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ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 170

[EPA-HQ-OPP-2017-0543; FRL-10016-03]

RIN 2070-AK49

Pesticides; Agricultural Worker Protection Standard; Revision of the Application

Exclusion Zone Requirements

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: EPA is finalizing revisions to the Agricultural Worker Protection Standard (WPS) to clarify and simplify the application exclusion zone (AEZ) requirements. This rulemaking is responsive to feedback received from stakeholders and the Agency's efforts to reduce regulatory burden, while providing the necessary protections for agricultural workers and the public. EPA remains committed to ensuring the protection of workers and persons in areas where pesticide applications are taking place. The AEZ and no contact provisions aim to ensure such protections. EPA also has a strong interest in promulgating regulations that are enforceable, clear, and effective.

DATES: This final rule is effective [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-2017-0543, is available at <http://www.regulations.gov> or at the Office of Pesticide Programs Regulatory Public Docket (OPP Docket) in the Environmental Protection Agency Docket Center (EPA/DC), West William Jefferson Clinton Bldg., Rm. 3334, 1301 Constitution

Ave., NW., Washington, DC 20460-0001. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566-1744, and the telephone number for the OPP Docket is (703) 305-5805.

Due to the public health concerns related to COVID-19, the EPA Docket Center (EPA/DC) and Reading Room is closed to visitors with limited exceptions. The staff continues to provide remote customer service via email, phone, and webform. For the latest status information on EPA/DC services and docket access, visit <https://www.epa.gov/dockets>.

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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).
- Crop Advisors (NAICS codes 115112, 541690, 541712).

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

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. 136-136y, particularly sections 136a(d), 136i, and 136w. Additionally, in accordance with the Pesticide Registration Improvement Extension Act of 2018 (PRIA 4) (Pub. L. 116-8; March 8, 2019), EPA is only revising the AEZ requirements in the WPS.

C. What action is the Agency taking?

EPA is revising the AEZ requirements of the WPS (40 CFR part 170) adopted in 2015 (80 FR 67496, November 2, 2015) (FRL-9931-81) (Ref. 1) to clarify and simplify the requirements. Specifically, EPA is amending the AEZ requirements by:

- Modifying the AEZ so it is applicable and enforceable only on an agricultural employer's property, as proposed.

- Adding clarifying language indicating that pesticide applications which have been suspended due to individuals entering an AEZ on the establishment may be resumed after those individuals have left the AEZ.

- Excepting agricultural employers and handlers from the requirement to suspend applications owing to the presence within the AEZ of persons not employed by the establishment who are in an area subject to an easement that prevents the agricultural employer from temporarily excluding those persons from that area.

- Allowing the owners and their immediate family (as defined in 40 CFR 170.305) to shelter in place inside closed buildings, housing, or shelters within the AEZ, and allowing the application performed by handlers to proceed 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.

- Simplifying and clarifying criteria and factors for determining AEZ distances of either 100 or 25 feet by basing the AEZ on application method. EPA has removed the language and criteria pertaining to spray quality and droplet size, as proposed, so that all ground spray applications from a height greater than 12 inches are subject to the same 25-foot AEZ.

As discussed further in this document, these revisions take into consideration the comments received from the public in response to the AEZ proposed rule (84 FR 58666, November 1, 2019) (FRL-9995-47) (Ref. 2).

D. Why is the Agency taking this action?

As further described in Unit II.B. of the proposed rule (Ref. 2), EPA initiated this rulemaking to clarify and simplify the WPS AEZ requirements in response to feedback about the AEZ requirements in the 2015 WPS rule from members of the agricultural community, including

the U.S. Department of Agriculture (USDA), state pesticide regulatory agencies (*i.e.*, State Lead Agencies (SLAs)) and organizations, and several agricultural interest groups, as well as discussions with the Pesticide Program Dialogue Committee (PPDC) and public comments. This rulemaking is also responsive to the Agency's efforts to reduce burden on regulated entities, while providing the necessary protections for agricultural workers and the public. EPA remains committed to ensuring the protection of workers and persons in areas where pesticide applications are taking place. The AEZ and no contact provisions aim to ensure such protections. EPA also has a strong interest in promulgating regulations that are enforceable, clear, and effective.

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

EPA evaluated the potential incremental economic impacts and determined that these changes reduce existing burden. This analysis (Ref. 3), which is available in the docket, is summarized here.

The primary benefit of revising the AEZ requirements is a reduction in the complexity of applying a pesticide and improving the compliance and enforceability of the requirements. This deregulatory action is expected to reduce the burden for affected entities because the revised requirements are expected to substantially reduce the complexity of arranging and conducting a pesticide application. EPA has not, however, quantified the anticipated cost savings.

II. Context and Goals of this Rulemaking

A. Context for this Rulemaking

1. *Statutory authority.* Enacted in 1947, FIFRA established a framework for the pre-market registration and regulation of pesticide products; since 1972, FIFRA has prohibited the registration of pesticide products that cause unreasonable adverse effects. FIFRA makes it

unlawful to use a pesticide in a manner inconsistent with the labeling and gives EPA's Administrator authority to develop regulations to carry out the Act. FIFRA's legislative history indicates that Congress specifically intended for FIFRA to protect workers and other persons from occupational exposure directly to pesticides or to their residues (Ref. 4).

Under FIFRA's authority, EPA has implemented measures to protect workers, handlers, other persons, and the environment from pesticide exposure in two primary ways. First, EPA includes product-specific use instructions and restrictions on individual pesticide product labeling. These instructions and restrictions are the result of EPA's stringent registration and reevaluation processes and are based on the risks of the particular product. Since users must comply with directions for use and restrictions on a product's labeling, EPA uses the labeling to convey mandatory requirements for how the pesticide must be used to protect people and the environment from unreasonable adverse effects of pesticide exposure. Second, EPA enacted the WPS to expand protections against the risks of agricultural pesticides without making individual product labeling longer and much more complex. 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. Its requirements complement the product-specific labeling restrictions and are intended to minimize occupational exposures generally.

2. *EPA's regulation of pesticides.* EPA uses a science-based approach to register and re-evaluate pesticides in order to protect human health and the environment from unreasonable adverse effects that might be caused by pesticides. The registration process begins when a manufacturer submits an application to register a pesticide. The application must contain required test data, including information on the pesticide's chemistry, environmental fate,

toxicity to humans and wildlife, and potential for human exposure. EPA also requires a copy of the proposed labeling, including directions for use and appropriate warnings.

Once an application for a new pesticide product is received, EPA conducts an evaluation, which includes a detailed review of scientific data to determine the potential impact on human health and the environment. EPA considers the risk assessments and results of any peer review and evaluates potential risk management measures that could mitigate risks that exceed EPA's level of concern. In the registration process, EPA evaluates the proposed use(s) of the pesticide to determine whether it would cause adverse effects on human health, non-target species, and the environment. In evaluating the impact of a pesticide on occupational health and safety, EPA considers the risks associated with use of the pesticide (occupational, environmental) and the benefits associated with use of the pesticide (economic, public health, environmental). However, FIFRA does not require EPA to balance the risks and benefits for each exposed group individually. For example, a product may pose risks to workers, but those risks may nevertheless be reasonable in comparison to the economic benefit of continued use of the product to society at large.

If the application for registration does not contain sufficient evidence for EPA to determine that the pesticide meets the FIFRA registration criteria, EPA communicates to the applicant the need for more or better refined data, labeling modifications, or additional use restrictions. Once the applicant has demonstrated that a proposed product meets the FIFRA registration criteria and any applicable requirements under the Federal Food, Drug, and Cosmetic Act (FFDCA), 21 U.S.C. 321 *et seq.*, EPA approves the registration subject to any risk mitigation measures necessary to meet the FIFRA registration criteria. EPA devotes significant resources to the regulation of pesticides to ensure that each pesticide product meets the FIFRA

requirement that pesticides not cause unreasonable adverse effects to the public and the environment.

When EPA approves a pesticide, the labeling generally includes all risk mitigation measures required by EPA for the particular pesticide product and the uses specified on its label. The risk mitigation measures may include requiring certain engineering controls, such as the use of closed systems for mixing pesticides and loading them into application equipment to reduce potential exposure to those who handle pesticides; establishing conditions on the use of the pesticide by specifying certain use sites, maximum application rate or maximum number of applications; or establishing restricted entry intervals (REIs) during which entry into an area treated with the pesticide is generally prohibited until residue levels have declined to levels unlikely to cause unreasonable adverse effects. Because users must comply with the directions for use and use restrictions on a product's labeling, EPA uses the labeling to establish and convey mandatory requirements for how the pesticide must be used to protect the applicator, the public, and the environment from pesticide exposure.

Under FIFRA, EPA is required to review periodically the registration of pesticides currently registered in the United States. The 1988 FIFRA amendments required EPA to establish a pesticide reregistration program. Reregistration was a one-time comprehensive review of the human health and environmental effects of pesticides first registered before November 1, 1984 to ensure that these pesticides' registrations were consistent with contemporary standards. The 1996 amendments to FIFRA required that EPA establish, through rulemaking, an ongoing “registration review” process of all pesticides at least every 15 years. The final rule establishing the registration review program was signed in August 2006 (71 FR 45720, August 9, 2006) (FRL-8080-4), and is promulgated in 40 CFR part 155. The purpose of both re-evaluation

programs is to review all pesticides registered in the United States to ensure that they continue to meet current safety standards based on up-to-date scientific approaches and relevant data.

Pesticides reviewed under the reregistration program that met current scientific and safety standards were declared “eligible” for reregistration. The results of EPA's reviews are summarized in Reregistration Eligibility Decision (RED) documents. Often before a pesticide could be determined “eligible,” additional risk reduction measures had to be put in place. For a number of pesticides, measures intended to reduce exposure to handlers and workers were needed and are now reflected on pesticide labeling. To address occupational risk concerns, REDs include mitigation measures such as: voluntary cancellation of the product or specific use(s); limiting the amount, frequency, or timing of applications; imposing other application restrictions; classifying a product or specific use(s) for restricted use only by certified applicators; requiring the use of specific personal protective equipment (PPE); establishing specific REIs; and improving use directions. During this process, EPA also encouraged registrants to find replacements for the inert ingredients of greatest concern. As a result of EPA's reregistration efforts, current U.S. farm workers are not exposed to many of the previously used active and inert ingredients that were of the greatest toxicological concern. And for most of the older products that remain registered, reregistration resulted in the inclusion of additional risk mitigation measures on the label.

EPA's registration review program is a recurring assessment of products against current standards. EPA reviews each registered pesticide at least every 15 years to determine whether it continues to meet the FIFRA standard for registration. Pesticides registered before 1984 were reevaluated initially under the reregistration program. These and pesticides initially registered in 1984 or later are all subject to registration review.

In summary, EPA's pesticide reregistration and registration reviews assess the specific risks associated with particular chemicals and ensure that the public and environment do not suffer unreasonable adverse effects from those risks. EPA implements the risk reduction and mitigation measures identified in the pesticide reregistration and registration review programs through amendments to individual pesticide product labeling.

3. *The Agricultural Worker Protection Standard (WPS)*. The Agricultural WPS regulation in 40 CFR part 170 is incorporated on certain pesticide product labeling through a statement in the agricultural use box. The WPS provides a comprehensive collection of pesticide management practices generally applicable to all agricultural pesticide use scenarios in crop production, complementing the product-specific requirements that appear on individual pesticide product labels.

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 an 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 PPE. Finally, the WPS has provisions to

mitigate exposures if they do occur by requiring the employer to provide to 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.

EPA manages the risks and benefits of each pesticide product primarily through the labeling requirements specific to each pesticide product. If pesticide products are used according to the labeling, EPA does not expect use to cause unreasonable adverse effects. However, data on incidents of adverse effects to human health and the environment from the use of agricultural pesticides show that users do not always comply with labeling requirements. Rigorous ongoing training, compliance assistance, and enforcement are needed to ensure that risk mitigation measures are appropriately implemented in the field. The framework provided by the WPS is critical for ensuring that the improvements brought about by reregistration and registration review are realized in the field. For example, the requirement for handlers to receive instruction on how to use the pesticide and the application equipment for each application is one way to educate handlers about updated requirements on product labeling to ensure they use pesticides in a manner that will not harm themselves, workers, the public, or the environment. In addition, REIs are established through individual pesticide product labeling, but action needs to be taken at the use site to ensure that workers are aware of areas on the establishment where REIs are in effect and given directions to be kept out of the treated area while the REI is in effect. The WPS has been designed to enhance the effectiveness of the existing structure of protections and to better realize labeling-based risk mitigation measures at the field level.

B. Goals of this Rulemaking

1. *Background and intent of the AEZ requirements.* In 2015, EPA finalized revisions to the WPS for the first time since 1992 (Ref. 1). As established in the 1992 WPS rule (57 FR 38101, August 21, 1992) (FRL-3374-6), the pesticide handler's employer and the pesticide handler are required to ensure that no pesticide is applied so as to contact, either directly or through drift, any agricultural worker or other person, other than appropriately trained and equipped pesticide handlers involved in the application. This requirement is commonly referred to as the “Do Not Contact” provision and has been one of the key protective and enforcement mechanisms on both pesticide labels and in the WPS. This requirement prohibits application in a way that contacts agricultural workers or other persons both on and off the agricultural establishment where the pesticide is being applied.

The 2015 WPS rule (Ref. 1) added requirements to supplement the existing requirements and to enhance compliance with safe application practices designed to protect agricultural workers and bystanders from pesticide exposure through drift. The 2015 WPS rule established the AEZ requirements for outdoor production, defined as “the area surrounding the application equipment that must be free of all persons other than appropriately trained and equipped handlers during pesticide applications.” The AEZ moves with the application equipment and is no longer in effect once the pesticide application stops. For aerial, air blast, and ground applications with fine or very fine droplet size, as well as fumigations, mists, and foggers, the area encompasses 100 feet from the application equipment in all directions. For ground applications with medium or larger droplet size and a spray height of more than 12 inches from the ground, the area encompasses 25 feet from the application equipment in all directions. For all other applications, there is no AEZ.

The 1992 WPS rule prohibited agricultural employers from allowing or directing any agricultural worker or other person other than trained and properly equipped pesticide handlers involved in the application to enter or remain in the treated area until after the pesticide application is complete. The 2015 WPS rule further prohibited the employer from allowing anyone in the part of the AEZ (which can extend beyond the treated area) that is within the boundaries of the establishment. For example, employers and handlers must ensure that workers in adjacent fields or buildings within their establishment move out of an AEZ as the pesticide application equipment passes; workers could return once the equipment has moved on (provided no REI is in effect in that area; the treated area does not map to the AEZ). The 2015 WPS rule also required handlers to “immediately suspend a pesticide application” if anyone other than a trained and properly equipped handler is within the AEZ, including any part of the AEZ beyond the boundaries of the agricultural establishment.

These restrictions were intended to reduce incidents, or the probability of incidents, in which people in areas adjacent to pesticide applications could be affected by drift. Additionally, the purpose of the AEZ was to supplement and establish written controls to guide employers and handlers on how to comply with the primary prohibition against applying pesticides in a manner that results in contact to others by establishing a well-defined area from which persons generally must be excluded during applications. The AEZ requirement was just one of the many worker and public health protection tools incorporated into the 2015 WPS rule to emphasize one of the key safety points in the WPS and on pesticide labels in general – do not spray people.

2. Stakeholder engagement after the 2015 WPS rule. Shortly after the publication of the 2015 WPS rule and during the Agency's extensive outreach and training efforts for State Lead Agencies (SLAs) after promulgating the rule, some SLAs and organizations that represent SLAs

began raising concerns about the AEZ requirements (Ref. 5). Frequent comments about the AEZ included concerns about its complexity and enforceability. In an effort to address questions and concerns raised by SLAs early on during the initial outreach and training efforts, EPA issued an AEZ-specific guidance in April 2016 (Ref. 6). Despite this guidance, EPA continued to hear from key stakeholder groups, including those representing SLAs such as the Association of American Pesticide Control Officials (AAPCO) (Ref. 7) and the National Association of State Departments of Agriculture (NASDA) (Ref. 8), regarding their concerns around the AEZ requirements.

In accordance with Executive Order 13777, *Enforcing the Regulatory Reform Agenda* (82 FR 12285, March 1, 2017), and based on the feedback received up to that point, EPA solicited additional public comments on the AEZ and other provisions of the WPS in the spring of 2017 on regulations that may be appropriate for repeal, replacement, or modification as part of the Agency's Regulatory Reform Agenda efforts. EPA encouraged entities significantly affected by Federal regulations, including state, local, and tribal governments, small businesses, consumers, non-governmental organizations, and trade associations, to provide input and other assistance, as permitted by law. EPA received comments from stakeholders on the WPS regulations, as amended in 2015, as part of the public's response to the Executive Order 13777 request.

These revisions are also in the spirit of Executive Order 13790, *Promoting Agriculture and Rural Prosperity in America* (82 FR 20237, April 25, 2017), the intent of which was to help ensure that regulatory burdens do not unnecessarily encumber agricultural production or harm rural communities. The Executive Order required USDA to assemble an interagency taskforce, including EPA, to identify legislative, regulatory, and policy changes to promote in rural America agriculture, economic development, job growth, infrastructure improvements,

technological innovation, energy security, and quality of life.

Information pertaining specifically to EPA's evaluation of existing regulations under Executive Order 13777, including the comments received, can be found at <https://www.regulations.gov> under docket ID number EPA-HQ-OA-2017-0190. Among the comments received, approximately 25 commenters provided input specific to the AEZ requirements in the 2015 WPS rule. Commenters on the AEZ requirements included SLAs, state organizations/associations, an agricultural coalition, farm bureau federations, grower and trade organizations, and a retailer organization (Ref. 9). Commenters discussed the need for changes to several WPS requirements, including the AEZ. Comments on the AEZ from organizations representing SLAs and agricultural interests raised concerns about the states' ability to enforce the AEZ requirements, expressed a need for clarity about how the requirement was intended to work, described problems with worker housing near treated areas, and the perception of increased burden on the regulated community. As noted in several of the SLA comments, including those submitted by AAPCO, EPA's efforts to address some of the concerns raised since 2015 through guidance have not been adequate. Commenters also indicated that EPA did not provide the necessary clarity to assist state regulatory agencies with compliance and enforcement activities.

In addition to comments received through the Regulatory Reform Agenda process, EPA solicited feedback on the WPS and AEZ requirements from the Pesticide Program Dialogue Committee (PPDC). The PPDC is a federal advisory committee that includes a diverse group of stakeholders from environmental and public interest groups, pesticide manufacturers, trade associations, commodity groups, public health and academic institutions, federal and state agencies, and the general public. In May 2017, the PPDC discussed the implementation of the

WPS in general as part of the ongoing Executive Order 13777 efforts (Ref. 10). On November 2, 2017, PPDC members again discussed the WPS requirements for the application exclusion zone in a public meeting with EPA (Ref. 11). Feedback EPA received on the AEZ revolved around the need to develop additional training and enhanced guidance for certain scenarios to ensure the success of the provision. With this feedback in mind, EPA addressed the remaining AEZ issues with a second guidance document, issued in February 2018 (Ref. 12). Despite this additional guidance, feedback from SLAs indicated that this guidance was still unable to adequately address the issues identified during the Regulatory Reform process and the Agency's outreach efforts.

Requests from SLAs to clarify and simplify WPS AEZ requirements, together with comments received through 2018 from various stakeholders regarding the need for improved clarity and guidance on the AEZ requirements, and the Agency's inability to effectively address all AEZ issues through guidance, prompted EPA's decision to address these issues through rulemaking.

III. Proposed Changes to the AEZ Requirements.

On November 1, 2019 (Ref. 2), EPA proposed narrow updates to the WPS regulation to improve the long-term success of the Agency's AEZ requirements. Specifically, EPA proposed to:

- Modify the AEZ so it is applicable and enforceable only on an agricultural employer's property, where an agricultural employer can lawfully exercise control over employees and bystanders who could fall within the AEZ. As currently written, the off-farm aspect of this provision has proven difficult for state regulators to enforce. These proposed changes would enhance both enforcement and implementation of the AEZ for state regulators and agricultural employers respectively. Off-farm bystanders would still be protected from pesticide applications

by the existing “do not contact” requirement that prohibits use in a manner that would contact unprotected individuals.

- Add clarifying language indicating that pesticide applications which have been suspended due to individuals entering an AEZ may be resumed after those individuals have left the AEZ.

- Simplify the criteria for deciding whether pesticide applications are subject to the 25- or 100-foot AEZ.

- Exempt the owners of certain family-owned farms from the AEZ requirements in regard to immediate family members who remain inside closed buildings, housing, or shelters on the establishment. This would allow farm owners and their immediate family members to stay in their homes or other enclosed structures on their property during certain pesticide applications. EPA proposed these targeted updates to improve enforceability for state regulators and reduce regulatory burdens for farmers while maintaining public health protections for farm workers and other individuals near agricultural establishments that could be exposed to agricultural pesticide applications.

IV. Public Comments

The public comment period for the proposed rule closed on January 30, 2020. EPA received 126 unique submissions to the docket, of which three were mass mail/signature campaigns that included over 28,000 written comments and/or signatures. Commenters included state pesticide regulatory agencies and associations, farmworker advocacy organizations, public health associations and professionals, growers and grower organizations, agricultural producer organizations, applicators and applicator organizations, farm bureaus, concerned citizens, and others. Comments and EPA’s responses to these comments, including those that do not raise

significant issues or substantially change the proposed requirements, are in a Response to Comments document (Ref. 13) that is available in the docket for this action. Those comments that have prompted changes to the proposed requirements for the final rule are discussed in Unit V, which describes the comments and the final requirements. In this unit, EPA is providing a summary of the substantive issues raised by comments and EPA's responses, which are discussed in detail in the Response to Comment document (Ref. 13).

A. Support for the Rulemaking

1. *Comments.* Of the 126 unique submissions to the docket, approximately 16 commenters submitted comments in support of EPA's efforts to clarify and simplify the AEZ requirements of the WPS, noting that these changes would result in improved enforceability and compliance while maintaining other protections intended to ensure the safety of workers or other persons from contact during pesticide applications. In addition to general support, 10 of these commenters provided additional recommendations to further improve upon the proposed changes.

2. *EPA Response.* EPA appreciates the commenters' general support for the proposed revisions. EPA acknowledges that several commenters provided additional feedback or recommendations on ways to improve the AEZ provision, which will be discussed in more detail in the following sections of this document and in the Response to Comments document (Ref. 13).

B. Opposition to the Rulemaking

1. *Comments.* Most of the comments submitted to the docket expressed opposition to EPA finalizing the proposed changes. Of the 126 unique submissions to the docket, EPA received 110 unique submissions in opposition to the proposed rule changes. This includes 3

mass mail/signature campaigns with 28,202 signatures or general comments of opposition and 89 individual comments submitted to the docket. Some of these comments speak to personal experiences with pesticide exposures, while others asked EPA in general to protect human health and the environment by maintaining the AEZ requirements. Other commenters stated that EPA should not allow humans to be sprayed, and that all people should receive adequate protections both on and off the establishment. In addition to the general comments received in opposition to the proposed rule, EPA received approximately 18 comments with more specific recommendations and concerns on the proposed rule, including feedback on EPA's analyses and rationale for the proposed changes.

2. *EPA Response.* EPA appreciates the many commenters who provided personal stories about experiences with pesticide exposures. These and many other experiences are some of the reasons EPA implements and supports the WPS requirements and makes every effort to ensure workers and bystanders are protected from pesticide risks.

EPA generally agrees with the commenters regarding protecting workers and bystanders from exposure during pesticide applications and believes that many of the comments result from deficiencies in the proposed rule's explanation of the proposed changes. Many of the commenters thought that by limiting the AEZ requirements to within the boundaries of the establishment where owners have the ability to control the movement of people, thereby excepting individuals off the establishment or on easements, and by exempting agricultural establishment owners and their immediate families from leaving their homes that are within the AEZ boundaries, EPA was permitting handlers to spray pesticides in a manner that would result in people being contacted by pesticides and being unnecessarily exposed. This is a misunderstanding of the proposed rule, which retained protections sufficient to protect workers, bystanders, and family members.

Consistent with both agricultural pesticide labels and the WPS since 1994, the handler employer and the handler must ensure that no pesticide is applied so as to contact, directly or through drift, any worker or other person, other than appropriately trained and equipped handlers involved in the application. This is a long-standing requirement, often referred to as the “Do Not Contact” provision, that was in place before (and after) EPA finalized its updates to the 2015 rule that introduced the concept of the AEZ. The AEZ, when considered by the agency, was initially framed as a set of guiding practices to support the “Do Not Contact” provision. Although EPA proposed that the AEZ would no longer apply to areas outside of the agricultural establishment’s boundaries or to those outside of the agricultural employer’s control (*e.g.*, those who are working on or in easements), EPA did not propose any change to the requirement that handlers must ensure that their application does not contact persons directly or through drift. If a handler has any reason to believe that workers or bystanders may be contacted by a pesticide during a pesticide application, the application should not take place until either those individuals leave the area or the handler can take measures to ensure that contact will not occur. Otherwise, the handler risks causing harm to others and violating the WPS and pesticide label.

EPA acknowledges it is critical to educate handlers and others on how to prevent pesticide exposure from occurring. The AEZ guidance documents issued by EPA since 2016 state that applications near establishment borders can continue provided that the applicator or handler follows certain measures or steps to ensure that applications will not result in individuals being contacted by spray or through drift off the establishment. As noted in these guidelines, this same information is incorporated into required WPS handler training programs (see 40 CFR 170.501 for handler training requirements) approved by EPA since June 2018. Most of these approved handler trainings are available through one of EPA’s cooperative agreements at

<http://www.pesticideresources.org/wps/training/handlers.html>. EPA-approved training programs will continue to provide this valuable information (including training related to the AEZ) to handlers regarding how to comply with the “Do Not Contact” provision. EPA is open to working with the various stakeholder groups on other training or supplemental educational materials for handlers. Ultimately, EPA and stakeholders have a shared interest in providing handlers with information and tools needed to prevent pesticides contacting anyone on or off the establishment.

C. EPA’s Administrative Record and Justifications for the AEZ Changes

1. *Comments.* Several commenters, including some advocacy groups, individuals within the public health field, and a joint letter signed by seven State Attorneys General (AG) offices, expressed opposition and concern regarding EPA’s justification of the proposed AEZ changes. The commenters argued that EPA’s proposal reflected an unsupported change in the position EPA took when promulgating the 2015 Rule. These commenters argued that the proposed rule rests on new conclusions based substantially on the same evidence the agency considered when reaching the opposite conclusions in 2015. Several commenters argued that if finalized, this rulemaking would likely violate the Administrative Procedure Act (APA) because the revisions reflect an unjustified and unsupported departure from the agency’s prior position. Furthermore, these commenters maintain that the agency’s explanation that changes are necessary to facilitate state compliance efforts is contrary to the evidence.

Commenters frequently pointed to EPA’s 2015 WPS rule where EPA concluded that creating the AEZ was a necessary supplemental protection because the “do not contact” requirement was not sufficiently protecting people against harmful pesticide exposure. They also noted that EPA further cited specific instances of pesticide exposure beyond the boundaries of

the agricultural establishment that the AEZ as finalized in 2015 could have prevented, but that a more limited AEZ would not. They suggested that the AEZ proposal reverses course entirely from that position and that it would be arbitrary and capricious to limit the AEZ without new evidence just five years after establishing the AEZ, with no explanation of why EPA's assessment of those facts in 2015 was incorrect.

Commenters dispute the reasons EPA presented to demonstrate the AEZ as established in 2015 is unworkable or difficult to administer. As evidence, the commenters cited EPA's reliance on feedback solicited and received in 2016 and 2017 through three venues:

- training and outreach to state pesticide regulatory agencies;
- as part of EPA's "Regulatory Reform Agenda" efforts in 2017; and
- two meetings of the PPDC in 2017.

The commenters suggest that EPA's reliance on these venues to support the proposed change is irrational and mischaracterized.

For example, commenters maintain that feedback from EPA's training and outreach to state agencies in 2016 cannot form a rational basis for the proposal because EPA's own Inspector General concluded that the agency's training efforts to prepare the regulated community for compliance with the 2015 WPS were woefully deficient. Commenters cited a 2018 evaluation by the EPA Office of Inspector General (OIG) that found that "essential" training and implementation materials—including the WPS Inspection Manual and How to Comply manual—were not available through 2016 (Ref. 14). As a result, they cite that "many state officials said they were not given the time, tools, or resources to successfully implement the revised WPS" by January 2, 2017, the compliance date for certain revisions.

Commenters also discussed information received in response to the agency's "Regulatory

Reform” solicitations in the spring of 2017, the provisions of the AEZ that the agency now proposes to modify were not even in effect at the time. The “suspend application” provisions of the AEZ had a compliance date of January 1, 2018. Commenters argued it would be irrational to rely on comments submitted in 2017 to support the proposition that the AEZ requirements are too hard to work with, when key requirements had not even come into effect.

Several advocacy organizations and the letter from the State AGs also commented on EPA’s reliance on feedback from the Pesticide Program Dialogue Committee (PPDC), a federal advisory committee under the Federal Advisory Committee Act, 5 U.S.C. App.2, that consists of representatives from user/grower groups, environmental, public interest, and animal welfare groups, farmworker representatives, public health representatives, chemical and biopesticides industry and trade associations, state, local, and tribal government, and federal agencies. The commenters stated that EPA’s reliance on PPDC’s feedback is flawed, and that EPA failed to disclose that the PPDC met and decided that there were no AEZ issues that necessitated revoking or curtailing it, and that they believed any potential issues could be addressed through guidance, education, and training (Ref. 13). Commenters cited that in the transcript, an EPA official summarized the discussion with respect to AEZ by noting that “what we largely talked about was the need to develop some additional and enhanced guidance around certain scenarios.”

2. *EPA Response.* The feedback EPA has received since finalizing the 2015 WPS, and the Agency’s attempts at addressing these concerns, influenced EPA’s approach to revising the AEZ requirements in the proposed rule. Based on the commenters’ statements, EPA believes it is necessary to more fully describe the process and the record relied upon, provide more context on the steps taken to address issues raised between 2015 and the proposed AEZ rulemaking and why a departure from the 2015 WPS justification for the AEZ is both warranted and will not

result in unreasonable adverse effects.

In late 2015 and early 2016, during the Agency's extensive outreach and training efforts for SLAs, some SLAs raised concerns about the AEZ requirements. Frequent comments about the AEZ included concerns about its complexity and enforceability, and that it would be difficult for states to provide compliance assistance in the absence of clear guidance from the Agency. In an effort to address some of the initial questions and concerns raised by SLAs during these efforts, EPA issued AEZ-specific guidance in April 2016 (Ref. 6). In the document, EPA interpreted the suspension requirement for people within the AEZ, but off the establishment, to mean that applications could resume if handlers take measures to ensure workers will not be contacted by sprays, such as:

- assessing the wind and other weather conditions to confirm they will prevent workers or other persons from being contacted by the pesticide either directly or through drift;
- adjusting the application method or employing drift reduction measures in such a way to ensure that resuming the application will not result in workers or other persons off the establishment being contacted by the pesticide;
- asking the workers or other persons to move out of the AEZ until the application is complete; or,
- adjusting the treated area or the path of the application equipment away from the workers or other persons so they would not be in the AEZ.

While this guidance addressed some of the issues raised, EPA continued to hear from SLAs and state associations representing SLAs regarding their concerns around the AEZ and the need for additional and clearer guidance on the AEZ specifically and the WPS in general (Refs. 7, 8). In an effort to address the concerns, EPA assisted a cooperative agreement partner on a

comprehensive “How-to-Comply” manual, released in late 2016 (Ref. 15).

Despite these efforts, SLAs continued to bring to EPA issues regarding the AEZ. Several SLAs, AAPCO, and NASDA submitted comments on these issues under Executive Order 13777 about their concerns (Ref. 9). These commenters continued to express concerns about a lack of clear AEZ guidance and the resulting confusion for both growers and state pesticide regulatory agencies. These concerns were grounded in the SLAs’ preparations to enforce the AEZ requirement and could not reasonably be ignored solely on account of preceding the AEZ compliance date, as commenters propose. As a result of these and other comments, EPA decided to raise this issue for discussion during the 2017 PPDC meetings.

During a meeting on May 4, 2017, EPA and PPDC members briefly discussed and flagged for further discussion the challenges in understanding the AEZ requirement, and obstacles to enforcement, compliance assistance, and education. On November 2, 2017 (Ref. 11), EPA and PPDC members discussed the AEZ in more detail. To clarify EPA’s record, EPA acknowledges that the commenters are correct that the PPDC did not recommend that rulemaking was required to achieve better compliance with the AEZ requirements. Rather, the feedback EPA received on the AEZ revolved around the need for additional training and enhanced guidance around certain scenarios to ensure the success of the AEZ provision.

Following the PPDC’s feedback on needing enhanced guidance, EPA completed a second AEZ guidance document. In the February 2018 guidance document (Ref. 12), EPA attempted to clarify the remaining issues on implementing the AEZ both on and off the establishment. Building upon the April 2016 guidance, EPA addressed the off-establishment AEZ by explaining what steps to take when someone enters the AEZ that is located off the establishment, when and under what circumstances handlers can resume pesticide applications that have been suspended,

as well as providing more detail about how to evaluate situations and what measures can be taken when people are within the AEZ but off the establishment. Similarly, EPA updated the WPS Inspection Manual (Ref. 16) in August 2018 with some of the same language and references to the 2016 and 2018 guidance documents and additional guidance for inspectors on compliance and enforcement when persons are in the AEZ but outside of the boundaries of the establishment or within easements. This detailed information is provided in both the February 2018 guidance document, the 2018 WPS Inspection Manual, and the response to comments document for this rulemaking.

The guidance documents issued between 2016 and now clarify that applications near establishment boundaries can occur when people are in the AEZ but outside of the boundaries of the establishment, provided that the applicator/handler follows all labeling requirements and takes the appropriate steps to prevent contact from occurring. While EPA believed this to be a workable and reasonable solution for implementing the AEZ requirements off the establishment, SLAs continued to inform EPA that guidance did not adequately address their issues. In particular, even though an applicator/handler ensures that conditions are favorable or takes measures to prevent drift off the establishment, the AEZ regulatory text could be read as prohibiting the application and risking of an enforcement action, even if a contact does not occur. As one SLA stated in their public comment to the AEZ proposal, guidance does not “carry the weight and authority” of codified regulations, and that their state AG had advised their office that they would be “on shaky ground were we to ignore the plain language of the Standard and regulate based on interpretative guidance.”

EPA agrees that guidance does not carry the weight of regulation, and that handlers and handler employers may be concerned about state or federal authorities taking a strict reading of

the regulation. In addition, handlers unaware of the existing guidance may interpret the AEZ provision more strictly than necessary. For these reasons, EPA agrees it is best to revise the regulation itself to clarify that the AEZ does not extend beyond the boundaries of the establishment and does not apply on or in easements where agricultural employers do not have control.

Despite proposing to limit the AEZ to within the boundaries of the establishment, public comments submitted by SLAs, AAPCO, and NASDA on the proposal emphasized that workers and bystanders have many protections provided by:

- the whole suite of WPS requirements, including the AEZ on the establishment, the “Do No Contact” provision at 40 CFR 170.505(a), the REI, and others;
- the certification and training regulations governing applicators of RUPs; and,
- product-specific labeling requirements and the pesticide label statement which prohibits applications to be made in such a way that workers or other persons are contacted by pesticides, either directly or through drift. (Note: the “Do Not Contact” requirement is provided on labels as well as in the WPS.)

These requirements work together to protect people from exposure to pesticides during applications. The trained handler or applicator should understand the principles underlying the AEZ requirement and how it relates to the “Do Not Contact” requirement. Any applicator or handler with any reason to believe someone may be contacted during the application, should suspend the application until they can assure people would not be contacted by pesticides. Otherwise, the applicator or handler would be at risk of violating the WPS and FIFRA.

EPA's risk assessments and registration decisions presume that no workers or other persons are being sprayed directly. Before the WPS 2015 revision, details on how to comply

with the “Do Not Contact” provision was limited. With the 2015 revision, EPA’s intention with the AEZ requirement was to provide applicators and handlers with specific criteria for suspending applications and actions to prevent contact with pesticides during applications. When developing the 2015 WPS rule, EPA found that incidents of exposure to drift or direct spray and other misuse violations continued to occur.

Based on the comments in opposing the changes, EPA recognizes that the AEZ proposed rule lacked important details and information on several fronts. Specifically, how the Agency intends to equip handlers with knowledge and tools to prevent contacting persons off the establishment with pesticides during applications; why the Agency believes the “Do Not Contact” provision is the most appropriate mechanism to prevent contacting persons off the establishment with pesticides; and why the “Do Not Contact” provision is adequately protective for persons off-establishment, despite the Agency’s 2015 assessment.

The Agency believes that the enhanced training requirements of the 2015 WPS should substantially increase compliance with the “Do Not Contact” requirement. The AEZ requirement provides an extra measure of assurance that applications will not result in worker or bystander exposure. This extra measure of assurance may be considered a redundant protection, but EPA considered it appropriate based on its 2015 understanding that the burdens of compliance with the AEZ would be minimal, inasmuch as the handler and handler employer were already required to take all steps necessary to prevent contact to workers or other persons. The changes to the AEZ (making it inapplicable off-establishment and to easements and the immediate family exemption) reflect EPA’s current understanding that in certain circumstances, the AEZ imposes burdens that are disproportionate to the need for the extra measure of assurance the AEZ is intended to provide.

D. Adequacy and Enforcement of the “Do Not Contact” Provision versus the AEZ

1. *Comments.* Several farmworker advocacy groups, former pesticide regulators, and the State AGs’ letter argue that the “Do Not Contact” provision has a history of shortcomings and despite the clear prohibition against spraying pesticides so as to contact workers or bystanders, EPA updated the WPS precisely because contact was still occurring. The commenters acknowledge that the “Do Not Contact” provision is an important mechanism, but it alone is not enough to protect workers and bystanders. Furthermore, several commenters argue that the “Do Not Contact” provision lacks specific guidance to the handler or applicator on how to comply with the provision and protect bystanders. By contrast, they point out that the AEZ provision clearly explains what must be done to protect workers and bystanders; spraying must be suspended if anyone is in the AEZ. While the “Do Not Contact” provision provides an important protection against pesticide poisoning, commenters argue that the vagueness and lack of instruction for the owner/applicator is part of what led to the inclusion of the AEZ in the 2015 WPS.

Commenters argue that the AEZ proactively protects against pesticide poisoning by requiring the suspension of application *before* anyone is sprayed while in contrast the “Do Not Contact” provision can be enforced only after contact with pesticides has occurred. The “Do Not Contact” provision prohibits action that once violated will have already resulted in harm to workers. Thus, they argue that enforcement of the “Do Not Contact” provision does not in itself prevent harm in the first place. They argue, however, that enforcement of the AEZ could help prevent a dangerous incident from occurring.

One commenter cites two situations where California enforced the AEZ provision of the WPS. In January 2017, California amended its existing worker safety regulations to align with

the 2015 Rule, creating state AEZ provisions, Cal. Code Regs. tit. 3, 6762, that are equivalent to the 2015 AEZ provisions. The commenter states that California enforced the AEZ requirement in at least two instances. On August 16, 2017, fieldworkers pruning tomato plants were exposed to pesticides during an application to melons less than 100 feet from where they were working. The fieldworkers suffered adverse health effects and two of them were taken to the hospital by ambulance. Similarly, on June 5, 2019, employees working with kiwi vines sought medical treatment after exposure to pesticides during an application at a different site less than 100 feet away. In both cases, the county agricultural commissioners issued administrative civil penalties based on violations of the California AEZ provisions. The commenter states that California has not encountered the challenges implementing the AEZ requirement that EPA has invoked as the reason for the Proposed Rule. They argue that California's regulations - which mirrors the federal AEZ provisions - have not been difficult to enforce, are not confusing or unnecessary, and that it shows that the AEZ requirements are effective and can be implemented.

At least two other commenters explained that a situation in Texas that they felt showed it is easier to enforce violations of the AEZ requirement than the "Do Not Contact" provision. In April 2019, an employee for a nonprofit organization saw a pesticide being applied from a plane in a field immediately north of another field where more than 60 workers were working. The two fields belonged to different owners. The complaint was eventually denied because, regardless of the workers' proximity to the aerial spray, the inspector believed they would not have been physically contacted by the pesticides under those conditions. The commenters argue this demonstrates that the "Do Not Contact" provision can be difficult to enforce, and it would be easier to prove violations of the AEZ provision.

Overall, the comments argue that EPA's claims in the proposal are false. Specifically,

commenters argue that EPA's claims that the AEZ offers no more protection than the "Do Not Contact" provision already provides, and that curtailing the AEZ would not reduce protections are false and are entirely inconsistent with the findings in 2015 that the AEZ was a necessary supplement to the "Do Not Contact" provision. Furthermore, they state that EPA does not dispute its findings in 2015 that without the AEZ in place, people are still being sprayed, creating an unreasonable risk.

2. *EPA Response.* EPA disagrees with commenters on the assertion that enforcing the "Do Not Contact" provision does not prevent harm in the first place. The "Do Not Contact" provision applies in all situations and application scenarios, regardless of whether the AEZ is required or has been followed. The primary safety goal of any application is to prevent pesticides from contacting people. Complying with the AEZ does not absolve handlers or handler employers from that primary responsibility. A handler could comply with the AEZ during an application and yet fail to follow all pesticide labeling requirements such that pesticide contacts people outside of the AEZ. The combination of following labeling requirements based on EPA's product-specific risk assessments and the WPS requirements together play a role in protecting human health. Reinforcing the need to not spray people is a key piece of that equation.

The requirement to suspend application if people other than trained and equipped handlers are in the AEZ was intended to act as a supplement or guide for applicators on the "Do Not Contact" requirement by giving the applicator specific criteria for suspending applications. It was EPA's intent that these specific criteria would be useful to applicators attempting to comply with the existing "Do Not Contact" requirement beyond the boundaries of the agricultural establishment.

Regardless of whether it is easier in a particular instance to prove a violation of the AEZ

requirement or of the do not contact requirement, the goal of the WPS is not to create easily proven violations but to reduce adverse effects to human health and the environment. EPA believes that the combination of protections created by the 2015 WPS, notwithstanding the revisions in this final rule, appropriately achieves that goal. The comments suggest a misplaced emphasis on creating easily proven violations, irrespective of adverse effects. EPA is not aware of any AEZ violation having been enforced without pesticide without contact occurring first, such as the two cases in California. In the Texas incident cited by the commenters, the inspector did not find a WPS violation because there was no evidence to suggest that pesticide contact could have occurred given the workers' proximity to the application, the application method, and variables such as weather, wind speed and direction, and vegetation. This is likely due, in part, to EPA's guidance on how to implement the AEZ off the establishment, which has interpreted the requirements at 40 CFR 170.505(b) to mean that applications can resume after the handler has assessed the conditions or used various safety measures to prevent a situation where individuals could be sprayed accidentally.

Despite EPA's best efforts to offer clarity and a workable solution through guidance, incongruity remains between EPA's interpretation of the "suspend" requirement as a temporary measure until handlers take appropriate steps, and how others may interpret the language at 40 CFR 170.505(b) to mean something more strict or permanent. For example, even though a handler could follow the steps in guidance and EPA-approved training and apply the pesticide safely without it contacting a person off the establishment, a state regulator could take an enforcement action against them if they held a strict reading of the regulatory requirement to suspend the application. While changes in this final rule rectify this difficult situation, the goal to prevent pesticide from contacting others will continue to be met through required WPS training,

including training on how to comply with the “Do Not Contact” requirement. Thus, EPA is open to working with the various stakeholder groups on other training or educational materials so that handlers have the information and tools so as not to spray pesticides in a manner that results in contact with anyone on or off the establishment.

E. EPA’s Cost Analysis for the AEZ Proposal

1. *Comments.* Several commenters, including several advocacy groups and the joint State AGs letter, argue that EPA’s cost analysis for the AEZ proposal fails to adequately justify the proposed revisions of the AEZ. Some of the commenters cite EPA’s 2015 cost analysis indicating that the benefits of extending the AEZ beyond the agricultural establishment’s boundaries could be substantial while the burden on applicators to temporarily suspending applications was minimal.

One commenter states that while the benefits of the proposal presumably correspond to reducing the “complexity” costs of the 2015 AEZ provisions, it is hard to see how a provision that requires the size (and shape) of the AEZ to change as the application equipment moves is less complex than a rule establishing an AEZ of a constant size and shape. Yet, EPA appears to be drawing a different conclusion now without any effort to explain why it has changed its view of the benefits and costs of maintaining the larger AEZ. In sum, they argue that EPA’s characterization of the costs and benefits of applying the AEZ protections beyond the agricultural establishment’s boundaries in the AEZ proposed rule is at odds with the rationale EPA presented in 2015 to justify the AEZ provision.

Another commenter states that the Agency has arbitrarily failed to quantify the costs of the increased pesticide exposure that would result from the proposal. Specifically, the comment cites that EPA’s acknowledgement in the proposal that farmworkers and others benefit from

extending the AEZ boundary beyond the agricultural establishment, but without explanation or support, the proposal characterizes these benefits as “minimal.” Furthermore, the Cost Analysis includes no discussion—whether quantitative or qualitative—of the costs of foregoing these protections, or of the increased risks to farmworkers or others of limiting the AEZ to within the boundaries of the establishment. Instead, they argue that the Cost Analysis states that “EPA is unable to quantify any increased risk of pesticide exposure from revising the AEZ requirements” and that the Agency asserts without explanation or support that any increase in this risk “may be negligible.” The Agency cannot avoid its obligation to analyze the consequences that foreseeably arise merely by saying that the consequences are unclear. The EPA’s refusal to quantify the costs of the proposal, including the costs of adverse impacts to human health, is striking given the agency’s statutory mandate under FIFRA to protect humans and the environment from unreasonable adverse effects of pesticides. As a result, the commenter argues that the APA does not permit the agency to ignore so central an evidentiary question.

Another commenter argues that the agency failed to support its assessment of the benefits of weakening the AEZ. EPA first claims that the proposal is expected to reduce the burden of compliance and lead to cost savings, but then predicts that “[i]n general, revising the AEZ requirement is not expected to result in any quantifiable cost savings for farms covered by the WPS.” The commenter then states that an “analysis that predicts cost savings but refuses to quantify those savings—indeed, that claims any such savings cannot be quantified—is not a rational basis for revising the AEZ.”

The commenters argue that given these flaws, the AEZ revisions would be arbitrary and capricious if finalized.

2. *EPA Response.* The economic analysis (2015 EA) (Ref. 17) for the 2015 WPS rule was

more comprehensive than the cost analysis for the AEZ proposal. However, the level of analysis specific to the AEZ provision in the 2015 EA was similar to what was contained in the cost analysis for the AEZ proposal. In the 2015 EA, the costs of the AEZ were qualitative, and assumed to be low as the AEZ was designed to supplement the “Do Not Contact” requirements of the WPS and the label that establish the responsibility of the applicator to prevent pesticides from contacting people. In both the 2015 EA and the cost analysis for the AEZ proposal, the discussion was qualitative and appropriate for a rule change that has impacts on application requirements and change in risks of exposure that cannot reasonably be quantified. A qualitative discussion of the potential effects of the rule is appropriate in the absence of information on which to base quantitative estimates. EPA’s action for this rulemaking is consistent with the APA.

EPA’s statement that changes to the AEZ in the proposed rule would reduce complexity was referring to restricting the AEZ to the establishment, removing the complex definition of droplet sizes based on the Volume Median Diameter (VMD), and making the size of the AEZ consistent across application methods. Although restricting the AEZ to the establishment does potentially change the size and shape of the AEZ near the edges of the establishment, it does reduce complexity because, in situations where the applicator is able to apply the pesticide without contacting any person, the applicator would not be required to suspend solely on account of the presence of persons who are outside the control of the agricultural employer. If the AEZ extends to persons outside the control of the agricultural employer (either off the farm or on farms through an easement), then the agricultural employer would be unable to fulfill his or her obligation to exclude those people. As a result, this could cause the application to halt for extended periods of time despite the applicator’s ability to take other measures to prevent drift

from contacting those people.

The commenters suggested that EPA did not consider the costs of changing the AEZ in the proposal, which they felt would increase the risks of pesticide exposure to people who would have been within the AEZ but off the establishment, within the AEZ and within an easement on the establishment, or in between the 25 and 100 feet area from application equipment, if the size of the AEZ were reduced on the establishment for some application methods. EPA evaluated the potential for increased risk, and concluded that the “Do Not Contact” requirement, the changes to the WPS-required training content in 2015, and the suite of requirements in the 2015 WPS rule provide effective protection from pesticide exposures during applications.

F. EPA’s Determinations on Environmental Justice (Executive Order 12898) and Children’s Health (Executive Order 13045)

1. *Comments.* Several advocacy commenters, individuals with public health expertise, State AGs, and general public commenters argued that EPA failed to comply with its obligations under Executive Order 12898 to address environmental justice (EJ) in minority populations and low-income populations. Under Executive Order 12898, federal agencies are directed to identify and address disproportionately high and adverse human health or environmental effects of their policies on minority populations and low-income populations in the United States. Commenters argue that the proposal does not meaningfully address its EJ impacts. Commenters argue that EPA relies on an unsupported conclusion that the proposal “would not have disproportionately high and adverse human health or environmental effects on minority or low-income populations.” Commenters suggest that by EPA failing to take a “hard look” at EJ issues in its review and to identify any method or analysis, the agency’s analysis in the proposal would likely fail to satisfy the APA’s arbitrary-and-capricious standard.

Similarly, commenters argue that EPA failed to comply with Executive Order 13045, which requires agencies to identify and assess health and safety risks that may disproportionately affect children and ensure that activities address disproportionate risks to children. Commenters cite examples of exposures involving children as well as various studies and information cited within the 2015 WPS indicating risks toward children; they argue based on this information, EPA did not fully consider how eliminating the off-establishment AEZ would impact children near the boundaries of establishments.

2. *EPA Response.* EPA does not believe this rulemaking will have disproportionately high and adverse human health or environmental effects on minority or low-income populations, nor will it have a disproportionate effect on children. EPA does consider the environmental and health protections for risks of agricultural pesticides to all potentially affected populations and addresses them in two ways. First, EPA manages the risks and benefits of each pesticide product primarily through registration and labeling requirements specific to each pesticide product. Routine pesticide registration reviews, and subsequent labeling directives as a result of those reviews, take into account protecting *all* groups, including vulnerable groups (*e.g.*, children and EJ communities). Second, the framework provided by the 2015 WPS is critical for ensuring that the improvements brought about by reregistration and registration review are realized. Therefore, if agricultural pesticide products are used according to their labeling, EPA does not expect there to be unreasonable adverse effects to children, EJ communities, or anyone else. Compliance assistance and enforcement also play a role in ensuring that risk mitigation measures are appropriately implemented in the field.

As indicated by the commenters, the 2015 WPS went through an exhaustive public participation to incorporate a number of safety mechanisms into the regulation, and extensively

engaged farmworker representatives, and when possible, worked directly with workers and handlers, to solicit their feedback and ideas for improvements. Some of these retained requirements and improvements to the WPS that promotes safety included enhanced and expanded training, and notifications; adding protection requirements such as the AEZ on the establishment; the “Do Not Contact” requirement and REIs; mitigating exposures by having decontamination supplies available and ensuring that workers receive emergency assistance if necessary; and establishing a minimum age of 18 for handler and early entry worker duties. EPA remains committed to ensuring the long-term success of the WPS and continues to support ongoing implementation efforts that arose from these interactions. This includes funding various cooperative agreements that support implementation and education and reviewing and approving all trainings to ensure appropriate information is provided to both workers and handlers on pesticide safety.

One of the areas that has seen a significant improvement as a result of that feedback involves that of enhanced training in place since the end of 2018. These enhanced trainings for workers and handlers include more steps on how to minimize worker and handler exposure and that of the families from pesticide residues carried from the treated areas to the home. In one cooperative agreement funded by EPA, early data provided to the Agency has shown worker knowledge gains as a result of these improved trainings, which have been provided in the field for over a year (Ref. 18). While EPA does not have similar information regarding knowledge gains for handlers, EPA expects that handler trainings have also increased the overall understanding of the requirements to ensure safer applications of pesticides. For example, the requirement for handlers to receive training and instruction on how to use the pesticide and the application equipment for each application is one way to inform handlers of updated product

labeling requirements so as not to apply pesticides in a manner that will harm themselves, workers, the public, or the environment.

EPA-approved trainings since 2018 (83 FR 29013; June 22, 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. Those measures include:

- Assessing the wind and other weather conditions to confirm he/she will prevent workers or other persons from being contacted by the pesticide either directly or through drift;
- Adjusting the application method or employing drift reduction measures in such a way to ensure that resuming the application will not result in workers or other persons off the establishment being contacted by the pesticide;
- Asking the workers or other persons to move out of the area until the application is complete; or
- Adjusting the treated area or the path of the application equipment away from the workers or other persons so they will not be sprayed.

EPA believes that by having incorporated this information into EPA-approved training, handlers have the information they need to safely apply pesticides when the establishment's owner and handler lack control over people's movements off the establishment. Based on this information already existing on how to comply with the "Do Not Contact" requirement of the WPS, EPA does not believe the change to limit the AEZ to within the boundaries of the establishment will result in unreasonable adverse effects for any persons, including EJ communities or children, off the establishment. EPA remains committed to the goal of conveying this information accurately and consistently through training and supplemental education

materials, and the Agency is open to working with its stakeholders to ensure the information is current and available.

In regard to the proposed changes to simplify the AEZ criteria for ground applications (*i.e.*, establish an AEZ of 25 feet when sprayed at a height greater than 12 inches) on the establishment, EPA determined that these changes would not result in unreasonable adverse effects on farmworker communities because the “Do Not Contact” requirement remains in effect. These changes would not result in unreasonable adverse effects on children because of the minimum age requirement prohibiting children under the age of 18 from participating in handler or early entry worker activities also remains in effect. Additionally, since the owner has control over the movement of people on his or her establishment, the owner can schedule applications and worker activities around each other to prevent potential conflicts with the AEZ and the “Do Not Contact” provision. With proper planning, EPA believes this to be of minimal impact on the establishment.

Commenters cited studies, such as those from Felsot *et al.* (Ref. 19) and Kasner *et al.* (Ref. 20), that show that pesticide applications using fine sprays are prone to drift greater than 25 feet. Some commenters instead recommended a simplified 100-foot AEZ to ensure that protections would be increased while meeting EPA’s stated goal of simplifying the AEZ. Drift potential is based on a number of factors in addition to droplet size, and the AEZ is designed to work in tandem with other provisions to ensure no contact and other label requirements (to reduce drift) to protect workers. Simplifying the AEZ criteria can help handlers better understand and implement the AEZ requirements successfully and promotes awareness on how to comply with the “Do Not Contact” provision. Additionally, all handlers must take EPA-approved trainings addressing how the AEZ facilitates compliance with the “Do Not Contact” provision,

and by simplifying the AEZ message, EPA expects that these annual trainings will better inform handlers' decision-making in regard to preventing contact even where the AEZ requirement does not apply. EPA believes that the potential costs and burdens for establishment owners to move workers who are within 100 feet of all ground spray applications would be disproportionate to the benefits, particularly when making applications using a medium or larger spray quality. Therefore, EPA has decided to finalize the AEZ distance requirements on the establishment as proposed. Specifically, EPA is establishing a 25-foot AEZ for all sprayed applications made from a height greater than 12 inches from the soil surface or planting medium, and no longer differentiating between sprayed applications based on the spray quality or other factors for setting different AEZ distances for outdoor production. EPA will maintain the existing AEZ distances of 100 feet for pesticide applications made by the following methods: aerially; by air blast or air-propelled applications; or as a fumigant, smoke, mist or fog. This issue is discussed in more detail in Unit V.C.

G. Procedural Mandates of FIFRA

1. *Comment.* One commenter argued that EPA violated FIFRA's procedural mandates. The commenter cites the requirement at Section 21(b) that before publishing regulations for "any public health pesticide," the EPA Administrator "shall solicit the views of the Secretary of Health and Human Services in the same manner as the views of the Secretary of Agriculture are solicited under Section 25(a)(2)." The commenter further cites the definition of "public health pesticide," which is defined at FIFRA Section 2(nn) as "any minor use pesticide product registered for use and used predominantly in public health programs for vector control or for other recognized health protection uses, including the prevention or mitigation of viruses, bacteria, or other microorganisms (other than viruses, bacteria, or other microorganisms on or in

living man or other living animal) that pose a threat to public health.” The commenter then states that for such pesticides, “[a]t least 60 days prior to signing any proposed regulation for publication in the *Federal Register*, the Administrator shall provide [the Secretary of Health and Human Services] a copy of such regulation.”

The commenter argues that the protections provided by the WPS applies to all agricultural pesticides, including public health pesticides, and that EPA was required to send a copy of the proposed rule to the Secretary of Health and Human Services (HHS) before it published the proposal in the *Federal Register*. By not doing so, the commenter claims EPA violated this procedural mandate in FIFRA.

2. *EPA Response*. EPA disagrees with this comment. The WPS only applies to agricultural establishments, where agricultural pesticides are used on agricultural plants (“any plant grown or maintained for commercial or research purposes and includes, but is not limited to, food, feed, and fiber plants; trees; turfgrass; flowers, shrubs; ornamentals; and seedlings”). See 40 CFR 170, Subpart D, for the scope, applicability, and definitions for “agricultural establishment” and “agricultural plant”. Conversely, Section 21(b) only applies to “public health pesticides” as defined in Section 2(nn) and quoted above.

Because this rulemaking applies only to agricultural pesticides used on agricultural plants on agricultural establishments, and not to “public health pesticides” as defined in FIFRA, the Agency is not required to solicit the views of the Secretary of HHS in regard to this rulemaking.

V. The Final Rule

A. Revisions to Address Issues Raised About the AEZ Extending Beyond the Boundary of the Establishment

1. *Proposal*. EPA proposed to revise the AEZ provision at 40 CFR 170.505(b) that

requires handlers to “suspend the application” if a worker or other person is in the AEZ, which as written in the 2015 WPS can extend beyond the boundaries of the agricultural establishment. EPA proposed to limit the AEZ to within the boundaries of the agricultural establishment. This change would make the requirement at 40 CFR 170.505(b) for pesticide handlers to suspend applications consistent with the requirement at 40 CFR 170.405(a)(2) for agricultural employers to exclude persons from the AEZ.

The AEZ is an area surrounding pesticide application equipment that exists only during outdoor pesticide applications. The 2015 WPS added the AEZ requirements to supplement the “Do Not Contact” requirements to reduce the number of incidents of exposure to pesticides during agricultural applications. 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 (besides trained/equipped handlers assisting in the application) is in the AEZ. The handler must suspend an application if a worker or other person is in any portion of the AEZ—on or off the establishment. EPA proposed to revise 40 CFR 170.505(b) so the handler/applicator would not be responsible for areas of AEZ off the establishment, where he/she lacks control over persons in the AEZ. However, EPA did not propose any changes to the existing provision in the 2015 WPS that prohibits a handler/applicator and the handler employer from applying a pesticide in such a way that it contacts workers or other persons directly or through drift (other than appropriately trained and PPE equipped handlers involved in the application). This provision will remain the key mechanism for ensuring the protections of individuals off the establishment from the potential exposures to pesticides from nearby agricultural pesticide applications.

2. *Final Rule.* In the final rule, EPA has adopted the proposed changes to limit the AEZ

to within the boundaries of the establishment in those areas where the agricultural employer has control over persons on the establishment.

3. *Comments and Responses.* a. *Comments.* Two SLAs, AAPCO, NASDA, several agricultural stakeholder associations, and farm bureaus expressed general support for EPA's proposal to limit the AEZ to within the boundaries of the establishment. These commenters cited some of the previously identified concerns associated with the AEZ off the establishment, where the establishment owner has no legal control or authority over anyone outside the establishment and could thereby impact applications long-term and potentially on a permanent basis depending on the presence of fixed structures. Additionally, commenters from SLAs, AAPCO, and NASDA expressed support for this revision because it creates more consistency between the owner and handlers' responsibilities under the WPS and clarifies the plain language of the requirement to be consistent with EPA's interpretive guidance. These commenters also expressed that minimizing and managing risks of pesticide exposure to all persons is central to their missions, and that extending such protections to individuals who are not agricultural workers or handlers is more properly accomplished by other means, such as the protections afforded under the "Do Not Contact" provision.

Several commenters from farmworker advocacy groups, public health professionals/associations, and commenters from the general public expressed opposition to the proposal to limit the AEZ requirements to within the boundaries of the establishment. Commenters argued that the proposed limitation of the AEZ to the boundaries of the farm would lessen protections for workers who might be exposed to drift from a neighboring farm, citing various example of cross-boundary drift situations. These commenters have argued that a robust implementation of the AEZ might have protected workers on adjacent fields from being sprayed.

Frequently, commenters noted that drift does not stop at boundary lines, that the AEZ requirement is necessary and not confusing. Therefore, they argue it should be maintained both on and off the establishment and for those working on or in easements.

Commenters argued that limiting the AEZ to the boundaries of the farm would lessen protections, and that it is irrelevant whether the applicator (or the agricultural employer or the owner of an agricultural establishment) has control over a person who is outside of the boundaries of the agricultural establishment. One commenter stated that if such a person is in the AEZ, there is a very high risk that the person is close enough to be sprayed by the pesticide, and the applicator should (and the current AEZ provision would require him/her to) suspend the application to give such individuals a chance to move away. The commenter further argued that restricting the AEZ to land within the agricultural establishment would significantly diminish the protection of bystanders. Further, the commenter suggested that the notion to make the duty of the agricultural employer and the applicator “more consistent” ignores the fact that these distinct duties usually rest on different people, stating that applicator typically works for the agricultural employer, and each would need training on the different duties imposed.

Commenters also argued that it is necessary that the AEZ apply beyond the boundaries of the agricultural establishment because it protects people who might otherwise be sprayed with a pesticide, citing EPA’s analysis in the 2015 WPS that including the area of the AEZ outside the boundaries of the agricultural establishment could potentially reduce unintended pesticide spray contact incidents four- to ten-fold. Commenters stated that EPA provided no rationale for why maintaining such a significant increase in protection is “unnecessary,” and stated that having an inconsistent shape (*i.e.*, the AEZ no longer being a consistent shape around the application equipment for off the establishment and for workers in easements) could actually be more

confusing and complex to implement.

Similarly, commenters stated that removing AEZ protections for persons on or in easements should not be finalized, and that using the scenarios of “easements” and “utility workers” as a rationale for allowing pesticide applications to be resumed even when someone is still within the AEZ is potentially misleading. Commenters expressed concerns that, due to the use of conditional language (“persons not employed by the establishment are present on easements that may exist.... The owner or ag employer may be unable to control the movement of people”), this revised requirement could be used as rationale to resume application while anyone is present within the AEZ, including people willing to vacate the area during the application, as well as those who are not on an easement. They argue that even if the conditional language is removed, people in easements should continue to be protected by EPA regulations, and that the rationale that people on easements are not within an owner’s control “in whole or in part” should not deprive them of their right to be protected. For those in easements, one commenter offered the solution to post a notice on the boundary of the easement about the date and time of pesticide application, so that individuals are empowered to leave the area so they can avoid being exposed to pesticides.

b. *EPA Response.* EPA disagrees with the commenters that the change to limit the AEZ within the boundaries of the establishment will result in protections being weakened. As stated in Unit IV.B above in previous responses to the overarching comments, handlers are still required to comply with the “Do Not Contact” requirements in the WPS and on pesticide labels. This requirement is applicable regardless of distance from the application equipment, and regardless of whether the persons are on or off the establishment or within easements.

Additionally, EPA believes that the enhanced training requirements of the 2015 WPS will

significantly improve compliance with the “Do Not Contact” requirement. These annual trainings (versus every 5 years under the previous rule) include best practices to prevent exposure during applications and are consistent with how EPA has been interpreting and implementing the AEZ off the establishment. To reiterate these best application practices covered in the new training materials, these measures include:

- Assessing the wind and other weather conditions to confirm he/she will prevent workers or other persons from being contacted by the pesticide either directly or through drift;
- Adjusting the application method or employing drift reduction measures in such a way to ensure that resuming the application will not result in workers or other persons off the establishment being contacted by the pesticide;
- Asking the workers or other persons to move until the application is complete; or
- Adjusting the treated area or the path of the application equipment away from the workers or other persons so they will not be sprayed.

While the AEZ will no longer apply off the establishment or to persons on the establishment pursuant to easements as a regulatory requirement, agricultural employers and handler employers must still include the AEZ as one of the safety measures in their trainings. Trained handlers will understand the principles underlying the AEZ and how it facilitates compliance with the “Do Not Contact” requirement, and that training will help inform their decision-making in regard to preventing contact with persons outside the establishment or present under an easement. EPA is committed and open to working with stakeholders to ensure that this information is presented to handlers in a clear and effective manner to impress upon handlers their responsibility under the WPS to not spray pesticides in a manner that results in contact in any situation.

EPA also disagrees with the commenters that requiring the AEZ only on the establishment would be more complex or confusing. For example, owners already have the responsibility of not allowing or directing any worker or other person not involved in the application to enter or remain in an AEZ that is within the establishment's boundaries. As indicated in the public comments submitted by NASDA, this change brings the pesticide handlers' duty to suspend applications in 40 CFR 170.505(b) in line with the agricultural employers' duty to exclude persons from the AEZ in 40 CFR 170.405(a)(2), so the two requirements will be consistent and will be noted as such in handler trainings.

B. Revisions to Address Issues Raised by SLAs Regarding When Handlers May Resume an Application That Has Been Suspended

1. *Proposal.* EPA proposed to revise the AEZ provision at 40 CFR 170.505(b) to add a paragraph clarifying conditions under which a handler may resume an application that was suspended because of people present in the AEZ on the agricultural establishment. The proposed revision of 40 CFR 170.505(b) would also clarify how the AEZ applies to persons not employed by the agricultural establishment who may be in easements (*e.g.*, gas, mineral, utility, or wind/solar energy workers) that may be within the boundaries of the establishment. These people are generally not within the control of the owner or agricultural employer of the establishment, so their presence could disrupt and prevent pesticide applications. EPA did not propose any changes to the existing "Do Not Contact" provision in the WPS.

The 2015 WPS rule was silent on if and when a handler could resume an application that was suspended, because workers or other people were present in the AEZ. EPA never envisioned that the AEZ requirement would lead to an application being suspended permanently, and the proposed change makes EPA's expectations explicit. EPA therefore proposed to revise the WPS

to clarify that handlers may resume a suspended application when no workers or other persons (other than appropriately trained and equipped handlers involved in the application) remain in an AEZ within the boundaries of the establishment.

EPA also proposed language to allow applications to be made or resume while persons not employed by the establishment in easements that may exist within the boundaries of agricultural establishments because, depending on the terms of the easement, the owner or agricultural employer may be unable to control the movement of people (*e.g.*, utility workers) within the easement. The 2015 AEZ requirement at 40 CFR 170.405(a)(2) precludes an application from being made on an agricultural establishment while workers or other people are in the AEZ within the boundaries of the establishment. In developing the original AEZ requirement, EPA presumed that all persons on an agricultural establishment would be subject to the control of the owner or agricultural employer, not recognizing the prevalence of easements which deprive the landowner of the ability, in whole or in part, to control the movement of persons within the easement. The proposed revisions at 40 CFR 170.505(b) address this situation by allowing handlers to make or resume an application despite the presence within the AEZ of persons not employed by the establishment who are working on or in an area subject to an easement. These individuals will still be protected by the “Do Not Contact” provision, so even though they could remain in an easement, the handler and the handler employer would be prohibited from allowing the pesticide application to result in any contact to these persons. The proposed revision to the regulatory text would be codified at 40 CFR 170.505(b).

2. *Final Rule.* In the final rule, EPA has adopted the proposed changes regarding when applications can resume after they have been suspended.

3. *Comments and Responses.* a. *Comments.* Several agricultural stakeholders, advocacy

groups, and one SLA association expressed support for clarifying that applications can be resumed once all individuals within the AEZ have left the area, other than those permitted by the regulation. All commenters cited the importance of providing clarity and aiding applicators in making better decisions regarding how to abide by the AEZ requirements.

However, several advocacy groups disagreed with the proposed change to limit the AEZ to within the boundaries of the establishment. They were against allowing handlers to continue to spray while individuals on adjacent properties were within the 25 and 100-foot AEZ distances as required in the 2015 WPS Rule. Additionally, the commenters expressed opposition to EPA's proposed changes which would allow the following groups of people to remain within the AEZ during applications:

- People who are present within the boundaries of the agricultural establishment because their presence is allowed pursuant to an easement, and
- People who are in the immediate family of the owner of the agricultural establishment.

b. *EPA Response.* EPA agrees with the commenters that revisions to clearly explain when applications can resume after being suspended are important and provide clarity not afforded under the 2015 WPS regulatory language. While the notion of suspending applications was implicitly meant to apply only until individuals not participating in the application have left the AEZ, EPA plans to move forward with the proposal to ensure that it is explicitly stated that suspended applications may resume once people leave the AEZ.

Regarding the commenters who disagreed with EPA's other proposals, those issues have been addressed more specifically in Sections A, C, and D of this Unit.

C. Revisions to Clarify and Simplify the AEZ Requirements for Outdoor Production

1. *Proposal:* EPA proposed to revise the criteria and factors for determining AEZ

distances at 40 CFR 170.405(a). EPA proposed the following revisions to simplify the AEZ requirements while maintaining the protections intended under the 2015 WPS:

- Eliminate the language and criteria pertaining to spray quality and droplet size and VMD for “sprayed applications”.
- Limit the criteria for 100-foot AEZ distances for outdoor production to pesticide applications made by any of the following methods: (1) Aerially; (2) by air blast or air-propelled applications; or (3) as a fumigant, smoke, mist, or fog.
- Establish a 25-foot AEZ for all sprayed applications made from a height greater than 12 inches from the soil surface or planting medium, and no longer differentiating between sprayed applications based on the spray quality or other factors for setting different AEZ distances for outdoor production.

Some pesticide labels will have restrictions for applications that are different than the criteria in the 2015 WPS or this AEZ rulemaking. For example, the restrictions on soil fumigant labels are more restrictive than the AEZ of 100 feet. In situations like this, pesticide users must follow the product-specific instructions on the labeling. As stated in 40 CFR 170.303(c) and 170.317(a), when 40 CFR part 170 is referenced on a pesticide label, pesticide users must comply with all the requirements in 40 CFR part 170, except those that are inconsistent with product-specific instructions on the pesticide product labeling.

2. *Final Rule*. EPA has finalized the AEZ distances of 25 and 100 feet as proposed. Also as proposed, EPA has removed the criteria of spray quality and droplet size for determining whether a ground spray is subject to a 25-foot or 100-foot AEZ, and has established a 25-foot AEZ for all ground spray applications made from a height greater than 12 inches from the soil surface or planting medium.

3. *Comments and Responses.* a. *Comments.* Farmworker advocacy group commenters, individuals within the public health field, former pesticide regulators and several general public commenters recommended that EPA keep the regulations for application method, height, and criteria as written in the 2015 WPS. While some acknowledge that problems with clarity and compliance exist, they state that the original criteria were a step in the right direction to protect workers and bystanders from direct spray and from drift. They claim that making the proposed changes would eliminate the AEZ entirely for applications of fine droplet size sprayed at 12 inches or lower and significantly reduces the AEZ for those that are sprayed higher than 12 inches in general. They argue that because pesticides sprayed with a fine droplet size are most prone to drift, the AEZ should be wider in those cases, not narrower. Commenters cited studies showing that pesticide applications using fine or smaller sprays are prone to drift greater than 25 feet. Finally, they maintain that EPA did not present any new or compelling evidence to support the changes in criteria.

A couple of commenters discussed that having a single distance requirement for the AEZ for each application method is a logical choice and doing so would moot any conflicts over terminology to describe spray droplet characteristics. However, they argue that a problem with EPA's proposals – to eliminate the AEZ for spray applications of fine droplets released less than one foot off the ground and to set a standard, 25-foot AEZ for all other ground spray applications – is that a pesticide spray composed of tiny droplets will easily move farther than 25 feet. They state that EPA has the capability, but failed to analyze, how much and how far a pesticide spray application could be expected to travel, and that such an analysis would show that a large percentage of the spray would drift outside a 25-foot AEZ under common weather conditions. One commenter argued that EPA's proposal also completely ignored the more protective (and

equally straight-forward and enforceable) option of setting a standard AEZ of 100 feet for all ground spray applications. Finally, commenters stated reducing the AEZ distance from 100 to 25 feet significantly reduces the size of the AEZ for ground spray applications with fine droplet sizes from ~ 31,415 square feet to ~ 1,963 square feet, a reduction of ~ 93%.

b. *EPA Response.* In choosing a 25-foot AEZ for ground applications above 12 inches, EPA sought one simplified AEZ criterion for ground spray applications that would maintain protection while alleviating the complexity. During repeated outreach and training events during WPS implementation efforts after the 2015 rulemaking, it became clear to EPA that there was a great deal of confusion and misunderstanding regarding the AEZ requirements and the criteria for determining the appropriate AEZ distance. Comments on simplifying the AEZ, which are summarized below, included:

- It would be very difficult to enforce the AEZ requirements in many circumstances, because it would be challenging to determine what the AEZ should have been during an application in many situations, unless it is simplified or there were additional recordkeeping requirements.

- The current rule refers to factors and criteria for determining the AEZ (*i.e.*, droplet size and “volume median diameters” or VMDs) that are no longer appropriate based on new information from the American Society of Agricultural and Biological Engineers (ASABE). The ASABE standards regarding the criteria for the droplet size classification system have been revised multiple times, thereby resulting in the VMD of 294 microns established under the 2015 WPS being no longer appropriate. An AEZ distance based on this factor makes it difficult for some applicators to determine their required AEZ. This has resulted in confusion and difficulty in complying with the AEZ requirement.

- The AEZ distances are currently based on factors that make it difficult for some applicators to determine their required AEZ, making it difficult to comply with the requirement.

The complexity has resulted in many calling for the elimination of the AEZ altogether.

- Although there is a good rationale and basis for the AEZ requirement, it needs to be simplified to make it more practical, understandable, and easier to implement.

The Agency considered maintaining the spray quality and spray droplet criteria from the 2015 WPS. EPA agrees that sprays may drift greater than 25 feet and smaller droplet sizes increase the drift potential. In addition to spray droplet size, numerous factors impact the potential for spray drift, including application method, wind speed and direction, temperature and humidity, nozzle release height, pesticide formulation, terrain and target crop. The Agency's efforts, however, are to develop a simplified approach that is easier to understand and implement while still providing necessary guidance on how to comply with the overarching "Do Not Contact" requirement.

EPA also considered the recommendation by several public commenters to simplify the AEZ by establishing a 100-foot AEZ for all ground spray applications above 12 inches. EPA agrees with the commenters that a 100-foot AEZ would simplify the criteria. However, EPA believes that the potential costs and burdens for establishment owners to move workers who are within 100 feet of all ground spray applications would be disproportionate to the benefits, particularly when making applications using a medium or larger spray quality.

The WPS "Do Not Contact" provision prohibits contacting persons with pesticides for all situations and without any distance limitation on the proximity of the application. The "Do Not Contact" provision is a performance standard that mandates an outcome but does not specify how it is to be achieved. The AEZ requirements are supplemental to the "Do Not Contact"

requirements (and any label-specific requirements intended to protect against contact) in that they provide a small set of concrete benchmarks intended to help handlers accomplish the no-contact objective. The AEZ, when coupled with the provisions to ensure no contact and other label requirements (which may prescribe nozzle types, droplet sizes, and buffers based on product-specific assessments), is designed to be just one of several mechanisms to protect workers and other persons. EPA has concluded that the 2015 AEZ ground spray criteria are too complex, and in many cases too restrictive, and the “Do Not Contact” requirement would be better supplemented by the combination of a simplified AEZ and additional product-specific requirements where needed. Where EPA’s product-specific risk assessments result in labeling language that is inconsistent with or exceeds the requirements of the 25-foot AEZ, the handler must comply with the pesticide product labeling. Therefore, EPA has decided to finalize the proposed 25-foot AEZ for all ground applications sprayed from a height greater than 12 inches to serve as the baseline for ground applications when product labels do not provide something more protective and to remove spray quality and spray droplets to make this baseline simple to determine. EPA is finalizing changes to simplify the criteria so applicators can better understand the AEZ requirements and need for the AEZ protections, and how to implement them.

D. Providing an Immediate Family Exemption to the AEZ Requirements.

1. *Proposal.* EPA proposed to revise §170.601 so that owners and applicators would be exempt from the AEZ requirements of §170.405(a)(2) in regard to members of their immediate families who are inside closed buildings, housing, or shelters on the establishment during pesticide applications. Immediate family, as defined at §170.305, includes the owner’s (or owners’) spouse, parents, stepparents, foster parents, father-in-law, mother-in-law, children, stepchildren, foster children, sons-in-law, daughters-in-law, grandparents, grandchildren,

brothers, sisters, brothers-in-law, sisters-in-law, aunts, uncles, nieces, nephews, and first cousins. “First cousin” is defined as the child of a parent's sibling, *i.e.*, the child of an aunt or uncle.

EPA proposed this revision to address unforeseen impacts of the 2015 AEZ requirements in certain situations. Stakeholders raised concerns related to the AEZ requirement in 40 CFR 170.405(a)(2) (requiring that employers must not allow workers/people to remain in the AEZ on the establishment other than properly trained and equipped handlers involved in the application) applying to workers or other persons that are in buildings, housing, or shelters on the establishment. Even when workers or other people are in closed buildings, housing, or shelters that are within the boundaries of the establishment, the employer cannot legally apply the pesticide if those people are within the boundary area of the AEZ—it is a violation of the WPS. There is no choice under the current rule but to remove them from the AEZ before the application can take place, regardless of whether the buildings are enclosed, or the handler can ensure the pesticide will not contact the people. This raised specific concerns for owners of agricultural establishments and their immediate families.

In the case of owners of agricultural establishments and their immediate families, family members cannot stay in their own home within the AEZ during pesticide applications even if the owner and applicator take appropriate steps to ensure family members would not be contacted by pesticide spray or drift. This can be burdensome, for example, when owners are employing EPA-recommended best practices such as those prescribed under the pollinator protection strategy to apply pesticides in the evening and when temperatures are below 50° F, when pollinators are not as active but immediate family members are more likely to be present. Although EPA acknowledged that there is an exposure risk for owners and immediate family members present within the AEZ during pesticide applications, EPA anticipates that family members would take

appropriate steps to protect other family members to ensure they would not be contacted during pesticide applications, and that the AEZ requirement therefore subjects owners of agricultural establishments and their immediate families to unnecessary burdens. Accordingly, EPA proposed to revise 40 CFR 170.601(a) so that owners and applicators would be exempt from the provisions of 40 CFR 170.405(a)(2) regarding members of their immediate families who are inside closed buildings, housing, or shelters on the establishment. This would not impact WPS protections for workers and handlers, because owners and applicators would still have to observe AEZ requirements for non-family member employees on the establishment. Because the proposed exemption was limited to 40 CFR 170.405(a)(2), family members would still be subject to all other AEZ requirements.

2. *Final Rule.* In the final rule, EPA has adopted the proposed change to §170.601(a)(1), but with several modifications. EPA has narrowed the proposed regulatory language to clarify that these exemptions only apply in regard to immediate family members who remain inside closed buildings, housing, or shelters on the establishment. In addition, EPA has added new regulatory language to §§170.601, 170.405(a)(2) and 170.505(b)(1) to make it clear that the immediate family exemption to the AEZ also applies when the handler performing the application is not an owner of the establishment, but only when the handler has been instructed by the owner to proceed with the application near family homes or closed buildings containing only the owner's immediate family inside.

Upon review of the comments, EPA recognized that expanding the §170.601(a) immediate family exemption to include §170.405(a)(2) is not sufficient to accomplish the proposed goal of allowing immediate family members to remain in the home or other shelter within the AEZ during applications. As proposed, the regulatory text of the revised rule would

exempt a farm owner of his or her responsibilities as an agricultural employer, but it is not clear that it would also exempt the farm owner from §170.505(b) when acting as a handler; he or she could still be subject to §170.505(b) and have to suspend the application until family members are evacuated from the home within the AEZ. Moreover, the proposed regulatory text made no exemption for applications made by handlers other than an establishment owner, so as drafted, there would effectively be no exemption at all. In order to accomplish the stated goals of the proposal, EPA is revising §170.601(a) to expressly include the AEZ requirements in §170.505(b) as well as those in §170.405(a)(2) in the immediate family exemption, and to extend that exemption to include handlers in certain circumstances. The AEZ requirements would still apply when owners and immediate family members are in the AEZ and outside of closed buildings, housing, or shelters.

As revised in this final rule, §170.601(a)(1) provides that the owner of the establishment may permit handlers to perform applications near closed buildings, housing, or shelters where the owners or their immediate family members are present, provided that the owner has expressly instructed the handlers that only the owners or their immediate family members remain inside the closed shelters, and that the application should proceed despite their presence in the closed shelters. Without these expressed instructions from the owner, handlers will be required to suspend the application if the owner or their immediate family members are inside closed structures within an AEZ.

EPA has also added references to this §170.601(a)(1)(vi) exemption in §§170.405(a)(2) and 170.505(b)(1) for clarity.

3. *Comments and Responses.* a. *Comments.* SLAs, AAPCO, NASDA, and several agricultural stakeholder groups and farm bureaus expressed their general support for adding the

AEZ requirements to the 40 CFR 170.601 immediate family exception. These commenters state that allowing immediate family members to remain inside closed buildings inside the AEZ boundaries during pesticide applications would reduce the burden to applicators who are on their own family farm. These commenters agreed with EPA's proposal that immediate family members, including children, would be as safe as they are now without the exemption because applicators would protect their own family members. Furthermore, the revision would reduce the considerable burden on farmers and their family members and create more flexibility while not compromising safety.

Conversely, several farmworker advocacy commenters and individuals in the general public expressed concerns over EPA's proposal to exempt farm owners and their immediate family members. Among the comments received, commenters stated that it is in everyone's best interest to leave the AEZ during a pesticide application, so requiring everyone to do so, including owners' family members, should not generate "undue burden," and that the applicator would not be able to ensure that only the owners' family members are inside particular buildings.

Commenters also suggested that the proposed revision of the AEZ would put a real burden on rural communities by reducing protection to family members who might not necessarily understand the risk of exposure to which they are subjecting themselves. Lastly, they maintain that the risk to public health outweighs any benefits.

In addition to these comments, one commenter stated that the Agency made no effort to explain why its rationale would justify exempting family members when the family members are outdoors but within an AEZ, and that, at best, it would justify an exemption only when family members are in a closed building. Second, the commenter suggested that the Agency did not explain how its rationale aligns with an earlier justification to exempt family members from

certain WPS requirements. The commenter stated that when the Agency included provisions in the 1992 WPS to exempt family members from certain requirements, EPA explained that it was reasonable to expect owners of agricultural establishments to take all steps necessary to protect their own family members, and at the same time the exemption gave owners flexibility on how to provide those protections. So, for example, the WPS does not require owners to give family members formal pesticide safety training or to keep records documenting that the family members had been trained. The commenter indicated that the Agency reasoned that such training could and would happen informally (and perhaps better) over time. As the commenter notes, the protection provided by the AEZ provisions, however, is not like training; it cannot be provided informally, or even adequately, over time, and that the AEZ provision is only meaningful if the applicator suspends spraying at the moment when someone is too near the application equipment. They believe that exempting family members will only encourage applicators to be less careful in complying with the “Do Not Contact” provision.

One commenter suggested that while the proposed exemption for family members is unjustifiably overbroad, EPA’s rationale does raise a valid concern. The commenter thought that it seemed reasonable that the WPS regulation should not require suspension of an application every time the application equipment passes near a closed, occupied building, but that there was a serious practical issue with the Agency’s proposed exemption of family members. To the extent that it is designed to address circumstances in which an immediate family member could be inside of a building within an AEZ, it would be practically impossible for an applicator to know whether any people were present and whether the only people in the building were members of the immediate family. Under the proposal, in order to comply, the applicator would most likely need to suspend application in order to check the building. Thus, the commenter

believes that the proposed change probably would not provide any real relief from the alleged burden. Moreover, another practical consideration is that an applicator who is not the owner of the agricultural establishment might well not know the relationship of the person in the AEZ (either within a building or not) to the owner.

b. *EPA Response.* The proposed rule regulatory text would exempt farm owners from providing the protections of 40 CFR 170.405(a)(2) to themselves or their immediate family members. The proposed language would exempt them from all requirements of the AEZ whether family members are inside or outside of enclosed structures as one of the commenters noted. EPA agrees with the commenter that the proposed language was overly broad and acknowledges that this was not the intention of the proposed exemption. As stated in the preamble to the proposal, EPA intended the exemption to apply only to family members inside closed buildings, housing, or shelters to reduce the burdens of having to leave their homes during a pesticide application. EPA believes this approach is consistent with the 1992 WPS rationale cited by one of the commenters. EPA expects owners of agricultural establishments to take all steps necessary to protect their own immediate family members, and the final rule gives owners flexibility to provide those protections by sheltering immediate family members in enclosed structures within the AEZ.

Accordingly, EPA is changing the regulatory text at 40 CFR 170.601(a)(1)(vi) to state that the exemption only applies when immediate family members of farm owners remain inside closed buildings, housing, or shelters on the establishment. This change clarifies that the AEZ requirements fully apply to immediate family members when they are outdoors, and that the exemption only applies when they shelter-in-place.

While reviewing the comments, EPA identified an ambiguity in the proposed rule

regarding whether the proposed family exemption is broad enough to allow handlers who are not an owner of the establishment to perform the application while owners and their immediate family members to remain inside closed buildings, houses, or structures. This is, in part, because the existing 40 CFR 170.601(a)(1) only applies to owners, and while it could be construed to apply to owners when performing the handler activities, it would not extend to other handlers who have been hired by the owner to perform those duties. However, EPA's intent was to allow the owner, who generally has awareness of, and control over, the movement of immediate family members on the establishment, to instruct an applicator or handler to perform an application while the owners or their immediate family members remained inside closed structures within the AEZ. The final rule reflects this intent and will relieve owners and their immediate families of the burden of vacating the building when the owner judges it unnecessary. Without the express instruction from the owner to proceed with an application despite his or her family's presence in the closed structure, the final rule requires handlers to comply with the suspension requirements at §170.505 and not proceed with the application until the owner's immediate family vacates the AEZ.

Some of the commenters understood the proposal to mean that applicators or handlers who are not owners of the agricultural establishment would need to comply with the AEZ requirements and suspend the application in all situations until they could confirm the structure was clear as required under 40 CFR 170.505, while others viewed EPA's proposal to apply more broadly (*i.e.*, family members could stay inside while a hired handler performs the application). The Agency recognizes that as proposed, §170.601(a)(1)(iv) might only apply to owners in their role as agricultural employers; it would not necessarily exempt the owner or any other person from the handler requirements of §170.505(b), making the proposed exemption unusable. This

would not be consistent with EPA's intent, or the understanding of at least some commenters.

Accordingly, EPA has revised the regulatory text at §170.601 to make clear that applications conducted by other handlers can proceed 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. Handlers will have to receive this information from the owner of the establishment prior to application and cannot assume that only the owner's family are inside without that assurance. The rule does not require that the instruction be provided to the handler in writing, as that could be unnecessarily burdensome in many cases. However, insisting on a written instruction may provide a handler relief from an enforcement action if the owner's representation proves to be incorrect.

EPA assumes that owners will take into account the risks to their immediate family members before instructing a handler to proceed with an application. This approach gives owners flexibility on how to provide appropriate protections when their family remains in an enclosed structure within the AEZ while reducing burdens during applications. This revision to the regulatory text will not lessen protections for workers or other persons, as this exemption to the AEZ requirement does not apply if a person present in the AEZ is not a member of the owner's immediate family.

EPA, however, disagrees with the assertion that the exemption would result in applicators being less careful in complying with the "Do Not Contact" provision. The farm owner or applicator must still suspend application if anyone other than the owners or their immediate family members are within the AEZ, including inside enclosed structures within an AEZ. It is

reasonable to believe that owners will warn their immediate family of a pesticide application in advance and instruct them that no one, other than their immediate family members, may be inside during the application. Moreover, the agricultural employer's responsibility under 40 CFR 170.405(a)(2) to not allow or direct any worker or other person within the AEZ other than appropriately trained and equipped handlers involved in the application requires the farm owner or agricultural employer to ensure that no one outside of the immediate family will be permitted in the house within an AEZ until after the application they are performing is complete or the application equipment has moved on.

E. Recommendations to Develop State Equivalency Provisions for the AEZ

1. *Comments.* One SLA, one state association representing SLAs, and one agricultural stakeholder association requested that EPA establish a mechanism to review and accept (when warranted) AEZ equivalency plans or provisions submitted by SLAs, territories, and tribes. The commenters all indicated that at least one state "shelter-in-place" provision has protections in addition to those specified in the federal AEZ. Commenters indicated that the state law was developed after a long, inclusive, and transparent rulemaking process with farm worker advocacy groups and grower groups. This state law provides clarifications and revisions to the federal requirements and provides protections in addition to those in the federal AEZ.

2. *EPA Response.* In the early development of the AEZ proposal, EPA had considered addressing state equivalency plans and a mechanism to review and accept those plans. EPA's preference at the time was to address state equivalency plans with the whole WPS in mind. However, under PRIA 4 (Pub. L. 116-8; March 8, 2019), EPA is required to carry out the 2015 WPS rule and is not permitted to propose or finalize revisions to the WPS other than to the AEZ prior to October 1, 2021. As a result of this statutory limitation, EPA has determined that EPA's

preferred path to revising the state equivalency request language at 40 CFR 170.609 would be outside the scope of what is permitted under statute since the preferred approach would not be limited to the AEZ requirements. While EPA is currently limited by PRIA 4 to make this change, EPA may be able to reexamine this recommendation starting in October 2021.

F. Recommendation to add an AEZ “Shelter-in-Place” Provision for Workers and Other Persons

1. *Comments.* In addition to the requests to establish mechanisms for state equivalency plans, two agricultural stakeholders and one SLA requested that EPA expand the exemption offered to agricultural owners and their immediate families to include workers and others who remain in an enclosed structure.

Another commenter argued that the EPA exemption allowing agricultural owners and their immediate families to remain inside a closed building within an AEZ would not need to be as complicated as suggested in the proposal. The commenter suggested that instead of naming different types of buildings, the criteria could be that application could continue as long as all visible openings by which the pesticide spray could enter the building – *e.g.*, doors and windows – appear closed, and that unnamed “variables” are irrelevant. The commenter stated that what should matter from a safety perspective is whether the spray is likely to contact someone within the AEZ, not the relationship between the owner of the agricultural establishment and the person in the AEZ. They argue this suggestion would eliminate the arbitrary distinction in the proposal that affords different protections to people in the owner’s immediate family and those who are not. Further, the commenter argues that an applicator could determine more quickly and easily whether he or she needed to suspend application simply by looking at the exterior of the building, rather than entering the building.

2. *EPA Response.* EPA disagrees with the commenters' recommendations to extend the exemption to remain in the AEZ to anyone provided they remain in an enclosed structure (*i.e.*, "shelter-in-place"). EPA had considered addressing this issue through development of an exception to the AEZ requirement that would consider and identify appropriate conditions that would allow people to remain in a building or structure in the AEZ. EPA believes that conditions vary too much for EPA to establish a generally applicable "shelter-in-place" provision, and would be better suited to narrowly-targeted "shelter-in-place" provisions developed by SLAs based upon the circumstances and need within their jurisdictions. However, as indicated previously, EPA's preferred path for developing state equivalency mechanisms and revising the language under 40 CFR 170.609 is currently limited by PRIA 4. EPA may reexamine this issue again if and when EPA has the authority to reconsider other aspects of the WPS.

G. Other Recommendations and Revisions

1. *Definitions. a. Application Exclusion Zone.*

i. *Current rule and proposal.* Under 40 CFR 170.305, the application exclusion zone means "the area surrounding the application equipment that must be free of all persons other than appropriately trained and equipped handlers during pesticide applications."

Under the proposed rule, EPA proposed to change the definition to mean "the area surrounding the application equipment from which persons generally must be excluded during pesticide applications."

The proposed change was intended to reflect the various proposed revisions limiting the AEZ to within the boundaries of the establishment and addressing easements within establishment boundaries and allowing an owner's immediate family to remain in an enclosed building within an AEZ during an application.

ii. *Comments and Responses.*

Comments. One commenter recommended that EPA revise the definition of AEZ to mean “the area surrounding the point(s) of pesticide discharge from the application equipment that must be free of all persons during pesticide applications, other than those persons noted under 40 CFR 170.405(a)(2) and 170.601(a)(1).” The commenter stated that definition of the AEZ as proposed was unclear and even EPA’s explanation of it was inconsistent, which will make compliance and enforcement difficult. For example, the April 2016 and February 2018 guidances both show graphics in which the AEZ is measured from the entirety of the pesticide application equipment for a ground sprayer. However, the February 2018 adds a graphic for an aerial spray in which the AEZ is measured from the points of pesticide discharge for an aerial sprayer. The two graphics are side by side in the February 2018 guidance.

In addition to this revised definition, the commenter recommended that to be consistent with this recommended definition, similar language should be added at 40 CFR 170.405(a)(1)(i) and 170.405(a)(1)(ii) to be clear that the AEZ distance is determined from the point(s) of pesticide discharge from the application equipment.

EPA Response. EPA agrees with the commenter and revised the final regulatory text when discussing measuring the AEZ from the points of pesticide discharge to “the area surrounding the point(s) of pesticide discharge from the application equipment that must generally be free of all persons during pesticide applications;” this recommended change is a commonsense revision to the definition and regulatory text that helps to improve the clarity of the rule and is consistent with EPA’s past outreach on the AEZ requirements. EPA did not include as part of the definition “other than those persons noted under §170.405(a)(2) and §170.601(a)(1).” The limits to the AEZ boundaries, exceptions, and exemptions are addressed

through the responsibilities of the agricultural employer or handler during applications within an AEZ, and regulatory text is found at §§170.405(a)(2), 170.505(b) and 170.601(a)(1), respectively. However, EPA has revised the definition to clarify that exclusion is the general rule, to which there are exceptions.

b. *Easements.* i. *Current rule and proposal.* Under the current rule, there is no definition or exception associated with easements. EPA proposed to allow applications to be made or resume while persons not employed by the establishment are present on easements that may exist within the boundaries of agricultural establishments, because, depending on the terms of the easement, the owner or agricultural employer may be unable to control the movement of people (*e.g.*, utility workers) within an easement. The proposal to address people not employed by the establishment who are in an area subject to an easement (*e.g.*, utility workers) provides regulatory relief to handlers and agricultural employers and may prevent disruptions to pesticide applications. Despite this proposed change, EPA did not define the meaning of an “easement.”

ii. *Comment and Response.*

Comment. One commenter stated that adding the exception to the AEZ beyond the boundary of the establishment where handlers do not have the ability to control the movement of people off the establishment or within easements allows a more reasonable approach on shared property. However, the commenter felt that without a definition of “easement”, the interpretation of such is left up to each state or historical elucidation. The commenter stated that “easement” is commonly defined as “a nonpossessory right to use and/or enter onto the real property of another without possessing it,” which allows some relief of the AEZ requirements along utility or roadway rights-of-ways that are clearly an “easement.” However, there is the challenge of unintentional consequences if the term is not defined on properties such as driveways, access

roads, etc. A definition of “easement” should be added to clarify exactly how EPA is defining “easement” to ensure consistency in the interpretation of the rule.

EPA Response. EPA’s intention for the easement exception was to recognize that some persons may have a legal right to be on parts of an agricultural establishment independent of the agricultural employer’s control, and for their presence not to be an insurmountable obstacle to pesticide application provided the pesticide could be applied without contacting such persons. Whether a person has such a legal right is a matter of state law, so it seems inappropriate for EPA to try to impose a national definition of “easement” in the WPS. EPA agrees that the commenter’s definition of “easement” is a common definition; however, EPA does not think that including it in the rule would substantially aid in interpretation or implementation.

2. Making the AEZ Based on Wind Direction. a. Current rule and proposal. Under the current rule, for aerial, air blast, fumigations, mists, and foggers, as well as ground applications with fine or smaller droplet sizes (less than 294 microns VMD), the AEZ area encompasses 100 feet from the application equipment in all directions. For ground applications with medium or larger droplet sizes (VMD greater than 294 microns) and a spray height of more than 12 inches from the ground, the area encompasses 25 feet from the application equipment in all directions. For all other applications, there is no AEZ.

In the proposed rule, EPA proposed to limit the criteria for 100-foot AEZ distances for outdoor production to pesticide applications made by any of the following methods: (1) Aerially; (2) by air blast or air-propelled applications; or (3) as a fumigant, smoke, mist, or fog. Additionally, the proposal set to establish a 25-foot AEZ for all sprayed applications made from a height greater than 12 inches from the soil surface or planting medium, and no longer differentiate between sprayed applications based on the droplet size of 294 microns or other

factors for setting different AEZ distances for outdoor production.

b. *Comments and Responses.*

i. *Comments.* Three commenters recommended improving implementation of the AEZ without compromising the safety of workers by making the AEZ based on wind direction. These commenters suggest that the AEZ should only apply to the downwind side of the applicator as drift only moves downwind. They argued that, for example, aerial applicators have the tools necessary to provide immediate onsite wind direction measurement so if wind direction does change during the application they can respond immediately. The commenters indicated that the labels for some products are reflective of this concept and offer evidence supporting the concept of buffer zones based on wind direction and believe this same logic should also be applied to the AEZ.

ii. *EPA Response.* EPA disagrees with this recommendation, as it would make the requirements of the AEZ more complex rather than less. This recommendation could also lead to workers being placed too close to applications based on wind direction, resulting in potential pesticide exposures with sudden shifts in wind direction during application. By maintaining an omnidirectional AEZ (*i.e.*, an AEZ around the application equipment in all directions), the AEZ will provide a margin of security against changes in wind direction for those on the establishment who may be near the ongoing application but are not properly trained and equipped handlers participating in the application.

3. *Recommendation to Reduce Redundancy.* a. *Comment.* One commenter suggested the following change presented in the proposal to make the final rule text less redundant:

- In 40 CFR 170.505(b)(1), remove “, other than an appropriately trained and equipped handler involved in the application,” because this language was repeated in the proposed text at

40 CFR 170.505(b)(1)(i).

b. *EPA Response.* EPA agrees with the commenter and has removed, “other than an appropriately trained and equipped handler involved in the application” from the final regulatory text in 40 CFR 170.505(b)(1) since it is repeated in 40 CFR 170.505(b)(1)(i).

Additionally, while not explicitly mentioned in any public comment, EPA has made a similar edit from the proposed to final rule to remove the redundant text, “...within the boundaries of the agricultural establishment...,” in 40 CFR 170.501(3)(xi) since that clarification is previously stated in the sentence.

VI. 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.

VII. References

The following is a listing of the documents that are specifically referenced in this 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 Revisions; Final Rule. *Federal Register*. 80 FR 67496, November 2, 2015 (FRL-9931-81).

2. EPA. Pesticides; Agricultural Worker Protection Standard; Revision of the Application

Exclusion Zone Requirements; Proposed Rule. *Federal Register*. 84 FR 58666, November 1, 2019 (FRL-9995-47).

3. EPA. Cost Analysis for Revisions to the Application Exclusion Zone in the Worker Protection Standard. 2020.

4. U.S. Senate. S. Rep. No. 92-883 (Part II), 92nd Congress, 2nd Session at 43-46 (1972). U.S. Code Congressional and Administrative News 1972, p. 4063.

5. North Carolina Department of Agriculture and Consumer Services (NCDA&CS). Letter from James W. Burnette, Jr., Director NCDA&CS, to James J. Jones, Assistant Administrator, OCSPP. December 4, 2015.

6. 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?D=EPA-HQ-OPP-2017-0543-0007>.

7. AAPCO. Letter from Dennis W. Howard, President, to Jack Housenger, Office Director, Office of Pesticide Programs. August 17, 2016. Available online at https://aapco.files.wordpress.com/2016/11/letter-to-jack-housenger-wps_aez.pdf.

8. NASDA. Letter from Nathan Bowen, Director, Public Policy, to Administrator Gina McCarthy. November 16, 2016. Available online at <https://www.nasda.org/letters-comments-testimony/nasda-letter-requesting-extension-for-worker-protection-standard-implementation-timeline>.

9. EPA. Reference List of Public Comments Regarding the Worker Protection Standard Submitted to Docket EPA-HQ-OA-2017-0190. List available at <https://www.regulations.gov/document?D=EPA-HQ-OPP-2017-0543-0005>.

10. EPA. Transcript from PPDC Meeting on May 4, 2017. Available online at

<https://www.epa.gov/sites/production/files/2017-07/documents/may-4-2017-ppdc-meeting-transcript.pdf>.

11. EPA. Transcript from PPDC Meeting on November 2, 2017. Available online at *<https://www.epa.gov/sites/production/files/2018-01/documents/november-2-2017-ppdc-meeting-transcript.pdf>*)

12. EPA. Worker Protection Standard Application Exclusion Zone Requirements: Updated Questions and Answers. February 15, 2018. Available at *<https://www.regulations.gov/document?D=EPA-HQ-OPP-2017-0543-0008>*.

13. EPA. Pesticides; Agricultural Worker Protection Standard; Revision of the Application Exclusion Zone Requirements; Response to Comments on the Proposed Rule. 2020.

14. EPA, Office of Inspector General, EPA Needs to Evaluate the Impact of the Revised Agricultural Worker Protection Standard on Pesticide Exposure Incidents, Report No. 18-P-0080 (Feb. 15, 2018) (“OIG Report”). Available online at *https://www.epa.gov/sites/production/files/2018-02/documents/_epaoig_20180215-18-p-0080.pdf*.

15. EPA. How to Comply with the 2015 Revised Worker Protection Standard for Agricultural Pesticides: What Owners and Employers Need to Know. 2016.

16. EPA. Inspection Manual: Worker Protection Standard Inspection Manual. 2018.

17. EPA. Economic Analysis of the Agricultural Worker Protection Standard Revisions. September 2015 (RIN 2070-AJ22). Available at *<https://www.regulations.gov/document?D=EPA-HQ-OPP-2011-0184-2522>*.

18. Association of Farmworker Opportunity Programs (AFOP). *2019 Training Data Report*. AFOP, Farmworker Health & Safety Programs report developed with EPA grant

#83597001, Occupational Safety and Health Administration Susan Harwood Training Program Funds grant #SH-05004-SH, and W.K. Kellogg Foundation grant #P3033500. January 2020.

19. Felsot *et al.* Agrochemical Spray Drift; Assessment and Mitigation—A Review, 46 J. Envntl. Sci. Health Part B 1. 2010. Provided in comment by Earthjustice *et al.*

20. Kasner *et al.*, Spray Drift from a Conventional Axial Fan Airblast Sprayer in a Modern Orchard Work Environment, 62 Annals of Work Exposures and Health 1134. 2018. Provided in comment by Earthjustice *et al.*

VIII. FIFRA Review Requirements

Under FIFRA section 25, EPA has submitted a draft of the final rule to the Secretary of the Department of Agriculture (USDA), the FIFRA Scientific Advisory Panel (SAP), and the appropriate Congressional Committees. USDA reviewed the draft final rule during the interagency review mentioned in Unit IX.A. and waived further review on October 7, 2020. Since there are no science issues warranting review, the FIFRA SAP waived a detailed review on October 12, 2020.

IX. 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 13563: Improving Regulation and Regulatory Review

This action is a significant regulatory action that was submitted to the Office of Management and Budget (OMB) for review under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011). Any changes made in response to OMB recommendations have been documented in the docket. EPA prepared a cost analysis

associated with this action, which is briefly summarized in Unit I.E. and is available in the docket (Ref. 3).

B. Executive Order 13771: Reducing Regulations and Controlling Regulatory Costs

This action is a deregulatory action as specified in Executive Order 13771 (82 FR 9339, February 3, 2017). The EPA cost analysis associated with this action is briefly summarized in Unit I.E. and is available in the docket (Ref. 3).

C. Paperwork Reduction Act (PRA)

This action does not impose any new information collection burden under the PRA, 44 U.S.C. 3501 *et seq.* OMB has previously approved the information collection activities contained in the existing regulations and has assigned OMB control number 2070-0190. This rule does not impose or modify any information collection burdens because the AEZ requirements are not associated with any information collection activities that require approval under the PRA.

D. 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.* In making this determination, the impact of concern is any significant adverse economic impact on small entities. An agency may certify that a rule will not have a significant economic impact on a substantial number of small entities if the rule relieves burden or has no net burden on the small entities subject to the rule. The changes to the AEZ requirements in this rule will reduce the impacts on all entities subject to the rule, so there are no significant impacts to any small entities. EPA has therefore concluded that this action will relieve regulatory burden for all directly regulated small entities.

E. Unfunded Mandates Reform Act (UMRA)

This action does not contain an unfunded mandate as described in UMRA, 2 U.S.C.

1531-1538, and does not significantly or uniquely affect small governments. The rule requirements will primarily affect agricultural employers and commercial pesticide handler employers. This action is also expected to be a burden-reducing action because removing the requirements should reduce the complexity of arranging and conducting a pesticide application. The cost analysis associated with this action is briefly summarized in Unit I.E. and is available in the docket (Ref. 3). As such, the requirements of sections 202, 203, 204, or 205 of UMRA, 2 U.S.C. 1531-1538, do not apply to this action.

F. Executive Order 13132: Federalism

This action does not have federalism implications as defined 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.

G. 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 any effect on tribal governments, on the relationship between the Federal Government and the Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes. There are no costs to Tribes associated with these changes because the WPS is implemented through the pesticide label, so changes to the regulation do not impose any new obligations on the part of Tribes. Thus, Executive Order 13175 does not apply to this action.

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

This action is not subject to Executive Order 13045 (62 FR 19885, April 23, 1997),

because it is not economically significant as defined in Executive Order 12866, and because EPA does not believe the environmental health or safety risks addressed by this action present a disproportionate risk to children. This determination is discussed in more detail in Unit IV.F.

I. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution or Use

This action is not a “significant energy action” as defined in Executive Order 13211 (66 FR 28355, May 22, 2001), because it is not likely to have a significant adverse effect on the supply, distribution, or use of energy.

J. National Technology Transfer and Advancement Act (NTTAA)

This rulemaking does not involve technical standards that would require Agency consideration under NTTAA section 12(d), 15 U.S.C. 272.

K. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

EPA believes that this action does not have disproportionately high and adverse human health or environmental effects on minority populations, low-income populations and/or indigenous peoples, as specified in Executive Order 12898 (59 FR 7629, February 16, 1994). A more detailed discussion of this determination is provided in Unit IV.F.

L. Congressional Review Act (CRA)

This action is subject to the CRA, 5 U.S.C. 801-808, 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, nurseries, pesticides, pesticide handler, worker protection standard.

Andrew Wheeler,

Administrator.

Therefore, for the reasons set forth in the preamble, 40 CFR chapter I, subchapter R is amended as follows:

PART 170--[AMENDED]

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

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

§ 170.305 Definitions.

2. Amend § 170.305 by revising the definition of *Application exclusion zone* to read as follows:

* * * * *

Application exclusion zone means the area surrounding the point(s) of pesticide discharge from the application equipment that must generally be free of all persons during pesticide applications.

* * * * *

3. Amend § 170.405 by revising paragraphs (a)(1)(i) and (ii) and (a)(2) 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.

(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 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) Persons not employed by the establishment in an area subject to an easement that prevents the agricultural employer from temporarily excluding those persons from that area.

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

* * * * *

4. 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 within the boundaries of the agricultural establishment 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, persons not employed by the establishment in an area subject to an easement that prevents the agricultural employer from temporarily excluding those persons from that area, and the owner(s) of the agricultural establishment and members of their immediate families who remain inside closed buildings, housing, or shelters on the establishment, 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 § 170.505 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) that is within the boundaries of the agricultural establishment or the area specified in column B of the Table in § 170.405(b)(4), except for:

- (i) Appropriately trained and equipped handlers involved in the application,
- (ii) Persons not employed by the establishment in an area subject to an easement that

prevents the agricultural employer from temporarily excluding those persons from that area, and

(iii) The owner(s) of the agricultural establishment and members of their immediate families who remain inside closed buildings, housing, or shelters on the establishment, 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) that is within the boundaries of the agricultural establishment or the area specified in column B of the Table in § 170.405(b)(4), except for:

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

(ii) Persons not employed by the establishment in an area subject to an easement that prevents the agricultural employer from temporarily excluding those persons from that area, and

(iii) The owner(s) of the agricultural establishment and members of their immediate families who remain inside closed buildings, housing, or shelters on the establishment, 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.

* * * * *

6. 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 on the establishment. 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 on the establishment, 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 on the establishment.

(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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