

ENVIRONMENTAL PROTECTION AGENCY**40 CFR Part 170**

[OPP-250120; FRL-5598-9]

RIN 2070-AC93]

Pesticide Worker Protection Standard; Glove Requirements

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: EPA is proposing two changes to the Worker Protection Standard (WPS) for agricultural pesticides. First, EPA proposes to allow separable glove liners to be worn beneath chemical-resistant gloves. Second, EPA proposes to delete the requirement that pilots must wear chemical-resistant gloves when entering and exiting aircraft used to apply pesticides. All other WPS provisions about glove liners and chemical-resistant gloves are unaffected by this proposal. EPA believes that these changes will reduce the costs of compliance and will increase regulatory flexibility without increasing potential risks.

DATES: Written comments, identified by docket control number OPP-250120, must be received on or before October 9, 1997.

ADDRESSES: By mail, submit written comments to: Public Information and Records Integrity Branch, Information Resources and Services Division (7506C), Office of Pesticides Programs, Environmental Protection Agency, 401 M St., SW., Washington, DC 20460. In person, bring comments to: Rm. 1132, CM #2, 1921 Jefferson Davis Highway, Arlington, VA.

Comments and data may also be submitted electronically by following the instructions under Unit VII. of this preamble. No confidential business information should be submitted through e-mail.

Information submitted as a comment concerning this document may be claimed confidential by marking any part or all of that information as "Confidential Business Information" (CBI). Information marked as CBI will not be disclosed except in accordance with procedures set forth in 40 CFR part 2. A copy of the comment that does not contain CBI must be submitted for inclusion in the public record. Information not marked confidential may be disclosed publicly by EPA without prior notice. All written comments will be available for public inspection in Rm. 1132 at the address given above, from 8:30 a.m. to 4 p.m.,

Monday through Friday, excluding legal holidays.

FOR FURTHER INFORMATION CONTACT:

Joshua First, Certification and Occupational Safety Branch (7506C), Office of Pesticide Programs, Environmental Protection Agency, 401 M St., SW., Washington, DC 20460. Telephone: 703/305-7437, e-mail: first.joshua@epamail.epa.gov.

SUPPLEMENTARY INFORMATION: Entities potentially regulated by this action are agricultural employers who use pesticides that are regulated by the Worker Protection Standard.

Category	Regulated Entities
Industry	Agricultural employers (farms, greenhouses, nurseries, forestry)

This listing is not intended to be exhaustive, but rather to be a guide for readers regarding entities likely to be regulated by this action. To determine whether or not you are subject to regulation by this action, you should carefully examine 40 CFR part 170.

I. Statutory Authority

This proposal is issued under the authority of section 25(a) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), 7 U.S.C. section 136-136y. Under FIFRA, EPA must regulate pesticides so that they do not cause unreasonable adverse effects to man or the environment, taking into account the economic, social, and environmental costs and benefits of the use of any pesticide. In deciding how to regulate pesticides, FIFRA requires EPA to balance the risks to human health and the environment associated with pesticide exposure and the benefits of pesticide use to society and the economy.

II. Background of the Worker Protection Standard

On August 21, 1992, EPA revised the Worker Protection Standard (WPS) (40 CFR part 170) which is intended to protect agricultural workers from risks associated with agricultural pesticides. The 1992 WPS expanded the scope of the original WPS to include not only workers performing hand labor activities in fields treated with pesticides, but also workers in or on farms, forests, nurseries, and greenhouses. It included pesticide handlers who mix, load, apply, or otherwise handle pesticides for use at these locations in the production of

agricultural commodities. The WPS requires that workers receive training, be notified of pesticide applications, and be instructed in the use of personal protective equipment (PPE), which includes chemical-resistant gloves. The WPS also established restricted entry intervals (REIs) after pesticides are applied, and required employers to provide decontamination supplies for workers to clean pesticide residues from themselves, and emergency medical assistance.

This proposed WPS amendment is one of a series of Agency actions in response to concerns raised by persons affected by the WPS since its promulgation in 1992. This proposal addresses the prohibition on the use of absorbent glove liners and the requirement that aerial pesticide application pilots wear chemical-resistant gloves when entering or exiting aircraft contaminated by pesticides. The changes in this proposal would increase the flexibility of the WPS without increasing potential risks, and would reduce the costs of compliance.

III. Current Glove Requirements

Exposure of hands and forearms to pesticide residues and mixes is an important route of occupationally-related exposure to pesticides. Studies have demonstrated that the appropriate use of chemical-resistant gloves can greatly reduce the potential exposure of workers' hands to pesticides.

PPE requirements, such as chemical-resistant gloves, are specific to the particular pesticide label. Pesticide labels may require that chemical-resistant gloves be worn in situations when there is a risk of dermal exposure to pesticide mixes or residues that pose a hazard.

The WPS defines and sets minimal standards for the types of PPE that are required on pesticide labels. For example, the WPS generally prohibits glove liners made of absorbent material from being used under chemical-resistant gloves, unless a pesticide label specifically permits them. While this prohibition is intended to stop the use of flocked gloves (where the liner material is an integral part of the glove), it technically includes separable liners as well. For field workers, PPE is only required during early entry into an area under an REI; workers may choose to wear PPE after the REI has expired, if they wish.

The parts of the WPS that affect the types of gloves and glove liners that agricultural workers must wear, which the Agency is proposing to change, are described below.

1. *Agricultural workers.* Section 170.112(c)(4)(vii), contains provisions governing the use of gloves by agricultural workers entering any pesticide treated area during an REI, generally referred to as early entry. This provision states: "Gloves shall be of the type specified on the [pesticide] product labeling. Gloves or glove linings made of leather, cotton or other absorbent materials must not be worn for early-entry activities unless these materials are listed on the product labeling as acceptable. . . ."

2. *Pesticide handlers.* Section 170.240(c)(5)(i) contains similar provisions for pesticide handlers; it states: "Gloves shall be of the type specified by the [pesticide] product labeling. Gloves or glove linings made of leather, cotton or other absorbent material shall not be worn for handling activities unless such materials are listed on the product labeling as acceptable. . . ."

3. *Aerial applicators.* Section 170.240(d)(6), applies to people who apply pesticides by air, and specifies: "Chemical-resistant gloves shall be worn when entering or leaving an aircraft contaminated by pesticide residues."

For the purposes of this proposal, a glove liner is defined as a separate glove-like hand covering made from a light weight material, with or without fingers. Flocking, which consists of closely placed small tufts of soft material glued or bonded onto the inside of gloves, is not defined as a glove liner. Flocked gloves are prohibited by the WPS because they are nearly impossible to adequately decontaminate, and EPA believes that they are unlikely to be disposed of after they are used.

IV. Glove Liners

A. Reasons for This Proposal

EPA has received written comments and held discussions on this subject with Congressional staff, grower groups, forestry groups, a group representing farmworkers, and sugar and pineapple growers from Hawaii. These groups maintain that the general WPS prohibition against separable, absorbent glove liners is problematic for both field workers and pesticide handlers.

Commenters reported that workers who wear chemical-resistant gloves without absorbent liners frequently develop irritated skin from continuous contact with the non-breathable inside of the gloves. They said that this occurs primarily during hot weather. Commenters also stated that, rather than warming hands during cold weather,

unlined rubber and vinyl gloves quickly chill workers' hands and can exacerbate skin conditions or dermatitis. Apparently, health and comfort problems limit workers' efficiency and ability to complete their tasks. As a result, workers often avoid properly wearing the unlined chemical-resistant gloves, thus increasing their chances of exposure to pesticide residues. These problems have been documented in the past, and even though hygiene may play a role in some of the discomfort workers experience, the gloves are fundamentally the cause of the problems.

EPA believes these reports are true. At the very least, compliance with glove requirements may not be good under extreme weather conditions. Allowing workers to wear separable liners underneath their chemical-resistant gloves would most likely improve compliance significantly and therefore result in decreased exposure to pesticides. EPA believes the costs are low enough and the potential risks from exposure are high enough to provide strong support for proposing this refinement of the existing rule.

EPA is concerned about reports from growers that support earlier documentation of the same problems by academia (like R. A. Fenske, 1988, whose work was based on clinical study and field observations and was used in understanding the problem of heat stress in the 1992 WPS) and government researchers like Schneider, F.A., et al., California Department of Food and Agriculture Report HS-1462, 1988. In that study the workers objected to wearing chemical-resistant gloves because of extreme heat-based discomfort, and the researchers had to modify their study because the workers would not wear the gloves for more than 2 hours at a time. The problem being documented is that many workers experience severe discomfort and dermal health problems from wearing unlined chemical-resistant gloves and that they will not wear the gloves properly as a result of their discomfort. Based on their experience and field observations, growers have stated to EPA that workers should be allowed to wear cotton liners or liners with properties similar to cotton, underneath their chemical-resistant gloves, and thereby reduce or eliminate their discomfort and promote the use of the protective equipment.

These concerns about heat stress and PPE are not new; the Agency raised these same concerns in its 1992 official Response to Comments (which documents EPA's approach to

developing the 1992 WPS) after the WPS was published in 1992:

The Agency has studied the issue of PPE for agricultural field workers who are performing routine hand labor tasks and has concluded that routine use of PPE, such as chemical-resistant gloves...for such field workers is, in general, not only impractical, but also may be risk-inducing due to heat stress concerns. The Agency has determined that hired agricultural workers, especially harvesters, have a disincentive to wear PPE.

The Response to Comments also states "the Agency recognizes that the use of personal protective equipment in hot, humid, working conditions may lead to heat stress and discomfort," and the "Agency has determined that multiple-use cotton gloves and cotton-lined gloves are not acceptable for use in pesticide handling or early entry because they are difficult to decontaminate after use and are too expensive to be disposable."

But in 1992, EPA's concern about "glove liners" was only about cotton-lined (flocked) chemical-resistant gloves, where the soft lining is permanently attached to the inside of the glove. The Agency was not concerned about separable liners, which were not widely available at the time. The regulatory text in 40 CFR 170.112 and 170.240 clearly reflects this intention because it refers to glove "linings", which are permanently attached, as opposed to "liners" which are removable from the chemical-resistant glove. In sum, EPA did not originally intend to eliminate separable glove liners from use and EPA believes that the WPS is written too broadly in this respect.

EPA's concerns about flocked liners are still justified, as flocked gloves are quite difficult if not impossible to decontaminate; they are also expensive enough that their relative high cost (from \$2.00 to \$10.00 per pair, and more for specialized materials) and long durability (several weeks to several months) is a considerable disincentive for their disposal after one or two uses.

EPA is not proposing to change the prohibition against flocked gloves, because its concerns about them have not changed. In this proposal EPA is distinguishing removable (separable) glove liners from flocked gloves. Unlike in 1992, separable glove liners made from cotton or similar material are now quite inexpensive (39 cents per pair and less) and widely available. EPA believes that their low cost is a strong incentive to comply with WPS and dispose of the liners after they are used. Although separable glove liners stand a far better chance of being decontaminated than non-removable flocking, EPA believes

that most attempts to decontaminate separable liners will not be adequate. It is for this reason that EPA is proposing that the liners be thrown away after a single use.

EPA believes that by not wearing gloves, workers are at greater risk of pesticide exposure than if they temporarily wear absorbent liners with some pesticide residues on them.

B. Options Considered

In considering the requests to change the prohibition on glove liners, EPA in part reassessed the initial analysis used to establish the restriction. This reassessment is based on discussions with stakeholders, internal exposure assessments by EPA, and weighing the risks and benefits of possible measures. After considering this information, the Agency has decided to propose changes to the WPS limitations on absorbent glove liners. EPA considers the proposed change to be a refinement of the current rule and not a substantive risk-based decision.

As previously stated, although the Agency remains concerned about workers' possible exposure to potential pesticide residues retained in absorbent separable glove liners, it is willing to propose changes to the current limitations and requirements listed above. EPA's initial and primary concern about glove liners stemmed from the inability to decontaminate flocked gloves and the unlikelihood that flocked chemical-resistant gloves would be thrown away after only one or two uses. The prohibition, as worded, is too broad for the narrow class of glove liner EPA meant to prohibit. By proposing the change, EPA is seeking to clarify its position. Given that separable glove liners are inexpensive (39 cents per pair or less), EPA believes that it is likely that the used liners will be properly thrown away after use.

EPA believes that, under certain conditions, the benefits of allowing the use of separable absorbent glove liners under chemical-resistant gloves outweigh the risk of potential pesticide exposure associated with the use of the liners. EPA believes that the potential but unquantified exposure scenarios associated with contaminated glove liners are lower than the known exposure and risks associated with not wearing the gloves. Certain measures can reduce the potential exposure associated with wearing liners contaminated with pesticide residues; these measures are discussed below.

1. EPA considered the option of allowing absorbent liners to be worn beneath chemical-resistant gloves only during certain weather conditions. For

example, absorbent glove liners could be used when the weather is too hot or too cold to comfortably use chemical-resistant gloves without the liners. The determination of when to wear the liners would be made by the workers themselves and would not involve monitoring for specific temperatures or humidity levels.

The Agency believes that this option could promote the use of chemical-resistant gloves among those workers who need to wear them the most. In hot and cold weather, workers wearing chemical-resistant gloves often experience discomfort and skin irritation, due to the skin of their hands continuously contacting the surface of the glove, which traps moisture against the skin. In hot weather, hands sweat but the sweat cannot evaporate and is trapped against the skin. In cold weather, the unlined chemical-resistant gloves immediately transfer the cold to the workers' hands. The effects of unlined gloves from heat and cold results in workers rarely wearing chemical-resistant gloves or not wearing them at all. But if workers are allowed to wear absorbent liners, both problems can be alleviated.

2. EPA considered the option of allowing absorbent liners when the weather reaches specific temperatures (or humidity levels). EPA considered the low temperature of 50 degrees Fahrenheit and the high of 78 degrees Fahrenheit to be the two thresholds beyond which workers could wear absorbent liners beneath their chemical-resistant gloves. Specifying temperatures could provide a concrete way to monitor compliance. However, EPA is unsure of the potential for enforcement of temperature-based limits, and actual temperature readings would not take into account the relative humidity in a given area, which could dramatically augment the discomfort posed by extreme temperatures at either end of the thermometer. Moreover, temperatures may differ significantly within small areas, such that workers at one end of a field could wear the liners and workers at the other end could not. For these reasons, EPA believes that this option is not practical.

3. EPA considered the option to allow the use of absorbent liners but require those workers using the liners to frequently wash their hands. This could alleviate concerns about exposure to residues in the liners. However, EPA believes that requiring this measure would run counter to the goal of regulatory flexibility and simplicity. Moreover, both WPS and the Occupational Safety and Health Administration already require that

workers be trained about the need for washing because of hygiene and pesticide residue risk concerns. This training also includes cautions for washing before eating, smoking, and using toilets.

4. EPA considered allowing workers unlimited reuse of liners, or to reuse absorbent liners several times before disposing of them, so long as the liners were thoroughly laundered daily or after each use. Laundering would have to be done with appropriate amounts of clean tap water and detergent. EPA is not proposing this option because of concerns (raised in previous **Federal Register** Notices, including the WPS itself), based on studies, that laundering will not adequately remove residues from liners. More important, it is likely that this measure cannot be monitored, and its potential for being enforced is unknown.

Along with allowing the re-use of liners, EPA considered requiring that chemical-resistant gloves be taped down when separable liners are worn beneath them. This measure was rejected because, although it may be suitable in some climates, in many climates it will trap moisture inside the glove and create discomfort. It would thereby defeat the very purpose of allowing glove liners in the first place. For this reason it was rejected for all scenarios where liners would be used.

C. Proposal

EPA is proposing to allow all agricultural workers, including pesticide handlers, to wear separable glove liners made from absorbent materials beneath the chemical-resistant gloves whenever chemical-resistant gloves are required, unless the label specifically states that such liners are not allowed.

Under this proposal, used liners must be discarded after a total of 8 hours of use or at the end of every 24-hour period during which they were used, whichever comes first. Each 8-hour and 24-hour period would begin when the liners were first donned by the worker. The liners could be worn several times during the 24-hour period to a total of 8 hours, but they would have to be disposed of immediately at the end of the 24-hour period or replaced immediately if directly contacted by pesticides (in keeping with 40 CFR 170.240(f)).

EPA also proposes that the liners must be no longer than the chemical-resistant glove under which they are worn, and that they may not protrude beyond the edge of the glove. The Agency is proposing this length restriction because, when exposed to

quantities of pesticides, absorbent glove liners can act as a "wick" and conduct pesticide residues inside the glove, where they may contact the worker's hands.

Although EPA is proposing to allow employers more flexibility by letting them choose when to allow workers to use absorbent glove liners, employers must be aware that § 170.240(f) would still apply. Section 170.240(f) requires that all PPE be used, cleaned, maintained and stored properly. This would apply to any glove liners that are worn by employees. For example, a glove liner upon which a pesticide is directly splashed or poured would have to be immediately removed, disposed of, and replaced by a new one.

EPA has proposed the 8/24-hour period for wearing the liners because the Agency believes that any potential pesticide residues that contact the liners will be mitigated by having the liners disposed of at the end of the 24-hour period. Moreover, EPA believes that an early-entry worker wearing the liners will work only one or two shifts during the entire 24-hour period. By current law, a worker's early-entry time cannot exceed more than 8 hours total in a 24-hour period. During early-entry work, the chances for serious contamination of the liner during this period is low. A direct spill or splash is more likely to pose significant risks, but only some mixers and loaders might be at risk from a direct splash or spill. The WPS requires that all PPE thus exposed to pesticides be removed, replaced immediately with clean PPE, and be decontaminated or disposed of.

For pesticide handlers, a 1995 National Institute of Occupational Safety and Health (NIOSH) study ("Dirty Bird," HETA 95-0248-2562) demonstrated that pesticide exposure to and contamination of mixer/loaders' removable glove liners over 8 to 9-hour work days can run from non-detectable to substantial. In that study, NIOSH concluded that the insides of mixer/loaders' protective (chemical-resistant) gloves generally become contaminated over time, especially when the liners are reused. NIOSH concluded that reusing the liners in mixer/loaders' chemical-resistant gloves "increases skin exposure [to pesticide residues]." EPA believes that these data support the proposed prohibition against reusing glove liners, especially those used by pesticide handlers. Two other NIOSH studies on chemical-resistant gloves and pesticide residues (HETA 92-0022-2327 and HETA 94-0096-2433) demonstrate that disposing of either the chemical-resistant liners or the gloves themselves will significantly reduce potential

exposure to pesticide residues. The studies also provide strong support for the 8-hour limit.

In sum, EPA is proposing this measure because the Agency believes that it will reduce workers' exposure to pesticides. EPA wants to reduce exposure that results from workers not wearing chemical-resistant gloves they are required to wear because of the discomfort they experience while wearing the gloves in both hot and cold weather. The Agency believes that the separable liners will alleviate that discomfort and will lead more workers to wear chemical-resistant gloves. EPA believes that the potential, but low and unquantified, exposures posed by pesticide residues penetrating the liners is far less than the very real risk of exposure from workers not wearing the protective gloves at all.

EPA has changed its previous determination that no glove liners whatsoever should be allowed because flocked gloves alone posed insurmountable problems. EPA now recognizes that its previous prohibition against any and all glove liners was too broad. EPA intends to maintain the narrow prohibition against flocked gloves and the use of cotton gloves alone.

D. Glove Liner Requirement: Comments Solicited

Public comments will assist EPA in determining whether the conditions resulting from the proposed change to the WPS could pose unreasonable risks to workers. EPA desires comments on the proposal, the options it considered, and on any other appropriate considerations.

Specifically, EPA would like to receive comments on the following issues:

1. The feasibility and value of requiring pesticide handlers and workers engaged in re-entry work to frequently wash their hands when using glove liners.
2. The need or value of further documentation of the extent and severity of the reported problems with skin irritation resulting from wearing unlined chemical-resistant gloves.
3. The feasibility of laundering the liners.
4. The feasibility of requiring liners to be changed during a work day that is less than 24 hours, such as after every shift, including ones less than 8 hours.
5. The extent to which workers need and wear chemical-resistant gloves.
6. The feasibility of allowing glove liners only under certain weather conditions (such as specified cold and hot temperatures).

7. The possible requirement that liners be changed every "n" days, where "n" = 1, 2, 3 ... ; or every "n" hours.

8. The feasibility of allowing glove liners only when workers could potentially contact certain classes of pesticides, such as Toxicology Category I or II, where the result of a worker not wearing chemical-resistant gloves at all may be much more severe.

9. The cost of liners, if disposal and regular replacement are required.

10. The feasibility and value of specifying which types of materials can be used to make glove liners.

11. Whether or not only workers engaged in early-entry should be able to wear glove liners, or if pesticide handlers should be allowed as well, as EPA is proposing.

V. Chemical-Resistant Gloves Requirement for Aerial Applicators

A. Reasons for This Proposal

In 1992, EPA believed that agricultural pilots were at substantial risk from exposure to pesticide residues when entering and exiting aircraft used to apply pesticides. EPA implemented the current requirement of chemical-resistant gloves to counter potential risks of exposure. After reviewing relevant studies and considering field demonstrations, EPA no longer believes that the required chemical-resistant gloves are necessary to protect agricultural pilots from potential pesticide residues when entering and exiting their cockpits.

The National Agricultural Aviation Association (NAAA) represents the interests of airplane and helicopter pilots who apply agricultural pesticides. The NAAA opposed the glove requirement in 1992 before the WPS was finalized; NAAA and EPA met again in 1995 and 1996 to further discuss and evaluate the WPS requirement that chemical-resistant gloves must be worn when people enter or exit aircraft contaminated by pesticide residues.

The NAAA has stated that many of the PPE requirements for agricultural aircraft pilots lack merit, and they believe that this is especially true with the gloves requirement. NAAA objects to the requirement not just because they believe it is superfluous, but because it can itself represent an unnecessary burden on pilots. For example, the chemical-resistant gloves may affect pilot dexterity, may add a superfluous package to the cockpit, and they could possibly contaminate items in the cockpit and the cockpit itself.

NAAA noted that studies done on the relative health of agricultural pilots

indicate that pilots do not suffer from chronic or long-term risks associated with the pesticides they apply any differently than the U.S. population does. EPA was not sure that those studies were comprehensive. But taking into consideration the results of agricultural pilot health surveys and the required annual Federal Aviation Administration (FAA) medical examinations of pilots, EPA believes that current pilot work practices certainly appeared to satisfy the intent of the WPS gloves requirement, and may therefore render the requirement unnecessary.

After meeting with NAAA, EPA sought answers to its remaining concerns. EPA subsequently evaluated pilot incident data from California and the FAA, pesticide exposure scenarios for pilots who do not mix or load pesticides, pilot work practices, and spray drift studies using colored dyes. EPA also considered technical developments such as modern agricultural aircraft construction, satellite-based aircraft guidance systems, and pesticide application methods and equipment. A discussion of the most pertinent considerations follows.

First, data submitted and used (Deere Co.) for development of the 1992 WPS indicated that pesticide-contaminated clothing, such as gloves, is the largest contributor of pesticides contamination into a tractor cab. EPA acted on these data when forming the WPS requirements for enclosed cabs, by requiring that the contaminated PPE be removed before entry into the cab. EPA believes that the same principle holds true for aircraft, that is, the presence of the chemical-resistant gloves, if they were in fact contaminated by pesticide residues from the outside of the aircraft, would most probably contaminate the cockpit. Pilots' chemical-resistant gloves may not necessarily get contaminated from the outside of the aircraft, but from the general environment in which pilots work.

Additionally, the Agency reviewed FAA pilot and aircraft safety records, FAA pilot medical records and crash data. As a result of the data reviews, both EPA and FAA concluded that there was no evidence supporting the general requirement that chemical-resistant gloves be worn when people enter or exit aircraft. The very small number of pesticide-related accidents were determined to be related to gross exposure to large amounts of highly toxic pesticides, which were unrelated to entering and exiting the cockpit. Both agencies determined that the chemical-resistant gloves would not have

mitigated any accidents, nor would the gloves be at all likely to affect pilots' health, which is closely monitored by FAA.

Finally, a 1995 NIOSH study ("Dirty Bird," HETA 95-0248-2562) of an aerial applicator business in Arkansas included an assessment of the pilots' potential exposure to pesticides and the value of some of the WPS PPE requirements for pilots. The NIOSH study found that, unless they also mix and load pesticides, agricultural pilots are exposed to "low, or less than detectable, levels of surface [pesticide] contamination" and "negligible airborne [pesticide] exposures" inside their aircraft. This description includes surface wipe samples of pesticide residues that were taken from around the cockpit entrance.

This NIOSH study, though not a large random sample of the aerial applicator industry, provides strong support for the reassessment of the chemical-resistant gloves requirement for pilots because it reinforces what EPA has heard and observed. Potentially at greater risk from exposure to incremental amounts of residues, those pilots who do mix and load the pesticides they apply must still wear the PPE required for mixing and loading; however, there is evidence that few aerial applicators do mix and load the pesticides that they apply.

B. Options Considered

Because there is no WPS definition of a contaminated aircraft, and based on the determination that not all aircraft used to apply pesticides are contaminated, EPA considered the option to keep the chemical-resistant glove requirement and define how contaminated aircraft could be identified. Thus, chemical-resistant gloves would not always have to be worn when entering and exiting aircraft that had applied pesticides. Chemical-resistant gloves would be required only when a clear determination had been made that the gloves would, in fact, be protecting the wearer from exposure to pesticide residues.

EPA did not propose this option for two reasons. First, EPA believes that there is substantial merit to the concerns about pilot dexterity, complicated working environment, and possible contamination of cockpits. Second and more important, the Agency rejected this option due to a lack of objective criteria available which would enable both pilots and EPA enforcement personnel to consistently identify contaminated aircraft.

C. Proposal

EPA believes it is highly unlikely that, as a result of pesticide application, significant pesticide residues will occur in areas commonly touched by people accessing the cockpit. Those areas on an aircraft which are usually exposed to pesticides, such as places immediately behind and around the nozzles, must always be handled with PPE, as they are part of the application equipment. EPA believes that chemical-resistant gloves would not add any appreciable protection against the minimal pesticide residues that might be encountered around the cockpit of an aircraft. In sum, there is low risk of exposure from entering and exiting the cockpit, and a low benefit from the chemical-resistant gloves.

EPA also believes that, as much as possible, the WPS should regulate similar situations consistently. The WPS requirements for exiting an enclosed cab to contact treated surfaces state that PPE must be removed before reentering the cab. The same approach should apply to pilots, whose cockpits are much smaller than ground cabs and are more susceptible to contamination.

Therefore, EPA is proposing to eliminate the current WPS requirement that chemical-resistant gloves must be worn when pilots enter and exit aircraft that have been used to apply pesticides.

D. Aerial Applicator Glove Requirement: Comments Solicited

The Agency seeks comments on this proposal and the considered options. EPA wants comments on whether or not chemical-resistant gloves could still provide a measurable, useful, amount of protection to pilots. EPA is also especially interested in receiving comments and suggestions on other ways to identify contaminated aircraft that will meet the needs of pilots and of enforcement personnel.

VI. Statutory Requirements

As required by FIFRA section 25, this proposed rule was provided for review to the U.S. Department of Agriculture and to the Committee on Agriculture of the House of Representatives and the Committee on Agriculture, Nutrition, and Forestry of the Senate. No comments were received from USDA or Congress. The FIFRA Scientific Advisory Panel waived its review.

VII. Public Docket

The official record for this rulemaking, as well as the public version, has been established for this rulemaking under docket control number "OPP-250120" (including comments and data submitted

electronically as described below). A public version of this record, including printed, paper versions of electronic comments, which does not include any information claimed as CBI, is available for inspection from 8:30 a.m. to 4 p.m., Monday through Friday, excluding legal holidays. The official rulemaking record is located at the address in "ADDRESSES" at the beginning of this document.

Electronic comments can be sent directly to EPA at:

opp-docket@epamail.epa.gov

Electronic comments must be submitted as an ASCII file avoiding the use of special characters and any form of encryption. Comment and data will also be accepted on disks in Wordperfect 5.1 file format or ASCII file format. All comments and data in electronic form must be identified by the docket control number OPP-250120. Electronic comments on this proposed rule may be filed online at many Federal Depository Libraries.

VIII. Regulatory Requirements

A. Executive Order 12866 and 13045

It has been determined that this proposed rule is not a "significant regulatory action" that requires review under Executive Order 12866, entitled *Regulatory Planning and Review* (58 FR 51735, October 4, 1993) or Executive Order 13045, entitled *Protection of Children from Environmental Health Risks and Safety Risks* (62 FR 19885, April 23, 1997). This action proposes to amend existing regulations and does not contain any new requirements that would increase the cost of compliance to any person. Any changes implemented as a result of this proposal would reduce the regulatory burden and lower costs.

B. Unfunded Mandates Reform Act and Executive Order 12875

This proposed action does not contain any new requirements or impose any additional burden. In proposing to amend existing requirements to provide flexibility or relief in the specific situations involved, this action will result in savings and burden relief for affected parties, including States, local or tribal governments and the private sector, and will not result in any unfunded federal mandates as defined by Title II of the Unfunded Mandates Reform Act of 1995 (Pub. L. 104-4). This action does not contain any federal mandates on States, localities or tribes, and is not subject to the requirements of Executive Order 12875, entitled *Enhancing the Intergovernmental*

Partnership (58 FR 58093, October 28, 1993).

C. Regulatory Flexibility Act

Under section 605(b) of the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*), the Agency certifies that this regulatory action does not have any significant adverse economic impacts on a substantial number of small entities. This proposed action provides regulatory relief and regulatory flexibility. In accordance with Small Business Administration (SBA) policy, this determination will be provided to the Chief Counsel for Advocacy of the SBA upon request. Any comments regarding the economic impacts that this regulatory action may impose on small entities should be submitted to the Agency at the address listed in ADDRESSES.

D. Paperwork Reduction Act

This proposed action does not contain any new information collection requirements that would need approval by the Office of Management and Budget (OMB) under the provisions of the Paperwork Reduction Act (PRA), 44 U.S.C. 3501 *et seq.* The information collection requirements contained in the existing Worker Protection Standards were approved by OMB under control number 2070-0148. An Agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations are listed in 40 CFR part 9.

The Agency is interested in any comments on whether or not this action will impact existing burden estimates, including the accuracy of the estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques. The final rule will respond to any comments received.

E. Executive Order 12898

Pursuant to Executive Order 12898, entitled *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* (59 FR 7629, February 16, 1994), the Agency has considered environmental justice related issues with regard to the potential impacts of this action on the environmental and health conditions in low-income and minority communities and has determined that this proposed change will not adversely affect environmental justice.

List of Subjects in Part 170

Environmental protection, Intergovernmental relations, Occupational safety and health, Pesticides and pests, and Reporting and recordkeeping requirements.

Dated: September 2, 1997.

Carol M. Browner,
Administrator.

Therefore, it is proposed that 40 CFR part 170 be amended as follows:

PART 170—[AMENDED]

1. The authority citation for part 170 would continue to read as follows:

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

2. Section 170.112 is amended by revising paragraph (c)(4)(vii) to read as follows:

§ 170.112 Entry restrictions.

* * * * *

(c) * * *

(4) * * *

(vii) Gloves shall be of the type specified on the pesticide product labeling. Gloves made of leather, cotton, or other absorbent materials must not be worn for early-entry activities, unless those materials are listed as acceptable on the product labeling. If chemical-resistant gloves with sufficient durability and suppleness are not obtainable for tasks with roses or other plants with sharp thorns, leather gloves may be worn over chemical-resistant gloves or chemical-resistant glove liners (if available). Once leather gloves have been used this way, they shall not be worn thereafter for any other purpose, and they shall only be worn over chemical-resistant gloves or chemical-resistant glove liners.

(A) Separable glove liners may be worn beneath chemical-resistant gloves, unless the pesticide product labeling specifically prohibits their use. The liners may be made of cotton or other absorbent materials. Glove liners are defined as a separate glove-like hand covering made from a light weight material, with or without fingers. Work gloves made from light cotton or poly-type material are considered to be a glove liner if worn beneath a chemical-resistant glove. Liners may not be longer than the glove under which they are worn. Chemical-resistant gloves with flocking and other non-separable soft lining materials are prohibited.

(B) Used glove liners must be discarded immediately after a total of 8 hours of use or at the end of the 24-hour period during which they were used, whichever comes first. The 8-hour and 24-hour periods begin when the liners are first donned. The liners must be

replaced immediately if directly contacted by pesticide solution (in keeping with 170.240(f)). Used glove liners may not be cleaned and re-used.

* * * * *

3. Section 170.240 is amended by revising paragraph (c)(5) and removing (d)(6)(i) and redesignating (d)(ii) and (d)(iii) as (d)(i) and (d)(ii), respectively to read as follows:

§ 170.240 Personal protective equipment.

* * * * *

(c) * * *

(5) Gloves shall be of the type specified on the pesticide product labeling. Gloves made of leather, cotton, or other absorbent materials may not be

worn while mixing, loading, applying, or otherwise handling pesticides, unless those materials are listed as acceptable on the product labeling.

(i) Separable glove liners may be worn beneath chemical-resistant gloves, unless the pesticide product labeling specifically prohibits their use. The liners may be made of cotton or other absorbent materials. Glove liners are defined as a separate glove-like hand covering made from a light weight material, with or without fingers. Work gloves made from light cotton or poly-type material are considered to be a glove liner if worn beneath a chemical-resistant glove. Liners may not be longer than the glove under which they are

worn. Chemical-resistant gloves with flocking and other non-separable soft lining materials are prohibited.

(ii) Used glove liners must be discarded immediately after a total of 8 hours of use or at the end of the 24-hour period during which they were used, whichever comes first. The 8-hour and 24-hour periods begin when the liners are first donned. The liners must be replaced immediately if directly contacted by pesticide solution. Used glove liners may not be cleaned and re-used.

* * * * *