

**COMMENTS OPPOSING EPA'S PROPOSED RULE
TO AMEND THE APPLICATION EXCLUSION ZONE PROVISIONS
IN THE WORKER PROTECTION STANDARD**

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My name is William Jordan. I am submitting these comments on behalf of the [Environmental Protection Network](http://environmentalprotectionnetwork.org) (EPN). EPN is an organization comprised of almost 500 U.S. Environmental Protection Agency (EPA) alumni volunteering their time to protect the integrity of EPA, human health and the environment. We harness the expertise of former EPA career staff and confirmation-level appointees to provide insights into regulations and policies proposed by the current administration that have a serious impact on public health and environmental protections. I am one of EPN's volunteers, and, like many others in EPN, I served at EPA for many years in Republican and Democratic administrations. I worked both in EPA's Office of General Counsel and in the Office of Pesticide Programs (OPP), where I ended my federal career as the Deputy Office Director for Programs.

On November 1, 2019, EPA published a notice of proposed rulemaking to amend selected provisions of EPA's Worker Protection Standard (WPS), 40 CFR part 170. 84 Fed. Reg. 58,666 – 58,674. Specifically, the proposal would weaken the existing provisions that collectively created what the WPS refers to as an Application Exclusion Zone (AEZ). The proposal would amend provisions in 40 CFR 170.405, .501, .505, and .601. For the reasons explained below, EPN opposes most elements of this proposal.

1. The Statutory Standard for Rules Affecting Pesticide Use

EPA regulates pesticides under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), 7 U.S.C. 136 et seq. With certain limited exceptions, it is illegal to sell or distribute a pesticide product unless EPA has issued a registration for the product. FIFRA sec. 12(a)(1)(A); 7 U.S.C. 136j(a)(1)(A). FIFRA establishes a standard for judging whether EPA may register a pesticide; the agency may register a pesticide only if it finds that use of the pesticide will not cause “unreasonable adverse effects on the environment.” FIFRA sec. 3(c)(5)(C) and (D); 7 U.S.C. 136a(c)(5)(C) and (D). FIFRA sec. 2(bb) defines the phrase, “unreasonable adverse effects on the environment” to mean “any unreasonable risk to man or the environment, taking into account the economic, social, and environmental costs and benefits of the use of any pesticide . . .” 7 U.S.C. 136(bb). In short, the test for approving a registration is whether the benefits of using a pesticide outweigh the risks.

The EPA's registration authorizes the sale and distribution of a pesticide with a specified composition, packaging, and labeling. Pesticide product labeling, in particular, is critically important because the labeling contains information considered necessary by EPA for the product to be used safely and effectively. Labeling typically contains use directions detailing when, where, and how the pesticide may be used, as well as warnings and requirements designed to mitigate the potential for the pesticide to harm people or the environment. Importantly, FIFRA also makes it a violation to use a registered pesticide in a manner inconsistent with its labeling. FIFRA sec. 12(a)(2)(G); 7 U.S.C. 136j(a)(2)(G). Thus, labeling becomes the

primary regulatory mechanism through which EPA ensures that use of registered pesticides will not cause “unreasonable adverse effects on the environment.”

FIFRA also authorizes EPA to prescribe regulations “to carry out the provisions” of the statute. FIFRA sec. 25(a)(1); 7 U.S.C. 136w(a)(1). While the agency has used its statutory rule-making authority to establish requirements relating to the registration process and other administrative functions, on occasion EPA has also used rulemaking to impose broad requirements directly affecting the use of pesticides. The Worker Protection Standard is the most obvious example of such rules. A regulation imposing requirements on pesticide use is necessarily one that carries out the registration mandate to ensure that pesticide use does not cause “unreasonable adverse effects on the environment.” Therefore, under FIFRA secs. 3 and 25, EPA must show that a rule affecting pesticide use will maintain or improve the balance of benefits and risks for the affected pesticides. Any rule that leads to a less favorable balance of risks and benefits from pesticide use would be illegal.

2. Background: The 1992 WPS’s “Do Not Spray People” Provision

In 1992, EPA promulgated the Worker Protection Standard to provide additional protections for the groups of people who receive the highest levels of pesticide exposure – workers who mix, load, and apply pesticides and those who work on agricultural sites that have been treated with pesticides. Among other requirements, the 1992 WPS included a provision that prohibits pesticide application in a way that contacts any person who is not engaged in the application (hereinafter referred to as either the “do not spray people” or “do not contact” provision). 40 CFR 170. 505(a). The fundamental purpose of the “do not spray people” provision is to protect people from receiving unsafe levels of exposure to pesticides. Pesticide applications involve the highest levels of release of a pesticide into the environment allowed by the pesticide labeling. Consequently, anyone who is directly sprayed or sprayed by a drifting pesticide will experience far more exposure than individuals receive in any other situation.

The “do not spray people” provision applies no matter whether the person is on or outside of the agricultural establishment where the pesticide is being applied. See *Id.*; EPA guidance at: <https://www.epa.gov/sites/production/files/2018-02/documents/aez-qa-fact-sheet-final.pdf>. It is critical that pesticide users comply with the “do not spray people” provision because EPA’s assessments of pesticide products assume that pesticide applications will not result in such exposures. 80 Fed. Reg. 67,521. EPA recognizes the necessity of the “do not spray people” provision in its current proposed rulemaking, describing it as part of “safe application practices to protect agricultural workers and bystanders from pesticide exposure through drift.” 84 Fed. Reg. 58,667. In fact, if EPA were to consider the risks of being sprayed directly, it is likely that the large majority of pesticide use patterns would be deemed to pose risks that outweigh their benefits.

3. Background: EPA’s Existing AEZ Requirements

The existing AEZ provisions, which were proposed in 2014, were finalized in 2015, and took effect January 2, 2018, are designed to reinforce the long-standing “do not spray people” provision. The AEZ provisions direct a pesticide applicator to “suspend” application if there is a person who is close enough to the

application equipment, i.e., within a defined “application exclusion zone.” By temporarily stopping, any such person has time to move far enough away to avoid being sprayed. In addition, the AEZ provisions require the agricultural employer to ensure that workers do not enter the AEZ.

The agency had one compelling reason to add the AEZ provisions: the “do not spray people” provision, by itself, did not provide adequate protection for agricultural workers and bystanders. In addressing public comments on the 2014 proposal claiming that the existing “do not spray people” provision provided adequate protection, EPA stated: “EPA disagrees with the assertion that the ‘do not contact’ requirements, along with the other protections on pesticide labels, are by themselves sufficient to protect workers and bystanders from being directly contacted by pesticides that are applied.” 80 Fed. Reg. 67,521. In short, despite the 1992 rule prohibiting applications that resulted in contact with people, too many people were getting sprayed. And, more importantly, these incidents often resulted in illnesses, visits to health care providers, and missed work days by the affected individuals and imposed significant financial costs on them and society. See EPA’s Economic Analysis of the Agricultural Worker Protection Standard Revisions available at: <https://www.regulations.gov/document?D=EPA-HQ-OPP-2011-0184-2522>

EPA relied on multiple types of evidence to support this conclusion:

- EPA cited a study that looked at pesticide poisoning data from only 11 states over a nine-year period (1998 – 2006). 80 Fed. Reg. 67,520-21. *Lee, S-J; Mehler, L; Beckman, J; Diebolt-Brown, B; Prado, J; Lackovic, M; et al. “Acute Pesticide Illnesses Associated with Off-Target Pesticide Drift from Agricultural Applications.” Environ. Health Perspect.* 119:1162–1169. 2011. The researchers examined over six thousand cases of unintentional pesticide exposures in agriculture and found that nearly half (47%) of exposures resulted from pesticide drift. *Id.* The same researchers determined that 85% - 93% of the cases involved violation of federal and/or state regulations.¹ *Id.*
- Based on a careful analysis of incident data, EPA concluded that the second largest category of WPS violations was the illegal spraying of individuals who were not involved in making a pesticide application. (The leading category of violations was failure to post certain required paperwork.) See EPA’s Economic Analysis of the Agricultural Worker Protection Standard Revisions available at: <https://www.regulations.gov/document?D=EPA-HQ-OPP-2011-0184-2522> These unlawful spray incidents were clearly highly concerning.
- The agency also noted that many commenters included descriptions of numerous incidents in which people had been sprayed unintentionally. 80 Fed. Reg. 67,521.
- Additionally, EPA included data submitted by a commenter summarizing state reports of hundreds of incidents involving unintentional sprayings. Further, the agency cited a survey in which “about

¹ The authors did not explain how they determined whether an incident involved a violation of federal or state law. By definition, all of these incidents would appear to violate the 1992 “do not spray people” provision.

20% of farmworkers in New Mexico reported . . . that pesticides were applied to fields at the same time that they were working.” Id. at 67,522.

Finally, the agency pointed out that, for a variety of reasons, illegal spray incidents were rarely reported to government authorities. Based on research, EPA estimated that only 10% - 25% of incidents are reported. See EPA’s Economic Analysis of the Agricultural Worker Protection Standard Revisions available at: <https://www.regulations.gov/document?D=EPA-HQ-OPP-2011-0184-2522> Consequently, there was ample basis for concluding that large numbers of people were being exposed to pesticides – illegally and unnecessarily – during applications.

In sum, the available information showed that the “do not spray people” provision, by itself, was not adequate to prevent these incidents involving potentially dangerous levels of pesticide exposures.

The 2015 AEZ provisions establish an area extending horizontally around pesticide application equipment from which persons generally must be excluded during active outdoor pesticide applications. 40 CFR 170.405(a). (The AEZ provisions do not apply to a small subset of people – those who are properly trained and wearing required personal protective equipment while they are engaged in making the pesticide application.) The AEZ provisions require the person operating the equipment (the “applicator” or “handler”) to suspend the application – i.e., to cease the application temporarily. By suspending the application, the applicator allows a person who should not be in the AEZ time to move beyond the AEZ and thereby to avoid being sprayed.

According to the 2015 final rule, the AEZ follows the movements of the equipment involved in the pesticide application. As the equipment moves, so too does the AEZ. The size of the AEZ is expressed as a distance from the application equipment, and the distance is either 25 or 100 feet, depending on the method of application.² (EPA selected the distance for each method of application based on its experience modeling pesticide drift; a person who is within the AEZ specified for each method would have a very high likelihood of being sprayed.) The AEZ area encompasses 100 feet from the application equipment in all directions for aerial, air blast, fumigation, misting, and fogging applications, as well as ground spray applications made with a “fine” or smaller droplet size. For ground applications with “medium” or larger droplets applied more than 12 inches from the ground, the area is 25 feet in all directions from the application equipment. 40 CFR 170.405(a)(1). For all other types of application methods, there is no AEZ. Id.

EPA’s 2015 rule made clear that the AEZ for outdoor applications, like the “do not spray people” provision, extended beyond the boundaries of the establishment where the pesticide was being applied. Again, EPA had multiple reasons for this choice. First, the agency noted that the “do not spray people” provision applied no matter where the person was located – on or off the establishment. Since the agency had decided that some additional measure was needed to promote compliance with that provision, EPA logically chose to make the AEZ protection extend beyond the boundaries of the establishment as well. 80 Fed. Reg. 67,524. Second, the agency examined the incident reports described in public comments and found that only one of 17 incidents potentially would have been avoided if the AEZ were limited solely to land within the boundaries of the establishment where the pesticide was being applied. By making the AEZ applicable outside the establishment, however, EPA found that four and possibly as many as 12 of the 17

² Product-specific labeling directions requiring a larger AEZ would supersede the general requirements in the WPS.

incidents could have been avoided – an improvement from only 6% of incidents avoided to between 24% and 71%. These data and analyses show that the larger AEZ is needed to fulfill the goal of protecting people from being sprayed unintentionally.

As a complement to the provision requiring an applicator to suspend spraying, the final 2015 rule 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. 40 CFR 170.405(a)(2). For example, employers and applicators have to ensure that workers in adjacent fields or buildings within their establishment move out of an AEZ as the pesticide application equipment passes.

EPA carefully considered the costs and benefits of the new AEZ provisions. The agency concluded that the AEZ provisions would yield benefits in terms of a reduced number of illegal sprayings. At the same time, EPA found that the costs of compliance – briefly stopping an application to allow an individual to move away from the application equipment – would be negligible. 84 Fed. Reg. 67,525. In EPA’s view, the expected benefits easily exceeded the negligible costs imposed. Thus, by imposing the AEZ requirement on all agricultural pesticide applications, EPA was not only consistent with, but required by the statutory mandate to prevent “unreasonable adverse effects on the environment.” See FIFRA secs. 3, 25; 7 U.S.C. sec. 136a, 136w.

In sum, despite a long-standing requirement to ensure that pesticide applications do not contact people, EPA found the number of people being sprayed unintentionally appeared excessive and avoidable. Consequently, EPA decided to add a provision to the WPS that expressly required applicators to follow the simple and easy steps necessary to avoid such incidents.

4. Overview of EPA’s Proposed Amendments to the AEZ Provisions

The proposal would not remove the AEZ provisions in their entirety, but it would significantly dilute the protections the AEZ provisions now provide. The proposal would make five major changes to the current WPS protections. Briefly, in the order discussed in the preamble, they are:

- 1] The AEZ would not extend beyond the borders of the property on which the application is being made, thereby diminishing protections for bystanders.
- 2] A change would clarify when an applicator may resume a suspended application.
- 3] The requirement to suspend application would not apply if the person within the AEZ is entitled to be present on the property pursuant to an easement affecting the property, thereby diminishing protections for bystanders.
- 4] The AEZ would be eliminated or its size would be reduced by more than 90% for certain common ground spray applications, thereby diminishing protection for anyone near those applications.
- 5] The requirement to suspend application would not apply if the person within the AEZ is a member of the “immediate family” of the property owner, thereby diminishing protections for bystanders.

I oppose all of these proposed changes, with the exception of the amendment to clarify when an applicator could resume applying a pesticide after suspending application due to the presence of a person within the AEZ. Each of these is discussed in detail, followed by a general analysis of the totality of the proposal.

5. Limiting the AEZ Only to the Boundaries of the Agricultural Establishment

The rulemaking proposes to revise the AEZ provision so that it does not apply when a person is outside of the agricultural establishment, even though the person is otherwise within the AEZ and thus, close enough to the application equipment to be sprayed. The preamble explains that the “change would bring the pesticide handlers’ duty to suspend applications in 170.505(b) in line with the agricultural employers’ duty to exclude persons from the AEZ in 170.405(a)(2) so the two requirements are more consistent.” 84 Fed. Reg. 58,669. The consequence of this change, EPA explained, is that “the handler/applicator would not be responsible for implementing AEZ requirements off the establishment, where he/she lacks control over persons in the AEZ.” EPA also proposed to make changes in the requirements for handler training to reflect the more limited scope of the AEZ.

EPA offered several reasons for the proposed change. First, an applicator has no control over a person who is outside of the agricultural establishment. *Id.* Second, EPA explains that “extending the AEZ boundary beyond the agricultural establishment is confusing and unnecessary.” *Id.* Third, EPA contends that “the ‘do not contact’ provision provides the more appropriate and enforceable regulatory mechanism to protect workers on nearby establishments and other people/bystanders that may be off the agricultural establishment but in close proximity to agricultural pesticide applications.” *Id.* Lastly, EPA asserts that “the costs of including off the establishment areas in the AEZ do not outweigh the minimal benefits of including the additional area in the AEZ.” *Id.*

None of these arguments stands up to close examination.

- First, 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. 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. An applicator should (and the current AEZ provision would require him/her to) suspend the application to give such individuals a chance to move away. Restricting the AEZ only to the land within the agricultural establishment would significantly diminish the protection for bystanders. Further, the notion that it is worthwhile 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. The applicator typically works for the agricultural employer, and each would need training on the different duties imposed.
- Second, extending the AEZ beyond the boundary of the establishment is both necessary and not confusing. It is necessary that the AEZ apply beyond the agricultural establishment because it protects people who might otherwise be sprayed with a pesticide. In fact, EPA’s own analysis, reported in the 2015 rule and not disputed in this proposal, indicates that making the AEZ apply outside the boundaries of the agricultural establishment would potentially reduce unintended spray incidents four- to ten-fold. (See section 3 of these comments.) EPA provides no rationale for why maintaining such a significant increase in protection is “unnecessary.” Moreover, it is hard to see how the proposed change would reduce confusion. Limiting the scope of the AEZ to the property of the agricultural establishment means that at certain points on the establishment, the size and

shape of the AEZ will change with the movement of the application equipment. In fact, EPA summarized (with apparent approval) a public comment that “a regulatory requirement to keep individuals out of varying widths of areas surrounding treated areas seems difficult . . . to implement” 84 Fed. Reg. 58,669. Common sense is that it is less confusing for the AEZ to have a consistent shape and size.

- Third, EPA’s administrative record and more recent examples show that many of the incidents in which people have reported being illegally sprayed involve people who are outside the boundaries of the establishment. For example, the Fresno Bee has published articles about two drift incidents that resulted in exposures of 54 and 63 workers on sites near farms where pesticides were being sprayed. See “Chemical exposures in California’s vast cropland spark fear for growers and workers,” <https://www.fresnobee.com/news/local/article234705742.html> EPA has argued there are “minimal benefits” from including these off-farm areas, but the agency has made no effort to quantify the benefits of the avoided risks. The administrative record of the 2015 rule, in contrast, suggests that applicators’ compliance with an AEZ provision likely could have prevented over half of reported spray incidents examined.
- Lastly, describing the impacts of the 2015 AEZ provision, the 2019 preamble states: that “the costs of including off the establishment areas in the AEZ do not outweigh the minimal benefits of including the additional area in the AEZ.” 84 Fed. Reg. 58,669. (emphasis added). I agree; since the benefits (whether minimal or substantial) outweigh the costs of the larger AEZ, EPA has effectively made the case for retaining the AEZ provision as promulgated in 2015. If, however, EPA meant to claim that the costs of a larger AEZ do outweigh its allegedly “minimal” benefits, this is plainly incorrect. The agency’s own 2015 analysis of the benefits of applying the AEZ protections beyond the agricultural establishment’s boundaries indicates the benefits could be substantial. Further, the 2015 rule concluded that the burden on applicators from temporarily suspending application was minimal. In the preamble to its 2019 proposal, EPA claims the “the primary benefit of changing the AEZ requirements is a reduction in the complexity of applying a pesticide.” Id. (The proposal’s benefits presumably correspond to reducing the “complexity” costs of the 2015 AEZ provisions). It is hard, however, 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 constant size and shape. Yet, EPA appears now to be asserting a different conclusion without any effort to explain why it has changed its view of the benefits and costs of maintaining the larger AEZ. In sum, EPA’s 2019 characterization of the costs and benefits of applying the AEZ protections beyond the agricultural establishment’s boundaries is at odds with the unchallenged rationale EPA presented in 2015 to justify the AEZ provision.

The agency also cites public comments in its discussion of the proposal to shrink the size of the AEZ. EPA noted that some comments said it would be “next to impossible for a State to ensure compliance” with the AEZ. Id. Other commenters said the idea of the AEZ was “not proposed” and “not open for public comment” and that “burdens and economic impacts upon agricultural operations and employers were not considered or addressed.” Id. Another comment said that the AEZ requirement could prove problematic if a passing vehicle is within 25 or 100 feet of “the property.” Finally, a comment complained that EPA’s guidance addressing the implementation of the AEZ provision was not sufficiently clear “for growers and the state regulatory agencies to implement the requirement.” Id.

Although EPA did not specifically cite these comments to support the proposal, these comments also fail to justify weakening the protections of the AEZ requirement.

- First, the task of enforcing the AEZ provisions' requirements is not significantly different from enforcing the "do not spray people" provision that EPA claims would provide adequate protection.³ Violations of the AEZ provision can be documented by direct observation, by the testimony of a witness, or by creating a video that can later be analyzed for compliance. (Most smart phones today have the technology to create high-resolution videos, and greater numbers of agricultural workers will own such phones in years to come.) While enforcement of the AEZ may be difficult in some situations, it can still be enforced and enforced easily when state personnel are conducting on-site inspections. Further, even if enforcement is difficult, that does not justify weakening a rule that significantly reduces the risk of unreasonable adverse effects on the environment.
- As for the alleged procedural flaws in EPA's 2015 rulemaking, no person sought judicial review of the adequacy of the agency's process. And, had someone done so, the court likely would have sustained the agency. The administrative record of the 2015 rulemaking clearly shows the AEZ provision was a logical outgrowth of, and conceptually similar to, EPA's initial 2014 proposal of an "entry restricted area" and a direct response to concerns raised by comments on the 2014 proposal.
- Contrary to the public comment objecting to the AEZ, the 2015 rulemaking documents EPA's consideration of the burdens on agricultural operations and employers and found them to be "minimal." See 80 Fed. Reg. 67,525.
- The reference to a "passing vehicle" reflects a misguided elevation of the convenience of uninterrupted applications over the safety of the passengers in passing vehicles. Whether on foot, in a vehicle, or a neighboring building, it is more important that people who are close to a pesticide application be protected from being sprayed than to avoid a brief stoppage in a pesticide application. Moreover, if the vehicle were on the farm and within the AEZ, even the agency's 2019 proposed rule would require the applicator to suspend the pesticide application. It would be arbitrary not to provide the same protection to people in vehicles that are beyond the agricultural establishment.

Finally, EPA proposed to amend the training requirements for pesticide handlers to correspond to the proposed change in the scope of the AEZ. Since the agency lacks sufficient reasons to limit the AEZ provision only to people on the agricultural establishment, EPA should retain the 2015 scope for the AEZ and should not change handlers' training.

³ EPA proposes to restrict the AEZ provisions only to land within the boundaries of the agricultural establishment, because retaining the full scope of the protections "would not address . . . concerns from State and Tribal pesticide regulators with compliance and enforcement issues related to the AEZ applying off the establishment." 84 Fed Reg. 58,670. It strains credulity to think that enforcement and compliance with the AEZ would be harder (and it may actually be more straightforward), if the AEZ encompasses land outside the boundary of the establishment. In fact, Liza Trossbach, the president of the American Association of Pesticide Control Officials (AAPCO), in her comments at the November 2, 2017, meeting of EPA's Pesticide Program Dialogue Committee (PPDC), said state personnel would use the same approach to enforcing the AEZ and "do not contact" provisions. See Transcript of the Pesticide Program Dialogue Committee, pp. 72 - 73 at <https://www.epa.gov/sites/production/files/2018-01/documents/november-2-2017-ppdc-meeting-transcript.pdf> AAPCO is the organization representing the views of the State Lead Agencies responsible for implementing FIFRA at the local level. The PPDC is an advisory committee with members representing a wide range of stakeholder organizations – pesticide companies, user groups, state and tribal regulators, and public interest groups, among others. EPA regularly presents issues to the PPDC to obtain the views of potentially affected stakeholders.

6. Clarification of When an Applicator May Resume a Suspended Application

The preamble of the proposal states it is intended to correct a purported ambiguity in the 2015 rule seen by some commenters – namely, whether and when an application may resume after it has been suspended due to the presence of a person within the AEZ. (Some public comments went so far as to allege that the AEZ provisions could be understood to bar permanently any pesticide applications within 100 feet of an unoccupied structure.⁴) Although EPA issued guidance making clear that the AEZ provision only required the temporary cessation of an application, comments alleged that neither pesticide applicators nor state enforcement personnel could rely on EPA’s guidance.⁵ Consequently, EPA decided it should issue an amended rule to make the position stated in the guidance legally binding. The proposal would add a provision to the regulation stating that the application could resume when no person is within the AEZ, except people who are permitted by the regulation to be there.

This limited portion of the proposal seems reasonable. As EPA’s preamble to the proposed rule notes, the agency “never envisioned that the AEZ requirement would lead to an application being suspended permanently . . .” While the notion that the cessation of the application was not permanent is implicit in the 2015 requirement to “suspend” application (and was confirmed by EPA’s guidance), there is no reason not to make the notion explicit.

In addition to making this clarification, however, the proposal would also amend the rule to allow the following additional groups of people to remain in an AEZ during an application: 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. I oppose these two changes and discuss them in sections 7 and 9 of these comments.

7. Exclusion from AEZ Protections of People Working on an Agricultural Establishment Pursuant to an Easement

The proposal contains a provision that would allow a pesticide application to proceed uninterrupted, despite the presence of a person within the AEZ, if the person is in an area subject to an easement that would otherwise prevent the agricultural employer from excluding the person. EPA lists as examples of such easements utility workers servicing wind or solar energy equipment, others working on gas or electricity

⁴ This reading of the regulation apparently arose from a mistaken belief that the AEZ provision prohibited any pesticide application if there was a temporary, uninhabited structure within 100 feet of the application equipment, or indeed the agricultural establishment. As the Pennsylvania Farm Bureau explained its understanding: “As finalized, the AEZ goes beyond the Agency stated intent . . . prohibiting appropriate pest mitigation activities if there is any kind of structure, permanent or otherwise, inhabited or vacant within one hundred feet of the agricultural establishment.” See <https://www.regulations.gov/document?D=EPA-HQ-OA-2017-0190-63424> p. 2 (emphasis added). Such a conclusion is an almost willful distortion of the plain meaning of the rule text in 40 CFR 170.505(b), which states: “After January 1, 2018, the handler performing the application must immediately suspend a pesticide application if any worker or other person, other than an appropriately trained and equipped handler is in the application exclusion zone described in Section 170.405(a)(1).”

⁵ It should be noted that Liza Trossbach, the President of AAPCO, considered the EPA guidance clear and sufficient. See Transcript of the Pesticide Program Dialogue Committee, p. 72 at <https://www.epa.gov/sites/production/files/2018-01/documents/november-2-2017-ppdc-meeting-transcript.pdf> See note 3, above.

transmission lines, or people working on a mineral easement. EPA asserts that such easements are more prevalent than the agency recognized when it promulgated the 2015 amendments including the AEZ provision. While that may be correct, EPA offers no data whatsoever on the prevalence of easements on agricultural establishments, much less the frequency with which AEZs overlap easements, or how often they do so when easement workers are present.⁶

The two main assertions justifying this proposed change contradict, without evidence or explanation, EPA's original rationale for the AEZ.

- First, the agency says it is sufficient to rely on the “do not spray people” provision to provide protection for easement workers. In 2015, however, EPA expressly concluded that the “do not spray people” provision was inadequate and therefore additional protection was needed. The agency fails to show why easement workers would be adequately protected when EPA data showed that, prior to 2015, thousands of illegal spraying incidents were occurring under the “do not spray people” rule.
- Second, EPA says its goal is to provide “regulatory relief to handlers and agricultural employers and [to] prevent pesticide applications from being disrupted.” 84 Fed. Reg. 58,670. The agency's proposal repeatedly notes that agricultural employers and applicators may lack the authority to order easement workers to move outside the AEZ, implying that, perhaps, the easement workers would not be willing to move voluntarily and their uncooperativeness would cause major disruptions. It is clear, however, that the 2015 rule clearly was designed to apply to situations where the agricultural employer could not order people to leave the AEZ. (To protect bystanders, the AEZ extended beyond the boundary of the agricultural establishment.) The purpose of the AEZ was to give people close to an ongoing pesticide application the chance to move away before they are sprayed. This critical protection should remain available regardless of whether the agricultural employer has the authority to control an easement worker's movements. EPA has provided no evidence in its administrative record – and it is simply unreasonable to expect – that easement workers would remain in an AEZ and risk getting sprayed if they were given the opportunity to move 100 feet away from the application equipment. Finally, as EPA has noted, the “do not spray people” provision would remain in effect, and in nearly all situations, an applicator could not spray a pesticide without causing it to contact a person within the AEZ. Thus, the proposed “regulatory relief” would simply encourage illegal and dangerous behavior – the application of a pesticide when a person is within the AEZ.

8. Eliminating or Reducing the Size of the AEZ for Certain Types of Applications

⁶ This proposed change may be intended, in part, to protect the agricultural employer from being found in violation of the 2015 requirement in 40 CFR 170.405(a)(2) to keep workers from being within the AEZ, when the individual is authorized to be in an easement that overlaps with an AEZ. The employer on an agricultural establishment may not have the authority under the terms of the easement to order the easement worker to leave the AEZ. In such a situation, it would arguably be unfair for a regulator to find the employer had violated the requirement in 40 CFR 170.405(a)(2). As long as the requirement to suspend application in 40 CFR 170.505(b) continues to apply when an easement worker is within the AEZ, I would not object to a clarification of 40 CFR 170.405(a)(2) stating that the duty to exclude workers from the AEZ did not apply to individuals who were within both an AEZ and an easement and the terms of the easement prevented the employer of an agricultural establishment from exercising that authority.

EPA's proposal would make several changes to the criteria and factors for determining the size of the AEZ. The most significant change would be to require an AEZ of a single, fixed distance (25 feet) from certain ground spray applications, rather than the current requirement which sets two distances (100 feet or 25 feet) depending on how the pesticide is being sprayed by ground equipment. The proposed change would eliminate or result in dramatically smaller AEZs for many pesticide applications. Specifically, EPA would: 1] eliminate the AEZ for spray applications made with tiny ("fine" or smaller) droplets when released less than 12 inches above the ground, and 2] reduce the size of the AEZ by ~93% for those ground spray applications with tiny droplets released more than 12 inches above the ground. Such applications are quite common and, because of the small droplet size, are among the most prone to drift considerable distances, even in a light wind. EPA also proposes to expand slightly the categories of applications for which a 100-foot AEZ would be required by including applications by air-propelled equipment.

EPA cites several reasons for eliminating and shrinking the size of the AEZ for pesticides sprayed in small droplets by ground equipment: reducing confusion, difficulty in enforcement, and inconsistency of the 2015 rule's criteria with new industry terminology. All of these reasons relate to the distinction in the 2015 rule that required different AEZ distances depending on the size of spray droplets and the release height of the spray. While an applicator will have determined the droplet size of a pesticide spray before beginning an application, it is understandable that applicators could have difficulty determining an exact release height under field conditions, given uneven terrain or plant heights. Such difficulty could cause confusion for applicators and pose problems for enforcement. Thus, 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.

The problem, however, with EPA's proposals – to eliminate the AEZ for spray applications of fine droplets released less than 1 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. EPA has the capability, but failed to analyze, how much and how far a pesticide spray application could be expected to travel. Such an analysis would show that a large percentage of the spray would drift outside a 25-foot AEZ under common weather conditions. EPA's draft also completely ignores the more protective (and equally straight-forward and enforceable) option of setting a standard AEZ of 100 feet for all ground spray applications. Finally, reducing the AEZ distance from 100 to 25 feet shrinks the size of the AEZ from ~ 31,415 square feet to ~ 1,963 square feet, a reduction of ~ 93%.

EPA's 2015 analysis of drift incidents affecting people outside the boundaries of an agricultural establishment (cited in section 3 of these comments) plainly shows that shrinking the size of the AEZ likely would markedly reduce the amount of protection the AEZ provides. EPA fails to explain why this reduction would not significantly undermine the protection provided by the AEZ or why alleged confusion and enforcement concerns should justify such a dramatic decrease. Finally, EPA does not mention, much less evaluate, the alternative option of applying a 100-foot distance to all spray applications. EPA either should make the AEZ for all ground spray applications 100 feet or should leave this portion of the 2015 rule unchanged.

I support the proposed change to expand the category of application methods subject to the 100-foot AEZ.

9. Exclusion from AEZ Protections of Persons Who Are in the "Immediate Family" of the Owner of the Agricultural Establishment

EPA proposes revisions to the AEZ provision so that an applicator does not need to suspend application when only immediate family members of the owner(s) of the agricultural establishment are in the AEZ. The current WPS defines “immediate family” to include: “spouse, children, stepchildren, foster children, parents, stepparents, foster parents, brothers, and sisters” of the owner(s) of the agricultural establishment.

EPA rationalizes this proposed change by citing the “burden” resulting from the requirement on the agricultural employer to make people, who are within a closed building that lies within an AEZ, move outside of the AEZ before an applicator may resume spraying. The burden, according to the proposal, is unreasonable when the people inside the building are immediate family members. (Curiously, the proposal would not extend to situations in which some people within a structure were not members of the owners’ immediate family.) To relieve this alleged burden, EPA proposes to create an exception to the existing AEZ provision for members of the immediate family of the owner(s) of the agricultural establishment.

EPA’s rationale simply is not to support such a sweeping proposal. First, the agency makes no effort to explain why its rationale would justify exempting family members when the family members are outdoors but are within an AEZ. At best, it would justify an exemption only when family members are in a closed building. (As explained below, I support an alternative approach that would address this concern, with fewer disadvantages.) Second, the agency does not explain how its rationale aligns with its earlier justification for exempting family members from certain WPS requirements. When the agency included provisions in the 1992 WPS to exempt family members from certain requirements, EPA explained that it was reasonable because EPA expected 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 about how they provided 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 agency reasoned that such training could and would happen informally (and perhaps better) over time. The protection provided by the AEZ provisions, however, is not like training; it cannot be provided informally, or even adequately, over time. The AEZ provision is only meaningful if the applicator suspends spraying at the moment when someone is too near the application equipment. Exempting family members will only encourage applicators to be less careful in complying with the “do not spray people” provision.

While the proposed exemption for family members is unjustifiably overbroad, EPA’s rationale does raise a valid concern. It seems reasonable that the WPS regulation should not require suspension of an application every time the application equipment passes near a closed, occupied building. But, there is 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 that comes 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 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.

There is a less extreme way to address the problem attributed to the potential presence of people – whether immediate family or not – in buildings that come within an AEZ. EPA should revise its rule to state that the requirement to suspend application does not apply when the only people within an AEZ are inside a closed building. EPA’s draft says, however, that EPA rejected this approach because “it would be complicated to

develop a national regulatory approach in the WPS that would address the many variables across the country . . .” In fact, such an approach does not need to be complicated. There is no need, for example, to address different types of buildings as long as all visible openings by which the pesticide spray could enter the building – e. g., doors and windows – appear closed. Other unnamed “variables” are irrelevant. What matters 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. Such a revision would also eliminate the arbitrary distinction created by the proposal that affords different protections to people in the owner’s immediate family and those who are not. Further, an applicator often could determine more quickly and easily whether he needed to suspend application simply by looking at the exterior of the building, rather than entering the building.

10. The Proposed Rule, Overall, Is Inadequately Justified, Internally Inconsistent, and Illegal

As already indicated, data and analysis supporting the individual elements of the agency’s proposal are virtually non-existent, but its reliance on concerns raised in public comments is also misplaced. EPA’s preamble states that its proposals are responding to comments from key stakeholders including: “the U. S. Department of Agriculture (USDA), State pesticide regulatory agencies and organizations, and several agricultural interest groups” that sought changes to the AEZ provisions. 84 Fed. Reg. 58666. EPA claims the changes also have support in comments from the public collected to develop the administration’s Regulatory Reform Agenda. But, a review of the documents purportedly containing such comments reveals that no one presented any evidence to show that the AEZ provisions were causing problems and needed change. For example, the comments from USDA’s Office of Pest Management Policy on the AEZ read in their entirety: “USDA support revisions to the Worker Protection Standards including the designated representative provision, the application exclusion zone provision, and the definition of a ‘family farm’ . . .” <https://www.regulations.gov/document?D=EPA-HQ-OA-2017-0190-32568> Notably, USDA did not offer reasons for making revisions or even suggest specific modifications or reference any other organization’s changes.

A search of the docket for the Regulatory Reform Agenda [EPA-HQ-OA-2017-0190] for “application exclusion zone” identified 20 distinct, relevant comments, all of which were submitted before May 15, 2017. (See Appendix A.) A typical comment, from the Pesticide Policy Coalition (PPC or Coalition), addressing the AEZ provisions reads:

The Coalition also recommends that EPA amend the final WPS rule to eliminate the Application Exclusion Zone (AEZ). The AEZ created a one-hundred foot buffer surrounding the application equipment that, according to the regulations now in place, extends beyond the agricultural establishment. The AEZ prohibits pest mitigation activities if there is any kind of structure, permanent or otherwise, inhabited or vacant within one hundred feet of the agricultural establishment. Additionally, any individual, structure, or a passing vehicle within one hundred feet of the property can effectively cease the grower’s application activity. This provision unduly burdens state agencies and growers without any additional regulatory benefits. Subsequent to finalization of the WPS rule, EPA’s Office of General Counsel was working to issue interpretive guidance clarifying the EPA’s intent under the final regulation. Guidance does not carry the weight and authority of a codified federal regulation and does not provide the necessary clarity for state agencies tasked with compliance and enforcement

activities, and regulatory certainty for farmers and pesticide applicators. The PPC recommends modifying the final WPS rule to remove the AEZ provision.

Nearly all of the other public comments repeat the substance (and often the exact words) of this comment.

While there were a number of comments, like the PPC comment, asking EPA to revoke the AEZ provisions, it is clear that they were based on misunderstandings of the rule's requirements. Prominent among the comments is the repeated, inaccurate assertion that the AEZ provision prohibits an applicator permanently from resuming the pesticide application if there is a structure within the AEZ. (See section 6, note 4 of these comments.)

EPA's preamble fails to acknowledge, however, that most opposition to the AEZ provisions disappeared when the AEZ rule was clearly explained. The Pesticide Program Dialogue Committee (PPDC, EPA's advisory committee, discussed the AEZ provisions at its November 2, 2017, meeting – over six months after the close of the comment period on the Regulatory Reform Agenda and after several months of EPA's and states' outreach and education efforts. Even though the PPDC included members of organizations that had filed comments on the Regulatory Reform Agenda, no one at the meeting said EPA should delete the AEZ provisions. Several PPDC commenters showed some confusion and misunderstandings, which EPA corrected. Overall, however, the PPDC participants seemed to accept the goal and specifics of the AEZ provisions. The Director of OPP, Rick Keigwin, summarized the PPDC discussion – without objection – as follows: “what . . . I heard from this discussion is that some additional guidance could be useful and there may be some additional scenarios that – in the guidance we've developed to date could be further enhanced and that there's a role that educational programs can play in helping to better explain what this provision is meant to be.” See the transcript of the PPDC meeting at:

<https://www.epa.gov/sites/production/files/2018-01/documents/november-2-2017-ppdc-meeting-transcript.pdf> p. 82.

Moreover, it should be noted that the vast majority (if not all) of the comments cited by the agency were made in advance of the 2018 effective date of the AEZ provision. Thus, none of the comments relied on by EPA could even have provided evidence of actual problems encountered in agricultural activities subject to the AEZ provision. Further, EPA's draft rulemaking provides no data on what has happened during the 2018 and 2019 growing seasons when agricultural producers have had to comply with the AEZ requirements. Thus, the administrative record is woefully lacking in information to characterize the real (as opposed to imagined) impacts of the AEZ provision.

Not only is EPA's rulemaking inadequately supported, but the proposal as a whole is fundamentally illogical and internally inconsistent. Three broad reasons for the proposed changes recur in the preamble: 1] simplifying the rule to reduce “confusion” and “complexity;” 2] reducing regulatory burden, without reducing protection; and 3] narrowing the scope of the AEZ due to concerns about “enforceability.” The actual proposals advanced by EPA do not achieve these goals; rather, they worsen the problems they purport to solve.

- First, rather than “clarifying and simplifying” the AEZ requirements, 84 Fed. Reg. 58666, the proposed changes would make compliance more complex and difficult. Under the existing 2015 rule, the requirement is clear and simple: suspend application if anyone, anywhere is so close to the application equipment that they might be sprayed. Applicators may resume their applications when everyone has moved out of the AEZ, (or, if the people in the AEZ are outside the agricultural

establishment, it is clear they won't be sprayed). With the proposed changes, however, the applicator's decision would become more complex. It would depend not only on the proximity of a person and their risk of being sprayed, but also on whether the person in the AEZ is a family member of the agricultural owner(s), whether the person is working under an easement that does not allow the agricultural employer to control his movement, and whether the person is within the boundaries of the agricultural establishment. Given that the operator of the application equipment is often not likely to have the knowledge to determine exactly who is within the AEZ – much less the person's family relationship with the owner(s); the terms of an applicable easement; or where exactly the person is standing, these exceptions make it considerably more difficult to choose when it would be lawful not to suspend application. The proposed scheme practically invites applicators to make mistakes.

- Second, EPA indicates that the proposed changes are reasonable because the benefits of reduced regulatory “burdens” outweigh any increased risks due to the changes. But EPA provides absolutely no information about how much “burden” is reduced. EPA reasonably concluded in 2015 that suspending application would impose only a minimal regulatory burden, and in its current preamble, the agency offers no new information to alter its 2015 conclusion.⁷ In fact, simple common sense supports the 2015 conclusion: allowing a person within an AEZ to move 25 or 100 feet away from the application equipment would require at most 15 - 45 seconds, assuming the person walks at a slow stroll (~ 3 feet/second = 2 mph). It is impossible to imagine that occasionally suspending a pesticide application for a minute or two would represent a significant regulatory burden. At the same time, by removing potentially large numbers of people from the protections of the AEZ, the regulation would return to the pre-2015 system and would thereby result in the thousands of additional illegal spraying incidents like those already documented by EPA. Finally, it is noteworthy that the people who would lose protection under these changes – easement workers and people outside the agricultural establishment – are some of the least likely to anticipate and be able to avoid being sprayed.
- Third, although EPA asserts that the changes would make the AEZ requirement more “enforceable,”⁸ they would actually make enforcement more complex and more difficult. To enforce the 2015 rule, a regulator would need only to know where an individual was standing in relation to the application equipment and how the pesticide was being applied. Under the current proposal, the enforcement decision – whether an applicator correctly continued application, despite the presence of a person near the application equipment – would also require knowledge of whether a person is a relative of the owner of the agricultural establishment, or is lawfully on an easement and is not subject to the employer's control, as well as exactly where a person was standing in relation both to the application equipment and the boundary of the agricultural establishment. If the proposals were made final, an official investigating an alleged violation of the AEZ requirement would need to collect these additional pieces of information, none of which would be routinely knowable from a

⁷ In fact, EPA approvingly cites the 2015 assessment's conclusion that the overall burden imposed by the AEZ provisions was “negligible.” See 84 Fed. Reg. 58,671.

⁸For example, EPA proposes to restrict the AEZ provisions only to land within the boundaries of the agricultural establishment, because retaining the full scope of the protections “would not address . . . concerns from State and Tribal pesticide regulators with compliance and enforcement issues related to the AEZ applying off the establishment.” 84 Fed Reg. 58,670. This rationale is nonsense; enforcement and compliance are no harder (and may actually be more straightforward), if the AEZ encompasses land outside the boundary of the establishment.

site inspection. In short, EPA's rule changes will make enforcement officials' jobs considerably harder and enforcement less likely to occur.

Finally, a regulation amending the AEZ provisions of the WPS, as proposed by EPA, would be illegal because it would clearly fail to produce a more favorable balance of benefits and risks of using affected pesticides. As explained in section 1, a regulation affecting pesticide use issued under FIFRA sec. 25 must advance the statutory mandate to prevent "unreasonable adverse effects on the environment." As shown repeatedly in the earlier sections, the changes would weaken the protection afforded by the AEZ provisions, thereby significantly increasing the risks to workers and bystanders of unsafe pesticide exposures. The agency never attempts to quantify the purported benefits of the changes. Instead, EPA presents ambiguous, qualitative characterizations, e.g., "Cost savings from the changes are largely in terms of reducing management complexity both on and off the establishment." 84 Fed. Reg. 58666. Yet, far from reducing complexity, the changes increase the complexity for applicators and enforcement personnel. And, notably, common sense and the analysis offered earlier in this section show that the claimed regulatory relief is negligible.

In sum, the individual proposals are poorly justified; the entire proposal is internally illogical; the proposal rests on a virtually nonexistent analytical foundation that is, at best, purely theoretical; and, if finalized, the amendments to the AEZ would be illegal. The bulk of the proposal should be withdrawn until EPA evaluates the real-world, field-level impacts of the AEZ provision.

APPENDIX A – Comments in the Regulatory Reform Agenda docket addressing the Application Exclusion Zone:

1. Comments of the Pesticide Policy Coalition
<https://www.regulations.gov/document?D=EPA-HQ-OA-2017-0190-38731>
2. Comments of the Pennsylvania Farm Bureau
<https://www.regulations.gov/document?D=EPA-HQ-OA-2017-0190-63331>
3. Comments of the North Carolina Department of Agriculture and Consumer Services
<https://www.regulations.gov/document?D=EPA-HQ-OA-2017-0190-46727>
4. Comments of the Illinois Farm Bureau
<https://www.regulations.gov/document?D=EPA-HQ-OA-2017-0190-34839>
5. Comments of the American Farm Bureau Federation
<https://www.regulations.gov/document?D=EPA-HQ-OA-2017-0190-44160> ;
<https://www.regulations.gov/document?D=EPA-HQ-OA-2017-0190-44135> (duplicate)
6. Comments from the Office of Pest Management Policy at the U.S. Department of Agriculture
<https://www.regulations.gov/document?D=EPA-HQ-OA-2017-0190-32568>
7. Comments of the Wyoming Ag-Business Association et al.
<https://www.regulations.gov/document?D=EPA-HQ-OA-2017-0190-41579>
8. Comments of the Kansas Farm Bureau
<https://www.regulations.gov/document?D=EPA-HQ-OA-2017-0190-40790>
9. Comments of the Idaho Farm Bureau
<https://www.regulations.gov/document?D=EPA-HQ-OA-2017-0190-45680>
10. Comments of the Oregon Farm Bureau
<https://www.regulations.gov/document?D=EPA-HQ-OA-2017-0190-32468>
11. Comments of the Tennessee Farm Bureau
<https://www.regulations.gov/document?D=EPA-HQ-OA-2017-0190-36696>
12. Comments of the Colorado Department of Agriculture
<https://www.regulations.gov/document?D=EPA-HQ-OA-2017-0190-36725>
13. Comments of the National Association of State Departments of Agriculture
<https://www.regulations.gov/document?D=EPA-HQ-OA-2017-0190-56233>
14. Comments of the Oregon Association of Nurseries et al.
<https://www.regulations.gov/document?D=EPA-HQ-OA-2017-0190-36727>
15. Comments of the National Agricultural Aviation Association
<https://www.regulations.gov/document?D=EPA-HQ-OA-2017-0190-39568>
16. Comments of the Pennsylvania Farm Bureau
<https://www.regulations.gov/document?D=EPA-HQ-OA-2017-0190-63424>
17. Comments of the Agricultural Retailers Association
<https://www.regulations.gov/document?D=EPA-HQ-OA-2017-0190-49305>
18. An Anonymous comment
<https://www.regulations.gov/document?D=EPA-HQ-OA-2017-0190-2198>
19. Comments of the Georgia Department of Agriculture
<https://www.regulations.gov/document?D=EPA-HQ-OA-2017-0190-32599>
20. Comments of the Iowa Farm Bureau Federation
<https://www.regulations.gov/document?D=EPA-HQ-OA-2017-0190-37762>