate drift-reduction technology. The commenter proposed that the employer or a certified applicator be held responsible for determining when to resume applications.

#### *4. Response.*

Comments revealed a number of limitations to the 2016/2018 Guidance that EPA had not previously considered. First, rather than provide the intended clarity, the 2016/2018 Guidance introduced ambiguity into the AEZ and opened the door to inconsistent interpretation and enforcement of the AEZ requirements. Codifying the procedures would continue this ambiguity. The “evaluation” step is open-ended, with any number of methodologies that could be used to

determine whether an application can resume. The lack of specificity could again lead to complexity and inconsistencies in implementation and enforcement across states.

Second, as one commenter noted, the procedures outlined in the 2016/2018 Guidance relied extensively on handlers' discretion and involve a more complex assessment beyond what the current AEZ provisions require. While judgments may be made with the benefit of extensive training and advanced technology, EPA agrees with the state lead agency's comment, which noted that not all handlers are certified applicators. The open-ended "evaluation" step is inconsistent with the AEZ's purpose: to serve as a uniform guideline for all types of handlers. Incident data continues to suggest that there is a need to supplement "Do Not Contact" in a way that relies less on handler discretion. For example, under the 2016/2018 Guidance a handler might evaluate and determine that they can safely resume an application despite the presence of a passing car, believing that people inside a car are safe from contact. Yet pesticide surveillance data has captured any number of ways in which people inside moving vehicles may be contacted by pesticides: via open windows, open sunroofs, and through the vehicle's ventilation system. In California in 2018, for instance, a student in a school bus was contacted by foam from an airblast application, which drifted through the open window (Ref. 18). While it is uncertain whether correct implementation of the AEZ requirements and 2016/2018 Guidance would have prevented the incident, it illustrates a scenario in which relying on the discretion of a handler could increase the human health risk of the application.

Finally, in light of comments, EPA believes that the 2016/2018 Guidance procedures do not necessarily reduce logistical burdens in the ways originally thought or as commenters described, if implemented correctly. The 2016/2018 Guidance did not create an exception to the 2015 WPS suspension requirement; the procedures outlined in guidance only describe when handlers can resume applications after they first suspend them and then evaluate the situation to

ensure there will be no contact. In the case of a property bounded by an off-establishment road, the handler would still have to suspend the application when a vehicle enters the AEZ. If a handler is unable to suspend in time because visibility is poor or because cars pass through the AEZ too quickly, they would not have been consistent with the 2016/2018 Guidance procedures even if they had evaluated the situation before beginning application and determined no contact would occur. While the 2016/2018 Guidance may have reduced some logistical burdens, it did not allow applications near establishment boundaries to proceed entirely unimpeded. Thus, upon further consideration, EPA does not believe correct implementation of the 2016/2018 Guidance would result in substantial benefit. Moreover, with regard to concerns about ground-based applicators, EPA notes that irrespective of the AEZ requirements and any associated guidance, handlers are always required under the 2015 WPS to ensure that pesticide applications are made under conditions that ensure no contact.

*F. Exemption Allowing Owners and Their Immediate Family to Remain Within the AEZ in Certain Scenarios, and Other Comments on Pesticide Applications Near Housing*

*1. Proposed rule.*

EPA proposed to include an immediate family exemption for certain AEZ scenarios. Specifically, EPA proposed to allow owners and their immediate family members to remain inside closed houses or structures in the AEZ during pesticide applications. The exemption also permits handlers to proceed with an application under these circumstances, provided that the owner has communicated certain information beforehand.

*2. Final rule.*

EPA has finalized the exemption for owners and their immediate family members, as proposed.

*3. Comments.*

Agricultural business stakeholders discussed logistical and financial difficulties for owners and handlers when housing lies within the AEZ. They described delays in farming operations if immediate family members were forced to leave the house during applications on their property. One farm bureau also noted the potential for delays stemming from houses located off-establishment less than 100 feet from the property line. This commenter noted that local regulations may not always require houses to be built farther away, and that it can be difficult for a handler to determine whether off-establishment houses are occupied.

As a result, NASDA and agricultural business stakeholders, as well as one advocacy organization, commented in favor of the immediate family exemption. These commenters noted that the exemption provides flexibility for farming families and reduces delays in applications.

Farmworker advocacy organizations discussed the potential human health risks associated with pesticide applications near farmworker housing. Commenters cited studies and anecdotal evidence of the poor quality of farmworker housing; houses may not be fully sealed to the outdoors, and cooking and laundry facilities may be open-air. These commenters suggested that the AEZ requirements do not account sufficiently for the risk of drift into houses or the risk of post-application exposure. In response, three organizations recommended that the AEZ be enforced as a buffer zone around employer-provided housing. One proposed an advanced notification requirement when housing will fall into the AEZ, so that residents can proactively take in laundry and cover cooking facilities.

Several commenters also elaborated on the logistical and financial difficulties that people who live near agricultural establishments face when housing falls in the AEZ, suggesting that families may be forced to relocate for long periods, and even overnight, due to ongoing pesticide applications. In response, one commenter suggested that applications near housing be restricted to certain times of day.



Two farmworker advocacy organizations stated that they did not oppose the exemption or took no position on it. One of these commenters recommended that owners clarify for handlers that the immediate family exemption does not apply to labor housing.

*4. Response.*

EPA agrees with comments in support of the immediate family exemption that suggested that the immediate family exemption will make some pesticide applications on family farms simpler and less burdensome. As stated in the 2023 Proposed Rule, EPA anticipates that owners will take appropriate steps to protect their family members in the AEZ; thus, the exemption provides flexibility at minimal risk to human health and without compromising the health of workers and non-family bystanders. As commenters requested, EPA plans to issue compliance assistance guidance. In this guidance, EPA will consider including best practices on communications between establishment owners and handlers to support the implementation of the immediate family exemption.

EPA agrees with commenters who cited studies demonstrating that the quality of housing in agricultural communities is variable (see, *e.g.*, Refs. 29 through 32). Thus, EPA has limited housing-related exceptions to owners of agricultural establishments and immediate family members in enclosed structures on the establishment, as proposed. In the case of on-establishment structures occupied by the owner and their immediate family, the owner is likely to know about major physical deficiencies and whether the structure is sufficiently enclosed (for example, free from leaks and broken windows) to protect family members inside. In contrast, an establishment owner will have less insight into the quality of off-establishment housing.

EPA acknowledges commenters' concerns over pesticide applications near housing. EPA believes many of these commenters' suggestions, such as advanced notification or clarifying that the immediate family exemption does not apply to labor housing, can be addressed through

guidance. Others, such as buffer zones around employer-provided housing, are beyond the scope of this action and would require additional analysis and public discussion to determine the appropriateness of buffers and buffer sizes around employee housing or other structures on the establishment where workers may be present. Employer-provided housing is not uniform (for example, workers with temporary H-2A agricultural visas may be housed in hotels off-establishment), nor is it regulated by EPA.

In its compliance assistance guidance, EPA will consider including best practices for handlers applying pesticides near housing, to take into account the logistical and economic difficulties that they may face. Some commenters have also expressed concern for people who live near agricultural establishments that may be disproportionately at risk from pesticide applications; EPA will also consider guidance that may include suggestions on best practices for communicating with people who live near agricultural establishments and whose housing may fall within the AEZ. EPA disagrees with commenters that communication about applications near housing is unreasonably burdensome. However, EPA will also consider including strategies that limit the need for such communication in its compliance guidance. For example, if local ordinances do not require that houses be set back more than 100 feet from property lines, handlers may need to adjust the application type or droplet size to decrease the size of the AEZ to 25 feet.

#### *G. Enforcement of the AEZ Requirements*

##### *1. Proposed rule.*

In Unit III. of the 2023 Proposed Rule, EPA asked for commenters' recommendations or considerations on improving the enforceability of the AEZ provisions.

##### *2. Final rule.*

In this final rule, EPA did not make any changes to proposed regulatory text based on

public comments related to enforcement.

### *3. Comments.*

AAPCO, NASDA, and another agricultural business stakeholder expressed concerns about the enforceability of the 2023 Proposed Rule. AAPCO asked how AEZ violations would be documented or even detected in the first place, given that one would have to measure from moving application equipment to moving bystanders. NASDA remarked that it would be difficult to enforce AEZ requirements off-establishment, as handlers have no control over people beyond the property boundaries. Similarly, NASDA noted that enforcement of the immediate family exemption requires further consideration to ensure it does not become burdensome to handlers or regulators. Despite its other concerns, NASDA agreed that clarifying when applications would resume would aid enforcement.

In contrast, an advocacy organization suggested that the AEZ provisions should aid enforcement of contact violations. The organization stated that “Do Not Contact,” on its own, may be difficult to enforce, as farmworkers may be reluctant to report a pesticide exposure to authorities and healthcare providers might not recognize the symptoms. In comparison, the commenter suggested that it should be easier to prove the distance between application equipment and bystanders.

A farmworker advocacy organization offered suggestions to aid enforcement of the AEZ requirements, as well as the WPS more generally. Noting that farmworkers often fear workplace retaliation or immigration consequences, they recommended interagency collaboration, inspections that prioritize workers’ confidentiality, unannounced inspections, and a general awareness of farmworkers’ cultural context and language needs on the part of inspectors.

### *4. Response.*

EPA appreciates the comments received in response to the request for recommendations

or considerations on improving the enforceability of the AEZ provisions. To assist inspectors with monitoring compliance with the WPS, EPA provides two guidance documents: the FIFRA Inspection Manual and the WPS Inspection Manual (Refs. 33 through 34). These guidance documents are reviewed and updated periodically. The manuals include sampling procedures that may be used to confirm the distance the pesticide traveled. As discussed elsewhere in this preamble, the AEZ requirement complements the “Do Not Contact” requirement by providing a measurement that may be used for enforcement to better protect farmworkers and others from pesticide exposure.

Additionally, EPA funds training through a State and Tribal Assistance Grant that specifically addresses the needs of pesticide inspectors, including the conduct of WPS inspections. EPA considers the feedback from stakeholders to be invaluable to ensure that inspector guidance and training continue to address evolving needs, especially given the unique WPS inspection challenges identified by farmworker advocacy organizations, including the significant cultural concerns raised by the commenters.

The enforceability of the WPS is important to the EPA and the Agency appreciates all comments received. Permitting applications to resume once all persons have left the AEZ is sufficiently clear to provide an enforceable standard.

The risks of retaliation that farmworkers face from reporting pesticide exposures, though beyond the scope of the AEZ rule, are contemplated by other sections of the WPS. (See 40 CFR 170.401(c)(2)(xi) (requiring worker training on existing protections against retaliatory acts) and 170.501(c)(2)(xiii) (requiring handler training on existing protections against retaliatory acts)). Furthermore, EPA has requested that the National Environmental Justice Advisory Council (NEJAC), a federal advisory committee to EPA, recommend how EPA can incorporate a deeper understanding of farmworker concerns about WPS inspections into training materials (Ref. 35).

As EPA receives feedback on the WPS from NEJAC and other federal advisory committees to the Agency, EPA will use this information to help inform its efforts to enhance training and to improve inspections and enforcement of the WPS.

H. *“Do Not Contact” and Restricted Entry Intervals*

1. *Proposed rule.*

EPA did not propose any changes to the “Do Not Contact” or Restricted Entry Interval (REI) provisions of the WPS.

2. *Final rule.*

EPA has finalized the 2023 Proposed Rule as proposed, retaining the “Do Not Contact” and Restricted Entry Interval (REI) requirements as written in the 2015 WPS.

3. *Comments.*

Two farmworker advocacy stakeholders asked that EPA review more generally the “Do Not Contact” provision of the WPS, which the AEZ supplements. These commenters stated that pesticide exposure can occur not just due to direct spray incidents but due to drift, pesticide residues on surfaces, and pesticide vapors in the air. According to these commenters, an AEZ that exists only while the application is ongoing does not prevent these exposures. One commenter requested that EPA add additional entry restrictions post-application, suggesting that the existing REIs are insufficient.

A farm bureau also expressed its support for the “Do Not Contact” provision, though opposing other aspects of the 2023 Proposed Rule.

4. *Response.*

EPA acknowledges commenters’ concerns over indirect exposure pathways. Drift that results in pesticide exposure is considered a violation of the “Do Not Contact” provision. REIs restrict entry to the treated area after pesticide applications to prevent exposure to pesticide

residues. While the WPS does govern some aspects of REIs, such as requirement surrounding early entry activities, the length of REIs is determined through the extensive analysis of chemicals' effects on people and the environment during the registration and registration review process. To redefine REIs in this rulemaking would be to go beyond its scope.

### *I. Handler Training Requirements*

#### *1. Proposed rule.*

To conform with the revised AEZ requirements, EPA proposed revisions to the handler training requirements at 40 CFR 170.501(c)(3)(xi). The new training requirements specify that “handlers must suspend a pesticide application if workers or other persons are in the application exclusion zone and must not resume the application while workers or other persons remain in the application exclusion zone.” The training requirements also incorporate the immediate family exemption, explaining that the applicator may resume the application “provided that the handlers have been expressly instructed by the owner(s) of the agricultural establishment that only immediate family members remain inside those closed buildings, housing, or shelters and that the application should proceed despite the presence of the owner(s) or their immediate family members inside those closed buildings, housing, or shelters.”

#### *2. Final rule.*

EPA finalized the handler training requirements at 40 CFR 170.501 as proposed.

#### *3. Comments.*

Two farmworker advocacy organizations and USDA commented on proposed revisions to the mandatory annual pesticide handler training. One farmworker advocacy organization expressed support for EPA's proposal to bring trainings into line with the revised requirements on suspending and resuming applications. One farmworker advocacy organization discussed handler trainings more generally, encouraging employers to offer engaging, multilingual

trainings.

USDA commented that trainings should also address pesticide applications at the boundaries of the agricultural establishment, including how and when handlers should communicate with people on neighboring establishments who may be within the AEZ. In keeping with its comments on maintaining language from the 2016/2018 Guidance, USDA also requested that handler trainings be updated to reflect procedures for situations where people off-establishment are in the AEZ, and to clarify how and when employers and handlers should communicate regarding the boundaries of the agricultural establishment.

#### *4. Response.*

Under the 2015 WPS, handler trainings are required to contain all of the topics for worker trainings at 40 CFR 170.401(c)(3), as well as additional topics such as proper application and use of pesticides, following label directions, and the AEZ and “Do Not Contact” requirements. Like worker trainings, handler trainings must be delivered in a format handlers can understand, such as through a translator, and must be held in a place free of distractions. All worker and handler trainings must be EPA-approved and presented by a qualified trainer of workers and/or handlers. (For the full list of handler training and trainer requirements, see 40 CFR 170.501.)

Through its cooperative agreements and its review and approval of individual training submissions as required by 40 CFR 170.501(c)(1), EPA supports the development of interactive WPS trainings for pesticide handlers in multiple languages. As of March 2024, EPA had approved 11 handler trainings (including trainings in both Spanish and English) that reflected the 2015 WPS. Because EPA is mostly reinstating the 2015 WPS requirements with some minor revisions, the training topics in 40 CFR 170.501(c)(3) will remain largely the same with the exception of adding content related to the immediate family exemption and clarification on resuming applications. Some trainings will also need to be revised to varying degrees to be

reflective of changes in Agency policy moving forward under this rulemaking. While all approved trainings include the required content under the 2015 WPS, some trainings have gone further by incorporating some of the best application practices and procedures (*e.g.*, assessing wind direction before proceeding with an application) for resuming applications that were provided in the 2016/2018 Guidance (Refs. 4 through 6). That guidance will be nullified because of this action and will be replaced with new guidance (see Units V.K. and VI.B.). EPA will work with the developers of these trainings to update their AEZ content both in response to this action and the change in policy and guidance direction. Additionally, EPA will continue to review handler and worker trainings and ensure that they are in line with the new AEZ requirements under this action.

For reasons explained in Unit V.E., EPA is not codifying 2016/2018 Guidance procedures for situations where people off-establishment are in the AEZ. As such, EPA will also not require that handler trainings include those procedures. However, EPA agrees with USDA that employers and handlers would benefit from more clarity regarding procedures and communication when applications are made near agricultural establishment boundaries, especially if people off the establishment may enter the AEZ. Therefore, EPA will consider providing clarity for these and other circumstances through compliance assistance guidance.

#### *J. Applications to Crop Canopies*

##### *1. Proposed rule.*

EPA did not propose any changes to the AEZ requirements at 40 CFR 170.405(a)(1)(ii) to account for agricultural practices from different industries.

##### *2. Final rule.*

EPA has finalized the regulatory text at 40 CFR 170.405(a)(1)(ii) as proposed.

##### *3. Comments.*



A trade organization representing the horticulture industry asked that EPA add clarifying language to 40 CFR 170.405(a)(1)(ii). The commenter noted that it is common practice in horticulture to apply pesticides directly to the canopies of ornamental plants. They asked that the language be amended to include “crop canopy” in the height requirements for the 25-foot AEZ distance criteria. Currently, if an application is made from a height of 12 inches or higher off the ground, it is subject to an AEZ, regardless of the distance from the crop canopy. The change the commenter suggested would mean that, if the application was made from a height of 12 inches or higher off the ground, but less than 12 inches from a crop canopy, there would be no AEZ.

*4. Response.*

When EPA developed the 2015 WPS, it did not intend to except from the AEZ requirements applications made from more than 12 inches off the ground but within 12 inches of a crop canopy. This rulemaking was focused primarily on reinstating the AEZ protections from the 2015 WPS, and therefore language around crop canopies goes beyond the scope of this action. EPA will consider clarifying in its compliance assistance guidance that applications made less than 12 inches from a crop canopy are still subject to an AEZ if they are more than 12 inches off the ground.

*K. Requests for Guidance*

*1. Proposed rule.*

At various places in the 2023 Proposed Rule, EPA requested feedback on whether additional guidance is needed and how it could be improved for various AEZ provisions, including implementation for off-establishment individuals and individuals in easements, the ASABE droplet size standards, and the immediate family exemption.

*2. Final rule.*

EPA plans to supplement this action with guidance to assist stakeholders with

compliance.

### *3. Comments.*

Many commenters requested that EPA issue guidance on this action. Several commenters asked for guidance clarifying the immediate family exemption. AAPCO requested that EPA provide guidance on the communication required to ensure that only family members remain inside closed buildings. They also requested guidance on how EPA will determine compliance.

AAPCO requested a general How-to-Comply manual on the AEZ for all stakeholders. To aid enforcement, they also asked for specific guidance and training for inspectors and state regulatory officials. A trade association asked for guidance for growers on implementing the AEZ off-establishment.

Another commenter asked for guidance on the notifications that establishment owners and employers must provide to workers.

USDA asked that EPA clarify whether it has previously developed an interpretive policy on the definition of airblast sprayers as they relate to the AEZ. If EPA has not, USDA asked for EPA to clarify where and when the interpretive policy will be published.

Related to its comments on the 2016/2018 Guidance, USDA also requested that EPA update the guidance document to specify whether then 2018 Guidance document superseded the 2016 one, and to clarify the term “treated area.”

One farmworker advocacy organization asked for the Agency to issue guidance on “Do Not Contact.” The commenter suggested that, to avoid violations, guidance should recommend that employers coordinate applications and fieldwork so that workers do not reenter a field immediately after application, but rather move away from the AEZ.

### *4. Response.*

EPA plans to address many of the commenters’ requests for guidance, as indicated

throughout Unit V. Guidance will support establishment owners, agricultural employers, and handlers with compliance. Specifically, EPA will consider addressing the following topics, as needed, based on feedback after this rule is published:

- Best practices for applications near the boundaries of the agricultural establishment and in easements.

- ASABE standard as applies to the AEZ requirements.

- Clarification on resuming applications.

- Implementation of the immediate family exemption, including the fact that the exemption does not apply to labor housing.

- Best practices for applications near housing.

- Best practices for communication, including communication with people off-establishment and in easements; communication between employers and handlers regarding the boundaries of the establishment; communication around who remains inside closed structures during an application in accordance with the immediate family exemption; communication with residents of surrounding communities whose houses may fall into the AEZ; and advance notification of applications.

- Strategies to limit the need for such communication.

- How the AEZ applies to agricultural practices from different industries, including that applications more than 12 inches off the ground but less than 12 inches from a crop canopy are still subject to an AEZ.

- Clarify the relationship between the AEZ, REI, and “Do Not Contact” requirements.

EPA anticipates that some compliance assistance materials, such as the How-to-Comply Manual for the WPS (Ref. 36), may be updated through its cooperative agreements. Guidance manuals for inspectors, such as the FIFRA Inspection Manual and the WPS Inspection Manual (Refs. 33

and 34), are reviewed and updated on a periodic basis.

In response to USDA’s request for clarification on what qualifies as an *airblast sprayer*, EPA’s Office of Pesticide Programs Electronic Label (OPPEL) definition of *airblast sprayer* is a “general term describing sprays directed into the foliage with a forced air stream, usually created with a powered fan mounted on or pulled behind a truck or tractor typically used in a vineyard, orchard, and some nurseries. Includes electrostatic sprayers.” (Ref. 37). EPA will use definitions that are consistent with current agency policy and update its guidance as needed to reflect changes as they occur.

Given that there have now been changes to the AEZ requirements, the AEZ-specific 2018 guidance document, titled “Worker Protection Standard Application Exclusion Zone Requirements: Updated Question and Answers” (Ref. 4) will be replaced with new compliance assistance guidance. EPA’s 2016 AEZ-specific guidance document, titled “Q&A Fact Sheet on the Worker Protection Standard (WPS) Application Exclusion Zone (AEZ) Requirements” was superseded by the 2018 guidance (Ref. 5). EPA’s 2016 document “Worker Protection Standard Frequently Asked Questions,” which provides answers to frequently asked questions on the full WPS (not just the AEZ requirements), will remain a resource for non-AEZ related guidance and will be updated consistent with this action (Ref. 6).

## **VI. The Final Rule**

### *A. Regulatory Changes*

EPA is finalizing the 2023 Proposed Rule without changes.

### *B. 2016/2018 Guidance*

Because EPA is finalizing the clarification on when suspended applications may resume, upon the effective date of this rule, the rule supersedes EPA’s 2018 interpretive guidance document, “Worker Protection Standard Application Exclusion Zone Requirements: Updated

Questions and Answers” (Ref. 4). EPA’s 2016 guidance document “Q&A Fact Sheet on the Worker Protection Standard (WPS) Application Exclusion Zone (AEZ) Requirements” was superseded by the 2018 interpretive guidance document (Ref. 5). EPA’s 2016 document “Worker Protection Standard Frequently Asked Questions,” which provides answers to frequently asked questions on the WPS (not just the AEZ requirements), will remain a resource for non-AEZ related guidance (Ref. 6).

### *C. Future Compliance Assistance Guidance*

After this final rule is published, EPA will consider addressing the following topics, as needed:

- Best practices for applications near the boundaries of the agricultural establishment and in easements.
- ASABE standard as applies to the AEZ requirements.
- Clarification on resuming applications.
- Implementation of the immediate family exemption, including the fact that the exemption does not apply to labor housing.
- Best practices for applications near housing.
- Best practices for communication, including communication with people off-establishment and in easements; communication between employers and handlers regarding the boundaries of the establishment; communication around who remains inside closed structures during an application in accordance with the immediate family exemption; communication with residents of surrounding communities whose houses may fall into the AEZ; and advance notification of applications.
- Strategies to limit the need for such communication.
- How the AEZ applies to agricultural practices from different industries, including that

applications more than 12 inches off the ground but less than 12 inches from a crop canopy are still subject to an AEZ.

EPA anticipates that some compliance assistance materials, such as the How-to-Comply Manual for the WPS (Ref. 36), may be updated through its cooperative agreements. Guidance manuals for inspectors, such as the FIFRA Inspection Manual and the WPS Inspection Manual (Refs. 33 and 34), are reviewed and updated on a periodic basis.

## **VII. Incorporation by Reference**

### *A. Incorporation of ASABE Standards*

This final rule incorporates voluntary consensus standards by reference. EPA identified an applicable voluntary consensus standard developed by ASABE for defining droplet sizes. Instead of fully reinstating the droplet size criteria established in the 2015 WPS, EPA is incorporating by reference the ASABE standard identified as “ANSI/ASAE S572, Spray Nozzle Classification by Droplet Spectra” and certain successor editions (ANSI/ASAE S572.1, ANSI/ASAE S572.2, and ANSI/ASAE S572.3) (Refs. 13 through 16) to enhance the Agency’s compliance with the National Technology Transfer and Advancement Act (NTTAA) (15 U.S.C. 272 *note*). (ASABE standards, engineering practices, and data initially approved prior to the society name change from “ASAE” to “ASABE” in July 2005 are designated as “ASAE”, regardless of the revision approval date.) The NTTAA and Office of Management and Budget (OMB) Circular A-119 require agencies to use voluntary consensus standards in its regulatory, procurement, and program activities in lieu of government-unique standards, unless use of such standards would be inconsistent with applicable law or otherwise impractical.

The ASABE categorization of “medium” droplet sizes has remained largely unchanged despite various updates to the standard over the years. Updates of the standard are briefly summarized as follows:

1. ANSI/ASAE S572. Spray Nozzle Classification by Droplet Spectra (Ref. 13). This original standard established 6 droplet size classes: Very Fine (VF), Fine (F), Medium (M), Coarse (C), Very Coarse (VC) and Extra Coarse (XC).

2. ANSI/ASAE S572.1. Spray Nozzle Classification by Droplet Spectra (Ref. 14). This standard added two new classes: Extra Fine (XF) and Ultra Coarse (UC).

3. ANSI/ASAE S572.2. Spray Nozzle Classification by Droplet Spectra (Ref. 15). This standard corrected flowrate values that were used to establish classification category thresholds but did not substantially change the standard.

4. ANSI/ASAE S572.3. Spray Nozzle Classification by Droplet Spectra (Ref. 16). This standard updated some classification boundaries to harmonize with the International Standards Organization's (ISO) operating pressures established in ISO 25358.

Given the relative stability of the categorization of “medium” droplet sizes, removing VMD from the AEZ criteria and instead using droplet size classifications (*i.e.*, “medium” as defined by the ASABE; see Unit IV.C. and V.C.) is expected to provide a clear, practical, and easy approach for determining AEZ distances. EPA anticipates that this revision will improve compliance with other AEZ requirements and make it easier to enforce these provisions by eliminating any need to determine whether an application is over or under the specified VMD of 294 microns, as required by the 2015 WPS.

#### *B. Reasonable Availability*

Copies of the ASABE standards identified in Unit VII.A. may be purchased from the ASABE, 2950 Niles Road, St. Joseph, MI 49085, or by calling (269) 429-0300, or at <https://www.asabe.org>. Additionally, each of these standards are available for inspection at the OPP Docket, Environmental Protection Agency Docket Center (EPA/DC), West William Jefferson Clinton Bldg., Rm. 3334, 1301 Constitution Ave. NW, Washington, DC. The EPA/DC

Public Reading Room hours of operation are 8:30 a.m. to 4:30 p.m. EDT, Monday through Friday, excluding legal holidays. The telephone number of the EPA/DC Public Reading Room is (202) 566-1744. EPA has determined that the standards are reasonably available to the class of persons affected by this rulemaking.

If you have a disability and the format of any material on an EPA web page interferes with your ability to access the information, please contact EPA's Rehabilitation Act Section 508 (29 U.S.C. 794d) Program at <https://www.epa.gov/accessibility/forms/contact-us-about-section-508-accessibility> or via email at [section508@epa.gov](mailto:section508@epa.gov). To enable us to respond in a manner most helpful to you, please indicate the nature of the accessibility issue, the web address of the requested material, your preferred format in which you want to receive the material (electronic format (ASCII, etc.), standard print, large print, etc.), and your contact information.

### **VIII. Severability**

The Agency intends that the provisions of this rule be severable. In the event that any individual provision or part of this rule is invalidated, the Agency intends that this would not render the entire rule invalid, and that any individual provisions that can continue to operate will be left in place. The amendments to 40 CFR part 170 finalized in this rule involve separate aspects of the AEZ and EPA finds that each provision is able to operate independently of the others. This has been demonstrated by the Agency's revisions to the AEZ provisions from the 2015 WPS, to the 2020 AEZ Rule, to the current final rule. With each final rule concerning the AEZ, EPA has been able to retain certain provisions while amending or vacating others. For the foregoing reasons, EPA finds that the amendments in this final rule are severable.

### **IX. References**

The following is a listing of the documents that are specifically referenced in this *Federal Register* document. The docket includes these documents and other information considered by



EPA, including documents that are referenced within the documents that are included in the docket, even if the referenced document is not physically located in the docket. For assistance in locating these other documents, please consult the person listed under **FOR FURTHER INFORMATION CONTACT**.

1. EPA. Pesticides; Agricultural Worker Protection Standard; Reconsideration of the Application Exclusion Zone Amendments; Proposed Rule. *Federal Register*. 88 FR 15346, March 13, 2023 (FRL-8528-03-OCSP). <https://www.govinfo.gov/content/pkg/FR-2023-03-13/pdf/2023-03619.pdf>.
2. EPA. Pesticides; Agricultural Worker Protection Standard Revisions; Revision of the Application Exclusion Zone Requirements; Final Rule. *Federal Register*. 85 FR 68760, October 30, 2020 (FRL-10016-03). Available at <https://www.govinfo.gov/content/pkg/FR-2020-10-30/pdf/2020-23411.pdf>.
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4. EPA. Worker Protection Standard Application Exclusion Zone Requirements: Updated Questions and Answers. February 15, 2018. Available at <https://www.regulations.gov/document/EPA-HQ-OPP-2017-0543-0008>.
5. EPA. WPS Guidance on the Application Exclusion Zone. Q&A Fact Sheet on the Worker Protection Standard (WPS) Application Exclusion Zone (AEZ) Requirements. April 14, 2016. Available at <https://www.regulations.gov/document/EPA-HQ-OPP-2017-0543-0007>.
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7. Executive Order 13990. Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis. *Federal Register* 86 FR 7037, January 25, 2021.

<https://www.govinfo.gov/content/pkg/FR-2021-01-25/pdf/2021-01765.pdf>.

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9. *State of New York et al. v. United States Environmental Protection Agency*, Case No. 1:20-cv-10642; (United States Southern District of New York, December 28, 2020). Amended Order Re: Complaint for Declaratory and Injunctive Relief.

10. *State of New York et al. v. United States Environmental Protection Agency*, Case No. 1:20-cv-10642; (United States Southern District of New York, August 15, 2022). Eleventh Stipulation and Consent Order Further Extending Stay and Extending Injunction.

11. The White House, Briefing Room. Fact Sheet: List of Agency Actions for Review. January 20, 2021. <https://www.whitehouse.gov/briefing-room/statements-releases/2021/01/20/fact-sheet-list-of-agency-actions-for-review/>.

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13. ASABE. *Spray Nozzle Classification by Droplet Spectra*. ANSI/ASAE S572 FEB2004, reaffirmed February 2004.

14. ASABE. *Spray Nozzle Classification by Droplet Spectra*. ANSI/ASAE S572.1 MAR2009 (R2017), reaffirmed December 2017.

15. ASABE. *Spray Nozzle Classification by Droplet Spectra*. ANSI/ASAE S572.2 JUL2018, July 2018.

16. ASABE. *Spray Nozzle Classification by Droplet Spectra*. ANSI/ASAE S572.3 FEB2020, February 2020.
17. National Pesticide Information Center (NPIC). Specific data requested from NPIC. 2024.
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*<https://www.epa.gov/sites/default/files/2014-01/documents/fiframanual.pdf>.*

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## **X. FIFRA Review Requirements**

Pursuant to FIFRA section 25(a), EPA submitted the draft final rule to the United States Department of Agriculture (USDA) for review (see 89 FR 57770, July 16, 2024 (FRL-8528-04-OCSP), with a copy sent to the appropriate Congressional Committees as required under

FIFRA section 25(a). USDA responded and provided comments on July 24, 2024 (Ref. 38).

USDA did not object to the final rule; however, USDA expressed concerns about the burden that the AEZ could place on growers and applicators in the absence of EPA's 2016/2018 Guidance.

EPA responded to these comments on August 28, 2024, explaining its rationale for superseding the guidance and reiterating the importance of the AEZ as a uniform baseline requirement to support pesticide handlers and protect human health (Ref. 38).

In accordance with FIFRA section 25(d), the EPA asked the FIFRA Scientific Advisory Panel (SAP) to waive review of the draft final rule, as was done for the draft proposed rule. The FIFRA SAP waived its scientific review of the draft final rule on June 29, 2024, because the final rule does not raise scientific or science policy issues that warrant a scientific review by the SAP.

## **XI. Statutory and Executive Order Reviews**

Additional information about these statutes and executive orders can be found at <https://www.epa.gov/laws-regulations/laws-and-executive-orders>.

### *A. Executive Order 12866: Regulatory Planning and Review and Executive Order 14094: Modernizing Regulatory Review*

This action is not a significant regulatory action as defined in Executive Order 12866 (58 FR 51735, October 4, 1993), as amended by Executive Order 14094 (88 FR 21879, April 11, 2023), and was therefore not subject to a requirement for Executive Order 12866 review.

### *B. Paperwork Reduction Act (PRA)*

This action does not impose any new or modify information collection burden that would require additional review or approval by OMB under the PRA, 44 U.S.C. 3501 *et seq.* OMB has previously approved the information collection activities contained in the existing regulations and assigned OMB Control No. 2070-0190 and it is identified by EPA ICR No. 2491.06. This

action does not impose an information collection burden, because the revisions do not affect the approved information collection activities.

*C. Regulatory Flexibility Act (RFA)*

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA, 5 U.S.C. 601 *et seq.* The small entities subject to the requirements of this action are agricultural and handler employers, and commercial pesticide handler employers. The Agency has determined that while reinstating several of the 2015 AEZ requirements could require agricultural employers to direct workers to move away from the edge of treatment areas as the application equipment passes, this would be a very temporary disruption in any worker activity and, as discussed in Unit III., would not lead to any quantifiable impacts on agricultural establishments, including small agricultural operations. On the part of the handlers, the requirement to cease an application if someone is in the AEZ clarifies the applicator or handler's responsibility and is unlikely to result in measurable costs for affected entities.

As explained in Unit II.A.4., the 2020 AEZ Rule never went into effect due to a series of court orders staying the effective date of the 2020 AEZ Rule. While the discussion compares the effects of this action to the 2020 AEZ Rule, the AEZ requirements have always extended beyond the boundary of an agricultural establishment and within easements since it originally went into effect in 2018. Therefore, given that the 2015 rule has remained in effect since its establishment, there are no new impacts expected with this rule.

*D. Unfunded Mandates Reform Act (UMRA)*

This action does not contain any unfunded mandate of \$100 million (adjusted annually for inflation) or more (in 1995 dollars) as described in UMRA, 2 U.S.C. 1531-1538, and does not significantly or uniquely affect small governments. The action imposes no enforceable duty on any state, local, or tribal governments and the costs involved are estimated not to exceed \$183

million in 2023 dollars (\$100 million in 1995\$ adjusted for inflation using the GDP implicit price deflator) or more in any one year.

*E. Executive Order 13132: Federalism*

This action does not have federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999), because it will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

*F. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments*

This action does not have tribal implications as specified in Executive Order 13175 (65 FR 67249, November 9, 2000), because it will not have substantial direct effects on tribal governments, on the relationship between the Federal Government and tribal governments, or on the distribution of power and responsibilities between the Federal Government and tribal governments.

*G. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks*

Executive Order 13045 (62 FR 19885, April 23, 1997) directs federal agencies to include an evaluation of the health and safety effects of the planned regulation on children in federal health and safety standards and explain why the regulation is preferable to potentially effective and reasonably feasible alternatives. While the environmental health or safety risks addressed by this action present a disproportionate risk to children, this action is not subject to Executive Order 13045 because it is not a significant regulatory action under section 3(f)(1) of Executive Order 12866. However, EPA's *Policy on Children's Health* (Ref. 23) applies to this action.

The WPS is intended to apply to myriad agricultural pesticides, and the Agency has not developed a health or risk assessment to evaluate any impact of the amendments of the AEZ



provisions for each pesticide subject to the WPS. The Agency finds that it is reasonable to expect that this rule will address existing environmental health or safety risks from agricultural pesticide applications that may have a disproportionate effect on children. Children face the risk of pesticide exposure from work in pesticide-treated areas or near ongoing pesticide applications, from the use of pesticides near their homes and schools, and from pesticide residues brought into the home by family members after a day of working with pesticides or being in or near pesticide-treated areas. Children also face the risk of pesticide exposure from drift. The rule is intended to limit these exposures and risks by reinstating AEZ requirements that no longer limit it to the property boundary of an agricultural establishment and expanding the AEZ back to 100 feet for sprayed applications with droplet sizes smaller than medium.

*H. Executive Order 13211: Actions Concerning Regulations that Significantly Affect Energy Supply, Distribution, or Use*

This action is not subject to Executive Order 13211 (66 FR 28355, May 22, 2001), because it is not a significant regulatory action under Executive Order 12866.

*I. National Technology Transfer and Advancement Act (NTTAA)*

This action involves voluntary standards subject to consideration under the NTTAA section 12(d), 15 U.S.C. 272 note. EPA has decided to use ANSI/ASAE S572, ANSI/ASAE S572.1, ANSI/ASAE S572.2, and ANSI/ASAE S572.3 to define “medium” droplet sizes. Additional information about these standards is provided in Unit VII., including how to access them and our incorporation of these standards into the regulation pursuant to 1 CFR part 51.

*J. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations and Executive Order 14096: Revitalizing Our Nation’s Commitment to Environmental Justice for All*

EPA believes that the human health or environmental conditions that exist prior to this

action result in or have the potential to result in disproportionate and adverse human health or environmental effects on communities with environmental justice concerns in accordance with Executive Orders 12898 (59 FR 7629, February 16, 1994) and 14096 (88 FR 25251, April 26, 2023). As noted in past assessments (Ref. 3), affected populations include minority and/or low-income individuals that may have a higher risk of exposure and/or are more vulnerable to the impacts of pesticides due to occupation, economic status, health and obstacles to healthcare access, language barriers, and other sociodemographic characteristics.

EPA believes that this action is likely to reduce existing disproportionate and adverse effects on communities with environmental justice concerns. This action will limit exposures to pesticides for agricultural workers, handlers, and communities adjacent to agricultural establishments; improve public health; and prioritize environmental justice by rescinding certain changes to the AEZ provisions that were reflected in the 2020 AEZ Rule but have not yet taken effect. This action will reinstate, for example, regulatory text requiring agricultural employers to keep workers and other people out of the AEZ during the pesticide application regardless of whether the individuals are outside of establishments' boundaries or within easements. Additionally, these changes will reinstate larger AEZs for those sprays with the highest spray drift potential. As discussed in Unit III., reinstating the 2015 WPS requirements for these AEZ provisions better balances social and health-related costs than the 2020 AEZ Rule.

EPA additionally identified and addressed environmental justice concerns by engaging with stakeholders from affected communities extensively in the development of the 2015 WPS rulemaking that originally established the AEZ requirements that the Agency is reinstating. Those efforts were conducted to obtain meaningful involvement of all affected parties. Consistent with those efforts and assessments, EPA believes this rule will better protect the health of agricultural workers and handlers by reinstating the complementary protections of the

AEZ that were intended to support the “Do Not Contact” requirements within the WPS.

The information supporting this executive order review is contained in Unit III. and the Economic Analysis from the 2015 WPS (Ref. 21).

*K. Congressional Review Act (CRA)*

This action is subject to the CRA, 5 U.S.C. 801 *et seq.*, and EPA will submit a rule report to each House of the Congress and to the Comptroller General of the United States. This action is not a “major rule” as defined by 5 U.S.C. 804(2).

**List of Subjects in 40 CFR Part 170**

Environmental protection, Agricultural worker, Employer, Farms, Forests, Greenhouses, Incorporation by reference, Nurseries, Pesticide handler, Pesticides, Worker protection standard.

**Michael S. Regan,**

*Administrator.*

Therefore, for the reasons stated in the preamble, 40 CFR Chapter I is amended as follows:

**PART 170—WORKER PROTECTION STANDARD**

1. The authority citation for part 170 continues to read:

**Authority:** 7 U.S.C. 136-136w.

2. Amend § 170.405 by

- a. Revising paragraphs (a)(1)(i) and (ii), and (a)(2);
- b. Revising and republishing paragraph (b); and
- c. Adding paragraph (c).

The revisions and additions to read as follows:

**§ 170.405 Entry restrictions associated with pesticide applications.**

\* \* \* \* \*

(a) \* \* \*

(1) \* \* \*

(i) The application exclusion zone is the area that extends 100 feet horizontally from the point(s) of pesticide discharge from the application equipment in all directions during application when the pesticide is applied by any of the following methods:

(A) Aerially.

(B) Air blast or air-propelled applications.

(C) As a fumigant, smoke, mist, or fog.

(D) As a spray using nozzles or nozzle configurations which produce a droplet size of smaller than medium, in accordance with the meaning given to “medium” in ANSI/ASAE S572, ANSI/ASAE S572.1, ANSI/ASAE S572.2, or ANSI/ASAE S572.3 (all incorporated by reference, see paragraph (c) of this section).

(ii) The application exclusion zone is the area that extends 25 feet horizontally from the point(s) of pesticide discharge from the application equipment in all directions during application when the pesticide is sprayed from a height of greater than 12 inches from the soil surface or planting medium using nozzles or nozzle configurations which produce a droplet size of medium or larger in accordance with the meaning given to “medium” in ANSI/ASAE S572, ANSI/ASAE S572.1, ANSI/ASAE S572.2, or ANSI/ASAE S572.3 (all incorporated by reference, see paragraph (c) of this section), and not as in paragraph (a)(1)(i) of this section.

\* \* \* \* \*

(2) During any outdoor production pesticide application, the agricultural employer must not allow or direct any worker or other person to enter or to remain in the treated area or an application exclusion zone that is within the boundaries of the establishment until the application is complete, except for:

(i) Appropriately trained and equipped handlers involved in the application, and

(ii) Owners of the agricultural establishment and their immediate family members who remain inside closed buildings, housing, or shelters under the conditions specified in § 170.601(a)(1)(vi).

\* \* \* \* \*

(b) *Enclosed space production pesticide applications.* (1) During any enclosed space production pesticide application described in column A of table 1 to paragraph (b) of this section, the agricultural employer must not allow or direct any worker or other person, other than an appropriately trained and equipped handler involved in the application, to enter or to remain in the area specified in column B of table 1 to paragraph (b) of this section during the application and until the time specified in column C of table 1 to paragraph (b) of this section has expired.

(2) After the time specified in column C of table 1 to paragraph (b) of this section has

expired, the area subject to the labeling-specified restricted-entry interval and the post-application entry restrictions specified in § 170.407 is the area specified in column D of table 1 to paragraph (b) of this section.

(3) When column C of table 1 to paragraph (b) of this section specifies that ventilation criteria must be met, ventilation must continue until the air concentration is measured to be equal to or less than the inhalation exposure level required by the labeling. If no inhalation exposure level is listed on the labeling, ventilation must continue until after one of the following conditions is met:

- (i) Ten air exchanges are completed.
- (ii) Two hours of ventilation using fans or other mechanical ventilating systems.
- (iii) Four hours of ventilation using vents, windows, or other passive ventilation.
- (iv) Eleven hours with no ventilation followed by one hour of mechanical ventilation.
- (v) Eleven hours with no ventilation followed by two hours of passive ventilation.
- (vi) Twenty-four hours with no ventilation.

**Table 1 to paragraph (b) – Entry Restrictions During Enclosed Space Production Pesticide Applications**

<b>A. When a pesticide is applied:</b>	<b>B. Workers and other persons, other than appropriately trained and equipped handlers, are prohibited in:</b>	<b>C. Until:</b>	<b>D. After the expiration of time specified in column C, the area subject to the restricted-entry interval is:</b>
1. As a fumigant	Entire enclosed space plus any adjacent structure or area that cannot be sealed off from the treated area	The ventilation criteria of paragraph (b)(3) of this section are met	No post-application entry restrictions required by § 170.407 after criteria in column C are met.

2. As a Smoke; Mist; Fog; or Spray using a spray quality (droplet spectrum) of smaller than medium, in accordance with the meaning given to “medium” by the American Society of Agricultural and Biological Engineers in ANSI/ASAE S572, ANSI/ASAE S572.1, ANSI/ASAE S572.2, or ANSI/ASAE S572.3 (all incorporated by reference, see § paragraph (c) of this section)	Entire enclosed space	The ventilation criteria of paragraph (b)(3) of this section are met	Entire enclosed space.
3. Not as in entry 1 or 2 of this table, and for which a respiratory protection device is required for application by the pesticide product labeling	Entire enclosed space	The ventilation criteria of paragraph (b)(3) of this section are met	Treated area.
4. Not as in entry 1, 2, or 3 of this table, and From a height of greater than 12 inches from the planting medium; or As a spray using a spray quality (droplet spectrum) of medium or larger in accordance with the meaning given to “medium” by the American Society of Agricultural and Biological Engineers in ANSI/ASAE S572, ANSI/ASAE S572.1, ANSI/ASAE S572.2, or ANSI/ASAE S572.3 (all incorporated by reference, see § 170.405(c))	Treated area plus 25 feet in all directions of the treated area, but not outside the enclosed space	Application is complete	Treated area.

5. Otherwise	Treated area	Application is complete	Treated area.
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(c) *Incorporation by reference.* The material listed in this paragraph is incorporated by reference into this section with the approval of the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. All approved incorporation by reference (IBR) material is available for inspection at the Environmental Protection Agency (EPA) and at the National Archives and Records Administration (NARA). Contact EPA at: OPP Docket, Environmental Protection Agency Docket Center (EPA/DC), West William Jefferson Clinton Bldg., Rm. 3334, 1301 Constitution Ave. NW, Washington, DC. The EPA/DC Public Reading Room hours of operation are 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number of the EPA/DC Public Reading room and the OPP Docket is (202) 566-1744. For information on the availability of this material at NARA, visit <https://www.archives.gov/federal-register/cfr/ibr-locations> or email [fr.inspection@nara.gov](mailto:fr.inspection@nara.gov). The material may be obtained from the American Society of Agricultural and Biological Engineers, 2950 Niles Road, St. Joseph, MI 49085, (269) 429-0300, <https://www.asabe.org>.

(1) ANSI/ASAE S572 FEB2004, Spray Nozzle Classification by Droplet Spectra, reaffirmed February 2004 (ANSI/ASAE S572).

(2) ANSI/ASAE S572.1 MAR2009 (R2017), Spray Nozzle Classification by Droplet Spectra, reaffirmed December 2017 (ANSI/ASAE S572.1).

(3) ANSI/ASAE S572.2 JUL2018, Spray Nozzle Classification by Droplet Spectra, ANSI approved July 2018 (ANSI/ASAE S572.2).

(4) ANSI/ASAE S572.3, Spray Nozzle Classification by Droplet Spectra, ANSI approved February 2020 (ANSI/ASAE S572.3).

\* \* \* \* \*



3. Amend § 170.501 by revising paragraph (c)(3)(xi) to read as follows:

**§ 170.501 Training requirements for handlers.**

\* \* \* \*

(c) \* \*

(3) \* \*

(xi) Handlers must suspend a pesticide application if workers or other persons are in the application exclusion zone and must not resume the application while workers or other persons remain in the application exclusion zone, except for appropriately trained and equipped handlers involved in the application, and the owner(s) of the agricultural establishment and members of their immediate families who remain inside closed buildings, housing, or shelters, provided that the handlers have been expressly instructed by the owner(s) of the agricultural establishment that only immediate family members remain inside those closed buildings, housing, or shelters and that the application should proceed despite the presence of the owner(s) or their immediate family members inside those closed buildings, housing, or shelters.

\* \* \* \*

4. Amend § 170.505 by revising paragraph (b) to read as follows:

**§ 170.505 Requirements during applications to protect handlers, workers, and other persons.**

\* \* \* \*

(b) *Suspending applications.*

(1) Any handler performing a pesticide application must immediately suspend the pesticide application if any worker or other person is in an application exclusion zone described in § 170.405(a)(1) or the area specified in column B of table 1 to paragraph (b) of § 170.405, except for:

(i) Appropriately trained and equipped handlers involved in the application, and

(ii) The owner(s) of the agricultural establishment and members of their immediate families who remain inside closed buildings, housing, or shelters, provided that the handlers have been expressly instructed by the owner(s) of the agricultural establishment that only immediate family members remain inside those closed buildings, housing, or shelters and that the application should proceed despite the presence of the owner(s) or their immediate family members inside those closed buildings, housing, or shelters.

(2) A handler must not resume a suspended pesticide application while any workers or other persons remain in an application exclusion zone described in § 170.405(a)(1) or the area specified in column B of table 1 to paragraph (b) of § 170.405, except for:

(i) Appropriately trained and equipped handlers involved in the application, and

(ii) The owner(s) of the agricultural establishment and members of their immediate families who remain inside closed buildings, housing, or shelters, provided that the handlers have been expressly instructed by the owner(s) of the agricultural establishment that only immediate family members remain inside those closed buildings, housing, or shelters and that the application should proceed despite the presence of the owner(s) or their immediate family members inside those closed buildings, housing, or shelters.

\* \* \* \* \*

5. Amend § 170.601 by revising paragraph (a)(1) to read as follows:

§ 170.601 Exemptions.

(a) \* \* \*

(1) On any agricultural establishment where a majority of the establishment is owned by one or more members of the same immediate family, the owner(s) of the establishment (and, where specified below, certain handlers) are not required to provide the protections of the

following provisions to themselves or members of their immediate family when they are performing handling activities or tasks related to the production of agricultural plants that would otherwise be covered by this part on their own agricultural establishment.

(i) Section 170.309(c).

(ii) Section 170.309(f) through (j).

(iii) Section 170.311.

(iv) Section 170.401.

(v) Section 170.403.

(vi) Sections 170.405(a)(2) and 170.505(b), but only in regard to owner(s) of the establishment and their immediate family members who remain inside closed buildings, housing, or shelters. This exception also applies to handlers (regardless of whether they are immediate family members) who have been expressly instructed by the owner(s) of the establishment that:

(A) Only the owner(s) or their immediate family members remain inside the closed building, housing, or shelter, and

(B) The application should proceed despite the presence of the owner(s) or their immediate family members remaining inside the closed buildings, housing, or shelters.

(vii) Section 170.409.

(viii) Sections 170.411 and 170.509.

(ix) Section 170.501.

(x) Section 170.503.

(xi) Section 170.505(c) and (d).

(xii) Section 170.507(c) through (e).

(xiii) Section 170.605(a) through (c), and (e) through (j).

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