

**SUPPORTING STATEMENT
FOR AN INFORMATION COLLECTION REQUEST (ICR)**

1. IDENTIFICATION OF THE INFORMATION COLLECTION

1(a). Title of the Information Collection

Agricultural Worker Protection Standard Training, Notification, and Recordkeeping (Renewal)
OMB Control No.: 2070-0190; EPA ICR No.: 2491.04

1(b). Short Characterization/Abstract

This Information Collection Request (ICR) estimates the recordkeeping and third-party response burden of paperwork activities that covers the information collection requirements contained in the Worker Protection Standard (WPS) regulations at 40 CFR Part 170¹. These requirements were updated in a 2015 Final Rule (80 FR 67495, November 2, 2015²) that amended 40 CFR Part 170, entitled “Pesticides; Agricultural Worker Protection Standard Revisions” [RIN 2070-AJ22].

Prior to the regulatory update, the WPS regulations already had provisions for training and notification of pesticide-related information for workers who enter pesticide-treated areas after pesticide application to perform crop-related tasks, as well as for handlers who mix, load, and apply pesticides. Agricultural employers and commercial pesticide handling establishments (CPHEs) are responsible for providing required training, notifications and information to their employees to ensure worker and handler safety. The changes to the regulation in 2015 improved protections and included revisions to many of the provisions as well as the addition of new requirements. The WPS regulation now includes expanded and more frequent training for workers and handlers, improved posting of pesticide-treated areas, additional information for workers before they enter a pesticide-treated area while a restricted entry interval (REI) is in effect, access to more general and application-specific information about pesticides used on the establishment, and recordkeeping of training to improve enforceability and compliance.

2. NEED FOR AND USE OF THE COLLECTION

2(a). Need/Authority for the Collection

The U.S. Environmental Protection Agency (EPA or the Agency) is responsible for the regulation of pesticides under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA³). This responsibility includes promoting worker and handler protection and safety from exposure to pesticides. Section 25 of FIFRA gives EPA broad regulatory authority for the purpose of carrying out the various provisions of the Act. The regulations at 40 CFR Part 170 establishes requirements to protect agricultural workers and pesticide handlers from the hazards of pesticides used in the production of agricultural plants on agricultural establishments.

Some of the agricultural workforce is occupationally exposed to pesticides and pesticide residues and that exposure can pose significant long- and short-term health risks. Workers and handlers are potentially exposed to a wide range of pesticides with different toxicities and risks. There is strong general evidence that such risks can occur and that they can be substantially reduced; the activities subject to this ICR are designed to help reduce these risks by reducing exposure. Overall, the

¹ 40 CFR 170. Available at https://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title40/40cfr170_main_02.tpl

² 80 FR 67495, November 2, 2015. Available at <https://www.federalregister.gov/documents/2015/11/02/2015-25970/pesticides-agricultural-worker-protection-standard-revisions>.

³ FIFRA. Available at <https://www.agriculture.senate.gov/imo/media/doc/FIFRA.pdf>

weight of evidence suggests that these paperwork activities, which are needed in order to comply with the WPS regulations, will result in significant health benefits to the nation's agricultural workers and pesticide handlers.

All of the paperwork activities under this ICR are provided by agricultural employers or CPHE employers to or for workers, handlers or other persons, and are not reported to EPA. Without the required training, affected employees may be unaware of the risks of pesticide exposure or how to protect themselves. Without the notifications and information, they would not know, among other things, where specific pesticides have been applied or when it is safe to enter a treated area, nor would they have pesticide-specific information available for health care personnel after an acute exposure incident. The WPS is enforced by state agencies. The EPA has received feedback from state regulatory partners indicating difficulty enforcing some requirements, due primarily to a lack of records. Recordkeeping is designed to improve enforcement capability as a means of fostering compliance, thereby improving protections.

2(b). Practical Utility/Uses of the Data

The ICR activities included in the regulation support the regulation's intent to protect workers, handlers and other persons from exposure to pesticides used on an agricultural establishment. The pesticide exposure and application information, safety information/poster, safety training, and entry restriction notifications required by the regulation are workplace practices designed to reduce or eliminate exposure to pesticides.

The requirements, such as instructions on safe operations and repair of equipment and notification regarding use of specific pesticides, provide agricultural workers and pesticide handlers with basic information so they are more informed and better able to protect themselves. The regulation establishes procedures for responding to exposure-related emergencies and providing medical personnel with basic information to take responsive measures as appropriate.

Training and notification are targeted at agricultural workers who perform tasks related to the cultivation and harvesting of plants in areas treated with pesticides, and pesticide handlers who mix, load, and apply pesticides for use in these areas. The notification and training requirements are necessary to provide agricultural workers and pesticide handlers with the information they need to protect themselves from pesticide poisoning and other pesticide-related injuries. Recordkeeping of training and applications greatly enhances the enforceability of these requirements.

3. NON-DUPLICATION, CONSULTATIONS, AND OTHER COLLECTION CRITERIA

3(a). Non-duplication

This ICR covers the only notification activities of its kind, and notifications required in this program occur only once per event. Consequently, duplication is avoided. The regulation provides for an exemption from the requirements of training for certified applicators of restricted-use pesticides (RUPs) trained under Certification of Pesticide Applicators regulation found in 40 CFR Part 171⁴. Therefore, no duplication of training is imposed. Additionally, the worker and handler pesticide training recordkeeping was intentionally developed to avoid duplication of training.

⁴ 40 CFR 171. Available at <https://www.ecfr.gov/cgi-bin/text-idx?SID=3a04fea730b631ed00adb5489f7a6303&node=pt40.24.171&rgn=div5>

3(b). Public Notice Required Prior to ICR Submission to OMB

Pursuant to 5 CFR 1320.8(d), EPA published a notice in the Federal Register (83 FR 24797; May 30, 2018) announcing the proposal to renew this information collection activity, providing a 60-day public comment period. The FR notice, supporting statement, and supporting attachments provided during the public comment period are available at <http://www.regulations.gov> using the docket identifier EPA-HQ-OPP-2018-0031. EPA did not receive any comments during the comment period.

3(c). Consultations

In addition to the Federal Register notice seeking public comment, the Agency sent consultation requests, as required under 5 CFR 1320.8(d)(1), to four representatives who perform the recordkeeping and third-party training and notification requirements reported under this ICR. EPA sought feedback on the clarity of the WPS instructions, the recordkeeping requirements, and the estimated burden and labor costs provided in the supporting statement. A record of the organizations contacted, the questions asked, and the responses received are provided in Attachment A.

During the consultation period, only one representative responded to EPA's consultation request. In summary, the respondent suggested that the time spent complying with the rule's notification and recordkeeping requirements comes at the expense of farm productivity. However, the respondent did not provide EPA with specific suggestions or data that warrants the need for the Agency to reevaluate the paperwork burden estimates presented during the first public comment period.

Regarding the recordkeeping requirements, the respondent provided some feedback indicating that the recordkeeping requirements and instructions are clear, but that he preferred a simple sheet or form with most of the requirements that could be filled out. Additionally, the respondent stated that while the basic recordkeeping requirements are easy to follow and that they currently use an Excel format to maintain records, an "app" or some other electronic alternative with drop down choices to record and store data could be beneficial. The respondent also suggested that if electronic alternatives were available, they would need to be simplistic, offer the ability to duplicate across multiple farms with flexible application options, and be versatile to various sized operations.

EPA agrees that the requirements for the display and retention of application records and Safety Data Sheets (SDSs) could be met with electronic records as long as all the other applicable requirements at §170.311(b) regarding content, location, accessibility, legibility, and display and retention times are met. Should an electronic alternative to paper be used, workers and handlers would need to have unimpeded access to the computer or other devices during their normal work hours, and would need to be instructed on how to access the electronic records on the computer or device. While EPA recognizes that some employers may want to maintain electronic copies of pesticide application records and product SDSs as a means to reducing the paperwork burdens associated with the recordkeeping requirements, the Agency has not developed a standard form or template (paper or electronic) that can be used to satisfy the recordkeeping requirements. The Agency believes that the decision to develop or use an electronic alternative to paper recordkeeping is best made at the discretion of the employer based on their individual needs and capabilities. At this time, EPA does not have enough information regarding how many employers currently use electronic alternatives to determine potential burden reduction. Therefore, EPA continues to assume in this ICR that records are being kept on paper and stored in a physical folder.

To assist with compliance and to reduce burdens on stakeholders, EPA has provided several guidance materials online⁵ to help users of agricultural pesticides understand the requirements of the WPS regulations. For example, a "How to Comply" manual (Attachment B), which was developed as part of an EPA cooperative agreement called the Pesticide Educational Resources Collaborative

⁵ <https://www.epa.gov/pesticide-worker-safety/agricultural-worker-protection-standard-wps>

(PERC), provides a comprehensive overview of the WPS requirements that is organized based upon the WPS responsibilities for the three primary types of employers; agricultural employers of workers, agricultural employers of pesticide handlers, and CPHEs. This organization should help users quickly find the information most relevant to them within the manual. PERC has also developed a Compliance Assistance Library⁶ tool that enables employers to find specific compliance information through a series of questions within a matter of minutes. Additionally, several State Lead Agencies (SLAs) have developed their own guidance materials, including recordkeeping templates, for users within their states. Should an agricultural employer choose to use any of these resources, EPA expects that these resources could significantly reduce the amount of time and effort it takes for an agricultural employer to become familiar with and comply with the WPS requirements most relevant to them.

3(d). Effects of Less Frequent Collection

Notifications in this program are required only once per event, as specified in 40 CFR 170. Consequently, the possibility for less frequent notification does not exist without withholding information from workers or handlers necessary for them to better protect themselves. The required frequency of safety training under the WPS regulations is once a year. Less frequent training and notification would increase risk to agricultural workers and handlers.

3(e). General Guidelines

This information collection adheres to OMB's guidelines at 5 CFR 1320.5(d).

3(f). Confidentiality

EPA does not collect any confidential information under this ICR; the collection focuses on recordkeeping and third-party training and notification requirements. Further, this activity complies with the provisions of the Privacy Act of 1974 and OMB circular A-108.

3(g). Sensitive Questions

No questions concerning sexual behavior or attitudes, religious beliefs, or other matters usually considered private are included in this information collection.

4. THE RESPONDENTS AND THE INFORMATION REQUESTED

4(a). Respondents/NAICS Codes

Respondents affected by the collection activities under this ICR are agricultural employers on agricultural establishments, including employers in farms as well as in nursery, forestry, and greenhouse establishments.

The North American Industrial Classification System (NAICS) codes have been provided in the following table to help identify potentially affected categories and entities. This listing is not, however, intended to be exhaustive.

NAICS Code	Examples of Potentially Affected Entities
111 - <i>Crop production</i>	Agricultural employers – farms and greenhouses
112 - <i>Livestock</i>	Agricultural employers – farms and greenhouses
113 - <i>Forestry and logging</i>	Agricultural employers – forests

⁶ <http://pesticideresources.org/wps/index.html>

NAICS Code	Examples of Potentially Affected Entities
115 - Support activities for agriculture and forestry	Commercial employers

4(b). Information Requested

The WPS regulation contains paperwork related requirements for information exchanges and notifications, employee trainings, and recordkeeping. This ICR describes the information collection activities contained in the WPS regulation, along with the estimated burden and costs related to those information collection requirements.

The regulation requires employers to collect, disseminate, and maintain information relating to employee notifications and training, and application of pesticides on agricultural establishments. The information exchanged and the records maintained as a result of this information collection provides agricultural workers and handlers with the information necessary to protect themselves against occupational exposure to pesticides.

(i). Data items, including recordkeeping requirements

This section describes the categories of recordkeeping and notification requirements under 40 CFR Part 170.

(1). Basic Pesticide Safety Information (§170.309(h) and §170.311)

The agricultural employer is required to display pesticide safety information on the agricultural establishment if workers or handlers are on the establishment and, within the last 30 days, a pesticide was used or a REI was in effect on the establishment. The content of the display includes general safety information to protect against exposure to pesticides and the contact information for appropriate emergency medical care facility and pesticide enforcement agency. The pesticide information must be displayed at a place on the establishment where workers and handlers are likely to pass by or congregate and can be readily seen and read. The information must also be displayed where decontamination supplies must be provided when the supplies are located at a permanent site or at sites with 11 or more workers or handlers.

In the WPS regulations, the pesticide safety information is a poster that is required to be displayed in one central location. The WPS regulations also require pesticide safety information to be displayed at some locations where decontamination supplies are required, and provides information to be displayed.

(2). Pesticide Hazard and Application-specific information (§170.311(b))

For each pesticide application, agricultural employers must record application-specific information if workers and handlers are on the establishment and within the last 30 days a pesticide product has been used or a restricted-entry interval has been in effect. The application-specific information and the relevant SDS (pesticide hazard information) must be displayed starting no later than 24 hours from the end of the pesticide application or before a worker's first entry (whichever is first) and kept on display for 30 days from the end of the restricted-entry interval, or until workers are no longer on the establishment, whichever is earlier. The application-specific and pesticide hazard information must be displayed at a place on the establishment where workers and handlers are likely to pass by or congregate and can be readily seen and read.

Recordkeeping has been expanded in content and must be retained for 2 years. The application-specific information display and record must include the name, EPA registration number, and active ingredients of the product applied; the crop or site treated and the location and description of

the treated area; the dates and times the application started and ended; and the end date and duration of the REI. Application-specific information records and a copy of the SDS are to be kept for a period of 2 years. The agricultural employer must promptly make the information available upon request to any worker or handler who is or has been employed by the agricultural establishment during those 2 years. Also, if any treating medical personnel, or any person acting under the direction of treating medical personnel, requests access to or a copy of any pesticide application and/or hazard, the agricultural employer must promptly provide a copy of or meaningful access to all of the requested information applicable to the worker's or handler's time of employment on the establishment.

(3). Notification to Workers of Entry Restrictions (§170.409)

The agricultural employer must notify workers of all entry restrictions associated with pesticide applications during and after applications. Entry restrictions apply in outdoor production and enclosed space production. The regulation specifies the entry restrictions during an application (§170.405) and post-application (§170.407). Notifications of entry restrictions are either oral or by the posting of warning signs, and in certain applications, both oral and posting are required (i.e., double notification) (§170.409). Double notification is required if the pesticide product labeling has a statement requiring both the posting and oral notification.

For outdoor production, posting of warning signs is required for pesticides that have an REI greater than 48 hours. If the REI is equal to or less than 48 hours, notification may be given orally or by posting of warning signs. For enclosed space production, when posting the entire structure, the signs must be visible from all reasonably expected points of worker entry to the structure or space. If the treated area comprises only a portion of the structure, signs must be posted where they are visible from expected points of entry, including each aisle or walking route that enters the treated area. If there are no expected worker entry points, then signs should be posted in the corners of the treated area or where there is maximum visibility.

The signs must be posted prior to application (but no more than 24 hours prior to scheduled application) and must stay up throughout the REI, but must be taken down within 3 days after the end of the REI. If there are no workers present on the establishment, or if no worker will enter the enclosed space, be within ¼ mile of an outdoor treated area, or if the worker was involved in the application then notifications are not required.

Oral warnings must include the location and description of the treated area, the dates and times when entry is restricted, and instructions to not enter the treated area until the REI has expired.

(4). Establishment-Specific Information (§170.403 and §170.503(b))

The agricultural employer must ensure that workers and handlers have been informed of establishment-specific information before any worker or handler performs any task on an agricultural establishment where within the last 30 days a WPS pesticide has been used or an REI for such a pesticide has been in effect. The employer must provide the information orally in a manner the worker or handler can understand.

The establishment-specific information includes the locations of the pesticide safety information (as described above 4(b)(i)(1)), pesticide application and hazard information, and decontamination supplies.

(5). Information Exchanges between Handler Employers and/or Handlers (§170.309(k), §170.313(h)-(j), and §170.503)

Agricultural employer informs CPHE employer of entry restrictions (170.309(k))

If any handler employed by a CPHE will be working on an agricultural establishment, the agricultural employer must provide the CPHE employer information about, or make sure they are aware of, any restrictions on entering treated areas that are under an REI, including the specific location and description of any treated areas where an REI is in effect that the handler may be in (or may walk within ¼ mile of) and restrictions on entering those areas.

CPHE employer informs handler of entry restrictions on agricultural establishment (§170.313(h))

The CPHE employer must ensure that any handler under their employment working on an agricultural establishment is provided information about, or is aware of, the specific location and description of any treated areas where a REI is in effect, and restrictions on entering those areas.

CPHE employer informs agricultural employer prior to application (§170.313(i)-(j))

The CPHE employer must provide the agricultural employer the following information prior to making any pesticide application on the agricultural establishment: the specific location and description of the area(s) to be treated; the date(s) and start and estimated end times of application; the product name, EPA registration number and active ingredients; the REI; whether posting or oral notification or both are required; and any restrictions or use directions on the labeling that must be followed to protect workers, handlers, or other persons during or after application (§170.313(i)). If there are any changes to the specific location and description of the area to be treated, the REI, whether posting, oral notification or both are required, any restrictions or use directions from the label that must be required for protection, or if the start time for the application will be earlier than scheduled, the CPHE employer must provide the agricultural employer updated information prior to the application. If there are changes to the product name, EPA registration number and active ingredient, or if the start and end times are after the scheduled time, they must be reported within 2 hours of completing the application. Changes in application end time of less than one hour need not be reported. (§170.313(j)).

Handler employer informs handler of safe use information (§170.503)

Handler employers (both agricultural employers and CPHE employers) must provide certain labeling and application-specific information to handlers. The handler employer must ensure that before any handler performs any handler activity involving a pesticide product that the handler has either read or been informed of labeling requirements and use directions applicable to the safe use of the pesticide. The handler employer must ensure that the handler is aware of requirements for any entry restriction, application exclusion zones and restricted-entry intervals as described in §170.405 and §170.407 that may apply based on the handler's activity.

(6). Safe Operation of Equipment and Repair (§170.309(i) and §170.313(f), §170.309(g) and §170.313(l))

The agricultural employer and CPHE employer must ensure that handlers are instructed in the safe operation of any equipment used for mixing, loading, transferring or applying pesticides.

Agricultural employers and CPHE employers may assign the tasks to clean, repair, or adjust pesticide equipment that has been used to mix, load or apply pesticides to their employees that have been trained as a handler. If the person(s) assigned to these tasks is not directly employed by the employer, then the employer is required to inform such persons about proper procedures for the handling of equipment before cleaning, repairing or adjusting equipment that has been used to mix, load, transfer or apply pesticides. The employer must inform this person(s) that the equipment may be contaminated with pesticides, the potential harmful effects of pesticide exposure, procedures for handling pesticide application equipment and for limiting exposure to pesticide residues, and personal hygiene practices and decontamination procedures for preventing exposures and removing pesticide residues.

(7). Information Required for Emergency Assistance (§170.309(f)(2) and §170.313(k)(2))

If a worker or handler is poisoned or injured by an exposure to pesticides as a result of their employment, the agricultural employer must provide emergency assistance. That assistance includes provisions of pesticide information related to the circumstance of the exposure or injury.

The agricultural employer must provide to the treating medical personnel copies of the SDS(s), the pesticide product name, EPA registration number and active ingredients, the circumstances of application or use of the pesticide(s), and the circumstances that could have resulted in exposure to the pesticide(s). §170.309(f)(2)

Similarly, the CPHE employer must provide to the treating medical personnel the same information relative to the handler under his employment. §170.313(k)(2)

(8). Pesticide Safety Training for Workers and Handlers (§170.401 and §170.501)

Agricultural workers must receive training before the worker performs any task on an agricultural establishment where, within the last 30 days, a pesticide product bearing a WPS label has been applied or an REI has been in effect. Handlers must receive handler training before performing any handling task (mixing, loading, applying) on an agricultural establishment. Note that some employees of an agricultural establishment may perform both worker and handler tasks. Workers or handlers who are certified as applicators of RUPs (40 CFR 171), or are certified as crop advisors are excepted from this training requirement while they meet these criteria. Workers who are trained as handlers under this rule are also excepted from the worker training requirement while they meet this criterion.

Workers on agricultural establishments and handlers on agricultural and commercial pesticide handling establishments require annual training. The worker training sessions must be conducted by an individual who has either completed an approved train-the-trainer program, is designated as a trainer of certified applicators, workers, or handlers by EPA or the State or Tribal agency responsible for pesticide enforcement, or is a certified applicator of RUPs under 40 CFR Part 171. The handler training must be provided by an individual who has either completed an approved train-the-trainer program, is designated as a trainer of certified applicators or handlers by EPA, or is a certified applicator of RUPs under 40 CFR Part 171.

Agricultural Worker Pesticide Safety Training (§170.401)

Agricultural workers must be trained before the worker performs any task on an agricultural establishment where, within the last 30 days, a pesticide product has been applied or an REI has been in effect. The agricultural employer must ensure that each agricultural worker is trained in pesticide safety in a manner that the worker can understand. Under the final rule the worker training grace period of 5 days is eliminated. All workers must receive the full worker training annually. The training covers all the points described in 40 CFR 170.130(c)(3) including take home exposure, early entry notification, establishment-specific information, and hazard information.

The agricultural employer must create and maintain records of worker training for 2 years, including the trained worker's printed name and signature, the date of the training, information identifying which EPA-approved training materials were used, the trainer's name and documentation showing the trainer met requirements, and the agricultural employer's name. The agricultural employer is responsible for providing to the worker, upon request, a copy of the record of the training.

Handler Pesticide Safety Training (§170.501)

Pesticide handlers must be trained before the handler performs any handling task. The handler employer must ensure that each handler is trained in pesticide safety in a manner that the handler can understand. All handlers must receive the handler training annually. The training covers all the points described in 40 CFR 170.130(c)(3) including take home exposure, early entry notification, establishment-specific information, and hazard information.

The agricultural employer must create and maintain records of handler training for 2 years, including the trained handler's printed name and signature, the date of the training, information identifying which EPA-approved training materials were used, the trainer's name and documentation showing the trainer met requirements, and the handler employer's name. The handler employer is responsible for providing to the handler, upon request, a copy of the record of the training.

(9). Personal Protective Equipment Information and Records

Provide handler medical evaluation, fit testing and respirator training and recordkeeping (§170.507(b)(10))

When the pesticide label used requires a respirator, the pesticide handler employers must provide handlers with a medical evaluation by a licensed health care professional to ensure the handler's physical ability to safely wear the respirator. The medical evaluation must conform with provisions at 29 CFR 1910.134. Pesticide handler employers must also provide handlers with fit-testing (§170.507(b)(10)(i)) and respirator training on the respirator specified on the pesticide product label (§170.507(b)(10)(ii)) that conforms with Occupational Health and Safety (OSHA) Standard provisions at 29 CFR 1910.134. The pesticide handler employer must maintain records documenting the completion of the medical evaluation, fit testing and respirator training that conform with 29 CFR 1910.134 for 2 years.

Inform the cleaner/laundrer of personal protective equipment (§170.507(d)(8))

The handler employer must inform any person who cleans or launders personal protective equipment (PPE) that such equipment may be contaminated with pesticides, the potentially harmful effects of exposure to pesticides, the correct ways to clean personal protective equipment and to protect themselves when handling such equipment, and the proper decontamination and personal hygiene practices.

Closed system instructions and training (§170.607(d)(3))

All handler employers on establishments with closed systems for mixing/loading pesticides must have written operating instructions for the closed system, which must be clearly legible and available at the mixing/loading site. The handler employer must ensure that any handler operating the closed system is trained in its use. Maintenance of closed system is to be done as specified in its written operating instructions and as needed to make sure the system functions properly.

(10). Exceptions

Early-entry exception notifications (§170.605(b)-(c), (f))

If an agricultural employer directs a worker to perform activities in a treated area where an REI

is in effect, the employer must orally inform each early-entry worker of the location of the early-entry area, the pesticide(s) applied, dates and times that the REI begins and ends, the exception in the regulation under which early-entry activities will be performed, whether contact with treated surfaces is permitted under the exception, the amount of time the worker is allowed in the treated area, the PPE required by the label for early entry, and the location of the pesticide safety display and decontamination supplies. The agricultural employer must ensure that each worker either has read the pesticide product labeling or has been informed, in a manner that the worker can understand, of all labeling requirements and statements related to human hazards or precautions, first aid, and user safety. The agricultural employer also must ensure that each early-entry worker has been instructed in prevention, recognition, and first aid treatment of heat-related illness.

(ii). Respondent Activities

To comply with the WPS regulation, agricultural employers and/or CPHE employers will generally engage in the following activities listed under the 11 categories in this section. Specific requirements are identified to fulfill the conditions of the major activity.

(1). Rule familiarization

Activity: Agricultural employers and CPHE employers to learn rule requirements.

- Read 40 CFR Part 170. Agricultural employers and CPHE employers will need to read the regulation in order to familiarize themselves with and understand the requirements.
 - Other sources of information and guidance, such as the "How to Comply" manual (Attachment B), the Compliance Assistance Library⁷, and individual state guidances and templates, may be used to fulfill this requirement. These sources are also expected to reduce the overall time and effort needed to familiarize oneself with the WPS requirements since they can guide employers to the information they need quickly. EPA has provided some of these resources as supplemental information to this ICR.

(2). Basic Pesticide Safety Information (§170.309(h) and §170.311)

Activity: The agricultural employer displays pesticide safety information on agricultural establishment. The employer would:

- Obtain or create pesticide safety display with content outlined in the regulation.
- Display safety information on the establishment where workers and handlers are likely to pass by or congregate and the information can be readily seen and read. The information must also be displayed where decontamination supplies must be provided when supplies are located at a permanent site or at sites with 11 or more workers or handlers.
- Add location-specific content to the basic pesticide safety information, including the name, address and telephone number of the state lead or tribal agency responsible for pesticide enforcement, and local emergency medical facility contact name, address and phone number.
- Inform workers and handlers of changes to the required information at beginning of next work day on agricultural establishment and update display within 24 hours of notice of any changes to the location-specific content.

⁷ <http://pesticideresources.org/wps/index.html>

(3). Pesticide Hazard and Application-specific Information (§170.311)

Activity: Gather, record, display and maintain pesticide hazard and application-specific information.

- Record required application-specific information and maintain a copy of SDS (pesticide hazard information). The application-specific information required is as follows:
 - the pesticide name,
 - EPA registration number,
 - active ingredients of the product applied,
 - the crop or site treated and the location and description of the treated area,
 - dates and times the application started and ended, and
 - the end date and duration of the REI.
- Application-specific information and pesticide hazard information must be on display at a location on the establishment where workers and handlers are likely to pass by or congregate and can be readily seen and read.
 - The information must be displayed before workers enter into the treated area or no later than 24 hours from the end of the pesticide application information, whichever is first.
 - The information must be displayed for 30 continuous days from the end date of the restricted-entry interval, or until workers or handlers are no longer on the establishment, whichever is earlier.
- Retain application-specific information record and pesticide hazard information for 2 years.
- Agricultural employers must make information available upon request to any worker or handler who is or has been employed by the agricultural establishment during the period the information is required to be displayed or the 2 years the records are kept.
- Agricultural employers must promptly make information available upon request to any treating medical personnel, or any person acting under the direction of treating medical personnel, during the period that the information was required to be displayed or kept as a record.

(4). Notification to Workers of Entry Restrictions (§107.409)

Activity: Notify workers of entry restrictions during and after application.

- The agricultural employer must notify workers of all entry restrictions associated with pesticide applications (as required by §170.405 and §170.407) either orally or by posting warning signs, or both, as required by the regulation and label and in accordance with §170.409.
- In outdoor production, employers must give oral notification to workers for all REIs equal to or less than 48 hours and for all double notification products. Warning signs must be posted for REIs greater than 48 hours and for all double notification products.
- In enclosed space, posting of warning signs is required if the pesticide applied has an REI greater than 4 hours. If the REI is equal to or less than 4 hours, notification may be given orally or by posting of warning signs. When posting the entire structure, the signs

must be visible from all reasonably expected points of worker entry to the structure or space. If the treated area comprises only a portion of the structure, signs must be posted where they are visible from expected points of entry, including each aisle or walking route that enters the treated area. If there are no expected worker entry points, then signs should be posted in the corners of the treated area or where there is maximum visibility.

- Signs must be posted prior to (but no sooner than 24 hours before) the application, and stay up for the duration of the REI.
- Signs must come down within 3 days of the end of the application, or at the end of the REI, whichever is later.
- Oral notifications must be given to workers prior to the application, if workers are on the premises; otherwise, the oral notification must be given prior to the start of the worker's first work period on the agricultural establishment.
- Oral notifications are given in a manner that the workers can understand, and include the following:
 - the location and description of the entry-restricted area and treated area,
 - the dates and times during which entry is restricted, and
 - instructions not to enter the treated area or application exclusion zone until the REI has expired and signs removed.

(5). Establishment-Specific Information (§170.403 & §170.503(b))

Activity: Provide establishment-specific information.

- Agricultural employer informs workers and handlers of the locations of the pesticide safety information, pesticide application and hazard information, and decontamination supplies.
- The information is given orally in a manner the worker or handler can understand.

(6). Information Exchanges between Handler Employers, Agricultural employers, and/or Handlers (§170.309(k), §170.313(h)-(j), and 170.503)

Activity: Provide application information to agricultural employers, CPHE employers and handlers.

- The handler employer must ensure that before any handler performs any handler activity involving a pesticide product, the handler either has read the portions of the labeling applicable to the safe use of the pesticide or has been informed in a manner the handler can understand of all labeling requirements and use directions applicable to the safe use of the pesticide.
- The handler employer must ensure that the handler is aware of requirements for any entry restrictions, application exclusion zones and restricted-entry intervals as described in §170.405 and §170.407 that may apply based on the handler's activity.
- The CPHE employer ensures that any handler under their employment who is working on the agricultural establishment is provided information on the location and description of any treated areas where an REI is in effect and restrictions on entering those areas.
- For pesticide applications, the agricultural employer informs the CPHE employer, or makes sure they are aware of, the specific location and description of any treated area

- where an REI is in effect that the handler may be in (or may walk within $\frac{1}{4}$ mile of) and restrictions on entering those areas.
- The CPHE employers notify the agricultural employer of the specifics of the treatment prior to making the application on the agricultural establishment, including the specific location and description of the treated area, the date(s) and estimated start and end times of application, the product name, the EPA registration number and active ingredients, the REI, whether posting, oral notification or both are required, and any restrictions or use directions on the labeling that must be followed to protect workers, handlers or other persons.
 - The CPHE employer informs the agricultural employer before the application if there are any changes to: the specific location and description of the area to be treated, the REI, whether posting, oral notification or both are required, any restrictions or use directions from the label required for protection of workers, handlers or others, and if the start time is earlier than scheduled.
 - The CPHE employer informs the agricultural employer within 2 hours of the end of the application if there are any changes to the product name, EPA registration number and active ingredient, or if the start and end times are after the scheduled times (except changes to the end time of less than one hour).

(7). Safe Operation of Equipment and Repair (§170.309(i) and §170.313(f), §170.309(g) and §170.313(l))

Activity: Instruct handlers on safe operation and repair of equipment.

- Handler employers, including agricultural employers and CPHE employers, must ensure that handlers are instructed in the safe operation of pesticide equipment.
- Agricultural employers and CPHE employers can only assign tasks to clean, repair, or adjust pesticide equipment that has been used to mix, load or apply pesticides to their employees that have been trained as a handler. If the person(s) assigned to these tasks is not directly employed by the employer, then the employer is required to inform such persons about proper procedures for the handling of equipment before cleaning, repairing or adjusting equipment that has been used to mix, load, transfer or apply pesticides. The employer must inform the person(s) that the equipment may be contaminated with pesticides, the potential harmful effects of pesticide exposure, procedures for handling pesticide application equipment and for limiting exposure to pesticide residues, and personal hygiene practices and decontamination procedures for preventing exposures and removing pesticide residues.

(8). Information Required for Emergency Assistance (§170.309(f)(2) and §170.313(k)(2))

Activity: Provide pesticide-specific information to medical personnel in case of an emergency.

- If a medical emergency exists, the agricultural employer or CPHE employer must provide the following information to the treating medical personnel:
 - copies of the SDS(s),
 - the pesticide product name, EPA registration number, and active ingredients,
 - the circumstances of the application or the use of the pesticide(s), and

- the circumstances that could have resulted in exposure to the pesticide(s).

(9). Pesticide Safety Training for Workers and Handlers (§170.401 and §170.501)
Activity: Arrange for training of workers and pesticide handlers.

- Train or arrange for pesticide safety training for all existing workers and handlers as well as new workers and handlers. Workers being sent into pesticide treated areas must be trained before performing tasks in that area on an agricultural establishment where, within the last 30 days, a pesticide product bearing a WPS label has been applied or an REI has been in effect. Training for non-excepted workers and handlers is required annually. Content is outlined in the regulation at §170.401 for workers and §170.501 for handlers.
- Worker and handler pesticide safety trainings are conducted by those designated as a qualified trainer. Eligibility for trainers is defined at §170.401(c)(4) for workers and §170.501(c)(4) for handlers.
- Employers must keep records of training including acknowledgements for 2 years. The records may be created by the trainer or the employer, but it is the agricultural employer's responsibility to document and maintain records.
- Training records must include:
 - the trained worker or handler's printed name,
 - the trained worker or handler's signature,
 - the date of the training,
 - the information identifying which EPA-approved training materials were used,
 - the trainer's name and documentation showing the trainer met the eligibility requirements of trainer, and
 - the agricultural employer's name.
- The employer must provide to the worker or handler a record of the training upon their request.

(10). Personal Protective Equipment Information and Records
Activity: Provide respirator training, medical evaluation and fit test to handlers; inform those who clean contaminated PPE; create and make available operating instructions for closed systems and train handlers on those operating instructions

Respirator Users: Medical evaluation, fit testing and respirator training (§170.507(b)(10))

- Pesticide handler employers, which include agricultural employers and CHPE employers, must provide handlers with respirator training on the respirator specified on the label of the pesticide product that the handler will handle. The training must conform with the provisions of OSHA's 29 CFR 1910.134(k)(1)(i)-(vi).
- Current OSHA provisions regarding training and information (CFR 1910.134(k)) requires the employer to provide effective training to employees who are required to use respirators. The training must be comprehensive, understandable, and recur annually and more often if necessary.
- Handler employers must create and maintain records for 2 years to document the completion of required medical evaluation, fit testing and respirator training of a handler

that conform with OSHA's Personal Protective Equipment Respiratory Protection Program at 19 CFR 1910.134.

- Fit-testing Recordkeeping: OSHA's Personal Protective Equipment 1910.134 "Respiratory Protection Program" requires the employer to establish a record of the qualitative and quantitative fit tests administered to an employee including:
 - the name or identification of the employee tested,
 - type of fit test performed,
 - specific make, model, style, and size of respirator tested;
 - date of test, and
 - the pass/fail results for qualitative fit tests or the fit factor and strip chart recording or other recording of the test results for quantitative fit tests.
- Respirator Training Recordkeeping: OSHA's 1910.134 does not outline specific information required to document respiratory training, but employers need to demonstrate compliance with the required training, at a minimum noting who was trained and when the training occurred.

Cleaners of PPE (§170.507(d)(8))

- The pesticide handler employer must inform any person who cleans or launders PPE that such equipment may be contaminated with pesticides, the potentially harmful effects of exposure to pesticides, the correct ways to clean personal protective equipment and to protect themselves when handling such equipment, and proper decontamination and personal hygiene practices.

Closed systems instructions and training (§170.607(d))

- Employers on establishments using closed systems must have operating instructions for the closed system that are clearly legible and available at the mixing or loading site.
- Employers on establishments using closed systems must ensure that any handler operating the system is trained in its use.
- The closed system must be cleaned and maintained as specified in the written operating instructions and as needed to make sure the system functions properly.

(11). Exceptions

Notification of Exceptions for Early Entry

Activity: Inform workers of safety requirements permitting exceptions/exemptions allowing for tasks to be performed in treated areas.

- When using regulation exceptions for early entry of workers into a treated area, the agricultural employer must inform each early-entry worker, orally, of the following information:
 - location of the early-entry area where work activities are to be performed,
 - pesticide(s) applied,
 - dates and times that the REI begins and ends,
 - the exception to the regulation that allows the early entry,

- description of the tasks that may be performed under the exception,
- whether contact with treated surfaces is permitted,
- amount of time the worker is allowed in the treated area,
- PPE required by the labeling for early entry, and
- location of the pesticide safety information and decontamination supplies.
 - The employer must ensure that each early-entry worker has been informed in a manner the worker can understand of the labeling requirements and statements related to human hazards, precautions, first aid, and user safety.
 - Additionally, the employer must ensure that each early-entry worker has been instructed in prevention, recognition, and first aid treatment of heat-related illness.

5. THE INFORMATION COLLECTED – AGENCY ACTIVITIES, COLLECTION METHODOLOGY, AND INFORMATION MANAGEMENT

5(a). Agency Activities

This ICR does not involve EPA activities; respondents provide training, notify third parties, and create and retain records.

5(b). Collection Methodology and Management

EPA does not collect or manage information under this ICR. Respondents are allowed flexibility in how they collect and manage the information.

5(c). Small Entity Flexibility

The protections in 40 CFR Part 170 depend upon workers receiving the various training and notifications contained in the regulation. These requirements cannot be reduced for small establishments without significantly compromising the protections offered to their workers and handlers. As such, small entities are required to follow the same requirements as larger establishments, unless exempted as a solely family-operated establishment under existing 40 CFR 170.204(a) or at the revised 40 CFR 170.601(a). Under this exemption, the owner of an agricultural establishment is not required to provide certain protections to himself or members of his immediate family who are performing handling tasks on their own agricultural establishment.

5(d). Collection Schedule

This ICR does not involve agency collection activities.

6. ESTIMATING THE BURDEN AND COST OF THE COLLECTION

The Paperwork Reduction Act (PRA) requires EPA to estimate the “paperwork burden,” i.e., the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a federal agency. This can include the resources to: review instructions; develop, acquire, install, and use technology and systems; search data sources; collect, review, validate, and verify information/data; process and maintain information/data; disclose and transmit/submit information/data; change/adjust the existing ways of complying with any previously applicable instructions and requirements to now comply with new requirements; and, train personnel. EPA is also required to estimate the paperwork costs, which include both the costs associated with the

paperwork burden hours, and any additional costs not tied to a burden hour, but incurred under the PRA nonetheless.

In this section, EPA describes the assumptions and methods used to estimate the total cost and hourly burden estimates for all PRA activities required under the rule. Tables 5-17 list the estimated burden hours and costs associated with this ICR. The estimates are based on the information and figures contained in the Economic Analysis as well as information obtained by the Agency from the U.S. Department of Labor's Bureau of Labor Statistics (BLS) for wage rates, and U.S. Department of Agriculture's (USDA) special tabulation for the number of farms that hire workers and use pesticides based on the number of farms in the 2007 Agricultural Census.⁸

6(a). Respondent Burden

Respondents include employers on agricultural establishments, workers and handlers on agricultural establishments, CPHE employers, CPHE handlers, and trainers. The burden includes the respondent's time to provide, receive, and gather pesticide-related information and may include activities such as becoming familiar with the regulations, conducting or receiving pesticide safety training, respirator fit testing and training for persons required to use respirators, preparing and posting pesticide safety and application information signs, providing oral and written notification to persons who may enter restricted entry areas, posting site specific pesticide application information, and other provision of information by employers to employees.

Estimates of burden are based on cited data and Agency assumptions and estimates unless otherwise noted for each requirement and activity. EPA estimates the burden in terms of the time it takes for a respondent to perform a given activity. That time estimate is then multiplied by the number of respondents or the number of responses depending upon the activity, to determine the total time burden. The burden estimates are explained in detail together with respondent costs, in the next section.

6(b). Estimating Respondent Burden and Costs

(i). Methodology

The various respondent types for this ICR (labor groups that are subject to PRA requirements) are identified. These respondent groups are from agricultural establishments, commercial pesticide handling establishments (CPHEs), or trainers. Agricultural establishments include farms, nurseries, and greenhouse establishments. Employers that do not hire workers or handlers (sometimes called "family farms" in this ICR) are exempt from most WPS requirements and, therefore, PRA activities in this ICR. Respondent groups include agricultural employers, agricultural workers, agricultural handlers, CPHE employers, CPHE handlers and trainers.

First, the Agency estimates the burden per response ("event") for each type of respondent to conduct each activity. The burden per response is multiplied by the estimated number of responses per year to get the annual burden of each activity for each respondent type. The estimated annual burden hours for each activity and respondent type are summed to get the total annual burden hours for the ICR.

To calculate the cost, the Agency estimated the hourly wage rates for each type of respondent as discussed in section 6 (b)(i)(1), Wage Rates, below. The corresponding cost for each burden hour estimate is calculated by multiplying the applicable wage rate by the applicable burden hour estimate (per response, annual per activity, total annual).

⁸ USDA, NASS 2008. 2007 Census of Agriculture. National Agricultural Statistics Service, United States Department of Agriculture. Updated December 2008. <https://www.agcensus.usda.gov/Publications/2007/>.

Section 6 (b)(ii) Requirements, below, presents the individual rule requirements and resulting PRA activities, with detailed explanations and estimates for the burden and cost of each.

(1). Wage Rates

For this ICR, the Agency used the estimated wages, benefits, and other costs incurred by an employer for all affected respondent groups based on publicly available data from the BLS. The wage rate methodology uses data from each sector for an unloaded wage rate (hourly wage rate), and then calculates the loaded wage rate (unloaded wage rate + benefits) and fully loaded wage rate (loaded wage rate plus overhead). These rates are presented for the respondent labor categories of agricultural employer, CPHE employer, worker, agricultural handler, CPHE handler, and trainer. The time for owners/operators of agricultural establishments that do not hire workers or agricultural handlers but who handle pesticides is valued at the same wage rate and agricultural employers. The wage rate for agricultural employers is also used to value the time of certified private applicators and the wage rate for CPHE employers is used to value the time of certified commercial applicators.

Each sector's wage data (with the exception of agricultural establishment workers and handlers) corresponds to a specific Standard Occupational Classification (SOC) and for certain categories, a North American Industry Classification System (NAICS) code as well. Specific details are provided in the wage rate table (see Table 1). The SOC system is used by Federal statistical agencies to classify workers into occupational categories for the purpose of collecting, calculating, or disseminating data.

EPA uses fully loaded wage rates for all sectors (respondent groups) in this ICR except workers. EPA chose not to use fully loaded wage rates for workers in this ICR, retaining the use of the loaded wage rate instead. Loaded wage rates are understood to account for the non-wage benefits that an employee receives, such as paid holiday and sick leave and/or health insurance. Fully loaded wage rates reflect non-wage and benefit costs incurred by the employer, such as overhead or equipment used by the employee. While handlers use pesticide application equipment, workers under the WPS are those engaged in hand labor activities associated with crop production such as hand weeding, thinning, and harvesting and have few associated equipment or other overhead costs.

Unloaded Wage Rate

Unloaded wage rates are estimated for the following labor types:

- Agricultural establishment employers
- Family farm owners/operators
- CPHE employers
- Agricultural establishment workers (trained and untrained)
- Agricultural establishment handlers
- CPHE handlers
- Trainers

EPA uses mean hourly wage data for all relevant labor types, except for agricultural establishment workers and handlers, available in the National Industry-Specific Occupational Employment and Wage Estimates from the BLS Occupational Employment Statistics data series.⁹ For agricultural establishment workers, the Agency uses the USDA Farm Labor Report's annual average wage rate for U.S. fieldworkers.¹⁰ The wage rate for agricultural establishment handlers is calculated as the average of the agricultural establishment employer and worker rates. The overall wage is then weighted in order

⁹ BLS May 2016 National Industry-Specific Occupational Employment and Wage. Estimates available at: https://www.bls.gov/oes/current/oes_stru.htm

¹⁰ USDA November 2017 NASS Farm Labor Report available at: <http://usda.mannlib.cornell.edu/usda/current/FarmLabo/FarmLabo-11-16-2017.pdf>

to estimate the wage for handlers aged 16 years and older. The wage rates are derived from BLS NAICS 2016 estimates.

Loaded Wage Rate

EPA calculates loaded wage rates for all labor categories. Loaded wage rates include non-monetary benefits paid to employees such as paid leave, insurance, and retirement contributions.¹¹ According to the BLS, the average private-sector employee receives benefits that amount to approximately 31.7% of the total remuneration with unloaded wages accounting for approximately 68.3%.¹² Therefore, benefits represent approximately 46.3% of the unloaded wage rates, based on benefits for all civilian non-farm workers.¹³ Based on this information, loaded wage rates are calculated using either the unloaded wage rate divided by 0.683, or the sum of the unloaded wage rate and benefits per hour. In spite of the fact that data from the National Agricultural Workers Survey (Department of Labor (DoL)) indicate that up to 77% of agricultural workers do not receive benefits as part of their employment¹⁴, EPA uses the loaded wage rate as the value of time for agricultural workers (\$16.75 per hour).

Fully Loaded Wage Rate

The fully loaded wage rates for all sectors except workers are presented in Table 1. Fully loaded wage rates represent the total cost to employers of an employee in a given occupation. In addition to wages and benefits, the fully loaded wage rate includes the cost of overhead or capital needed to employ someone, such as building/office space, computers, and equipment. Pesticide handlers use pesticide application equipment, so EPA uses fully loaded wages for these occupations. Since a fully loaded wage rate is not used for workers in the estimation of cost, as explained above, only loaded wage rates are presented for workers in Table 1. The loaded wage rate is multiplied by 50% (EPA guidelines 20-70%) to get overhead costs, making fully loaded wage rates 150% of loaded wage rates.

Category	Unloaded Wage	Benefits per Hour (UW * 0.463)	Loaded Wage (UW + B)	Fully Loaded Wage (LW * 1.5)	BLS SOC Code
Agricultural Establishment Employer*	23.47	10.87	34.34	51.50	45-1011
Family Farm Owner/Operator [%]	23.47	10.87	34.34	51.50	45-1011
CPHE Employer†	21.24	9.83	31.07	46.61	37-1010
Worker	11.45	5.30	16.75	N/A #	45-2092
Agricultural Handler	14.63	6.77	21.40	32.11	45-2091
CPHE Handler	17.17	7.95	25.12	37.68	37-3012
Trainer	33.14	15.34	48.48	72.73	29-9010

* Wage rates for Agricultural Establishment Employers also represent the owner/operator of an establishment that does not employ workers or handlers, but handles pesticides, and represent certified private applicators.

[%] Assumes family farm owners/operators are covered under the same NAICS and BLS SOC codes as Agricultural Establishment Employers since they are considered the first-line supervisors of their farm. EPA also assumes that any additional operators (i.e., family members performing worker/handler tasks and other farm related activities) are compensated at the same rate since they are likely sharing supervisory and coordination activities.

† Wage rates for CPHE Employer represent certified commercial applicators.

¹¹ BLS May 2016 National Industry-Specific Occupational Employment and Wage. Estimates available at: https://www.bls.gov/oes/current/oes_stru.htm

¹² BLS Employer Costs for Employee Compensation- December 2017. Available at: <https://www.bls.gov/news.release/pdf/ecec.pdf>

¹³ BLS Civilian workers, by major occupational and industry group – December 2017. Available at from <http://www.bls.gov/news.release/ecec.t01.htm>

¹⁴ U.S. Department of Labor, Office of the Assistant Secretary for Policy, Office of Programmatic Policy, *National Agricultural Workers Survey (NAWS) 2001-2002 A Demographic and Employment Profile of United States Farm Workers Research Report No. 9*, March 2005. Available here: http://www.doleta.gov/agworker/report9/naws_rpt9.pdf

Assumes that farm worker/laborers do not receive fully loaded wage rates/benefits.

(2). Number of Establishments, Workers and Handlers

Additional information used in this ICR includes the number of agricultural establishments subject to the WPS. To estimate the number of agricultural establishments that use pesticides and hire labor, the Agency used publicly available data from the 2012 Census of Agriculture combined with information from a special tabulation of data from the 2007 Census of Agriculture^{15,16}. The WPS applies to those farms that use pesticides in the commercial production of agricultural plants on farms, forests, nurseries, and greenhouses and primarily to those that employ workers engaged in hand labor activities or handlers working directly with pesticides. According to the 2012 Census of Agriculture (NASS, 2014) and shown in Table 2, there are over 2.1 million ranches, farms, nurseries, and greenhouses in the United States. Over 1.5 million grow crops, including nursery and greenhouse production. Almost one million of them reported using pesticides. Based on more refined data from the 2007 Census of Agriculture, EPA estimates that about 870,000 crop-producing establishments used pesticides in 2012 and the Agency assumes this is representative of most years. Crop-producing establishments include entities assigned to NAICS 111, crop farming, but also livestock operations assigned to NAICS 112 that also produce crops. EPA further estimates that there are 374,794 agricultural establishments that hire workers and/or handlers, of which 304,106 use pesticides.¹⁷

Description of Agricultural Establishment	Number of All Agricultural Establishments	Number of Agricultural Establishments that Use Pesticides in any given year
All Agricultural Establishments	2,109,303	999,806
Crop-producing Establishments	1,551,654	871,935
Crop-producing Establishments Hiring Workers and/or Handlers	374,794	304,106
Crop-producing Establishments Hiring Workers*	312,568	252,940
Crop-producing Establishments Hiring Handlers†	221,187	201,145
Crop-producing Establishments without Workers and/or Handlers	1,176,360	567,829

* Source: 2012 Census of Agriculture, EPA estimates based on special tabulation of data from 2007 Census of Agriculture.

† Includes an estimated 158,961 establishments that hire both workers and handlers, of which 149,979 use pesticides in any given year.

Also shown in Table 2 are two important subsets of crop producing establishments. EPA estimates that 312,568 crop-producing establishments hire workers, of which 252,940 use pesticides in any given year. EPA also estimates that 221,187 crop-producing establishments hire pesticide handlers, of which 201,145 use pesticides in any given year. Included in each of these subsets are an estimated 158,961 crop-producing establishments that hire both workers and handlers, of which 149,979 use pesticides in any given year. Finally, EPA calculates that there are about 1.2 million crop-producing establishments that do not employ workers or handlers. EPA estimates that almost 570,000 of these farms use pesticides, many of which rely on family labor which is largely exempt from WPS provisions. Some of these farms, however, are affected by certain PPE provisions.

Table 3 presents information on farm labor. From the 2012 Census of Agriculture, there are over 2.7 million people employed on agricultural establishments, the majority of whom work on crop-producing establishments. Not all employees, however, are workers engaged in hand labor activities or

¹⁵ NASS. 2014. 2012 Census of Agriculture. National Agricultural Statistics Service, United States Department of Agriculture. May 2014. <http://www.agcensus.usda.gov/Publications/2012/>.

¹⁶ 2008. 2007 Census of Agriculture. National Agricultural Statistics Service, United States Department of Agriculture. Updated December 2008. <https://www.agcensus.usda.gov/Publications/2007/>

¹⁷ USDA, NASS Special Tabulation of data from 2007 and 2012 Census of Agriculture, 2008 and 2012, respectively

handlers working with pesticides. USDA estimates there are less than 1.1 million workers, including those working through labor contractors.¹⁸ EPA, however, conservatively estimates that there are 1,995,038 workers and handlers, of whom 1,813,475 are employed on agricultural establishments that use pesticides in any given year. EPA estimates that there are 1,910,055 workers, of whom 1,742,987 work on establishments that use pesticides in a year, and 300,621 pesticide handlers although 274,053 are estimated to actually handle pesticides in any given year. Included within each of these subsets of employees are an estimated 215,638 handlers who also perform worker tasks, of whom 203,565 are employed on establishments that use pesticides in any given year.

Description of Agricultural Establishment	Number of Employees on All Agricultural Establishments	Number of Employees on Agricultural Establishments that Use Pesticides in any given year
All Agricultural Establishments	2,736,417	not available
Crop-producing Establishments	2,408,452	2,098,272
Crop-producing Establishments Hiring Workers and/or Handlers	1,995,038	1,813,475
Crop-producing Establishments Hiring Workers*	1,910,055	1,742,987
Crop-producing Establishments Hiring Handlers [†]	300,621	274,053
Crop-producing Establishments without Workers and/or Handlers	-	-

* Source: 2012 Census of Agriculture, EPA estimates based on special tabulation of data from 2007 Census of Agriculture.

[†] Includes an estimated 215,638 handlers who also perform worker tasks, of whom 203,565 are employed on establishments that use pesticides in any given year.

For CPHEs, the Agency estimates that there are approximately 42,272 firms. EPA identified 1,936 firms employing 14,320 handlers in NAICS 115112 (soil preparation, planting, and cultivating) that engage in pest control services.¹⁹ The remaining 40,336 CPHEs are estimated based on the number of commercial certified applicators. Based on state reports under the Certified Applicator Program from 2008 to 2013, EPA estimates that there 89,594 commercial applicators certified to apply pesticides in the Agricultural Pest Control (Plants) Category, who are assumed to be distributed among firms of one to three applicators.

(ii). Requirements

This section details the Agency’s estimate of burden and cost per respondent for activities in each category of WPS requirements that are defined as paperwork burden. The tables below present the unit and total hourly burden and costs for agricultural establishments and CPHEs to comply with the rule requirements. There are eleven categories each with a varying number of activities in each category that have data items that require record keeping.

(1). Rule familiarization

All existing agricultural establishment employers and CPHE employers that apply pesticides (i.e., agricultural-use products covered by the WPS) must become familiar with the WPS requirements. This can be achieved by either reviewing the regulations at 40 CFR 170 or reviewing any appropriate guidances as needed. EPA estimates that respondents will take an average of 30 minutes per year per establishment to review the information relevant to their establishment. EPA estimates that there are 374,794 crop-producing (agricultural) establishments that hire workers and/or handlers, 42,272 CPHEs, and 567,829 family farms (agricultural establishments that apply pesticides but do not hire workers or

¹⁸ ERS. 2014. Farm Labor, Number and Geographical Distribution of Hired Farmworkers. Economic Research Service, U.S. Department of Agriculture. Updated October 30. <http://ers.usda.gov/topics/farm-economy/farm-labor/background.aspx#Numbers>

¹⁹ D&B. 2014. Database of business information maintained by Hoover’s Inc., a Dun and Bradstreet Company. <http://www.hoovers.com/>

handlers, and qualify for the family farms exemption). Table 4 shows the activity, respondent group, the number of respondents affected by the activity, the total number of responses, the hourly wage rates for each respondent, the time in hours each respondent will spend annually reading the regulations, the cost per response for each activity, and the total burden in hours and total cost. The total time burden for all establishments for rule familiarization is estimated to be 492,448 hours. The total cost is estimated to be \$25,253,464. (Table 4)

Activity	Respondent Group	Number of Respondents	Total Responses Annually (3-yr. avg.)	Wage Rate (\$/hr)	Per Event Average		TOTALS	
					Burden (hours)	Cost (\$)	Burden (hours)	Cost (\$)
Rule Familiarization	Agricultural Establishment Employers Hiring Workers and/or Handlers	374,794	374,794	51.50	0.5	25.75	187,397	9,650,946
	CPHE Employer	42,272	42,272	46.41	0.5	23.21	21,136	980,922
	Family Farm Owners †	567,829	567,829	51.50	0.5	25.75	283,915	14,621,597
TOTALS		984,895	984,895				492,448	25,253,464

* Estimates may not add due to rounding. Respondents are counted only once.
 † See §170.601 Exemptions, “Exemption for owners of agricultural establishments and their immediate families.”

(2). Basic Pesticide Safety Information (§170.309(h) and 170.311)

The agricultural employer is required to display pesticide safety information on the agricultural establishment at a location on the establishment where workers and handlers are likely to pass by or congregate and it can be readily seen and read. The information must also be displayed where decontamination supplies must be provided, when the supplies are located at a permanent site or at sites with 11 or more people. This requirement only affects agricultural establishments.

EPA assumes that there is one main pesticide safety information display, typically the permanent site of decontamination supplies, per agricultural establishment that hires labor and uses pesticides (304,106 agricultural establishments) and that it takes 2 minutes (0.033 hours) to post the display.

The number of displays at decontamination sites depends on the size and type of the establishment. Large and large-small fruit and vegetable establishments and large greenhouse establishments will potentially have work crews of 11 or more people, especially at harvest. EPA estimates that there are 21,694 such establishments (8,210 large establishments and 13,484 large-small establishments). On average, the 8,210 large establishments will have 10 occasions per year to post displays and the 13,484 large-small establishments will have 4 occasions for a total of 136,036 postings. Each occasion takes 2 minutes.

The employer must add contact information to the display for medical care and for the state lead agency responsible for enforcing the WPS. Any changes to the information required on the pesticides safety information display must be promptly updated at the main location and where decontamination supplies are provided. EPA assumes an average of 3 minutes is needed to fill in the contact information on the safety information display. All 304,106 establishments will need one display for the main location. The 13,484 large-small fruit and vegetable establishments are expected to need an additional display and the 8,210 large fruit, vegetable, and greenhouse establishments are expected to need, on average, 1.5 additional displays to post at decontamination sites with 11 or more people. EPA, therefore, estimates 329,905 total display posters needed on agricultural establishments. EPA assumes

that one-third, or, on average, 109,968 displays, will need contact information added or changed.

Multiplying the per event average by the total number of responses for each line item yields the total burden hours and costs. EPA estimates that the total number of burden hours for agricultural establishments is 20,023 hours and the cost is \$1,031,190. (Table 5)

Activity	Respondent Group	Number of Respondents	Total Responses Annually (3-yr. avg.)	Wage Rate (\$/hr)	Per Event Average		TOTALS	
					Burden (hours)	Cost (\$)	Burden (hours)	Cost (\$)
Post Main Display	Agricultural Employer	304,106	304,106	51.50	0.033	1.70	10,035	516,828
Post Decontamination Display	Agricultural Employer	21,694	136,036	51.50	0.033	1.70	4,489	231,193
Add/Change Contact Information	Agricultural Employer	304,106	109,968	51.50	0.05	2.58	5,498	283,168
TOTALS		304,106	550,110				20,023	1,031,190

*Estimates may not add due to rounding. Respondents are counted only once.

(3). Pesticide Application and Hazard Information (\$170.313(h))

For each pesticide application, agricultural employers must record application-specific information and maintain a copy of the SDS, and display both of them no later than 24 hours from the end of the application and remain on display for 30 days from the end of the REI, or until workers are no longer on the establishment, whichever is earlier. The display must be posted where workers and handlers are likely to pass by or congregate and can be readily seen and read.

This requirement must be met by all employers hiring workers and/or handlers, estimated to number 304,106 establishments. EPA assumes an average of 20 applications per establishment per year, resulting in 6,082,120 responses. (Table 6, Lines 1-3)

The application-specific record must include the name, EPA registration number, and active ingredients of the product applied; the crop or site treated and the location and description of the treated area; the date(s) and times the application started and ended; and the end date and duration of the REI. EPA calculates that total time to gather and record all the application-specific information is 7 minutes or 0.117 hours based on the following activities:

- The average time to gather and record the application information is assumed to take 5 minutes.
- To obtain a copy of the SDS information takes an estimated 4 minutes based on internet searches performed by the Agency. SDS are also typically available at pesticide dealers.
- The same product may be used on multiple sites on a farm; it is assumed that on average one SDS is needed for two application records which results an average of 2 minutes per application record. Therefore, 5 minutes plus 2 minutes equals 7 minutes to gather and record application specific information.

To post this information, it is assumed to take 1 minute per response or 0.017 hours.

Application-specific information and the relevant SDS are to be kept as records for a period of two years. EPA assumes it takes 1 minute or 0.017 hours per application to store the record and a copy of SDS.

The agricultural employer must provide upon request the application-specific information and

pesticide hazard information to any worker or handler who is or has been employed by the agricultural establishment, and/or to treating medical personnel while displayed and during the two years the records are kept.

EPA assumes that the majority of requests for information will come from current employees and that a request will be made for information on about one application in 20, or an estimated average of one request per establishment per year, for a total of 304,106 requests per year. In the case of the current employee, locating the applicable records is likely to be fairly simple as the employee should be able to provide exact information about the time and location of the application in question. EPA assumes that the employer will have the same burden regardless of who requests the information. EPA estimates that the exchange of information would take about 6 minutes (0.1 hours), for a total burden of 30,411 hours. (Table 6, Line 4)

EPA further assumes that about one in 100 workers and handlers will make a request for information after they have left an establishment's employ, or 19,950 requests per year. EPA assumes that the agricultural employer will spend, on average, 21 minutes (0.35 hours) to respond to a request including the time to verify the former employee's work status, period of time on the establishment, and the appropriate records and to send the records, either electronically or by mail, to the requester. Total burden for responding to requests from former employees is calculated to be 6,983 hours. (Table 6, Line 5)

EPA estimates that the total number of burden hours for agricultural establishments to gather, record and maintain records is 949,711 hours and the cost is \$48,910,122. (Table 6)

Table 6: Pesticide Hazard and Application Specific Information								
Activity	Respondent Group	Number of Respondents	Total Responses Annually (3-yr. avg)	Wage Rate (\$/hr)	Per Event Average		TOTALS	
					Burden (hours)	Cost (\$)	Burden (hours)	Cost (\$)
Gather and Record	Agricultural Employer	304,106	6,082,120	51.50	0.117	6.01	709,581	36,543,404
Post Information	Agricultural Employer	304,106	6,082,120	51.50	0.017	0.86	101,369	5,220,486
Maintain Records	Agricultural Employer	304,106	6,082,120	51.50	0.017	0.86	101,369	5,220,486
Provide information on request-current employee	Agricultural Employer	304,106	304,106	51.50	0.10	5.15	30,411	1,566,146
Provide information on request – former employee	Agricultural Employer	304,106	19,950	51.50	0.35	18.03	6,983	359,599
TOTALS		304,106	18,570,416				949,711	48,910,122

*Estimates may not add due to rounding. Respondents are counted only once.

(4). Notification to Workers of Entry Restrictions (§170.409)

Agricultural establishment employers must notify workers of all entry restrictions associated with a pesticide application as required by §170.405 and §170.409. Employers must either orally notify workers or post warning signs in accordance with §170.409. Employers must post warning signs for outdoor production applications with REIs greater than 48 hours. Workers must be notified of outdoor applications of products with an REI of 48 hours or less either orally or by posted warning signs. In the case of indoor production, posting is required if the REI is greater than 4 hours, otherwise notification

may be either oral or by posting. Double notification is required if the pesticide product labeling has a statement requiring both the posting and oral notification. Posted notifications must be taken down after the end of the REI.

EPA estimates that there are 252,940 establishments that hire workers that also use pesticides (Table 2). EPA also estimates that 1,742,987 workers are employed on agricultural establishments that use pesticides. On average, establishments are assumed to make 20 pesticide applications per year. To estimate the number and mechanism by which workers are notified of REIs, the Agency divides these establishments by type of production (outdoor vs indoor) and by economic size.

- Outdoor production. EPA estimates that there are 252,394 farms and nurseries primarily engaged in 'outdoor' production (identified by NAICS 111 except 11141) that hire workers and use pesticides. It is assumed that farms and nurseries make, on average, 8 applications requiring posting and 14 applications where they make oral notifications, including 2 occasions with double notification requirement. EPA estimates that there are 1,727,929 workers on these establishments.
- Indoor production, large. EPA estimates that there are 108 large greenhouses primarily engaged in 'indoor' production (NAICS 11141) that hire workers and use pesticides. It is assumed that large greenhouses post signs for 20 applications and make 2 applications where they also make oral notifications (double notification requirement). EPA estimates that there are 12,860 workers in large greenhouses that use pesticides.
- Indoor production, small. EPA estimates that there are 438 small greenhouses primarily engaged in 'indoor production (NAICS 11141) that hire workers and use pesticides. It is assumed that small greenhouses post signs for 16 applications and make 6 applications where they make oral notifications, including 2 occasions with double notification requirement). EPA estimates that there are 2,199 workers in small greenhouses that use pesticides.

Posting. A posting event includes posting the signs prior to application (but no more than 24 hours prior to scheduled application) and removing the posting after the REI has expired. EPA assumes 2 warning signs are typically needed for each event but that 3 may be needed due to the proximity of worker housing or multiple access points in larger fields. The agricultural employer is assumed to post the signs. As noted above, the Agency assumes that farms and nurseries primarily engaged in 'outdoor' production will average 8 posting events per year.

- EPA estimates that there are 53,478 large farms and nurseries that hire workers and use pesticides, resulting in 427,824 posting events. EPA assumes 70% of the events will entail posting 2 signs and 30% will entail posting 3 signs for 983,995 postings $(427,824 \times 0.7 \times 2) + (427,824 \times 0.3 \times 3)$.
- EPA estimates that there are 96,239 large-small farms and nurseries that hire workers and use pesticides, resulting in 769,912 posting events. EPA assumes 80% of the events will entail posting 2 signs and 20% will entail posting 3 signs for 1,693,806 postings $(769,912 \times 0.8 \times 2) + (769,912 \times 0.2 \times 3)$.
- EPA estimates that there are 65,380 medium-small farms and nurseries that hire workers and use pesticides, resulting in 523,040 posting events. EPA assumes 90% of the events will entail posting 2 signs and 10% will entail posting 3 signs for 1,098,384 postings $(523,040 \times 0.9 \times 2) + (523,040 \times 0.1 \times 3)$.
- EPA estimates that there are 37,297 small-small farms and nurseries that hire workers and use pesticides, resulting in 298,376 posting events. EPA assumes 95% of the events will entail

posting 2 signs and 5% will entail posting 3 signs for 611,671 postings ($298,376 \times 0.95 \times 2$) + ($298,376 \times 0.05 \times 3$).

- Finally, the estimated 108 large greenhouses that hire workers and use pesticides are assumed to average 20 posting events each requiring 2 signs for 4,320 postings ($108 \times 20 \times 2$) and the estimated 438 small greenhouses that hire workers and use pesticides are assumed to average 16 posting events each requiring 2 signs for 14,016 postings ($438 \times 16 \times 2$).

In total, the Agency estimates there will be 4,406,192 postings ($983,995 + 1,693,806 + 1,098,384 + 611,671 + 4,320 + 14,016$) and each posting event is assumed to take 10 minutes (0.17 hours) of the agricultural employer's time. (Table 7, Line 1).

Oral Notification. EPA assumes that in 10% of the applications requiring oral notification, the employer must make a second notification for workers in different locations or working different shifts. EPA also assumes about 80% of workers will receive an oral notification about any single application, on average, since all workers may not be present on the establishment for the duration of a REI.

- For farms and nurseries (outdoor production), the Agency estimates that there are 3,533,516 occasions requiring oral notifications, given 252,394 establishments averaging 14 occasions per year. Given assumptions about second notifications, there will be 3,886,868 oral notifications by employers on farms and nurseries.
- EPA estimates that there are 1,727,929 workers on farms and nurseries. Given 14 applications with oral notification per year, the Agency calculates there will be 19,352,805 notifications received each year ($1,727,929$ workers \times 80% on site \times 14 applications).
- For large green house establishments (indoor production), the Agency estimates 216 occasions requiring oral notifications, given 108 establishments averaging 2 occasions per year. EPA assumes that in 10% of the occasions, the employer must make a second notification for workers in different locations or working different shifts resulting in 238 oral notifications by employers in large greenhouses.
- EPA estimates that there are 12,860 workers in large greenhouse establishments that use pesticides. Given 2 applications with oral notification per year, the Agency calculates there will be 20,576 notifications received each year ($12,860$ workers \times 80% on site \times 2 applications).
- For small green house establishments, the Agency estimates 2,628 occasions requiring oral notifications, given 438 establishments averaging 6 occasions per year. EPA assumes that in 10% of the occasions, the employer must make a second notification for workers in different locations or working different shifts resulting in 2,891 oral notifications by employers in small greenhouses.
- EPA estimates that there are 2,199 workers in small greenhouse establishments that use pesticides. Given 6 applications with oral notification per year, the Agency calculates there will be 10,555 notifications received each year ($2,199$ workers \times 80% on site \times 6 applications).

Each oral notification is estimated to require 3 minutes of the agricultural employer's time as well as 3 minutes time of per worker present on the farm or greenhouse during the REI (0.05 hours).

Therefore, the Agency estimates that agricultural employers will make 3,889,997 oral notifications (3,886,868 employer oral notifications to workers for farms and nurseries + 238 employer oral notifications to workers for large green houses + 2,891 employer oral notification to workers for small green houses). (Line 2 in Table 7)

For agricultural workers, the Agency estimates they will receive a total of approximately 19,383,936 notifications (19,352,805 notifications to workers on farms and nurseries + 20,576 notifications to workers in large green houses + 10,555 notifications to workers in small green houses). (Line 3 in Table 7)

EPA estimates that the total average time in terms of burden hours and costs for agricultural establishments to inform workers of an area under an REI is 1,898,062 hours with a cost of \$64,070,607. (Table 7)

Activity	Respondent Group	Number of Respondents	Total Responses Annually (3-yr. avg.)	Wage Rate (\$/hr)	Per Event Average		TOTALS	
					Burden (hours)	Cost (\$)	Burden (hours)	Cost (\$)
Post Indoor/outdoor	Agricultural Establishments	252,940	4,406,192	51.50	0.17	8.58	734,365	37,819,818
Provide Oral Notification	Agricultural Establishments	252,940	3,889,997	51.50	0.05	2.58	194,500	10,016,742
Receive Oral Notification	Agricultural Workers	1,742,987	19,383,936	16.75	0.05	0.84	969,197	16,234,046
TOTALS		1,995,927	27,680,125				1,898,062	64,070,607

*Estimates may not add due to rounding. Respondents are counted only once.

(5). Establishment-Specific Information (§170.403 and §170.503(b))

The agricultural employer must ensure that workers and handlers have been informed of establishment-specific information before any worker or handler performs any task in a treated area on an agricultural establishment. The employer must provide the information orally in a manner the worker or handler can understand.

The establishment-specific information includes the locations of the pesticide safety information (as described above), pesticide application and hazard information, and decontamination supplies. EPA estimates that all 374,794 agricultural establishments will provide establishment specific information 2 times a year resulting in 749,588 responses for agricultural establishments. Each response requires 1 minute of the employer's time. In addition, the Agency estimates that 1,995,038 agricultural workers will receive establishment specific information one time per year and that it takes 1 minute of the employee's time to receive this information resulting in 1,995,038 responses. There is no record keeping requirement for this activity.

EPA estimates that the total average burden in terms of hours and costs for agricultural employers is 45,744 hours and \$1,200,344. (Table 8)

Activity	Respondent Group	Number of Respondents	Total Responses Annually (3-yr. avg.)	Wage Rate (\$/hr)	Per Event Average		TOTALS	
					Burden (hours)	Cost (\$)	Burden (hours)	Cost (\$)
Inform- Provide Establishment Specific	Agricultural Establishment'	374,794	749,588	51.50	0.017	0.8583	12,493	643,396

Activity	Respondent Group	Number of Respondents	Total Responses Annually (3-yr. avg.)	Wage Rate (\$/hr)	Per Event Average		TOTALS	
					Burden (hours)	Cost (\$)	Burden (hours)	Cost (\$)
Information	Agricultural Workers/Handlers	1,995,038	1,995,038	16.75	0.017	0.2792	33,251	556,948
TOTALS		2,369,829	2,744,620				45,744	1,200,344

* Estimates may not add due to rounding. Respondents are counted only once.
 † Assumes 2 early entry events per year per establishment.

(6). Information Exchanges between Agricultural Employers, CPHE Employers, and Handlers (§170.309(k), §170.313(h)-(j), and §170.503)

There are requirements for the handler employers to exchange certain information, and to share this information with their handler employees. The following information exchanges include the burden of both the respondent that provides the information and the respondent that receives that information. The total burden for all respondents to comply with these requirements is 4,449,061 hours and \$211,861,784. (Table 9)

Agricultural Employer Informs CPHE Employer of Entry Restrictions

If any handler employed by a CPHE will be working on an agricultural establishment, the agricultural employer/operator must provide the CPHE employer the specific location and description of any areas that may be treated or areas where an REI may be in effect and that the handler may be in (or walk within ¼ mile of), and any restrictions on entry into those areas. The CPHE employer is to then provide this information to the CPHE handler.

EPA estimates that the annual average number of agricultural establishments that apply pesticides is 871,935 (Table 2). Each agricultural establishment is assumed to contract with CPHE’s for one application a year. Based on state reports under the Certified Applicator Program, the Agency estimates that there are 89,594 commercial applicators certified in crop protection. Assuming each commercial applicator makes or directs 90 pesticide applications per year results in 8,063,460 contract pesticide applications on agricultural establishments (more than 9 applications per establishment, on average) each of which require the agricultural employer to inform the CPHE employer of any treated areas in the vicinity of the area the handler will be. EPA assumes it takes 3 minutes (0.05 hours), on average, for the agricultural employer to provide (and the CPHE employer to receive) the information about other treated areas considering that for many instances there will be no other treated areas where an REI is in effect in the area. (See Table 9, Lines 1 and 2.)

The CPHE employer is required to provide that information (that is, the location and description of any treated areas where an REI is in effect and restrictions on entering those areas) to the CPHE handlers working on the agricultural establishment. This information exchange results in a time-cost for the CPHE employer to provide information and the CPHE handlers to receive information. This time-cost requirement does not include self-employed CPHE handlers as they are already informed of the application because they are assumed to be the CPHE employer who had the information exchange with the agricultural employer. For those CPHEs that hire labor and are required to inform their handlers of the applications made CPHEs including those on WPS farms. EPA estimates that there are 1,936 CPHE employers providing and 14,320 handlers receiving the information. This information exchange will occur for 1,288,800 applications, assuming that each handler makes 90 applications per year (14,320 x 90 = 1,288,800). EPA assumes that it takes 3 minutes (0.05 hours) for the employer to provide and the handler to receive the information for each notification. (Table 9, Lines 3 and 4)

CPHE Employer Informs Agricultural Employer prior to Application

The CPHE applicator must also provide application information to the agricultural establishments on which it makes the application, prior to making any pesticide application on the agricultural establishment. The information the CPHE employer must provide, or make sure the agricultural employer is aware of, includes the specific location and description of the area(s) to be treated; the date(s) and start and estimated end times of application; the product name, EPA registration number and active ingredients; the REI; whether posting, oral notification or both are required; and any restrictions or use directions on the labeling that must be followed to protect workers, handlers, or other persons during or after application. If there are any changes to the specific location and description of the area to be treated, the REI, whether posting, oral notification or both are required, any restrictions or use directions from the label that must be required for protection, or if the start time for the application will be earlier than scheduled, the CPHE employer must provide the agricultural establishment employer updated information prior to the application. If there are changes to the product name, EPA registration number and active ingredient, or if the start and end times are after the scheduled time, they must be reported within 2 hours of completing the application. Changes in application end time of less than one hour need not be reported. (§170.313(j))

From above, the Agency estimates that there are 42,272 commercial firms making 8,063,460 contract pesticide applications on agricultural establishments. EPA estimates that 70% of the applications applied by CPHE handlers require 2 exchanges of information and the remaining 30% require 1 exchange of information, or 1.7 notifications per application, on average. The total number of notifications by CPHE handlers to agricultural establishments that use pesticides is, therefore, 13,707,882 (8,063,460x 1.7). EPA assumes it takes 6 minutes (0.10 hours) for CPHEs to notify and for the agricultural establishment to receive the information. (Table 9, Lines 5 and 6)

Handler Employers Inform Handlers of Safe Use Information

Handler employers (agricultural establishment employers or CPHE employers) must provide certain labeling and application-specific information to handlers. The handler employer must ensure that before any handler performs any handler activity involving a pesticide product, has been informed of labeling requirements and use directions applicable to the safe use of the pesticide. The handler employer must ensure that the handler is aware of requirements for any entry restrictions, application exclusion zones and restricted-entry intervals as described in §170.405 and §170.407 that may apply based on the handler's activity. (§170.503)

This information exchange results in a time-cost for the handler employer to provide information and the handler to receive information. EPA estimates that there are 201,145 agricultural employers of handlers that use pesticides each year and they employ 274,053 handlers. EPA assumes that the handlers are responsible for 10 applications per year, on average, totaling 2,011,450 applications per year. EPA further assumes that the exchange of information will take 7 minutes (0.117 hours). (Table 10, Lines 7 and 8).

EPA estimates that there are 1,936 CPHE employers who will inform each of their 14,320 handlers for each application. As estimated above, CPHE handlers account for 1,288,800 applications per year. EPA estimates that it takes 7 minutes of the CPHE employer to provide information and 7 minutes for each handler to receive the information. (Table 9, Lines 9 and 10)

The total average burden in terms of hours and costs for respondents to comply with this requirement is 4,449,061 hours and \$211,861,784. (Table 9)

Table 9: Information Exchanges Between Agricultural Employer, CPHE Employer, or CPHE Handler								
Activity	Respondent Group	Number of Respondents	Total Responses Annually (3-yr. avg.)	Wage Rate (\$/hr)	Per Event Average		TOTALS	
					Burden (hours)	Cost (\$)	Burden (hours)	Cost (\$)
1. Agricultural Establishment Provides Information on treated areas under an REI to CPHE employer	Agricultural Establishment Employer	871,935	8,063,460	51.50	0.05	2.575	403,173	20,763,410
2. CPHE receives information on treated areas under a REI	CPHE Employer	42,272	8,063,460	46.61	0.05	2.331	403,173	18,791,894
3. CPHE Provides Information on treated areas under an REI on ag establishment to CPHE Handlers	CPHE Employer	1,936	1,288,800	46.61	0.05	2.331	64,440	3,003,548
4. CPHE Handlers receive Information on treated areas under an REI on ag establishment from CPHE employer	CPHE Handler	14,320	1,288,800	37.68	0.05	1.884	64,440	2,428,099
5. CPHE employer provides application information to Ag establishment employer	CPHE Employer	42,272	13,707,882	46.61	0.10	4.661	1,370,788	63,892,438
6. Ag establishment employer receives the application information from CPHE employer	Agricultural Establishment Employer	871,935	13,707,882	51.50	0.10	5.150	1,370,788	70,595,592
7. Ag Establishment Provides Label/Application Information to Handlers	Agricultural Establishment Employer	201,145	2,011,450	51.50	0.117	6.026	235,340	12,119,992
8. Ag Handler Receives Label/Application Information from Ag Establishment	Ag Establishment Handlers	274,053	2,011,450	32.11	0.117	3.757	235,340	7,556,756
9. CPHE Employer Provides Label/Application Information to CPHE Handlers	CPHE Employer	1,936	1,288,800	46.61	0.117	5.453	150,790	7,028,303
10. CPHE Handler Receives Label/Information from CPHE	CPHE Handlers	14,320	1,288,800	37.68	0.117	4.409	150,790	5,681,752
TOTALS		1,202,580	52,720,784				4,449,061	211,861,784

*Estimates may not add due to rounding. Respondents are counted only once. The number of respondents will often times be smaller than the responses because there are some activities in one Information Collection that will be done once and other activities that will be done multiple times.

(7). Safe Operation, Cleaning and Repair of Equipment (§170.309(i) and §170.313(f), §170.309(g) and §170.313(l))

The agricultural employer and CPHE employer must ensure that handlers are instructed in the safe operation of any equipment used for mixing, loading, transferring or applying pesticides.

Agricultural employers and CPHE employers can only assign the tasks to clean, repair, or adjust pesticide equipment that has been used to mix, load or apply pesticides to their employees that have been trained as a handler. If the person(s) assigned to these tasks is not directly employed by the employer, then the employer is required to inform such persons about proper procedures for the

handling of equipment before cleaning, repairing or adjusting equipment that has been used to mix, load, transfer or apply pesticides. The employer must inform the person(s) that the equipment may be contaminated with pesticides, the potential harmful effects of pesticide exposure, procedures for handling pesticide application equipment and for limiting exposure to pesticide residues, and personal hygiene practices and decontamination procedures for preventing exposures and removing pesticide residues.

EPA estimates that there are 201,145 agricultural establishments employing handlers that use pesticides in a given year (Table 2). Most establishments probably have one handler to whom information must be provided. Of the 72,908 large farms that have more than one handler and use pesticides, the Agency estimates that 20% (14,582) will have to provide pesticide equipment safety information on 2 occasions per year and the other establishments provide the information once, resulting in 215,727 responses annually. EPA estimates that there are 274,053 handlers employed on agricultural establishments that use pesticides (Table 3) and all receive the equipment safety information once per year. Instruction is assumed to take 5 minutes (0.083 hours).

For CPHEs, there are 1,936 establishments that provide pesticide equipment safety information, likely in conjunction with pesticide safety training. EPA assumes CPHEs conduct 1.3 safety training sessions each year, resulting in 2,517 responses. EPA estimates the number of CPHE handlers to be 14,320 all of whom receive the information once. Instruction is assumed to take 5 minutes (0.083 hours).

The total average burden in terms of hours and costs for agricultural employers to comply with this requirement is 42,218 hours and \$1,713,890. (Table 10)

Activity	Respondent Group	Number of Respondents	Total Responses Annually (3-yr. average)	Wage Rate (\$/hr)	Per Event Average		TOTALS	
					Burden	Cost	Burden	Cost
					(hours)	(\$)	(hours)	(\$)
Agricultural Employer informs handlers.	Agricultural Establishment Employer	201,145	215,727	51.50	0.083	4.292	17,977	925,829
	Agricultural Establishment Handler	274,053	274,053	32.11	0.083	2.676	22,838	733,320
CPHE Employer informs handlers.	CPHE Employer	1,936	2,517	46.61	0.083	3.884	210	9,776
	CPHE Handler	14,320	14,320	37.68	0.083	3.140	1,193	44,965
TOTALS		491,454	506,617				42,218	1,713,890

*Estimates may not add due to rounding. Respondents are counted only once.

(8). Information Required for Emergency Assistance (§170.309(f)(2) and §170.313(k)(2))

In the event of an illness or injury to a worker or handler that may have been caused by a pesticide exposure, the agricultural employer must provide the relevant SDS(s), product information, and circumstances of the application and exposure to the attending medical personnel as specified in §170.309(f)(2) and §170.313(k)(2).

To determine the burden and cost of this activity, the Agency assumes that the number of responses is equivalent to the total number of incidents involving pesticides on agricultural establishments. EPA relied on the Sentinel Event Notification System for Occupational Risk

(SENSOR)-Pesticides database to estimate the number of pesticide incidents that occur annually. As a result of this exercise, the Agency identified 703 cases most relevant to agricultural situations occurring over three years or 234 incidents per year. To determine whether the incidents could be prevented, EPA's benefits analysis divided these incidents into two categories: incidents that could be prevented by the changes to the WPS and incidents that could be prevented by the changes to the certification rule. EPA did this to avoid double counting an incident as a benefit in both rule updates. However, any incident involving a pesticide on an agricultural establishment could require the agricultural employer to provide emergency assistance so this section considers the incidents in both categories (those that are relevant to WPS and those that are relevant to the changes to the certification rule.)

The next step is to extrapolate the 234 agricultural pesticide incidents per year in SENSOR-Pesticides to the estimated number of incidents per year nationally, accounting for underreporting and the subset of states that participate in SENSOR-Pesticides. The Agency estimates that less than 10% of incidents are reported to a database like SENSOR, implying at least 2,340 agricultural pesticide incidents annually. Only 10 states report to SENSOR-Pesticides; extrapolating to the national level based on the number of workers and handlers results in at least 4,212 agricultural pesticide incidents nationally per year while extrapolation based on the number of agricultural establishments results in at least 6,786 agricultural pesticide incidents nationally. Taking the midpoint, the estimated number of incidents is 5,500 per year. Based on the Agency's assessment of the three years of data; these incidents are assumed to be categorized as follows:

- 57%, or 3,145 cases would be relevant to the WPS rule update; and
- 43%, or 2,355 cases would be relevant to the certification rule update.

The next step is to estimate the number of agricultural pesticides incidents that would occur each year after the changes to the WPS are implemented and assuming the changes to the certification rule are implemented. EPA estimates 30-56% of incidents associated with the WPS could be prevented by the changes to the WPS, implying 1,383 to 2,201 incidents would still occur. Separately, the Agency estimated that 70-85% of cases relating to certified applicators could be prevented if the changes to the certification rule are implemented, leaving 353 to 706 incidents. Therefore, the Agency estimates that 1,736 to 2,907 incidents involving agricultural pesticides will still occur each year after the two rules are implemented. Taking the midpoint, the Agency estimates there would be about 2,320 agricultural pesticide incidents per year, where an agricultural employer may need to provide emergency assistance. Medical information would not be needed in every incident, as some are minor and the worker will not seek medical care, however the Agency includes all estimated incidents in estimating burden.

EPA estimates that there are 304,106 agricultural establishments that hire workers and/or handlers and use pesticides and 1,936 CPHEs. Assuming that emergency assistance is equally likely to be needed from either establishment, agricultural establishment employers would respond to 99.4% of incidents, or 2,306, and CPHE employers would respond to 14 incidents.

EPA assumes that each provision of pesticide-specific emergency information takes 5 minutes of the employer's time to locate and provide it to medical personnel.

EPA estimates that the average burden in terms of hours and costs for agricultural worker and handler employers to comply with this requirement is 193 hours and \$9,951 (Table 11)

In addition, the treating medical personnel may request additional application and hazard information as specified in §170.311(b) during the period the information is displayed or required to be retained as records. The burden of obtaining the application and hazard information is estimated in Section 6(b)(iii)(3).

Table 11: Information Required for Emergency Assistance								
Activity ²⁰	Respondent Group	Number of Respondents	Total Responses Annually (3-yr. average)	Wage Rate (\$/hr)	Per Event Average		TOTALS	
					Burden (hours)	Cost (\$)	Burden (hours)	Cost (\$)
Agricultural Employer Provides Information to Medical Personnel	Ag. Establishment Employer	304106	2,306	51.50	0.083	4.29	192	9,897
CPHE Employer Provides Information to Medical Personnel	CPHE Employer	1936	14	46.61	0.083	3.88	1	54
TOTALS		306,042	2,320				193	9,951

*Estimates may not add due to rounding. Respondents are counted only once.

(9). Pesticide Safety Training for Workers and Handlers (§170.401 and §170.501)

Annual training is required for all agricultural workers and handlers on agricultural establishments and handlers employed by CPHEs.

Calculations in this ICR are based on assumptions the Agency made about the number of training sessions held each year. EPA estimates that the average burden in terms of hours and costs for agricultural and CPHE employers and their worker and handler employees to comply with this requirement is 2,265,160 hours and \$ 67,055,858. (Table 12)

Agricultural Worker Pesticide Safety Training

Workers must be trained before they perform any tasks on an agricultural establishment in an area that, within the last 30 days, has been treated with a pesticide or is under an REI. Workers who are trained as handlers under this rule, are certified as applicators of RUPs (40 CFR 171), or are certified as crop advisors are exempted from this training requirement while they meet these criteria. The training must be provided by persons designated by EPA, state or tribal pesticide enforcement agencies as a trainer of certified applicators, handlers, or workers; trainers that have completed an approved Train-the-Trainer course; or certified applicators (40 CFR 171). The wage rate for the first two categories of trainers is \$72.73 and a certified applicator is assumed to be the agricultural employer (wage rate \$51.50).

Worker pesticide safety trainings are the responsibility of the agricultural establishment employer. EPA estimates that there are 312,568 establishments that hire workers, i.e., those that engage in hand labor activities in the production of crops. Operations that primarily raise livestock (NAICS 112) are not included in the estimate because it is assumed that the types of crops primarily raised do not necessitate hiring agricultural workers. Handlers that work on livestock operations are included in the handler training section below. This estimate includes establishments that do not use pesticides on the assumption that most establishments will conduct trainings early in the season before pesticide application decisions are made, but will train workers in case pesticides are needed. EPA

²⁰ The transfer of pesticide information which can be phoned or faxed in by the employer is assumed to take 5 minutes of an employer's time per event.

further estimates that there will be a total of 518,487 training sessions per year given multiple trainings to accommodate different sizes of workforce across different types of farms:

- Large establishments (annual revenue of \$750,000 or more) with more than 10 employees, estimated to number 16,454, hold an average of 6.4 training sessions per year;
- Large establishments (annual revenue of \$750,000 or more) with fewer than 10 employees, estimated to number 40,224, hold an average of 1.45 training sessions per year;
- Small establishments (annual revenue of less than \$750,000) with more than 10 employees, estimated to number 17,598, are assumed to hold an average of 3.25 training sessions per year;
- Small establishments (annual revenue between \$10,000 and \$750,000) with fewer than 10 employees, estimated to number 167,377, are assumed to hold an average of 1.27 training sessions per year;
- Small establishments (annual revenue less than \$10,000) with fewer than 10 employees, estimated to number 70,917, are assumed to hold an average of 1.2 training sessions per year.

EPA assumes that 14% of trainings will be conducted by trainers of certified applicators, accounting for 72,588 training sessions held on 43,760 establishments; 10% of trainings will be conducted by trainers who completed a Train-the-Trainers program, accounting for 51,849 training sessions held on 31,257 establishments; and 76% of trainings will be conducted by certified applicators, accounting for 394,050 training session held on 237,551 establishments. (Table 12, lines 1-3)

EPA estimates that there are 1,910,055 employees on farms that primarily produce crops (NAICS 111) and hire labor. Given a new hire rate of 16%²¹, the Agency estimates that 84% of the 215,638 handlers employed on establishments hiring workers, or 181,136, will be returning employees who will receive handler safety training. Thus, the Agency estimates that 1,728,919 workers (1,910,055 - 181,136) will be trained each year. (Table 12, line 4)

The training time requirement for worker training sessions is estimated to take 45 minutes (0.75 hours) to cover the training content.

Employers (numbering 312,568) are required to make a record of the training (numbering 518,497 as calculated above) and have it signed by the trained worker (numbering 1,728,919). The estimated time burden for agricultural establishment to collect signatures and file the records of training is 7 minutes (0.12 hours) per training session. The time required for workers to sign is 30 seconds (0.0083 hours) per worker. Employers are required to keep records of training for 2 years, including names of workers trained, trainer's name and eligibility, and the employer's name; date; materials used; and signature acknowledgement of receipt of training. This record must be provided to the employee upon their request. EPA estimates that one-third of workers (576,306) will request a copy, given that 28% of workers report having multiple employers.²² EPA assumes it takes about 2 minutes (0.033 hours) per request for the employer to copy the training record. (Table 12, lines 5-7)

Agricultural Handler Pesticide Safety Training

Handler pesticide safety trainings are the responsibility of the handler employer. Handlers are trained annually and the training time for agricultural establishment handler training is estimated to take 60 minutes.

²¹ Department of Labor (DOL). 2005. National Agricultural Workers Survey (NAWS) 2001-2002 A Demographic and Employment Profile of United States Farm Workers Research Report No. 9, Office of the Assistant Secretary for Policy, Office of Programmatic Policy, U.S. Department of Labor, March. Available here: http://www.doleta.gov/agworker/report9/naaws_rpt9.pdf

²² Ibid.

EPA estimates that there are 221,187 establishments that hire handlers (Table 2), including establishments that do not apply pesticides on the assumption that most establishments will conduct trainings early in the season before pesticide application decisions are made, but will train handlers in case pesticides are needed. EPA further estimates that there will be a total of 134,424 training sessions per year given the number of trainings across different sizes of farms:

- Large establishments (annual revenue of \$750,000 or more), which are assumed to average 2 handlers/farm, estimated to number 79,434, will average 0.8 training sessions/year (4 trainings for every 5 farms, as some farms are able to share resources), resulting in 63,547 training sessions;
- Large-small establishments (annual revenue between \$100,000 and \$750,000), which are assumed to average 1 handler/farm, estimated to number 141,753, will average 0.5 training sessions/year (1 training for every 2 farms, as some farms are able to share resources), resulting in 70,877 training sessions.

The training must be provided by persons designated by EPA, state or tribal pesticide enforcement agencies as a trainer of certified applicators or handlers; trainers that have completed an approved Train-the-Trainer course; or are certified applicators (40 CFR 171). EPA assumes that 14% of trainings will be conducted by trainers of certified applicators, accounting for 18,819 training sessions for 30,966 establishments; 10% of trainings will be conducted by trainers who completed a Train-the-Trainers program, accounting for 13,442 training sessions for 22,119 establishments; and 76% of trainings will be conducted by certified applicators, accounting for 102,162 training session for 168,102 establishments. (Table 12, lines 8-10)

EPA estimates that there are 300,621 handlers, including those that are employed on establishments that do not hire workers. This number includes 16% (the new hire rate) of the 215,638 handlers employed on establishments that hire workers (34,502) who also receive worker safety training. (Table 12 line 11)

Employers (numbering 221,187) are required to make a record of the training. Given a new hire rate of 16%²³, the Agency assumes that there will be 1.16 training occasions per establishment, or 256,577 occasions. The estimated time burden for the agricultural establishment employer to collect signatures and file the records of training is 4 minutes (0.067 hours) per training occasion. See line 12. The record must be signed by the trained handler (numbering 300,621), which is assumed to take 30 seconds (0.0083 hours) per handler. (Table 12, line 13)

The employer must maintain the record for 2 years and provide a record of the same information to the handler upon request. EPA estimates that 16% of handlers (48,099) will request a copy, given the new hire rate of 16%²⁴, assumed to represent the turnover rate of handlers. EPA assumes it takes about 2 minutes (0.033 hours) per request for the employer to copy the training record. (Table 12, line 14)

CPHE Handler Pesticide Safety Training

Handler pesticide safety trainings are the responsibility of the handler employer. Certified applicators do not need to take WPS handler training. The training time for CPHE handler training is estimated to take 60 minutes.

EPA estimates that there are 1,936 commercial establishments that hire 14,320 handlers (D&B, 2014). EPA assumes that there will be an average of 1.3 training sessions per firm, given an average of over 7 handlers per firm and some turnover of employees. EPA, therefore, estimates a total of 2,517 training sessions per year.

²³ Ibid.

²⁴ Ibid.

The training must be provided by persons designated by EPA, state, or tribal pesticide enforcement agencies as a trainer of certified applicators or handlers; trainers that have completed an approved Train-the-Trainer course; or are certified applicators (40 CFR 171). EPA assumes that 14% of trainings will be conducted by trainers of certified applicators, accounting for 352 training sessions for 271 establishments; 10% of trainings will be conducted by trainers who completed a Train-the-Trainers program, accounting for 252 training sessions for 194 establishments; and 76% of trainings will be conducted by certified applicators, accounting for 1,913 training session for 1,471 establishments. See lines 15-17. EPA assumes that none of the handlers are certified applicators, so all 14,320 handlers take the WPS safety training. (Table 12, line 18)

Employers (numbering 1,936) are required to make a record of the training. Given the Agency's assumption about the average number of trainings per firm, the Agency calculates that there will be 2,517 training occasions necessitating a record. The estimated time burden for the agricultural establishment employer to collect signatures and file the records of training is 4 minutes (0.067 hours) per training occasion. See line 19. The record must be signed by the trained handler (numbering 14,320), which is assumed to take 30 seconds (0.0083 hours) per handler. (Table 12, line 20)

The employer must maintain the record for 2 years and provide a record of the same information to the handler upon request. EPA estimates that 16% of handlers (2,291) will request a copy, given the new hire rate of 16%²⁵, assumed to represent the turnover rate of handlers. EPA assumes it takes about 2 minutes (0.033 hours) per request for the employer to copy the training record. (Table 12, line 21)

EPA estimates that the average burden in terms of hours and costs for agricultural worker and handler employers to comply with this requirement is 2,252,912 hours and \$ 67,055,858. (Table 12).

Activity	Respondent Group	Number of Respondents	Total Responses Annually	Wage Rate (\$/hr)	Per Event Average		TOTALS	
					Burden (hours)	Cost (\$)	Burden (hours)	Cost (\$)
Train Workers on Pesticide Safety (Lines 1-3)	Trainers of Certified Applicators (14% of trainings)	43,760	72,588	72.73	0.75	54.55	54,441	3,959,486
	Trainers who completed a Train-the-Trainer program (10% of trainings)	31,257	51,859	72.73	0.75	54.55	38,887	2,828,233
	Certified Applicator of RUPs* (76% of trainings)	237,551	394,050	51.50	0.75	38.63	295,537	15,220,164
4. Attend worker pesticide safety training	Workers (minus trained handlers 181,135)	1,728,919	1,728,919	16.75	0.75	12.56	1,296,689	21,719,545

²⁵ Ibid.

Table 12: Pesticide Safety Training								
Activity	Respondent Group	Number of Respondents	Total Responses Annually	Wage Rate (\$/hr)	Per Event Average		TOTALS	
					Burden (hours)	Cost (\$)	Burden (hours)	Cost (\$)
5. Record and maintain records of worker training	Agricultural establishment employers	312,568	518,863	51.50	0.12	6.01	60,490	3,115,243
6. Sign Acknowledgement of worker training	Workers (minus trained handlers)	1,728,919	1,728,919	16.75	0.0083	0.14	14,408	241,328
7. Provide copy of record upon request	Agricultural establishment employers	312,568	576,306	51.50	0.033	1.70	19,018	979,565
8 – 10. Train handlers of agricultural establishments	Trainers of certified applicators (14% of trainings)	18,819	18,819	72.73	1.00	72.73	18,819	1,368,706
	Trainers who completed a Train-the-Trainer program (10% of trainings)	13,442	13,442	72.73	1.00	72.73	13,442	977,658
	Certified Applicator of RUPs* (76% of trainings)	102,162	102,162	51.50	1.00	51.50	102,162	5,261,355
11. Attend handler training on agricultural establishment	Agricultural establishment handlers	300,621	300,621	32.11	1.00	32.11	300,621	9,652,940
12. Record and maintain records of handler training (agricultural establishment)	Agricultural establishment employers with handlers (1.16 sessions where the 0.16 is the new hire rate)	221,187	256,577	51.50	0.07	3.43	17,105	880,914
13. Sign Acknowledgement of worker training (receive a copy upon request)	Handlers of agricultural establishments	300,621	300,621	32.11	0.0083	0.27	2,505	80,441
14. Provide copy of record upon request	Agricultural establishment employers	221,187	48,099	51.50	0.033	1.70	1,587	81,744
15 -17. Train handlers of CPHEs	Trainers of certified applicators (14% of 2793*1.3)	271	352	72.73	1.00	72.73	352	25,623
	Trainers who completed a Train-the-Trainer program (10% of 2793*1.30)	194	252	72.73	1.00	72.73	252	18,328
	Certified Applicator of RUPs (76% of the 1.3 trainings by commercial certified)	1,471	1,913	46.61	1.00	46.61	1,913	89,165

Activity	Respondent Group	Number of Respondents	Total Responses Annually	Wage Rate (\$/hr)	Per Event Average		TOTALS	
					Burden (hours)	Cost (\$)	Burden (hours)	Cost (\$)
	applicators)							
18. Attend handler training on CPHEs	CPHE Handlers	14,320	14,320	37.68	1.00	37.68	14,320	539,578
19. Record and Maintain records of handler training (CPHE)	CPHE employers (1.3 sessions per CPHE)	1,936	2,517	46.61	0.07	3.11	168	7,821
20. Sign acknowledgement of handler training	CPHE Handlers	14,320	14,320	37.68	0.0083	0.31	119	4,496
Provide copy of record upon request	CPHE employers	1,936	2,291	46.61	0.033	1.54	76	3,524
TOTALS		2,121,277	6,147,424				2,252,912	67,055,858

* Assumes certified applicator is the agricultural establishment employer. The number of respondents will often times be smaller than the responses because there are some activities within one Information Collection that will be done once and other activities within the same Information Collection that will be done multiple times.

(10). Personal Protective Equipment (PPE) Information

The WPS includes requirements for agricultural employers and CPHE employers when certain PPE is used, such as training or instructions that must be provided to employees. In summary, the Agency estimates that the average burden in terms of hours and costs for agricultural establishment employers and their handler employees to comply with these requirements is 210,833 hours and \$8,995,212. (Table 13 A)

For family farms, the Agency estimates that the average burden is 10,643 hours and \$ 548,113. (Table 13 B). Lastly, for CPHEs, the Agency estimates that the average burden in terms of hours and costs for CPHE employers and their handler employees is 21,217 hours and \$987,505. (Table 13 C)

The requirements and associated assumptions used to estimate the burden in terms of hours and costs are described below:

Respirator Users: Medical Evaluation, Fit-Testing and Respirator Training (§170.507(b)(10))

Agricultural handlers that use products with labeling that requires a respirator must complete a medical evaluation, respirator fit test, and respirator training. Handler employers are required to keep records documenting compliance for 2 years.

- EPA assumes the handler will spend about 30 minutes filling out the medical evaluation, available on-line.
- The fit test and training takes about 30 minutes, which the Agency assumes is taking at an off-farm testing center.
- EPA assumes an agricultural employer spends about one hour of time arranging the medical evaluation, fit test and training.
- EPA assumes that collecting and storing documentation takes the employer 4 minutes (0.07 hours) per handler.

Agricultural Establishments. EPA assumes that 75% of all large agricultural establishments (annual revenue of \$750,000 or more) that primarily produce crops (NAICS 111) and hire labor will

have one handler undergo respirator fit testing and training, thus 42,508 establishments and handlers. Further, 75% of large-small agricultural establishments (annual revenue between \$100,000 and \$750,000) that primarily produce vegetables (NAICS 1112), fruits and nuts (NAICS 1113), tobacco (11191), and cotton (11192), as well as nurseries and greenhouses (NAICS 1114) and hire labor will have one handler undergo respirator fit testing and training, thus 19,090 establishments and handlers. EPA assumes that establishments that primarily produce livestock (NAICS 112) and large-small farms that produce oilseeds and grain (NAICS 1111) and other crop production, such as forage (NAICS 11193, 11194, and 11199) are less likely to utilize products requiring a respirator. In total, the Agency calculates there will be 61,598 establishments and handlers subject to the requirement. (Table 13 A)

Family Farms. Establishments that do not hire workers or handlers (family farm) must also comply with the respirator fit requirements if they use products covered by the WPS that require a respirator. The handlers on these crop-producing establishments are an owner/operator or the immediate family of the owner/operator. EPA assumes that 40% of large family farms (annual revenue of \$750,000 or more) that use pesticides and produce oilseeds and grain (NAICS 1111), vegetables (NAICS 1112), fruits and nuts (NAICS 1113), tobacco (11191), and cotton (11192), as well as nurseries and greenhouses (NAICS 1114) will have an operator/handler undergo respirator fit testing and training, thus 4,284 establishments and handlers. Further, 40% of large-small family farms (annual revenue between \$100,000 and \$750,000) that primarily produce vegetables (NAICS 1112), fruits and nuts (NAICS 1113), tobacco (11191), and cotton (11192), as well as nurseries and greenhouses (NAICS 1114) will have one operator/handler undergo respirator fit testing and training, thus 2,682 establishments and handlers. In total, the Agency calculates there will be 6,966 establishments and handlers subject to the requirement. (Table 13 B)

CPHEs. Commercial operations will already obtain respirator fit test and training under OSHA. Under the WPS, CPHE handler employers (1,936) are required to keep records documenting the completion of medical evaluation, respirator fit testing, and respirator training for their handlers that wear respirators. EPA assumes that half of all CPHEs handlers will use a respirator for pesticide products covered by the WPS resulting in 7,160 records. (Table 13 C)

Cleaners of PPE (§170.507(d)(8))

Handler employers are required to inform the person who cleans or launders PPE equipment or clothing that the PPE equipment or clothing may be contaminated with pesticides, the harmful effects of exposure to pesticides and the proper method to clean contaminated personal protective equipment or clothing and how to protect themselves. EPA assumes all 304,106 agricultural establishments using pesticides and all 1,936 CPHEs will have to provide this information once annually. The person who cleans or launders is assumed to be a handler. EPA estimates that it takes agricultural and CPHE employers 5 minutes to inform cleaner/lauderer persons of this information. (Table 13 A)

Closed Systems Instructions (§170.607(d))

Agricultural establishment employers must create and make available at the mixing or loading site operating instructions for closed systems. The employer must ensure that any handler operating the closed system is trained in its use.

- EPA assumes that it takes the employer approximately 2 hours to write down the operating instructions, but that instructions would only have to be updated about every 5 years, for an annual burden of 0.4 hours.
- EPA assumes that the employer spends about 15 minutes (0.25 hours) to train a handler to use the system.

Agricultural Establishments. For agricultural establishments, EPA assumes that 50% of the

large and establishments producing oilseeds and grain (NAICS 1111), vegetables (NAICS 1112), fruits and nuts (NAICS 1113), tobacco (NAICS 11191), and cotton (NAICS 11192), as well as nurseries and greenhouses (NAICS 1114) or 26,314 establishments will have a closed system. EPA further assumes that 40% of large-small agricultural establishments producing vegetables (NAICS 1112), fruits and nuts (NAICS 1113), tobacco (NAICS 11191), and cotton (NAICS 11192), as well as nurseries and greenhouses (NAICS 1114) or 10,182 establishments will have a closed system. Smaller agricultural establishments (annual revenue less than \$100,000) would not typically own such a system. In total, therefore, EPA calculates there will be 36,496 establishments subject to the requirement. EPA assumes an equal number of handlers will receive the training, i.e., one operator per establishment. (Table 13 A)

Family Farms. For establishments that do not hire workers or handlers, i.e., rely on family labor, EPA assumes that one-third of large establishments (annual revenue of \$750,000 or more) producing oilseeds and grain (NAICS 1111), vegetables (NAICS 1112), fruits and nuts (NAICS 1113), tobacco (11191), and cotton (11192), as well as nurseries and greenhouses (NAICS 1114) or 3,570 establishments will have a closed system. Further, EPA assumes that the primary owner/operator of all establishments trains one other family member in the operation of the system. (Table 13 B, Lines 4-6)

CPHEs. For CPHEs, EPA assumes that all 1,936 establishments have, on average 2 closed systems. Thus, they will create 3,872 sets of operating instructions. EPA assumes that the firms will train, on average, 4 handlers to operate the system. For self-employed CPHEs (commercial applicators), the Agency assumes all of the estimated 40,336 firms will have 1 closed system. As these firms are assumed to have a single operator, there will not be training associated with these firms.

Table 13 A: PPE Information - Agricultural Establishments (hire workers)								
Activity	Respondent Group	Number of Respondents	Total Responses Annually	Wage Rate (\$/hr)	Per Event Average		TOTALS	
					Burden (hours)	Cost (\$)	Burden (hours)	Cost (\$)
1. Agricultural Handler Respirator Training and Fit Test	Ag Establishment Handlers (assume 1 handler per large and large-small farm = 27.3% of handlers)	61,598	61,598	32.11	0.50	16.06	30,799	988,956
2. Respirator Medical Evaluation	Ag Establishment Handlers	61,598	61,598	32.11	0.50	16.06	30,799	988,956
3. Employer Administration of Respirator Fit Testing, training and medical evaluation	Ag Employer	61,598	61,598	51.50	1.00	51.50	61,598	3,172,297
4. Record and Maintain Records	Ag Establishment Employer (assume all large and large small farms with handlers)	61,598	61,598	51.50	0.07	3.43	4,107	211,486
5. Inform Cleaner /lauderer	Ag Establishment Employer	304,106	304,106	51.50	0.083	4.29	25,342	1,305,122
6. Cleaner/ launderer receives information	Cleaner/ launderer (assume 1 for each handler)	304,106	304,106	32.11	0.083	2.68	25,342	813,737
7. Provide written operating instructions for closed system	Ag Employer (assume 50% of large and large-small farms)	36,496	36,496	51.50	0.40	20.60	14,598	751,809
8. Provide Closed System Training	Ag Establishment Employer	36,496	36,496	51.50	0.25	12.88	9,124	469,881
9. Receive Closed System Training	Ag Establishment Handler	36,496	36,496	32.11	0.25	8.03	9,124	292,968
10. TOTALS		669,810	964,091				210,833	8,995,212

*Estimates may not add due to rounding. Respondents are counted only once.

Table 13 B: PPE Information - Agricultural Establishments without hiring workers or handlers								
Activity	Respondent Group	Number of Respondents	Total Responses Annually	Wage Rate (\$/hr)	Per Event Average		TOTALS	
					Burden (hours)	Cost (\$)	Burden (hours)	Cost (\$)
1. Family Farms Respirator Training and Fit Test	Family Farm Owner/Operator	6,966	6,966	51.50	0.50	25.75	3,483	179,364
2. Medical Evaluation	Family Farm Owner/Operator	6,966	6,966	51.50	0.50	25.75	3,483	179,364
3. Record and Maintain Records	Family Farm Owner/Operator	6,966	6,966	51.50	0.07	3.43	464	23,915
4. Provide written operating instructions for closed system	Family Farm Owner/Operator	3,570	3,570	51.50	0.40	20.60	1,428	73,542
5. Provide Training for Closed Systems	Family Farm Owner/Operator	3,570	3,570	51.50	0.25	12.88	893	45,964
6. Receive Training for Closed Systems	2 nd Family Farm Operator	3,570	3,570	51.50	0.25	12.88	893	45,964
TOTALS		10,536	31,607				10,643	548,113

*Estimates may not add due to rounding. Respondents are counted only once.

Table 13 C: Personal Protective Equipment Information - CPHEs								
Activity	Respondent Group	Number of Respondents	Total Responses Annually	Wage Rate (\$/hr)	Per Event Average		TOTALS	
					Burden (hours)	Cost (\$)	Burden (hours)	Cost (\$)
1. Record and Maintain Records of Respirator Fit Test and Training	CPHE Employer	1,936	7,160	46.61	0.07	3.26	501	23,361
2. Inform Cleaner/laundrer	CPHE Employer (assumes 1 CPHE Cleaner/Laundrer/CPHE)	1,936	1,936	46.61	0.083	3.88	161	7,520
3. Cleaner/laundrer receives information	Cleaner/laundrer (assumes 1 CPHE Cleaner/Laundrer/CPHE)	1,936	1,936	37.68	0.083	3.14	161	6,079
4. CPHE Employer Provide written operating instructions for closed system	CPHE Employer	1,936	3,872	46.61	0.40	18.64	1,549	72,190
5. CPHE Employer Provides Closed System Training	CPHE Employer	1,936	1,936	46.61	0.40	18.64	774	36,095
6. CPHE Handler Receives Closed System Training	CPHE Handler (assumes 4 CPHE handlers/CPHE)	7,744	7,744	46.61	0.25	11.65	1,936	90,237
7. CPHE Self-Employed Provide written operating instructions for closed system	CPHE Employer	40,336	40,336	46.61	0.40	18.64	16,134	752,024
TOTALS		11,616	64,920				21,217	987,505

*Estimates may not add due to rounding. Respondents are counted only once. The number of respondents will often times be smaller than the responses because there are some activities within one Information Collection that will be done once and other activities within the same Information Collection that will be done multiple times.

(11). Exceptions/Exemptions (\$170.605)

Notification of Exceptions for Early-Entry Activities

If the agricultural employer directs a worker to perform activities in a treated area where an REI is in effect (i.e., early entry), the agricultural employer must notify the worker of certain required information regarding that entry, including the location of the early-entry area where work activities are to be performed, pesticide(s) applied, dates and times that the REI begins and ends, the exception to the regulation that allows the early entry description of the tasks performed under the exception, whether contact with treated surfaces is permitted, amount of time the worker is allowed in the treated area, PPE required by the labeling for early entry, and the location of the pesticide safety information and decontamination supplies. The employer must ensure that each early-entry worker has been

informed of the labeling requirements and statements related to human hazards, precautions, first aid, and user safety and instructed in prevention, recognition, and first aid treatment of heat-related illness.

EPA assumes that there will be an event necessitating early entry associated with one out of 50 pesticide applications. EPA further assumes that there are 20 pesticide applications per agricultural establishment per year, on average, implying a 40% chance of an event occurring on an establishment. Given 252,940 farms employing workers and using pesticides, the Agency estimates there will be 101,176 early entry events per year, on average. EPA assumes that it takes the agricultural employer 6 minutes (0.10 hours) on average to obtain the required information and another 6 minutes (0.10 hours) to provide it to the workers going into the treated area.

EPA assumes that 50% of workers on an establishment will be involved in early entry activities should they occur. Given a 40% chance of an event occurring on an establishment, the Agency estimates that approximately 20% of the 1,742,988 workers employed on an agricultural establishment that applies pesticides, or 348,598 workers, are involved in early-entry events per year. As above, 6 minutes of each involved worker’s time will be required for each oral notification during any early-entry events.

EPA estimates that the total average burden in terms of hours and costs for agricultural employers and their worker/handler employees to comply with this requirement is 55,095 hours and \$1,626,014. (Table 14)

Activity	Respondent Group	Number of Respondents	Total Responses Annually (3-yr. average)	Wage Rate (\$/hr)	Per Event Average		TOTALS	
					Burden (hours)	Cost (\$)	Burden (hours)	Cost (\$)
Gather information	Ag. Establishment Employer	101,176	101,176	51.50	0.10	5.15	10,118	521,056
Provide Oral Notifications	Ag. Establishment Employer	101,176	101,176	51.50	0.10	5.15	10,118	521,056
Receive Oral Notification	Ag. Worker †	348,598	348,598	16.75	0.10	1.68	34,860	583,902
TOTALS		449,774	550,950				55,095	1,626,014

*Estimates may not add due to rounding. Respondents are counted only once.

† Assume 20% of 1,813,475 agricultural workers.

6(c). Estimating Agency Burden and Cost

This ICR involves activities conducted by respondents, including notification to third parties. EPA does not conduct any activities or collect any information under this ICR so there is no Agency burden and cost to estimate.

6(d). Estimating the Total Burden and Costs

The following section provides the respondents’ total burden and cost for the activities detailed in the previous tables. Using the estimates for the number of respondents for each activity and the associated per respondent burden and cost estimates derived in the preceding sections, the Agency calculated the total annual burden and costs (Table 15). Because the Agency does not collect information, the Agency does not have any associated burden or cost.

6(e). Total Annual Burden Hours and Cost Tables

Table 15: Total Estimated Annual Burden Hours and Costs		
	Hours	Costs
Respondents	10,448,160	\$433,264,055
Agency	n/a	n/a

6(f). Cross-walk of ICs to Supporting Statement

IC Title	Supporting Statement Crosswalk
1 Rule Familiarization	Table 4
2 Agricultural Employers Display Basic Safety Information	Table 5
3 Agricultural Employers Record/Maintain Pesticide Application Records and Copy of Safety Data Sheet and Provide upon Request	Table 6
4 Agricultural Employer Notifies Agricultural Workers of Restricted Entry Areas	Table 7
5 Agricultural Workers Receive Restricted Entry Area Notifications from Agricultural Employer	Table 7
6 Agricultural Employers Provide Establishment-Specific Information to Handlers and Agricultural Workers	Table 8
7 Agricultural Workers and Agricultural/Commercial Handlers Receive Establishment-Specific Information from Agricultural Employer	Table 8
8 Agricultural Employer Notification to Commercial Handler Employer of Restricted Entry Interval	Table 9
9 Commercial Handler Employer Notifies Handler Employee of Treated Areas under an REI on Agricultural Establishment	Table 9
10 Commercial Handler Receives Agricultural Establishment Restricted Entry Interval Information from Employer	Table 9
11 Agricultural and Commercial Handler Employers Inform Handlers about Application/Label Information	Table 9
12 Agricultural and Commercial Handler Employers Inform Handlers about Safe Operation, Cleaning and Repair of Equipment	Table 10
13 Handlers Receive Information About Safe Operation, Cleaning and Repair of Equipment from Agricultural and Commercial Handler Employers	Table 10
14 Agricultural and Commercial Handler Employers Provide Information Required for Emergency Assistance to Medical Personnel	Table 11
15 Agricultural Employers Provide Agricultural Worker Pesticide Safety Training	Table 12
16 Agricultural Workers Attend and Acknowledge Pesticide Safety Training Provided by Agricultural Employers	Table 12
17 Agricultural Employers Maintain Records of Agricultural Worker Pesticide Safety Training and Provide upon Request	Table 12
18 Agricultural Employers Provide Handler Pesticide Safety Training	Table 12
19 Agricultural Handler Employees Attend and Acknowledge Pesticide Safety Training Provided by Employers	Table 12
20 Agricultural Employers Maintain Records of Handler Pesticide Safety Training and Provide upon Request	Table 12
21 Commercial Handler Employers Provide Handler Pesticide Safety Training	Table 12
22 Commercial Handler Employees Attend and Acknowledge Pesticide Safety Training Provided by Employers	Table 12
23 Commercial Handler Employers Maintain Records of Handler Pesticide Safety Training and Provide Upon Request	Table 12
24 Agricultural and Commercial Handlers Receive Respirator Training and Fit Test, and Complete Medical Evaluation	Table 13
25 Agricultural and Commercial Handler Employers Create and Maintain Medical Evaluation, Respirator Fit Testing, and Respirator Training Records	Table 13
26 Agricultural and Commercial Handler Employers Notify Cleaners/Launders of Personal Protective Equipment of Potential Contamination, Adverse Effects, Cleaning Methods, and Precautions	Table 13
27 Agricultural and Commercial Employers Provide Training and Operating Instructions for Closed System	Table 13
28 Agricultural and Commercial Handlers Receive Training and Operating Instructions for Closed System	Table 13
29 REI - Early Entry Exception: Agricultural Employers Provide Early Entry Notification and Information to Agricultural Workers	Table 14
30 REI - Early Entry Exception: Agricultural Workers Receive Info Orally from Agricultural Employer	Table 14

6(g). Reasons for Changes in Burden

The total estimated annual respondent burden for this renewal ICR is 10,448,160 hours. There is no change in the number of hours in the total estimated respondent burden compared with that identified in the ICR currently approved by OMB. There is an increase of 3,220 respondents, which is the result of a correction to the Agency's previously reported bottom-line annual estimates. Although the full burden analysis for the currently approved ICR properly accounted for burden imposed on these respondents, these respondents were inadvertently omitted from the total number of respondents

reported to OMB. This change is an adjustment.

The burden in this ICR reflects the many regulatory requirements in the WPS regulations, as well as estimates of the number of respondents/responses based on the most current information that is available to EPA. The regulatory requirements include modifications to restrictions in field entry activities during restricted entry intervals; increased hazard communications; increased training (for both workers and handlers); increased posting of pesticide application information; provisions for information during emergency assistance; and recordkeeping for training, application-specific information, and respirator requirements.

6(h). Burden Statement

The total annual respondent burden for providing the training and notifications associated with the Agricultural Worker Protection Standard Regulations is estimated to be 10,448,160 hours. This total estimate includes the third party WPS training and notification requirements, e.g., provisions requiring employers to: provide employees with pesticide-specific treatment (application) information, ensure that employees receive basic pesticide safety training, provide emergency information on pesticide treatments, and notify employees when an exception/exemption to the WPS is being implemented, and provisions requiring handler notification to employers regarding pesticide treatments (applications), etc.

The annual public reporting and recordkeeping burden for this collection of information is estimated to average about 6 minutes per response. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information. 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 and 48 CFR chapter 15.

To comment on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques, EPA has established a public docket for this ICR under Docket ID Number EPA-HQ-OPP-2018-0031, which is available for online viewing at www.regulations.gov, or in person viewing at the OPP Docket in the EPA Docket Center (EPA/DC), EPA West, Room 3334, 1301 Constitution Avenue, NW, Washington, D.C. The EPA Docket Center Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Reading Room is (202) 566-1744, and the telephone number for the OPP Docket is (703) 305-5805. An electronic version of the public docket is available at www.regulations.gov. This site can be used to submit or view public comments, access the index listing of the contents of the public docket, and to access those documents in the public docket that are available electronically. When in the system, select "search," then key in the Docket ID Number identified above. Also, you can send comments to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW, Washington, D.C. 20503, Attention: Desk Officer for EPA. Please include the EPA Docket ID Number EPA-HQ-OPP-2018-0031 and OMB Control Number 2070-0190 in any correspondence.

7. ATTACHMENTS TO THE SUPPORTING STATEMENT

Attachments to the supporting statement are available in the public docket established for this ICR under docket identification number EPA-HQ-OPP-2018-0031. These attachments are available for online viewing at www.regulations.gov or otherwise accessed as described in section 6(h) of the supporting statement, and as noted below.

Attachment A: **Summary of Consultations for the Renewal ICR, entitled "Agricultural Worker Protection Standard Training, Notification and Recordkeeping"**

Attachment B: **How to Comply With the 2015 Revised Worker Protection Standard For Agricultural Pesticides.** Available at <https://www.epa.gov/pesticide-worker-safety/pesticide-worker-protection-standard-how-comply-manual>