

Supporting Statement for PESP Information Collection Request (ICR) Under the Paperwork Reduction Act (PRA)

EXECUTIVE SUMMARY

Identification of the Information Collection – Title and Numbers

Title: Agricultural Worker Protection Standard Training, Notification, and Recordkeeping

ICR Numbers: EPA ICR No.: 2491.06, OMB Control No.: 2070-0190

Docket ID No.: EPA-HQ-OPP-2020-0316

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.

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>.

Supporting Statement

1. Explain the circumstances that make the collection of information necessary.

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. These exposures can potentially 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 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 had received feedback from state regulatory partners indicating difficulty enforcing some requirements, due primarily to a lack of records. The recordkeeping requirements in the WPS that are discussed in this ICR are designed to improve enforcement capability as a means of fostering compliance, thereby improving protections.

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

2. Indicate how, by whom, and for what purpose the information is to be used. Except for a new collection, indicate the actual use the Agency has made of the information received from the current collection.

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 and their families from pesticide poisoning and other pesticide-related injuries. Recordkeeping of training and applications greatly enhances the enforceability of these requirements.

3. Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submission of responses.

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

4. Describe efforts to identify 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.

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

Additionally, the worker and handler pesticide training recordkeeping requirements were intentionally developed to avoid duplication of training.

5. If the collection of information impacts small businesses or other small entities, describe the methods used to minimize burden.

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 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.

6. Describe the consequence to Federal program or policy activities if the collection is not conducted or is conducted less frequently, as well as any technical or legal obstacles to reducing burden.

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 per worker or handler. Less frequent training and notification would increase risk to agricultural workers and handlers.

7. Explain any special circumstances that require the collection to be conducted in a manner inconsistent with OMB guidelines.

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

8. If applicable, provide a copy and identify the date and page number of publications in the Federal Register of the agency's notice, required by 5 CFR 1320.8(d), soliciting comments on the information collection prior to submission to OMB. Summarize public comments received in response to that notice and describe actions taken in response to the comments. Specifically address comments received on cost and hour burden. Describe efforts to consult with persons outside EPA to obtain their views on the availability of data, frequency of collection, the clarity of instructions and recordkeeping, disclosure, or reporting format (if any), and on the data elements to be recorded, disclosed, or report.

Pursuant to 5 CFR 1320.8(d), EPA published a notice in the Federal Register on August 3, 2021 (86 FR 41840; FRL-8734-01-OCSP), announcing the planned renewal of this information collection activity, soliciting public comment on specific aspects of the ICR and providing a 60-day public comment period.

The EPA also consulted 3 stakeholders: Blackberry Farms, Shannon Farms Services Inc., and Pietro Industries, specifically asking them for their assessment of the regulatory burden estimates expressed by the Agency in this ICR. A summary of the consultation will be in **Attachment A**.

While no comments were received from stakeholders during consultation, the Agency did receive one comment from a collection of organizations, which declared the importance of Worker Protection Standard Training, notification and recordkeeping. A copy of this submission is reflected in **Attachment C**.

9. Explain any decision to provide any payment or gift to respondents, other than remuneration of contractors or grantees.

This question is not applicable to this Information Collection Request renewal.

10. Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation, or agency policy.

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.

11. Provide additional justification for any questions of a sensitive nature, such as sexual behavior and attitudes, religious beliefs, and other matters that are commonly considered private.

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

12. Provide estimates of the hour burden of the collection of information.

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 and their families against occupational and take-home exposure to pesticides.

Additionally, the employer must ensure that each early-entry worker has been instructed in prevention, recognition, and first aid treatment of heat-related illness.

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 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.

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.⁵ For agricultural establishment workers, the Agency uses the USDA Farm Labor Report's annual average wage rate for U.S. fieldworkers.⁶ 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 to estimate the wage for handlers aged 16 years and older. The wage rates are derived from BLS NAICS 2021 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.⁷ According to the BLS, the average private-sector employee receives benefits that amount to approximately 29.4% of the total remuneration with unloaded wages accounting for approximately 70.6%.⁸ Therefore, benefits represent approximately 41.6% of the unloaded wage rates, based on benefits for all civilian non-farm workers.⁹ Based on this information, loaded wage rates are calculated using either the unloaded wage rate divided by 0.706, 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 employment¹⁰, EPA uses the loaded wage rate as the value of time for agricultural workers (\$21.20 per hour).

Fully Loaded Wage Rate

⁵ BLS May 2021 National Industry-Specific Occupational Employment and Wage. Estimates available at: https://www.bls.gov/oes/current/oes_stru.htm

⁶ USDA November 2017 NASS Farm Labor Report available at: <http://usda.mannlib.cornell.edu/usda/current/FarmLabo/FarmLabo-11-16-2017.pdf>

⁷ BLS May 2021 National Industry-Specific Occupational Employment and Wage. Estimates available at: https://www.bls.gov/oes/current/oes_stru.htm

⁸ BLS Employer Costs for Employee Compensation- June 2021. Available at: <https://www.bls.gov/news.release/pdf/ecec.pdf>

⁹ BLS Civilian workers, by major occupational and industry group - June 2021. Available at from <http://www.bls.gov/news.release/ecec.t01.htm>

¹⁰ 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/naaws_rpt9.pdf

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.

Table 1. Wage Rates for Selected Occupations					
Category	Unloaded Wage	Benefits per Hour (UW * 0.45)	Loaded Wage (UW + B)	Fully Loaded Wage (LW * 1.5)	BLS SOC Code
Agricultural Establishment Employer*	26.16	12.11	38.27	57.41	45-1011
Family Farm Owner/Operator%	26.16	12.11	38.27	57.41	45-1011
CPHE Employer †	23.61	10.93	34.54	51.81	37-1010
Worker	14.49	6.71	21.20	N/A #	45-2092
Agricultural Handler	16.38	7.58	23.96	35.95	45-2091
CPHE Handler	18.81	8.71	27.52	41.29	37-3012
Trainer	29.67	13.74	43.41	65.11	25-1194

* 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.

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

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 2017 Census of Agriculture based on a USDA NASS, Special Tabulation (#23632) of data from the 2017 Census of Agriculture¹¹. 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 2017 Census of Agriculture (USDA NASS, 2021) and shown in Table 2, there are over 2.042 million ranches, farms, nurseries, and greenhouses in the United States. Of those, over 1.270 million grow crops, including nursery and greenhouse production. Nearly 900 thousand ranches, farms, nurseries, and greenhouses reported using pesticides in a given year. Based on more refined data from the 2017 Census of Agriculture, EPA estimates that about 735,400 crop-producing establishments used pesticides in 2017 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 about 367,460 agricultural establishments that hire workers and/or handlers, of which nearly 289,600 use pesticides.¹² (Table 2).

Description of Agricultural Establishment	Number of All Agricultural Establishments	Number of Agricultural Establishments that Use Pesticides in any given year
All Agricultural Establishments	2,042,220	893,815
Crop-producing Establishments	1,277,426	735,376
Crop-producing Establishments Hiring Workers and/or Handlers	367,459	289,598
Crop-producing Establishments Hiring Workers*	301,595	237,687
Crop-producing Establishments Hiring Handlers'	211,737	191,752
Crop-producing Establishments without Workers and/or Handlers	909,967	445,778

* Source USDA NASS. 2021. Special Tabulation (#23632) of data from the 2017 Census of Agriculture, August 2021 <http://www.agcensus.usda.gov/Publications/2017/>.

¹¹ USDA NASS. 2021. Special Tabulation (#23632) of data from the 2017 Census of Agriculture, August 2021 <http://www.agcensus.usda.gov/Publications/2017/>.

¹² USDA, NASS. 2021. Special Tabulation (#23632) of data from the 2017 Census of Agriculture, August 2021 <http://www.agcensus.usda.gov/Publications/2017/>.

† Includes an estimated 145,873 establishments that hire both workers and handlers, of which 139,841 use pesticides in any given year.

Also shown in Table 2 are two important subsets of crop producing establishments. EPA estimates that about 301,595 crop-producing establishments hire workers, of which 237,687 use pesticides in any given year. EPA also estimates that 211,737 crop-producing establishments hire pesticide handlers, of which 191,752 use pesticides in any given year. Included in each of these subsets are an estimated 145,873 crop-producing establishments that hire both workers and handlers, of which 139,841 use pesticides in any given year. Finally, EPA calculates that there are about 909,967 crop-producing establishments that do not employ workers or handlers. EPA estimates that almost 445,778 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 2017 Census of Agriculture, there are over 2.4 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 handlers working with pesticides. USDA estimates there are about 540,000 workers, including those working through labor contractors.¹³ EPA, however, conservatively estimates that there are 1,708,113 workers and handlers, of whom 1,519,382 are employed on agricultural establishments that use pesticides in any given year. EPA estimates that there are 1,620,387 workers, of whom 1,448,830 work on establishments that use pesticides in a year, and 271,804 pesticide handlers although 248,221 are estimated to actually handle pesticides in any given year. Included within each of these subsets of employees are an estimated 184,078 handlers who also perform worker tasks, of whom 177,669 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	2,411,033	1,871,412
Crop-producing Establishments	2,077,199	1,779,714
Crop-producing Establishments Hiring Workers and/or Handlers	1,708,113	1,519,382

¹³ ERS. 2014. Farm Labor, Number and Geographical Distribution of Hired Farmworkers. Economic Research Service, U.S. Department of Agriculture. Updated October 30, 2021. <http://ers.usda.gov/topics/farm-economy/farm-labor/background.aspx#Numbers>

Crop-producing Establishments Hiring Workers*	1,620,387	1,448,830
Crop-producing Establishments Hiring Handlers ¹	271,804	248,221
Crop-producing Establishments without Workers and/or Handlers	-	-

* Source: USDA NASS. 2021. Special Tabulation (#23632) of data from the 2017 Census of Agriculture, August 2021 <http://www.agcensus.usda.gov/Publications/2017/>.

¹ Includes an estimated 184,078 handlers who also perform worker tasks, of whom 177,669 are employed on establishments that use pesticides in any given year.

For CPHEs, the Agency estimates that there are approximately 43,318 firms. EPA identified 1,829 firms employing 12,723 handlers in NAICS 115112 (soil preparation, planting, and cultivating) that engage in pest control services.¹⁴ The remaining 41,489 CPHEs are estimated based on the number of commercial certified applicators. Based on state reports under the Certified Applicator Program from 2019 to 2020, EPA estimates that there are an additional 82,977 commercial applicators certified to apply pesticides in the Agricultural Pest Control (Plants) Category who are not included in Dun and Bradstreet’s database of businesses and who are assumed to be essentially self-employed in firms averaging two applicators.

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 367,459 crop-producing (agricultural) establishments that hire workers and/or handlers, 43,318 CPHEs, and 445,778 family farms (agricultural establishments that apply pesticides but do not hire workers or handlers and qualify for the family farms exemption). Table 4

¹⁴ D&B. 2021. Database of business information maintained by Hoover’s Inc., a Dun and Bradstreet Company. <http://www.hoovers.com/>

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 428,277 hours. The total cost is estimated to be \$24,465,390. (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	367,459	367,459	57.41	0.5	28.70	187,730	10,547,565
	CPHE Employer	43,318	43,318	51.81	0.5	25.91	21,659	1,122,186
	Family Farm Owners †	445,778	445,778	57.41	0.5	28.70	222,889	12,795,638
TOTALS		856,555	865,555				428,277	24,465,390

* 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 (289,598 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 (10,209 + 25,118) and large greenhouse establishments (130) will potentially have work crews of 11 or more people, especially at harvest. EPA estimates that there are 35,457 such establishments (10,339 large establishments (10,209 fruit and vegetable + 130 greenhouse) and 25,118 large-small establishments). On average, the 10,339 large establishments will have 10 occasions per year to post displays and the 25,118 large-small establishments will have 4 occasions for a total of 203,862 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 289,598 establishments will need one display for the main location. The 25,118 large-small fruit and vegetable establishments are expected to need an additional display and the 10,339 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 203,862 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 20,923 hours and the cost is \$1,201,174. (Table 5)

Table 5: Basic Pesticide Safety Information- WPS Posters at Main Display & Decontamination Sites- Poster Changes								
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	289,598	289,598	57.41	0.033	1.89	9,557	548,652
Post Decontamination Display	Agricultural Employer	35,457	203,862	57.41	0.033	1.89	6,727	386,223
Add/Change Contact Information	Agricultural Employer	289,598	92,771	57.41	0.05	2.87	4,639	266,300
TOTALS		289,598	586,231				20,923	1,201,174

*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 289,598 establishments. EPA assumes an average of 20 applications per establishment per year, resulting in 5,791,960 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 289,598 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 28,960 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 17,797 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 6,229 hours. (Table 6, Line 5)

EPA estimates that the total number of burden hours for agricultural establishments to gather, record and maintain records is 903,983 hours and the cost is \$51,897,652. (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	289,598	5,791,960	57.41	0.117	6.70	675,729	38,793,583
Post Information	Agricultural Employer	289,598	5,791,960	57.41	0.017	0.96	96,533	5,541,940
Maintain Records	Agricultural Employer	289,598	5,791,960	57.41	0.017	0.96	96,533	5,541,940
Provide information on request-current employee	Agricultural Employer	289,598	289,598	57.41	0.10	5.74	28,960	1,662,582
Provide information on request – former employee	Agricultural Employer	289,598	17,797	57.41	0.35	20.09	6,229	357,607
TOTALS		289,598	17,683,275				903,983	51,897,652

*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 237,687 establishments that hire workers that also use pesticides (Table 2). EPA also estimates that 1,448,830 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 237,687 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 1,448,830 workers on these establishments.
- Indoor production, large. EPA estimates that there are 130 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 14,101 workers in large greenhouses that use pesticides.
- Indoor production, small. EPA estimates that there are 781 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 3,590 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 38,724 large farms and nurseries that hire 773,856 workers and use pesticides. Averaging 8 posting events per year results in 309,792 posting events. EPA assumes 70% of the events will entail posting 2 signs and 30% will entail posting 3 signs for 712,522 postings ($309,792 \times 0.7 \times 2$) + ($309,792 \times 0.3 \times 3$).
EPA estimates that there are 110,989 large-small farms and nurseries that hire workers and use pesticides, resulting in 887,912 posting events. EPA assumes 80% of the events will entail posting 2 signs and 20% will entail posting 3 signs for 1,953,406 postings ($887,912 \times 0.8 \times 2$) + ($887,912 \times 0.2 \times 3$).
- EPA estimates that there are 58,471 medium-small farms and nurseries that hire workers and use pesticides, resulting in 467,768 posting events. EPA assumes

90% of the events will entail posting 2 signs and 10% will entail posting 3 signs for 982,313 postings $(467,768 \times 0.9 \times 2) + (467,768 \times 0.1 \times 3)$.

- EPA estimates that there are 28,592 small-small farms and nurseries that hire workers and use pesticides, resulting in 228,736 posting events. EPA assumes 95% of the events will entail posting 2 signs and 5% will entail posting 3 signs for 468,909 postings $(228,736 \times 0.95 \times 2) + (228,736 \times 0.05 \times 3)$.
- Finally, the estimated 130 large greenhouses that hire workers and use pesticides are assumed to average 20 posting events each requiring 2 signs for 5,200 postings $(130 \times 20 \times 2)$ and the estimated 781 small greenhouses that hire workers and use pesticides are assumed to average 16 posting events each requiring 2 signs for 24,992 postings $(781 \times 16 \times 2)$.

In total, the Agency estimates there will be 4,147,342 postings $(712,522 + 1,953,406 + 982,313 + 468,909 + 5,200 + 24,992)$ 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 4,147,342 occasions requiring oral notifications, given 237,687 establishments averaging 14 occasions per year. Given the assumptions about second notifications, there will be 3,651,791 oral notifications by employers on farms and nurseries.
- EPA estimates that there are 1,448,830 workers on farms and nurseries. Given 14 applications with oral notification per year, the Agency calculates there will be 16,068,550 notifications received each year $(1,448,830 \text{ workers} \times 80\% \text{ on site} \times 14 \text{ applications})$.
- For large green house establishments (indoor production), the Agency estimates 286 occasions requiring oral notifications, given 130 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 28.6 oral notifications by employers in large greenhouses.
- EPA estimates that there are 14,101 workers in large greenhouse establishments that use pesticides. Given 2 applications with oral notification per year, the Agency calculates there will be 22,562 notifications received each year $(14,101 \text{ workers} \times 80\% \text{ on site} \times 2 \text{ applications})$.

- For small green house establishments, the Agency estimates 3,590 occasions requiring oral notifications, given 781 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 5,155 oral notifications by employers in small greenhouses.
- EPA estimates that there are 3,590 workers in small greenhouse establishments that use pesticides. Given 6 applications with oral notification per year, the Agency calculates there will be 17,232 notifications received each year (3,590 workers x 80% on site x 6 applications).

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

Therefore, the Agency estimates that agricultural employers will make 3,651,791 oral notifications (3,646,350 employer oral notifications to workers for farms and nurseries + 286 employer oral notifications to workers for large green houses + 5,155 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 16,068,550 notifications (16,028,757 notifications to workers on farms and nurseries + 22,562 notifications to workers in large green houses + 17,232 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 1,677,241 hours with a cost of \$67,198,276. (Table 7)

Table 7: Notification to Workers of Restricted Entry Areas								
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	237,687	4,147,342	57.41	0.17	9.57	691,224	39,683,147
Provide Oral Notification	Agricultural Establishments	237,687	3,651,791	57.41	0.05	2.87	182,590	10,482,466
Receive Oral Notification	Agricultural Workers	1,448,830	16,068,550	21.20	0.05	1.06	803,428	17,032,663
TOTALS		1,686,517	23,867,683				1,677,24	67,198,276

Activity	Respondent Group	Number of Respondents	Total Responses Annually (3-yr. avg.)	Wage Rate (\$/hr)	Per Event Average		TOTALS	
					Burden	Cost	Burden	Cost
					(hours)	(\$)	(hours)	(\$)
							1	

*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 367,459 agricultural establishments will provide establishment specific information 2 times a year resulting in 734,918 responses for agricultural establishments. Each response requires 1 minute of the employer's time. In addition, the Agency estimates that 1,708,113 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 1,708,113 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 40,717 hours and \$1,306,727. (Table 8)

Activity	Respondent Group	Number of Respondents	Total Responses Annually (3-yr. avg.)	Wage Rate (\$/hr)	Per Event Average		TOTALS	
					Burden	Cost	Burden	Cost
					(hours)	(\$)	(hours)	(\$)
Inform-Provide Establishment Specific Information	Agricultural Establishment ¹	367,459	734,918	57.41	0.017	0.9568	12,249	703,194
	Agricultural Workers/Handlers	1,708,113	1,708,113	21.20	0.017	0.3533	28,469	603,533

Activity	Respondent Group	Number of Respondents	Total Responses Annually (3-yr. avg.)	Wage Rate (\$/hr)	Per Event Average		TOTALS	
					Burden	Cost	Burden	Cost
					(hours)	(\$)	(hours)	(\$)
TOTALS		2,075,572	2,443,031			40,717	1,306,727	

* 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 4,753,011 hours and \$251,871,379. (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 735,376 (from 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 95,700 commercial applicators certified in crop protection. Assuming each commercial applicator makes or directs 90 pesticide applications per year results in 8,613,000 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 1,829 CPHE employers providing and 12,723 handlers receiving the information. This information exchange will occur for 1,145,070 applications, assuming that each handler makes 90 applications per year ($12,723 \times 90 = 1,145,070$). 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 43,318 commercial firms making 8,613,000 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, 14,642,100 (8,613,000 x 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 191,752 agricultural employers of handlers that use pesticides each year and they employ 248,221 handlers. EPA assumes that the handlers are responsible for 10 applications per year, on average, totaling 2,482,210 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 1,829 CPHE employers who will inform each of their 12,723 handlers for each application. As estimated above, CPHE handlers account for 1,145,070 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 4,753,011 hours and \$251,871,379. (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	Cost	Burden	Cost
					(hours)	(\$)	(hours)	(\$)
1. Agricultural Establishment Provides Information on treated areas under an REI to CPHE employer	Agricultural Establishment Employer	735,376	8,613,000	57.41	0.05	2.87	430,650	24,723,617
2. CPHE receives information on treated areas under a REI	CPHE Employer	43,318	8,613,000	51.81	0.05	2.59	430,650	22,311,977
3. CPHE Provides Information on treated areas under an REI on ag establishment to CPHE Handlers	CPHE Employer	1,829	1,145,070	51.81	0.05	2.59	57,254	2,966,304
4. CPHE Handlers receive Information on treated areas under an REI on ag establishment from CPHE employer	CPHE Handler	12,723	1,145,070	41.28	0.05	2.06	57,254	2,363,424
5. CPHE employer provides application information to Ag establishment employer	CPHE Employer	43,318	14,642,100	51.81	0.1	5.18	1,464,210	75,860,720
6. Ag establishment employer receives the application information from CPHE employer	Agricultural Establishment Employer	735,376	14,642,100	57.41	0.10	5.74	1,464,210	84,060,296
7. Ag Establishment Provides Label/Application Information to Handlers	Agricultural Establishment Employer	191,752	2,482,210	57.41	0.117	6.72	290,419	16,672,930
8. Ag Handler Receives Label/Application Information from Ag Establishment	Ag Establishment Handlers	248,221	2,482,210	35.95	0.117	4.21	290,419	10,440,548

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 (\$)
9. CPHE Employer Provides Label/Application Information to CPHE Handlers	CPHE Employer	1,829	1,145,070	51.81	0.117	6.06	133,973	6,941,151
10. CPHE Handler Receives Label/Information from CPHE	CPHE Handlers	12,723	1,145,070	41.28	0.117	4.83	133,973	5,530,413
TOTALS		1,202,580	56,054,900				4,753,011	251,871,379

*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 191,752 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 56,469 large farms that have more than one handler and use pesticides, the Agency estimates that 20% (11,294) will

have to provide pesticide equipment safety information on 2 occasions per year and the remaining other establishments provide the information once, resulting in a total of 203,046 responses annually. EPA estimates that there are 248,221 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 1,829 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 2,378 responses. EPA estimates the number of CPHE handlers to be 12,723 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 38,864 hours and \$1,768,962. (Table 10)

Table 10: Safe Operation, Cleaning and Repair of Equipment								
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 (\$)
Agricultural Employer informs handlers.	Agricultural Establishment Employer	191,752	203,046	57.41	0.083	4.784	16,920	971,405
	Agricultural Establishment Handler	248,221	248,221	35.95	0.083	2.996	20,685	743,629
CPHE Employer informs handlers.	CPHE Employer	1,829	2,378	51.28	0.083	4.273	198	10,161
	CPHE Handler	12,723	12,723	41.28	0.083	3.440	1,060	43,767
TOTALS		454,525	466,368				38,864	1,768,962

*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. Any incident involving a pesticide on an agricultural establishment could require the agricultural employer to provide emergency assistance, so this section estimates the number of incidents relevant to WPS. EPA relied on the Sentinel Event Notification System for Occupational Risk-Pesticides (SENSOR-Pesticides) database to estimate the annual number of pesticide incidents based on SENSOR reports over the 2015-2017 time period. SENSOR-Pesticides is administered by the National Institute for Occupational Safety and Health. SENSOR-Pesticides is a surveillance program that monitors occupational illnesses related to pesticide exposure. The SENSOR-Pesticides database does not cover every state, so to derive an estimate of the national number of incidents that could require the employer to provide emergency assistance, the incidents reported to SENSOR-Pesticides must be extrapolated to cover states that do not participate. The number of incidents nationally is extrapolated by the number of hired farm workers and the number of agricultural establishments with hired workers in the SENSOR-Pesticide states, as described below.

EPA found 482 agricultural pesticide incidents from the 2015-2017 time period in SENSOR-Pesticides. The Agency extrapolated the number of incidents per year from the subset of states that participate in SENSOR-Pesticides to the national level and adjusted the estimate for likely underreporting of incidents reported. The Agency identified the total number of incidents reported for each of the eight states (California, Florida, Louisiana, Michigan, Nebraska, North Carolina, Texas, and Washington) for each year between 2015-2017. However, the states reporting to SENSOR-Pesticides changed each year. To estimate an annual incident rate by dividing the number of incidents by the number of hired farmworkers in reporting states, based on the 2017 USDA NASS Census of hired farm labor (2017 NASS Census Table 7). This provides a rate of incident per 10,000 workers for each year from 2015-2017. For example, in 2015 there were 170 total cases reported based on incident reports from the eight states. The 170 cases was divided by the total number of workers hired in those eight states in 2015 (1,058,966) to estimate an incident rate per 10,000 workers in 2015 ($10,000 * 170 / 1,058,966 = 1.605$) The same method was applied to the years 2016 and 2017 to derive a rate per 10,000 workers for each year. The rates for each of the three years was then averaged. The average of the three-year rate per 10,000 workers is 1.772 ($(1.605 + 1.382 + 2.330)/3 = 1.772$).

Alternatively, the Agency extrapolates to the national level by estimating the number of incidents per 1,000 farm operations. The Agency used the number of farm operations in

the 2017 NASS Census data (2017 NASS Census Table 7) to derive the number of farm operations that hire labor for each of the eight reporting states. An incident rate per 1,000 farm operations was derived by dividing the number of incidents for each year by the number of total number of operations from each of the reporting states, and then averaging across the three years. The Agency estimates that the average rate per 1,000 operations is about 1.625 based on the reporting data.

To derive national estimates, EPA multiplying the number of workers in all states (2,411,033, Table 3) by the average incident rate per 10,000 workers (1.772) to get the projected number of annual incidents per farm worker Nationally $((1.772 * 2,411,033)/10,000 = 427.34)$. The same operation was performed to derive the number of annual incidents per farm operation nationally $((1.625 * 513,137)/1,000 = 833.99)$. The midpoint of the two estimates is used below $((427.34 + 833.99) / 2 = 630.67)$.

The Agency estimates that about 10% of incidents are reported to a database like SENSOR. (11/2021. <https://www.cdc.gov/niosh/topics/pesticides/overview.html>). Pesticide incident estimates are likely to be underreported Any underreporting to SENSOR- Pesticides would be reflected as an underestimate of the national level of incidents. If only 10% of pesticide incidents are reported, there would be an estimated number of incidents of about 6,307 $(630.67*10)$ agricultural pesticide incidents annually.

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 the burden since even in minor cases the establishment may provide information about the pesticide to which the worker was exposed.

EPA estimates that there are 289,598 agricultural establishments that hire workers and/or handlers and use pesticides and 1,829 CPHEs. Assuming that emergency assistance is equally likely to be needed from either establishment, agricultural establishment employers would respond to 99.4% $(100 - 1,829/289,598)$ of incidents, or 6269, and CPHE employers would respond to 40 $(0.006*6,307)$ 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 526 hours and \$30,164 (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 below (Table 11).

Table 11: Information Required for Emergency Assistance								
Activity ¹⁵	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	289,598	6,269	57.41	0.083	4.78	522	29,993
CPHE Employer Provides Information to Medical Personnel	CPHE Employer	1,829	40	51.81	0.083	4.32	3	171
TOTALS		289,598	6,307				529	30,164

*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 2,076,179 hours and \$70,695,803. (Table 12)

¹⁵ 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.

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 \$65.11 and a certified applicator is assumed to be the agricultural employer (wage rate \$57.41).

Worker pesticide safety trainings are the responsibility of the agricultural establishment employer. EPA estimates that there are 301,595 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 further estimates that there will be a total of 496,543 training sessions per year given multiple trainings to accommodate different sizes of workforce across different types of farms:

- Large establishments (annual revenue of \$1,000,000 or more) with more than 10 employees, estimated to number 10,641, hold an average of 6.4 training sessions per year;
- Large establishments (annual revenue of \$1,000,000 or more) with fewer than 10 employees, estimated to number 28,611, hold an average of 1.45 training sessions per year;
- Small establishments (annual revenue of less than \$1,000,000) with more than 10 employees, estimated to number 29,338, 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 171,428, 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 61,577, 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 69,516 training sessions held on 42,223 establishments; 10% of trainings will be conducted by trainers who completed a Train-the-Trainers program, accounting for 49,654 training sessions held on 30,160 establishments; and 76% of trainings will be conducted by certified applicators, accounting for 377,373 training session held on 229,212 establishments. (Table 12, lines 1-3)

EPA estimates that there are 1,620,387 employees on farms that primarily produce crops (NAICS 111) and hire labor (Table 3). Given a new hire rate of 16%¹⁶, the Agency estimates that 84% of the 271,804 handlers employed on establishments hiring workers, or 228,315 will be returning employees who will receive handler safety training. Thus, the Agency estimates that 1,576,898 workers (1,620,387 – 43,489) 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 301,595) are required to make a record of the training (numbering 496,543 as calculated above) and have it signed by the trained worker (numbering 1,576,898). 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 will request a copy (520,376), given that 28% of workers report having multiple employers.¹⁷ 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.

¹⁶ 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/naws_rpt9.pdf

¹⁷ Ibid.

EPA estimates that there are 211,737 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 123,889 training sessions per year given the number of trainings across different sizes of farms:

- Large establishments (annual revenue of \$1,000,000 or more), which are assumed to average 2 handlers/farm, estimated to number 60,067, will average 0.8 training sessions/year (4 trainings for every 5 farms, as some farms are able to share resources), resulting in 48,054 training sessions.
- Large-small establishments (annual revenue between \$100,000 and \$1,000,000), which are assumed to average 1 handler/farm, estimated to number 151,670, will average 0.5 training sessions/year (1 training for every 2 farms, as some farms are able to share resources), resulting in 75,835 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 17,344 training sessions for 29,643 establishments; 10% of trainings will be conducted by trainers who completed a Train-the-Trainers program, accounting for 12,389 training sessions for 21,174 establishments; and 76% of trainings will be conducted by certified applicators, accounting for 94,155 training sessions for 160,920 establishments. (Table 12, lines 8-10)

EPA estimates that there are 271,804 handlers, including those that are employed on establishments that do not hire workers. This number includes 16% (the new hire rate) of the 184,078 handlers employed on establishments that hire workers (29,452) who also receive worker safety training. (Table 12 line 11)

Employers (numbering 211,737) are required to make a record of the training. Given a new hire rate of 16%¹⁸, the Agency assumes that there will be 1.16 training occasions per establishment, or 245,615 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 271,804), 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 (43,489)

¹⁸ Ibid.

will request a copy, given the new hire rate of 16%¹⁹, 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 1,829 commercial establishments that hire 12,723 handlers (D&B, 2021). 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 2,378 training sessions per year.

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 333 training sessions for 256 establishments (Table 12; line 15); 10% of trainings will be conducted by trainers who completed a Train-the-Trainers program, accounting for 238 training sessions for 183 establishments (Table 12; line 16); and 76% of trainings will be conducted by certified applicators, accounting for 1,807 training session for 1,390 establishments (Table 12; line 17). EPA assumes that none of the handlers are certified applicators, so all 12,723 handlers take the WPS safety training. (Table 12, line 18)

Employers (numbering 1,829) 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 2,378 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 12,723), 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 (2,036) will request a copy, given the new hire rate of 16%²⁰, 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)

¹⁹ Ibid.

²⁰ Ibid.

EPA estimates that the average burden in terms of hours and costs for agricultural worker and handler employers to comply with this requirement is 2,076,179 hours and \$70,695,803. (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)	42,223	69,516	65.11	0.75	48.83	52,137	3,394,640
	Trainers who completed a Train-the Trainer program (10% of trainings)	30,160	49,654	65.11	0.75	48.83	37,241	2,424,743
	Certified Applicator of RUPs* (76% of trainings)	229,212	377,373	57.41	0.75	43.06	283,029	16,248,718
4. Attend worker pesticide safety training	Workers (minus trained handlers 181,135)	1,576,898	1,576,898	21.2	0.75	15.90	1,182,674	25,072,684
5. Record and maintain records of worker training	Agricultural establishment employers	301,595	496,543	57.41	0.12	6.89	59,585	3,420,783
6. Sign Acknowledgement of worker training	Workers (minus trained handlers)	1,576,898	1,576,898	21.2	0.0083	0.18	13,141	278,585
7. Provide copy of record upon request	Agricultural establishment employers	301,595	520,376	57.41	0.033	1.89	17,172	985,869
8 – 10. Train handlers of agricultural establishments	Trainers of certified applicators (14% of trainings)	29,643	17,344	65.11	1.00	65.11	17,344	1,129,294
	Trainers who completed a	21,174	12,389	65.11	1.00	65.11	12,389	806,639

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 (\$)
	Train-the-Trainer program (10% of trainings)							
	Certified Applicator of RUPs* (76% of trainings)	160,920	94,155	57.41	1.00	57.41	94,155	5,405,458
11. Attend handler training on agricultural establishment	Agricultural establishment handlers	271,804	271,804	35.95	1.00	35.95	271,804	9,771,354
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)	211,737	245,615	57.41	0.07	3.83	16,374	940,050
13. Sign Acknowledgement of worker training (receive a copy upon request)	Handlers of agricultural establishments	271,804	271,804	35.95	0.0083	0.30	2,265	81,428
14. Provide copy of record upon request	Agricultural establishment employers	211,737	43,489	57.51	0.033	1.90	1,435	82,534
15 -17. Train handlers of CPHEs	Trainers of certified applicators (14% of 2793*1.3)	256	333	65.11	1.00	65.11	333	21,674
	Trainers who completed a Train-the Trainer program (10% of 2793*1.30)	183	238	65.11	1.00	65.11	238	15,481
	Certified Applicator of RUPs (76% of the 1.3 trainings by	1,390	1,807	41.28	1.00	41.28	1,807	74,595

Activity	Respondent Group	Number of Respondents	Total Responses Annually	Wage Rate (\$/hr)	Per Event Average		TOTALS	
					Burden (hours)	Cost (\$)	Burden (hours)	Cost (\$)
	commercial certified applicators)							
18. Attend handler training on CPHEs	CPHE Handlers	12,723	12,723	41.28	1.00	41.28	12,723	525,205
19. Record and Maintain records of handler training (CPHE)	CPHE employers (1.3 sessions per CPHE)	1,829	2,378	51.81	0.07	3.45	159	8,213
20. Sign acknowledgement of handler training	CPHE Handlers	12,723	12,723	41.28	0.0083	0.34	106	4,377
21. Provide copy of record upon request	CPHE employers	1,829	2,036	51.81	0.033	1.71	67	3,480
TOTALS		1,936,076	5,656,096				2,076,179	70,695,803

* 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 176,976 hours and \$8,440,726. (Table 13 A)

For family farms, the Agency estimates that the average burden is 2,613 hours and \$150,012. (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 21,369 hours and \$1,105,540. (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 conducted 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 \$1,000,000 or more) that primarily produce crops (NAICS 111) and hire labor will have one handler undergo respirator fit testing and training, thus 28,654 establishments and handlers. Further, 75% of large-small agricultural establishments (annual revenue between \$100,000 and \$1,000,000) 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 18,861 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 47,515 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 \$1,000,000 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 1,216 establishments and handlers. Further, 40% of large-small family farms (annual revenue between \$100,000 and \$1,000,000) 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 378 establishments and

handlers. In total, the Agency calculates there will be 1,594 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 (1,829) 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 6,362 (12,723/2) 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 289,598 agricultural establishments using pesticides and all 1,829 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 line 5; Table 13 C line 2)

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 28,654 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 18,861 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 47,515 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 \$1,000,000 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 1,014 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 1,829 establishments have, on average 2 closed systems. Thus, they will create 7,316 (1,829 X 4) 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 41,489 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 C lines 6-7)

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)	47,515	47,515	35.95	0.50	17.98	23,757	854,078
2. Respirator Medical Evaluation	Ag Establishment Handlers	47,515	47,515	35.95	0.50	17.98	23,757	854,078
3. Employer Administration of Respirator Fit Testing, training and medical evaluation	Ag Employer	47,515	47,515	57.41	1.00	57.41	47,515	2,727,822
4. Record and Maintain Records	Ag Establishment Employer (assume all large and large-small farms with handlers)	47,515	47,515	57.41	0.07	3.83	3,168	181,855
5. Inform Cleaner /launderer	Ag Establishment Employer	289,598	289,598	57.41	0.083	4.78	24,133	1,385,485
6. Cleaner/ launderer receives information	Cleaner/ launderer (assume 1 for each handler)	289,598	289,598	35.95	0.083	3.00	24,133	867,587
7. Provide written operating instructions for closed system	Ag Employer (assume 50% of large and large-small farms)	33,903	33,903	57.41	0.40	22.96	13,561	778,537
8. Provide Closed System Training	Ag Establishment Employer	33,903	33,903	57.41	0.25	14.35	8,476	486,586

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 (\$)
9. Receive Closed System Training	Ag Establishment Handler	33,903	33,903	35.95	0.25	8.99	8,476	304,699
10. TOTALS		626,711	870,963				176,976	8,440,726

*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	1,594	1,594	57.41	0.50	28.71	797	45,767
2. Medical Evaluation	Family Farm Owner/Operator	1,594	1,594	57.41	0.50	28.71	797	45,767
3. Record and Maintain Records	Family Farm Owner/Operator	1,594	1,594	57.41	0.07	3.83	106	6,102
4. Provide written operating instructions for closed system	Family Farm Owner/Operator	1,014	1,014	57.41	0.40	22.96	405	23,278
5. Provide Training for Closed Systems	Family Farm Owner/Operator	1,014	1,014	57.41	0.25	14.35	253	14,549
6. Receive Training for Closed Systems	2 nd Family Farm Operator	1,014	1,014	57.41	0.25	14.35	253	14,549
TOTALS		2,608	7,824				2,613	150,012

*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	1,829	6,362	51.81	0.07	3.63	445	23,071
2. Inform Cleaner/laundrerer	CPHE Employer (assumes 1 CPHE Cleaner/Laundrerer/CPHE)	1,829	1,829	51.81	0.083	4.32	151	7,897
3. Cleaner/laundrerer receives information	Cleaner/laundrerer (assumes 1 CPHE Cleaner/Laundrerer/CPHE)	1,829	1,829	41.28	0.083	3.44	151	6,292
4. CPHE Employer Provide written operating instructions for closed system	CPHE Employer	1,829	3,658	51.81	0.40	20.72	1,463	75,808
5. CPHE Employer Provides Closed System Training	CPHE Employer	1,829	1,829	51.81	0.40	20.72	732	37,904
6. CPHE Handler Receives Closed System Training	CPHE Handler (assumes 4 CPHE handlers/CPHE)	7,316	7,316	51.81	0.25	12.95	1,829	94,760
7. CPHE Self-Employed Provide written operating instructions for closed system	CPHE Employer	41,489	41,489	51.81	0.40	20.72	16,595	859,808
TOTALS		10,974	64,311				21,369	1,105,540

*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 237,687 farms employing workers and using pesticides, the Agency estimates there will be 95,075 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 1,448,830 workers employed on an agricultural establishment that applies pesticides, or 289,766 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 47,992 hours and \$1,705,953. (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	95,075	95,075	57.41	0.10	5.74	9,507	545,824
Provide Oral Notifications	Ag. Establishment Employer	95,075	95,075	57.41	0.10	5.74	9,507	545,824
Receive Oral Notification	Ag. Worker †	289,766	289,766	21.2	0.10	2.12	28,977	614,304
TOTALS		384,841	479,916				47,992	1,705,953

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

† Assume 20% of 1,448,830 agricultural workers.

13. Provide an estimate for the total annual cost burden to respondents or recordkeepers resulting from the collection of information.

There are no operational and/or maintenance costs.

14. Provide estimates of annualized cost to the Federal government.

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.

15. Explain the reasons for any program changes or adjustments reported in Items 13 (or 14) of OMB Form 83-I.

The total estimated annual respondent burden for this renewal ICR is 10,188,669 hours. There is a decrease of 259,491 hours in the number of burden hours in the total estimated respondent burden compared with that identified in the ICR currently approved by OMB. This is due to a decline in the number of respondents (farms and employees) since the last Census of Agriculture. This change is an adjustment. (Table 15).

Table 15: Total Estimated Annual Burden Hours and Costs		
	Hours	Costs
Respondents	10,188,669	\$480,131,806
Agency	n/a	n/a

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.

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.

16. For collections whose results will be published, outline the plans for tabulation and publication.

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 per worker or handler. Less frequent training and notification would increase risk to agricultural workers and handlers.

17. If seeking approval to not display the expiration date for OMB approval of the information collection, explain the reasons why display would be inappropriate.

This question not applicable to this ICR.

18. Explain each exception to the certification statement identified in Item 19 of OMB Form 83-I.

EPA does not request an exception to the certification of this information collection.

Attachments

Attachments to the supporting statement are available in the public docket established for this ICR under docket identification number EPA-HQ-OPP-2021-316. These attachments are available for online viewing at www.regulations.gov or otherwise and as noted below.

Attachment A: Consultation Summary

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>

Attachment C: General Public comment submission to the docket (EPA-HQ-OPP-2021-0316)

APPENDIX

Recordkeeping requirements

The following describes the categories of recordkeeping and notification requirements under 40 CFR Part 170:

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

(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 REI, 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.

The application-specific information display and record must include: the pesticide product's 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, or to their designated representative,

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 REIs 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 RUP applicators (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 RUP applicator 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. All workers must receive the full worker training annually. The training covers all the points described in 40 CFR 170.401(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 170.501(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 systems 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.

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 Library²¹, and individual state guidances and templates, may be used to fulfill this requirement. These resources 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 workday on agricultural establishment and update display within 24 hours of notice of any changes to the location-specific content.

(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 product’s name,
 - EPA registration number,
 - active ingredients of the product applied,

²¹ <http://pesticideresources.org/wps/index.html>

- 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 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 ¼ 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

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.