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# Analysis of the Information Collection Requirements for Agricultural Workers Protection Standards

August 6, 2014

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# **Executive Summary**

CropLife America (CropLife) has engaged Summit Consulting, LLC (Summit) to analyze the assumptions underlying the estimate of information collection burden as described in the Information Collection Request (ICR) for the proposed updates to the Agricultural Worker Protection Standards published by the Environmental Protection Agency on February 19, 2014. This analysis was conducted for the purpose of supplementing CropLife's response to the ICR as part of the public comment period.

The major findings of this analysis are as follows:

- Discrepancies in Cost of Increased Burden: The proposed update to the WPS include increased recordkeeping, training, and posting requirements, which represent an overall increase in burden hours to approximately four-and-a half times that of the existing 2011 WPS, based on EPA estimates. However, due to differences in how wage rates are calculated across the two ICRs, the dollar estimate of the burden less than doubles between the 2011 WPS ICR and the ICR for the proposed WPS. The calculation in the ICR for the proposed WPS does not accurately reflect the difference in burden reflected by the proposed change to the current WPS.
- Use of "Loaded" Wage Rates: The use of "Loaded" wage rates appears inconsistent with recent EPA practice in other ICRs, and inappropriate to the type of activities described. The above-noted discrepancy is due to the use of "Loaded" wage rates in the ICR for the proposed standard, whereas "Fully Loaded" wage rates were used in the ICR for the 2011 WPS. Loaded wage rates are sometimes used to estimate burden in cases in which no capital or operating and maintenance costs are incurred by respondent firms; however, that is not the case in this instance. The use of Fully Loaded rates would increase the cost burden estimate of the proposed WPS by approximately 50%.
- **Costs of Recordkeeping Set up and Maintenance**: The burden estimate in the proposed WPS does not include any recordkeeping costs associated with set-up costs for a recordkeeping system, storage costs, or disposal costs for records that may hold sensitive information. Given the use of "Loaded," as opposed to "Fully Loaded" rates, these overhead costs are not reflected anywhere within the burden estimate proposed in the ICR.
- Estimation of Greenhouse Numbers: The ICR assumes only 519 greenhouses will be subject to the proposed WPS. Based on the 2012 data from the National Agricultural Statistics Service, CropLife estimates the number of greenhouses that would be subject to the proposed WPS is actually over 28,000. This difference in the number of greenhouses would lead to an approximately 15% increase in the total burden estimate, all other assumptions held constant.
- **Burden of Recordkeeping Activities**: Several key recordkeeping activities are estimated to take between one and four minutes per worker. Generally, the minimum recordkeeping time for individual recordkeeping activities in similar, recent ICRs from EPA is not less than five minutes per task.
- Burden of Enforcement: No consideration is provided in the ICR for rule enforcement costs. WPS agricultural inspections are conducted by state, territorial and tribal pesticide regulatory agencies that will include these updated rules in their inspection protocols. The additional recordkeeping requirements may add to the inspection time, as well as require development of additional training and guidelines for inspectors.

The remainder of this document is as follows:

• In the first section of this document, we provide an overview of the proposed rule.



- In the second section, we provide a review of the key assumptions that form the basis for the estimate of burden for the revised rule, as well as a critique of some of the inconsistencies, and potential inaccuracies within those assumptions that substantively affect the estimate of employer burden.
- In the third section of this document, we provide a set of revised burden cost estimates using revisions in the EPA assumptions based on a review of similar, recent ICRs from EPA, a review of EPA's own internal policies regarding estimating burden, and input from CropLife regarding other inputs of interest. With these revised assumptions, we provide several estimates of costs based on different sets of revised assumptions.

# About the Proposed Agricultural Worker Protection Standard (WPS)

The Agricultural Worker Protection Standard (WPS) (OMB No. 2070-0148; EPA No. 1759.06) is a rule published by the Environmental Protection Agency (EPA) aimed at reducing the risk of pesticide poisoning and injury among agricultural workers and pesticide handlers. The WPS applies to over two million agricultural workers and handlers and requires that owners and employers on agricultural establishments provide protections to prevent pesticide exposure, trainings on pesticide safety, and mitigation efforts in case of exposures.

EPA has recently proposed changes to the 2011 WPS, and has submitted an ICR for public comment regarding those changes under Docket #EPA-HQ-OPP-2011-0184. Prior to the 2011 update, the WPS was implemented through a 2008 version of the rule. The proposed 2014 revision to the WPS introduces a number of new requirements related to recordkeeping, as well as enhanced training requirements. Table 1 shows a tabulation of these proposed activities.

Category	Activity
New Entrant Rule Familiarization	Agricultural or CPHE Employer: Learn/refresh requirements annually
Information Exchange	<ul> <li>Agricultural Establishment provides information on treated areas under an REI to CPHE</li> <li>CPHE provides application information to agricultural establishment</li> <li>CPHE provides information to CPHE handers</li> <li>CPHE handler receives information from CPHE</li> </ul>
Safe Operation, Cleaning, and Repair of Equipment	<ul> <li>Agricultural or CPHE Employer Informs Handlers</li> <li>Agricultural or CPHE Handler Receives information</li> </ul>
Information for Emergency	<ul> <li>Agricultural or CPHE Employer provides information to medical personnel, worker, or handler</li> </ul>

#### Table 1: Proposed Revision to the 2011 WPS – New Proposed Activities

Category	Activity
Pesticide Safety Training	<ul> <li>Agricultural Employer or CPHE provides training to handlers</li> <li>Agricultural or CPHE Handler attends training</li> <li>Agricultural Employer or CPHE records and maintains handler training records</li> <li>Agricultural Establishment Handlers or CPHE sign acknowledgement of training</li> </ul>
Personal Protective Equipment Information	<ul> <li>Agricultural Establishment or CPHE handler receives respirator training</li> <li>Agricultural Establishment or CPHE handler undergoes initial respirator survey</li> <li>Agricultural Establishment or CPHE handler undergoes respirator fit-test</li> <li>Health care worker reviews medical evaluation</li> <li>Agricultural Establishment or CPHE handler undergoes follow up evaluation</li> <li>Agricultural Establishment or CPHE handler undergoes follow up evaluation</li> <li>Agricultural or CPHE Employer records and maintains records</li> <li>Agricultural or CPHE Employer informs cleaner/launderer</li> <li>Agricultural or CPHE Employer maintains closed system repair records</li> </ul>

The estimated annual burden to agricultural employers for the existing WPS as described in the accompanying ICR is 1,827,493 hours at a cost of \$92,729,052. The ICR for the proposed rule estimates the burden at 8,316,993 hours at a cost of \$196,130,463, which represents a total increase of nearly 6.5 million hours and over \$100 million with the implementation of the proposed rule.

In addition to the changes in the worker protection, training, and recordkeeping activities included under the proposed rule, the assumptions used to generate the burden estimates provided within the ICR for the proposed rule differ significantly from the assumptions used in the ICR for the current rule. In this document, we provide a review of the key assumptions that form the basis for the estimate of burden for the revised rule, as well as a critique of some of the inconsistencies, and potential inaccuracies within those assumptions that substantively affect the estimate of employer burden.

# Review of EPA Assumptions Regarding the Burden Estimate in the proposed WPS Revision ICR

A large number of assumptions are used to generate the burden estimates presented in the ICR for the proposed revision to the WPS.

This section describes the methodology and findings associated with analysis of the previously mentioned key assumptions. This section also suggests potential adjustments to the key assumptions in order to more accurately estimate the cost burden of the proposed revision to the WPS ICR.

We focus on three types of burden that are required with an ICR:

- 1. Estimates of the Respondent Burden for Collection of Information
- 2. Capital and Operation and Maintenance Costs for Recordkeeping
- 3. Estimates of the Agency Burden for Collection of Information

# **Estimates of the Respondent Burden for Collection of Information**

A large number of assumptions are used to generate the burden estimates presented in the ICR for the proposed revision to the WPS. A limited number of key assumptions contributed largely to the overall burden estimate. These key assumptions include:

- Wage Rate Calculations
- Recordkeeping Costs
- Number of Greenhouses
- Burden on Small Businesses

This section describes the methodology and findings associated with analysis of the previously mentioned key assumptions. This section also suggests potential adjustments to the key assumptions in order to more accurately estimate the cost burden of the proposed revision to the WPS ICR.

#### Wage Rate Calculations

Wage rates represent the hourly cost of a worker's time, and are used to measure labor burden for various types of labor for activities in the ICR. The wage rate used in the 2011 WPS ICR is calculated as follows in Table 2. Calculations for wage rates used in the cost estimates appear in the cost estimation section in Table 7 and Table 11.

Component	Notes	Calculated Amount (Agricultural Workers) <sup>1</sup>
Base Wage Rate	Hourly Salary Amount	\$ 9.23
Fringe Benefits	Equals 43% of the Base Wage Rate, or 30% of the Loaded Wage Rate <sup>2</sup>	\$ 4.02
Loaded Wage Rate	Base Wage Rate + Fringe Benefits	\$ 13.25
Overhead Costs	50% of Loaded Wage Rate	\$ 6.62
Fully Loaded Wage Rate	Base Wage Rate + Fringe Benefits + Overhead Costs	\$19.87

#### Table 2: Components of a Fully Loaded Wage Rate Calculation (Attachment D, 2011 WPS ICR)

Fully loaded wage rates include fringe benefits (paid leave, supplemental pay, health insurance, other insurance, retirement and savings, other fringe benefits), as well as overhead costs (rent, computer support, phones facilities). Loaded wage rates include fringe benefits but do not include overhead costs.



<sup>&</sup>lt;sup>1</sup> Attachment D: Wage Rate Tables for Agricultural Employers and Agricultural Workers, Supporting Statement for an Information Collection Request (ICR). EPA-HQ-OPP-2010-0896 and OMB Control No. 2070-0148. (January 31, 2011).

<sup>&</sup>lt;sup>2</sup> The loading factor of 43% is applied to the hourly salary to calculate the amount of fringe benefits. This loading factor is calculated as the 30/70, or approximately 42.9%. Fringe benefits are assumed to make up 30% of the loaded wage rate, based on data from the Bureau of Labor Statistics (BLS) Employer Costs for Employee Compensation (ECEC) for civilian and private industry workers.

The ICR for the current WPS used a fully loaded wage rate in the calculation of the burden estimate. However, the ICR for the proposed revision to the WPS uses a loaded wage rate instead, preventing a direct comparison of the two ICRs.

#### **Review Method**

Summit selected a sample of recent EPA ICRs from to the Office of Pesticide Programs (OPP) and Office of Pollution, Prevention, and Toxics (OPPT) as part of this analysis. ICRs from these two offices were selected as both the OPP and OPPT are located within the Office of Chemical Safety and Pollution Prevention (OCSPP), and presumably share similar standards for estimation. Recent ICRs from 2013 and 2014 were selected for review in order to reflect the most recent standards.

## Findings

From the sample of ICRs recently published by OCSPP, it appears that the ICRs typically account for some amount of overhead. However, terminology for loaded rates and fully loaded rates are not completely consistent. The three equally used rates include:

- Fully Loaded Rates: Overhead as 50% of Loaded Rates
- Loaded Rates 1: Overhead as 17% of Loaded Rates
- Loaded Rates 2: Overhead not accounted for or explicitly mentioned

Table 3 shows the sample of selected ICRs and the associated wage rate calculations used.

Year	EPA ICR No.	Office	ICR Name	Rate Used <sup>3</sup>	Notes
2014	1249.10	OPP	Requirements for Certified Applicators Using 1080 Collars for Livestock Protection	Fully loaded wage rates	Rate calculations are identical to those used in the 2011 and 2008 WPS ICR.
2013	2330.02	OPP	Pesticide Registration Fees Program	Fully loaded wage rates	Rate calculations are identical to those used in the 2011 and 2008 WPS ICR.
2013	2479.01	OPPT	Tier 2 Data Collection for Certain Chemicals Under the Endocrine Disruptor Screening Program (EDSP)	Fully loaded wage rates	Rate calculations are identical to those used in the 2011 and 2008 WPS ICR.

#### Table 3: Recent EPA Information Collection Request Comparisons



<sup>&</sup>lt;sup>3</sup> The terms "Loaded wage rates 1" and "Loaded wage rates 2" are named for differentiation. They are both referred to simply as loaded wages within each associated ICR.

Year	EPA ICR No.	Office	ICR Name	Rate Used <sup>3</sup>	Notes
2013	2302.02	OPPT	EPA's Design for the Environment (DfE) Formulator Product Recognition Program	Loaded wage rates 1	Wage rates and fringe benefits are taken from the BLS Employer Costs for Employee Compensation (ECEC) data. An additional loading factor of 17 percent is applied to wages to account for overhead for a loaded wage rate.
2013	1741.07	OPPT	Correction of Misreported Chemical Substances on the Toxic Substances Control Act (TSCA) Chemical Substance Inventory	Loaded wage rates 1	Wage rates and fringe benefits are taken from the BLS Employer Costs for Employee Compensation (ECEC) data. An additional loading factor of 17 percent is applied to wages to account for overhead for a loaded wage rate.
2014	2261.03	OPPT	Safer Detergent Stewardship Initiative (SDSI) Program	Loaded wage rates 1	Loaded rates are taken from the BLS Employer Costs for Employee Compensation (ECEC) data. An additional loading factor of 17 percent is applied to wages to account for overhead.
2014	1246.12	ΟΡΡΤ	Reporting and Recordkeeping for Asbestos Abatement Worker Protection	Loaded wage rates 2	Hourly labor rates reflect wage and non-wage benefits. Information on overhead costs is not explicitly mentioned.
2014	1365.10	OPPT	Asbestos-Containing Materials in Schools and Asbestos Model Accreditation Plans	Loaded wage rates 2	Loaded wages including fringe benefits are used. Information on overhead costs is not explicitly mentioned.
2013	2487.01	OPPT	EPA's Design for the Environment (DfE) Logo Redesign Consultations	Loaded wage rates 2	Indicated that no capital or operating and maintenance costs are incurred by respondents under this ICR.

#### Fully Loaded Wage Rates

The two other ICRs from OPP that Summit reviewed used the fully loaded wage rate. This fully loaded wage rate used calculations that were identical to those used in the current WPS ICR. The source document describing the calculation of fully loaded wage rates is an EPA memo prepared by the Office of Prevention, Pesticides, and Toxic Substances (now the OSCPP), which indicates the methodology for estimating OPP ICR wage rates for industry, state, and EPA labor costs. This document is meant to standardize the calculation of wage rates for ICRs published within OPP, including the following:

- Sectors: Industry, State Government, EPA
- Labor Types: Management, Technical, Clerical



• Wages: Unloaded (basic wages), Loaded (wages + benefits), and Fully Loaded (wages + benefits + overhead)

Summit was not able to locate a more recent version of this memo, and so assumed that the 2006 version is the current version.

#### Loaded Wage Rates 1 (Limited Overhead Costs)

Three ICRs in the sample used Loaded Wage Rates 1, which used loaded wage rates from the Bureau of Labor Statistics (BLS) and applied an additional loading factor of 17% as overhead. The use of 17% as a loading factor for overhead is substantiated by two source documents published in 2002<sup>4</sup>. Like the wage rates in Fully Loaded Wage rates, the Loaded Wage Rates 1 are divided into standard categories for Management, Technical/Professional, and Clerical labor categories.

#### Loaded Wage Rates 2 (No Overhead Costs)

Three ICRs in the sample used Loaded Wage Rates 2, which are just the reported loaded wage rates from BLS. These wage rates do not account for any overhead, and the associated ICRs do not make mention of overhead costs. Likewise, the EPA Economic Analysis associated with the proposed revision to the WPS ICR does not specifically mention accounting for overhead costs.

## Potential Adjustments

Based on the analysis of recent ICRs published by OCSPP, it appears that there is significant reason to use Fully Loaded Wage Rates in the calculation of burden estimates for the proposed revision to the WPS ICR. Using Loaded Wages Rates with no overhead costs is only appropriate when there are no capital or operating and maintenance costs are incurred by respondents under an ICR. However, there are capital and operating and maintenance costs associated with the type of recordkeeping required by the proposed ICR. Doing so would make the proposed revision to the WPS ICR consistent with other ICRs from the OPP, as well as simplify cost estimations for material used in WPS activities, which are otherwise calculated separately.

## **Recordkeeping Costs**

Proposed revision to the WPS identifies six distinct recordkeeping activities required to maintain compliance. Since the recordkeeping requirement did not exist in previous versions of the WPS, this set of activities is one of the primary sources of increased cost and time burden in the ICR for the proposed revision to the WPS. These activities are summarized in Table 4 below.



<sup>&</sup>lt;sup>4</sup> Wage Rates for Economic Analyses of the Toxics Release Inventory Program (EPA, 2002), and Revised Economic Analysis for the Amended Inventory Update Rule: Final Report (EPA, 2002)

#	Record Type	Description	Recordkeeping Time Burden (per unit)
1	Application- specific information	Pesticide application information, including timeframe of application, duration of REI, product label, and SDS information.	<ul> <li>Gather record info = 12 minutes</li> <li>Maintain record = 1 minute</li> <li>Provide record info upon request = 6 minutes</li> </ul>
2	Training Records	Record of worker/handler training, including training requirements met and agricultural employer data.	<ul><li>7 minutes per worker</li><li>4 minutes per handler</li></ul>
3	Recordkeeping associated with handler medical evaluation, fit testing, and respirator training	Records of completion of handlers' medical evaluation, fit testing, and respirator training. Includes results of extensive qualitative and quantitative fit tests and equipment information for the respirator used.	<ul> <li>4 minutes per medical evaluation record (per handler)</li> <li>4 minutes per respirator fit test (per handler)</li> <li>23% will require follow-up to the medical evaluation (another 4 minutes of recordkeeping for that subpopulation)</li> </ul>
4	Records of system maintenance for handler employers of closed systems	Maintenance records of closed systems; maintenance to be completed as specified in written operating instructions and as needed.	• 3 minutes
5	Records that employees received oral notice of pesticides (for workers exempt from training in first 2 days)	[Exemption for workers that are performing tasks up to 2 days before the training requirement is enacted.] Worker must be provided a copy of an EPA-approved pesticide information sheet and its contents communicated to the work orally in a language the worker understands prior to conducting any tasks.	• 10 minutes

# Table 4: Summary of Record keeping Activities Proposed in WPS ICR

#	Record Type	Description	Recordkeeping Time Burden (per unit)
6	Early entry notifications records	Records of worker early entry activities - includes acknowledgement of notification by printed name, date of birth, and signature of each early-entry workers who received the information.	• 4 minutes

According to the proposed revision to the WPS, the EPA's rationale for adding the recordkeeping requirements is due to feedback received from the agency's state regulatory partners, who have indicated "difficulty enforcing some requirements, due primarily to a lack of records."<sup>5</sup> The EPA notes that "proposed recordkeeping is designed to improve enforcement capability as a means of fostering compliance, thereby improving protections." EPA also expects that recordkeeping will enhance enforceability of training and notification requirements.<sup>6</sup>

Though EPA's justification for the increased burden is based on the ability of records to improve consistency across information tracking, the proposed revision to the WPS requires that all records are created and maintained within each agricultural establishment. With no central authority from EPA to create and manage the records in the desired format, the third-party recordkeeping requirement may unnecessarily increase the burden on agricultural employers without comparable improvement in compliance, enforcement capability, or worker safety. This concept is further explored below.

#### **Review Method**

To evaluate the estimated burden of recordkeeping in the proposed revision to the WPS, Summit reviewed various existing ICRs from EPA and the Department of Labor (DOL) to compare recordkeeping costs and time burdens associated with these activities. Summit also reviewed EPA's *Economic Analysis of Proposed Revisions to the Worker Protection Standards*, which informed the development of cost estimations in the ICR, to examine the calculation methodology in more detail. Since recordkeeping was not included in previous versions of the WPS, the added costs of recordkeeping events in the proposed ICR cannot be compared to any earlier baseline cost estimate.



<sup>&</sup>lt;sup>5</sup> Agricultural Worker Protection Standard Training and Notification (Proposed Rule) OMB Control No.: 2070-[new]; EPA ICR No.: 2491.01

<sup>&</sup>lt;sup>6</sup> Agricultural Worker Protection Standard Training and Notification (Proposed Rule) OMB Control No.: 2070-[new]; EPA ICR No.: 2491.01

## Findings

#### Recordkeeping Wage Rate Considerations

Based on Summit's review of other ICRs, including a 2014 DOL ICR related to mine safety standards<sup>7</sup> and a 2013 EPA ICR for recordkeeping associated with the Clean Water Act<sup>8</sup>, there are inconsistencies regarding the wage rate to be assigned to recordkeeping in a nontraditional business environment, such as farming, mining, or pollution mitigation. The proposed revision to the WPS assigns a wage rate of \$28.21 for recordkeeping, which represents the BLS wage rate for an agricultural employer. Each recordkeeping task calculates the total cost of the activity as the time estimate (i.e. 0.05 hours) multiplied by the \$28.21 wage rate. While the DOL mine safety ICR uses this same wage rate to account for creating and maintaining training records, the EPA Clean Water Act ICR calculates the cost for recordkeeping based on wage rates for data clerks hired for such tasks. Since clerical responsibilities are not a typical job function of an agricultural employer, the wage rate of \$28.21 may not adequately incorporate the added burden of recordkeeping efforts, especially within smaller establishments that likely have less experience in this area.

#### Lack of Standard Forms

As noted above, the EPA does not require the use of any standard reporting forms for the recordkeeping activities in the proposed revision to the WPS. Though this allows the employers some flexibility, the lack of standard agency forms may increase reporting burden and costs and could decrease compliance as well as cause difficulties for enforcement personnel. Most other ICRs examined during Summit's review utilized standard forms for recordkeeping.

#### Potential Adjustments

Overall, Summit found that the following recordkeeping costs are not currently accounted for in the proposed ICR and should be considered for inclusion:

- Set-up costs to establish a recordkeeping system (if one has not already been established)
- Costs to develop internal record forms
- Printing costs (for paper records)
- Computer software/system costs (for electronic records)
- Storage costs
- Disposal costs of records with sensitive information
- Maintenance costs for records beyond the two-year minimum for longer-term employees

Additionally, the time burden for some recordkeeping activities appear to be underestimated, with some activities, like signature-recording, estimated to take only 30 seconds. For example, the timeburden estimate of four minutes for recording the respirator fit test may be low, given the in-depth quantitative and qualitative testing required for this activity.



<sup>&</sup>lt;sup>7</sup> DOL Mine Accident ICR 1219-0007 (2014) <sup>8</sup> EPA-HQ-OECA-2009-0274-0191 (2013)

## Number of Greenhouses

The proposed revision to the WPS estimates certain activities, specifically those for notifications and postings, which will require more effort by greenhouse owners than by other WPS-affected establishments. The proposed revision to the WPS ICR estimates the number of greenhouses which would be impacted by this proposed revision to the WPS as 519, which CropLife believes to be too low a number, especially as the current WPS ICR estimates the number of greenhouses as 11,350. Because the number of applicable establishments is an assumption used in determining the burden of a variety of activities, CropLife identified the number of greenhouses as a key assumption.

## Review Method

Summit reviewed the EPA Economic Analysis in order to identify how EPA determined the number of greenhouses for the proposed revision to the WPS ICR.

#### Findings

A review of the EPA Economic Analysis did not reveal how EPA has estimated the number of greenhouses to be affected by the proposed revision to the WPS to be 519. The EPA Economic Analysis does instead clarify that the number of WPS farms, defined as agricultural establishments that produce crops and also hire workers, includes nurseries and greenhouses, as well as livestock operations that also produce crops. The EPA Economic Analysis also identifies the number of WPS farms estimated to use pesticides. However, the EPA Economic Analysis makes no mention on the specific number of greenhouses.

Moreover, without a specific definition for WPS-affected greenhouses, Summit finds the proposed ICR calculation for greenhouse posting requirements to be potentially inaccurate. The proposed ICR subtracts the assumed number of greenhouses (519) from the number of WPS farms, and calculates the posting requirements for each establishment separately. This calculation assumes that WPS farms have at most one greenhouse, though it is possible that a single farm encompasses multiple greenhouses.

Both the small assumed number of greenhouses, as well as the assumption that a WPS farm has a single greenhouse, may lead to an underestimation of proposed revision to the WPS costs for greenhouses.

## Potential Adjustments

CropLife has engaged outside consultants to review agricultural data (National Agricultural Statistics Service 2012) to confirm the number of greenhouses within the U.S. The number identified through this study (28,147) may be used to substitute the 519 greenhouse assumption currently used in the proposed revision to the WPS ICR, retaining the conservative assumption that a WPS farm has at most a single greenhouse.

## **Impact on Small Businesses**

The introduction or revision of federal standards often uniquely impacts small businesses, which typically operate with less administrative overhead and may not have sophisticated business systems or infrastructure in place to easily adapt to new regulations. Specifically, the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996 requires special consideration for small entities because such firms often cannot devote staff resources to follow regulatory developments and often are less able to bear the burden of an information collection because of their smaller staff and resources. The



proposed revision to the WPS does not account for a potential differential impact on small businesses that may need to spend additional resources to set up a recordkeeping system or employ staff in the required tasks for WPS compliance.

Within the proposed revision to the WPS, EPA notes that "requirements cannot be reduced for small establishments without significantly compromising the protections offered to their workers and handlers" and that "small entities are required to follow the same requirements as larger establishments" (except in the case of solely family-operated establishments).<sup>9</sup> Costs are estimated on an individual basis (per worker, handler, or employer, for example), which estimates a lower total cost burden for the over 300,000 small farms, nurseries, greenhouses, and other entities affected by the rule. However, the per-unit cost for these activities may actually be greater within smaller establishments due to the lack of business infrastructure found in many larger establishments, noted above.

#### Findings

In the proposed revision to the WPS, EPA does not provide any cost adjustments for small agricultural entities, as the agency estimates that per-person recordkeeping and training costs will be identical, regardless of the size of the establishment. Though these per-unit costs may be similar, it is likely that smaller entities may incur additional costs to establish a recordkeeping system, for example, if one had not been set up previously that would be adequate to handle the new WPS requirements. Furthermore, small businesses may require additional clerical support to comply with the recordkeeping activities that the agricultural employer may be unable to perform, given other demands from day-to-day operational responsibilities.

The Paperwork Reduction Act, in accordance with the RFA, requires that an agency justify any specific impact to small businesses in an ICR and also explain how the agency attempts to minimize that impact. To meet this requirement, other ICRs have included provisions and established programs to assist small businesses in determining what aspects of the federal rule applies to them, and to provide alternative methods of compliance, if applicable.

In an EPA ICR revising regulations related to the effect of particulate matter on air pollution<sup>10</sup>, the EPA noted that while regulatory flexibility could not be allowed for small businesses, the agency would assist smaller businesses in navigating the requirements of the rule and determining non-applicable components of the rule to limit unnecessary burden. A similar approach could be incorporated in the proposed revision to the WPS, given the necessity for consistency in worker training around pesticide application and protections, but accounting for the differences in accounting and recordkeeping burden, depending on the farm size.



<sup>&</sup>lt;sup>9</sup> Agricultural Worker Protection Standard Training and Notification (Proposed Rule) OMB Control No.: 2070-[new]; EPA ICR No.: 2491.01

<sup>&</sup>lt;sup>10</sup> Information Collection Request for Changes to 40 CFR Parts 51 and 52: Prevention of Significant Deterioration (PSD) for Particulate Matter Less Than 2.5 Micrometers (PM2.5) – Increments, Significant Impact Levels (SILs) and Significant Monitoring Concentration (SMC). (OMB Control Number: 2060-0609)

# **Capital and Operations and Maintenance Costs for Recordkeeping**

According to the Paperwork Reduction Act (PRA), agencies are required to provide an estimate of the total annual cost burden to respondents or record-keepers resulting from the collection of information. This must include, if applicable, a total capital and start-up cost component, annualized over the expected useful life, as well as a total operation and maintenance. These estimates should take into account costs associated with generating, maintaining, and disclosing or providing the information. In cases in which sensitive information containing personally identifiable information (PII) is created, agencies also often include costs related to protecting this information, or disposal costs, including shredding or destruction of records.

## Paper vs. Electronic Records

In the proposed ICR, it is assumed that paper records will be kept. In EPA's *Economic Analysis of Proposed Revisions to the Worker Protection Standards*, the agency includes extremely specific costs for some items such as folders and storage boxes. However, key costs associated with security and disposal of sensitive records are not included.

Other similar ICRs, such as the DOL mine safety ICR noted above, include specific time differentials for standard (paper) compared to e-responses. The DOL ICR also provided evidence that electronic reporting introduced through that ICR would reduce the burden by lowering estimated response times from previous versions. It is also likely that electronic recordkeeping would increase data protection, reliability, and security. Since the agricultural employers have freedom in selecting their method of recordkeeping, the estimated costs should identify the cost variations that account for paper versus electronic systems.

Finally, the proposed revision to the WPS requires that records must be maintained for two years. However, it does not specify whether records must be maintained past the standard two years if an individual worker remains at the establishment as a current employee past this time period. For example, a DOL mine training ICR<sup>11</sup> examined by the Summit team requires this extended record maintenance, which would increase the recordkeeping cost burden in such cases. Disposal costs for outdated records are also excluded from the proposed revision to the WPS.

## Potential Adjustments

To account for the introduction of electronic records, costs associated with computer and software set-up and maintenance should be considered for inclusion. Furthermore, data security and disposal costs of records with sensitive information should be incorporated in the burden calculations.

# **Estimates of the Agency Burden for Collection of Information**

The proposed revision to the WPS specifies that there are no costs to the EPA or other governmental agency for standardization of documents or enforcing compliance with the proposed revision to the WPS. However, with the introduction of the new requirements of the proposed revision to the WPS, some level of state agency action will be required to facilitate the implementation and enforcement of the new proposed revision to the WPS requirements.



<sup>&</sup>lt;sup>11</sup> DOL Mine Training ICR 1219-0009 (2014)

With the introduction of recordkeeping requirements, some standardization of records is likely to be necessary, especially as it is difficult to estimate recordkeeping burdens without specifications of what information needs to be recorded. Moreover, without guidance from either the EPA or state agencies, agricultural establishments are likely to incur costs of developing the appropriate records on their own. Standardized documentation for recordkeeping will also reduce any enforcement burdens necessary in ensuring that agricultural establishments comply with the proposed revision to the WPS. Therefore, it is likely that individual states or other local authorities will be tasked with developing standardized forms for the recordkeeping activities. In such cases, state and local authorities will incur costs associated with becoming familiar with WPS requirements, developing standardized documents, and providing standardized documents and guidance to agricultural establishments.

In addition, a certain level of enforcement action by local or state authorities is likely to be necessary to ensure that agricultural establishments comply with the requirements of the proposed revision to the WPS. Though agricultural establishments are not required to submit reports to the EPA for review, local authorities are likely to choose to inspect agricultural establishments periodically to ensure compliance with regard to recordkeeping. This type of review may be undertaken independently, or as part of the review procedures for other state or local actions, such as fulfilling compliance requirements for program participation.

#### **Review Method**

Summit reviewed the sample of ICR published by EPA previously used in the wage rate assumption analysis and identified those ICRs which had actions associated with State agencies or the EPA. The annual burdens per respondent and type of labor used were determined for the following types of actions:

- Standardized Documentation Costs:
  - o Rule familiarization
  - o Answer Questions
  - Create Guidance/Information
- Enforcements Costs:
  - o Review report

## Findings

A review of the sample ICRs indicated that typically EPA, state agency, or both institutions were tasked with some level of information collection preparatory activity or result review. Actions performed by a state agency were sorted into the previously identified task categories based on the following crosswalk in Table 5.

#### Table 5: Crosswalk of State Agency Standardization and Enforcement Tasks

Prospective WPS ICR Task	Crosswalked Tasks	Notes
Rule Familiarization	<ul> <li>Read/Hear rule or any collection instrument</li> <li>Reading and interpreting regulation</li> </ul>	Refers to agency efforts to become familiar with rule.



Prospective WPS ICR Task	Crosswalked Tasks	Notes
Answer Questions	<ul><li>Develop correspondence</li><li>Answer/respond to questions</li></ul>	Refers to agency efforts to clarify rule to public.
Create Guidance/Information	<ul> <li>Create information</li> <li>Develop written guidance for implementing rule</li> <li>Implement program that is not less stringent than regulation</li> <li>Prepare instructions/questionnaires/surveys</li> <li>Distribute forms</li> </ul>	Refers to agency efforts to provide standardized guidance, forms, or information for the public
Review Report	<ul> <li>Process information/data submissions/initial responses</li> <li>Receive/review submissions</li> <li>Review results</li> </ul>	Refers to agency efforts to collect and review data

Based on the crosswalk, the average time burden per activity was determined for the managerial, technical, and clerical labor categories. The cost of developing standardized documentation is the sum of costs for rule familiarization, question response, and guidance creation. The annual average amount of time for each labor category and action is shown below in Table 6.

#### Table 6: Sample ICR Standardization and Enforcement Average Agency Burden

	Average Annual per Agency Burden Amount				
Activity Type	Managerial	Technical	Clerical		
Rule Familiarization (per agency)	1	2	0		
Answer Questions (per agency)	7	8.4	0		
Create Guidance (per agency)	3.7	11.9	39		
Standardized Documentation Costs (per agency)	11.7	22.3	39		
Enforcement Costs: Review Report (per review)	2.7	7.7	0.7		

## Potential Adjustments

Though the current and proposed revision to the WPS have not included standardization and enforcement costs in the associated ICRs, the need for recordkeeping may substantiate increased efforts on the part of local agencies, in order to ensure compliance with the WPS.

Documentation standardization costs are likely to be incurred once the proposed revision to the WPS is issued, with costs annualized over the time the WPS is in place. Enforcement costs are likely to be incurred for each review action, the frequency of which may vary across localities.

# **Cost Estimate Scenarios**

In order to isolate the quantifiable effect of adjustments to the proposed revision to the WPS, three distinct cost estimate scenarios were developed as a comparison to the base case presented by the EPA developed proposed revision to the WPS ICR. The three scenarios are described as follows:

- Scenario 1: The first scenario presents the cost burden of the revision to the WPS using the same time burden estimates as the EPA provided cost burden estimates. However, instead of using a loaded wage rate, a fully loaded wage rate, including costs of overhead, is used for all respondents.
- Scenario 2: The second scenario presents the cost burden of the revision to the WPS using the same loaded wage rates as the EPA provided cost burden estimates. However, time burden and respondent assumptions for identified activities are updated, and time burdens and respondent assumptions for additional potentially required tasks are also included.
- Scenario 3: The third scenario presents the cost burden of the revision to the WPS using fully loaded wage rates as well as the updated time burden and respondent assumptions used in Scenario 2.

The following sections will explore the assumptions and cost estimates of each section in additional detail, and offer comparisons with the original estimate prepared by EPA.

# Scenario 1 Estimate: Wage Rates Adjustment Only

Scenario 1 presents the cost estimate of the proposed revisions to the WPS using fully loaded wage rates instead of loaded wage rates. The time burden estimates, as well as the number of respondents, remain the same between Scenario 1 and the cost estimate originally provided by EPA.

## Wage Rate Changes

The loaded wage rates used by the EPA provided estimates for the proposed revisions to the ICR are used to generate the fully loaded wage rates. In Table 7 below, the row labeled Loaded Wage Rate represents the wage rates used by the proposed ICR estimate.

Overhead costs, representing 50% of the loaded wage rate are added to the loaded wage rate to calculate the fully loaded wage rate. This methodology for calculating the fully loaded wage rate is consistent with EPA guidance and wage rate estimation described previously in this report. The fully loaded wage rate is shown for existing labor categories in Table 7 and will be used instead of the loaded wage rate.

Component	CPHE Employer	CPHE Handler	Handler Trainer	Ag. Employer	Ag. Handler	Ag. Worker	Healthcare Worker
Base Wage Rate	\$21.21	\$14.07	\$26.51	\$19.75	\$19.75	\$9.40	\$30.04
Loaded Wage Rate	\$30.30	\$20.10	\$37.87	\$28.21	\$28.21	\$13.43	\$42.91

#### Table 7: Wage Rate Calculations - Existing Respondent Categories



Component	CPHE Employer	CPHE Handler	Handler Trainer	Ag. Employer	Ag. Handler	Ag. Worker	Healthcare Worker
Overhead Costs	\$15.15	\$10.05	\$18.94	\$14.11	\$14.11	\$6.72	\$21.46
Fully Loaded Wage Rate	\$45.45	\$30.15	\$56.81	\$42.32	\$42.32	\$20.15	\$64.37

#### Cost Estimate Change by Section

By keeping the time burden and respondent number values the same for Scenario 1, the overall percentage change in Scenario 1 costs are the same as the percentage change in wage rate (50%) from loaded wage rates to fully loaded wage rates. Table 8 displays the changes in cost for each activity category from the EPA proposed estimate to Scenario 1.

#### Table 8: Scenario1 Cost Comparison by Activity Category

Activity Category	Total Time Burden	ICR Estimated Total Cost	Scenario 1 Total Cost
New Entrant Rule Familiarization	233,554	\$ 6,664,253	\$ 9,996,380
Basic Pesticide Safety Information	73,044	\$ 2,060,571	\$ 3,090,857
Pesticide Specific Information	1,472,514	\$ 41,539,611	\$ 62,309,416
Notification of Restricted Entry	2,166,445	\$ 44,256,901	\$ 66,385,352
Establishment Specific Information	47,004	\$ 825,700	\$ 1,238,550
Exchange Information between Agricultural Employer and CPHE	1,472,229	\$ 43,198,278	\$ 64,797,417
Safe Operation, Cleaning, Repair of Equipment	39,990	\$ 982,482	\$ 1,473,724
Emergency Assistance Information	200	\$ 5,645	\$ 8,468
Pesticide Safety Training – Workers	2,101,714	\$ 40,097,930	\$ 60,146,894
Pesticide Safety Training – Handlers	389,121	\$ 9,395,073	\$ 14,092,610
Pesticide Safety Training – CPHE Handlers	21,095	\$ 470,116	\$ 705,174
Personal Protective Equipment - Respirator Uses (Agricultural Handler)	207,868	\$ 4,867,402	\$ 7,301,103
Personal Protective Equipment - Respirator Uses (CPHE Handler)	20,616	\$ 454,101	\$ 681,151
Exemptions - 2 Day Waiting Period	30,445	\$ 603,314	\$ 904,971
Exemptions - Early Entry Total	41,183 <b>8,317,021</b>	\$ 795,885 <b>\$ 196,217,264</b>	\$ 1,193,828 <b>\$ 294,325,895</b>

# Scenario 2 Estimate: Burden Adjustment Only

Scenario 2 presents the cost estimate of the proposed revisions to the WPS using updated time burden and respondent assumptions. Scenario 2 also includes the time burdens associated with additional tasks that are not included in the proposed ICR estimate provided by EPA. Scenario 2 uses the same loaded wage rates as the EPA proposed estimate provided by EPA.

The following sections describe the assumption changes that were made, as well as the resulting change in cost estimates.

#### **Time Burden Changes**

This section describes the time burden changes that were made in Scenario 2. The majority of these changes fall in the realm of the proposed revisions to the WPS' recordkeeping burden. The tasks that have been changed are listed in Table 9 below.

Category	Activity	Labor Category	ICR Time Estimate (minutes)	Adjusted Time Estimate (minutes)	Burden Additions
Pesticide Specific Information	Maintain Records	Agricultural Employer	1	5	+ 4 mins.
Pesticide Safety Training - CPHE Handlers	Maintain Record of Training	CPHE Employer	4	5	+ 1 min.
Personal Protective Equipment - Respirator Uses (Agricultural Handler)	Record and Maintain Medical Records	Agricultural Employer	4	5	+ 1 min.
Personal Protective Equipment - Respirator Uses (Agricultural Handler)	Maintenance of Closed System Recordkeeping	Agricultural Employer	3	5	+ 2 mins.
Personal Protective Equipment - Respirator Uses (CPHE Handler)	Record and Maintain Medical Records	CPHE Employer	4	5	+ 1 min.
Personal Protective Equipment - Respirator Uses (CPHE Handler)	Maintenance of Closed System Recordkeeping	CPHE Employer	3	5	+ 2 mins.
Exemptions - Early Entry	Record and Maintain Records	Agricultural Employer	4	5	+ 1 min.

#### Table 9: Adjustments to Burden Estimates for Recordkeeping Activities (Scenario 2)

As described in Table 9 above, the burden estimates for the recordkeeping activities have been adjusted upward to reflect a minimum of 5 minutes per activity. This revised estimate is based on research conducted of similar ICRs, which suggested that a minimum standard of 5 minutes is used to approximate the burden for such recordkeeping activities. For example, of the sampled ICRs referenced earlier in this report, the 2014 EPA Asbestos Abatement Worker Protection ICR<sup>12</sup>, the 2014 DOL Mine Safety Standards ICR<sup>13</sup>, and the 2013 EPA ICR associated with the Clean Water Act<sup>14</sup> all utilize a minimum of 0.08 hours (5 minutes) to estimate the burden of comparable recordkeeping activities.

The increases in recordkeeping time burden estimates can also be justified due to EPA's exclusion of key aspects of any recordkeeping requirement, as noted earlier in this report. For example, set-up costs to establish a compliant recordkeeping system, storage costs, and disposal costs of records containing sensitive information are not included in the proposed rule. Furthermore, these specific costs, plus the overall burden estimates for recordkeeping, could be more accurately calculated if EPA factored in the use of electronic records to replace paper records.

Incorporating this time adjustment across all recordkeeping activities listed above, the total cost associated with implementation of the proposed rule would increase approximately 16%, from \$196.2 million to \$227.3 million. It should also be noted that applying the 5-minute minimum to only some of the recordkeeping activities would incur a lower overall cost increase, and that using the 5-minute burden minimum for all activities may represent a more extreme scenario for illustrative purposes.

#### **Respondent Changes**

This section describes the respondent changes that were made in Scenario 2. These changes are limited to the greenhouse number assumptions described previously in this report, which in turn affects the respondent level of a number of other items. The following represents the respondent number changes which are included in Scenario 2:

- **Number of Greenhouses**: The proposed ICR estimate uses an estimate of 519 greenhouses as respondents. For Scenario 2, the number of greenhouses has been increased to 28,147, as informed by NASS data.
- Number of WPS Farms without Greenhouses (Non-Greenhouse): This number represents the number of WPS farms that do not have a greenhouse, and is calculated as the number of WPS Farms that use pesticides (304,348) less the number of greenhouses. It is assumed for this estimation that a WPS Farm will only have one greenhouse.
- **Breakdown of Greenhouses and Non-Greenhouses by Size**: A detailed breakdown of greenhouses by WPS farm size is determined by applying the pro-rata percentage of greenhouse size from the proposed ICR estimate to the updated number of greenhouses. The breakdown of greenhouses by size is shown below in Table 10.
- Workers in Greenhouses: For the proposed ICR estimate, a total of 18,388 workers are assumed to work in greenhouses. For Scenario 2, the cost estimate assumes the same number of workers per greenhouse (35.43) for a total of 997,239 greenhouse workers.



<sup>&</sup>lt;sup>12</sup> EPA Reporting and Recordkeeping for Asbestos Abatement Worker Protection 1246.12 (2014)

<sup>&</sup>lt;sup>13</sup> DOL Mine Accident ICR 1219-0007 (2014)

<sup>&</sup>lt;sup>14</sup> EPA-HQ-OECA-2009-0274-0191 (2013)

#### Table 10: Breakdown of Non-Greenhouses and Greenhouses by Size

Size	ICR Number of Greenhouses <sup>15</sup>	Percentage of Total	Number of Greenhouses (2012 NASS)	Number of Non- Greenhouses (Calculated from 2012 NASS)
Small-Small	29	5.59%	1,573	39,307
Medium-Small	191	36.80%	10,359	79,200
Large-Small	169	32.56%	9,165	115,795
Large	130	25.05%	7,050	41,899
Total	519	100.00%	28,147	276,201

This change in respondents affects the calculation of the following tasks:

- Basic Pesticide Safety Information
- Notification of Restricted Entry

#### New Task Burdens

This section describes the new tasks that may be necessary additions to the revisions to the WPS. These tasks that have been added are the following:

- Documentation Standardization and Enforcement by Agencies
- Additional Training the Trainer Costs

#### Documentation Standardization and Enforcement by Agencies

- Developing Standardized Reporting
- Enforcement and Review Actions

The time burdens for the aforementioned tasks are stated in Table 6 in the assumptions section above, and reflect average value of similar tasks from other ICRs. These new tasks will be performed state agency actors, which are not previously identified in the proposed WPS. The wage rates that are used for local agencies are taken from Bureau of Labor Statistics, and represent loaded wages, which include fringe and benefits, but not overhead. The loaded wage rates for the state actors are shown in the line labeled "Loaded Wage Rate" in Table 11.

#### Table 11: Wage Rate Calculations - Additional Wage Categories

Component	State Managerial	State Technical	State Clerical
Base Wage Rate	\$38.36	\$26.78	\$18.20
Loaded Wage Rate	\$54.27	\$54.85	\$38.30



<sup>&</sup>lt;sup>15</sup> Supporting Statement for an Information Collection Request (ICR) for the Proposed Rule to the Agricultural Worker Protection Standard Training and Notification, February 19, 2014.

Component	State Managerial	State Technical	State Clerical
Overhead Costs	\$27.43	\$19.15	\$13.01
Fully Loaded Wage Rate	\$82.28	\$57.44	\$39.04

It is assumed that each state will have one set of respondents, and so documentation standardization and enforcement tasks will be completed by 50 respondents (one for each state, District of Columbia and territories excluded). Costs of developing standardized documentation are annualized over three years. For Scenario 2, it is assumed that states will review all WPS farms once over a three year period.

## Additional Train-the-Trainer Costs

The training requirements for the proposed rule specify that all existing and new workers and handlers are generally trained by the start of their third day on an agricultural establishment where a pesticide product bearing a WPS label has been applied, or an REI has been in effect within the last 30 days. Qualified trainers include certified applicators by EPA or a state or tribal agency responsible for pesticide enforcement, or those who have completed a pesticide safety train-the-trainer program approved by EPA. Per the proposed rule, it is assumed that time and cost estimates to equip these individuals as qualified trainers occur outside of the scope of the WPS. At a minimum, therefore, it could be assumed that trainers-in-training would require materials to a) be trained or b) train others.

EPA notes in their 2011 version of the WPS that EPA and industry leaders have created and distributed approved training materials at no cost to many agricultural establishments. In training new trainers, however, a number of establishments may require additional training materials. To account for this additional cost, Summit conservatively estimates that half of the expected trainings coordinated by these newly qualified trainers (from train-the-trainer programs) would require new training materials from the EPA. As observed in other ICRs, we estimate mailing costs to amount to \$2 per package. The adjusted costs for this activity, therefore, are estimated to increase the overall cost by \$3,768 (50% of 11,305 train-the-trainers, times \$2 per mailing, divided by 3 for annual cost over the 3-year rule). This cost would directly impact costs incurred at the state or federal level, and does not include labor costs associated with preparing packages of training materials.

Finally, training costs in the proposed ICR may be grossly underestimated given the wage rates used for the cost calculations. Training wage rates range from \$28.21 per hour (for certified applicators of RUPs) to \$37.87 per hour (for certified applicators and those who completed train-the-trainer programs). According to the Bureau of Labor Statistics, Training and Development Managers earn an average of \$45.86 per hour. While these employees may largely be staffed outside of the agricultural sector, it is important to consider that a higher wage rate (than that included in the proposed rule) may be necessary to attract and retain effective and skilled training staff.

## Additional Costs to Convert Existing Closed Loading Systems

In a Director's Memo issued by DPR and separate from the proposed WPS, the definition of a compliant closed system has been revised in such a way that it will require significant retrofitting of a large percentage of existing closed systems, according to CropLife. For example, the new definition would require that the maximum container pressure not exceed 5 PSI, which is difficult to measure on a consistent basis and even more difficult to regulate. CropLife estimates that the cost to convert an



existing mid-large system to meet the proposed standard would cost an initial \$25,000 to \$100,000 plus annual maintenance costs of \$5,000 to \$10,000.

Given that the proposed WPS estimates that 96,763 large and large-small agricultural establishments have closed systems, a conservative calculation increases overall cost of the proposed WPS by \$1.3 billion<sup>16</sup> in the first year of implementation of the rule. While Summit has not incorporated this extreme cost in its assumption change calculations, this figure serves to illustrate an additional potential burden that would be placed on agricultural producers through the proposed rule.

## Cost Estimate Change by Section

The percentage change in costs from the proposed ICR estimate in Scenario 2 varies by activity. Tasks that are not explicitly mentioned in this section did not change from the proposed ICR estimate.

#### Recordkeeping

Table 12 shows the comparative costs between the proposed ICR estimate and Scenario 2 costs of recordkeeping.

Category	Activity	Labor Category	ICR Cost per Activity	Scenario 2 Cost per Activity	Percentage Difference in Cost
Pesticide Specific Information	Maintain Records	Agricultural Employer	\$2,864,801	\$14,324,004	400%
Pesticide Safety Training - CPHE Handlers	Maintain Record of Training	CPHE Employer	\$7,334	\$9,168	25%
Personal Protective Equipment - Respirator Uses (Agricultural Handler)	Record and Maintain Medical Records	Agricultural Employer	\$277,237	\$346,546	25%
Personal Protective Equipment - Respirator Uses (Agricultural Handler)	Maintenance of Closed System Recordkeeping	Agricultural Employer	\$25,141	\$41,901	67%
Personal Protective Equipment - Respirator Uses (CPHE Handler)	Record and Maintain Medical Records	CPHE Employer	\$5,642	\$7,052	25%

 <sup>&</sup>lt;sup>16</sup> \$25,000 initial cost for retrofit divided by 3 years (term of rule) + \$5,000 annual maintenance cost = \$13,333 per retrofit \* 96,763 large and large-small establishments = \$1,290,173,333.

Category	Activity	Labor Category	ICR Cost per Activity	Scenario 2 Cost per Activity	Percentage Difference in Cost
Personal Protective Equipment - Respirator Uses (CPHE Handler)	Maintenance of Closed System Recordkeeping	CPHE Employer	\$8,872	\$14,786	67%
Exemptions - Early Entry	Record and Maintain Records	Agricultural Employer	\$247,159	\$308,949	25%
TOTAL			\$3,436,186	\$15,052,406	338%

#### Basic Pesticide Safety Information

Changing the number of greenhouse and non-greenhouse respondents affects the cost of tasks under providing basic pesticide information via postings. The changes for the specific tasks are included in Table 13.

#### Table 13: Cost Changes for Basic Pesticide Safety Information

Task	ICR Total Respondents	ICR Total Cost	Scenario 2 Total Respondent Number	Scenario 2 Total Cost	Percentage Difference in Cost
Display Main Poster <sup>17</sup>	304,348	\$ 429,283	304,348	\$ 429,283	0%
Display Decontamination Posters (Non-greenhouses)	789,236	\$ 1,113,217	712,687	\$ 1,005,245	-10%
Display Decontamination Posters (Greenhouses)	2,076	\$ 2,928	112,588	\$ 158,805	5324%
Poster Update Changes	365,220	\$ 515,143	376,541	\$ 531,111	3%
Total	1,460,880	\$ 2,060,571	1,506,164	\$ 2,124,444	3%

## Notification of Restricted Entry

Changing the number of greenhouses and non-greenhouse respondents affects the costs of notification of restricted entry. The changes for the specific tasks are included in Table 14.

<sup>&</sup>lt;sup>17</sup> Respondent number does not change, as the respondents are not greenhouse/non-greenhouse specific.

Task	ICR Total Respondents	ICR Total Cost	Scenario 2 Total Respondent Number	Scenario 2 Total Cost	Percentage Difference in Cost
Provide Oral Notification	4,253,606	\$ 5,999,711	3,866,814	\$ 5,454,141	-9%
(Non-greenhouses) Provide Oral Notification (Greenhouses)	3,114	\$ 4,392	168,882	\$238,208	5324%
Receive Oral Notification (non- Greenhouses)	22,746,416	\$ 15,274,218	22,746,416	\$15,274,218	0%
Receive Oral Notification (Greenhouses)	66,197	\$ 44,451	3,590,060	\$ 2,410,726	5323%
Post Indoor/Outdoor (Non-Greenhouse)	2,430,632	\$ 22,856,043	2,209,608	\$ 20,777,681	-9%
Post Indoor/Outdoor (Greenhouse)	8,304	\$ 78,085	450,352	\$ 4,234,810	5323%
Total	29,508,269	\$ 44,256,900	33,032,132	\$ 48,389,784	9%

## Additional State Actions

Task	Respondents	State Managerial Time Burden per Response	State Technical Time Burden per Response	State Clerical Time Burden per Response	State Clerical Material Costs	Estimated Total Costs
Developing Standardized Reporting	17	11.7	22.3	39		\$41,847
Enforcement and Review Actions	32,888	2.7	7.7	0.7		\$15,168,047
Train the Trainer Costs	11,305		20	20.7	\$3,768	\$3,768
Costs Total	44,243	14.4	30	39.7	\$3,768	\$15,213,66

# Summary of Changes

Table 15 summarizes the cost changes from the proposed ICR estimate in Scenario 2.

Activity Category	ICR Estimated Cost	Scenario 2 Estimated Cost	Difference in Cost	Percentage Difference Cost <sup>18</sup>
New Entrant Rule Familiarization	\$6,664,253	\$6,664,253	\$0	0%
Basic Pesticide Safety Information	\$ 2,060,571	\$2,124,444	\$63,873	3%
Pesticide Specific Information	\$41,539,611	\$52,998,813	\$11,459,203	28%
Notification of Restricted Entry	\$ 44,256,900	\$48,389,784	\$4,132,882	9%
Establishment Specific Information	\$825,700	\$825,700	\$0	0%
Exchange Information between Agricultural Employer and CPHE	\$43,198,278	\$43,198,278	\$0	0%
Safe Operation, Cleaning, Repair of Equipment	\$982,482	\$982,482	\$0	0%
Emergency Assistance Information	\$5,645	\$5,645	\$0	0%
Pesticide Safety Training - Workers	\$40,097,930	\$40,097,930	\$0	0%
Pesticide Safety Training - Handlers	\$9,395,073	\$9,395,073	\$0	0%
Pesticide Safety Training - CPHE Handlers	\$470,116	\$471,950	\$1,834	0%
Personal Protective Equipment - Respirator Uses (Agricultural Handler)	\$4,867,402	\$4,953,472	\$86,070	2%
Personal Protective Equipment - Respirator Uses (CPHE Handler)	\$454,101	\$461,426	\$7,325	2%
Exemptions - 2 Day Waiting Period	\$603,314	\$603,314	\$0	0%

#### Table 15: Scenario 2 Cost Estimation Changes by Activity Category

<sup>&</sup>lt;sup>18</sup> Calculated values may differ due to rounding.

Activity Category	ICR Estimated Cost	Scenario 2 Estimated Cost	Difference in Cost	Percentage Difference Cost <sup>18</sup>
Exemptions - Early Entry	\$795,885	\$857,675	\$61,790	8%
Additional State Actions	\$0	\$15,293,587	\$15,209,894	N/A
Additional Train- the-Trainer (material costs)	\$0	\$3,768	\$3,768	N/A
Total	196,217,261	\$227,327,595	\$31,110,331	16%

#### Scenario 3 Estimate: Wage Rate and Burden Adjustments

Scenario 3 presents the cost estimate of the proposed revisions to the WPS using the fully loaded wage rate, as well the updated time burden and respondent assumptions and additional tasks included in Scenario 2.

The input assumptions for Scenario 3 include those assumption changes for wages made in Scenario 1 and Scenario 2. Fully loaded wage rates of state agency labor categories are shown in the row labeled "Fully Loaded Wage Rate" in Table 11.

#### Cost Estimate Change by Section

The percentage change in costs from the proposed ICR estimate in Scenario 3 varies by activity and is as follows.

#### Table 16: Scenario 3 Cost Estimation Changes by Activity Category

Activity Category	ICR Estimated Cost	Scenario 3 Cost	Difference in Cost	Percentage Difference Cost
New Entrant Rule Familiarization	\$6,664,253	\$ 9,996,380	\$ 3,332,127	50%
Basic Pesticide Safety Information	\$ 2,060,571	\$ 3,186,666	\$ 1,126,095	55%
Pesticide Specific Information	\$41,539,611	\$ 79,498,220	\$ 37,958,610	91%
Notification of Restricted Entry	\$ 44,256,900	\$ 72,584,675	\$ 28,327,774	64%
Establishment Specific Information	\$825,700	\$ 1,238,550	\$ 412,850	50%
Exchange Information between Agricultural Employer and CPHE	\$43,198,278	\$ 64,797,417	\$ 21,599,139	50%
Safe Operation, Cleaning, Repair of Equipment	\$982,482	\$ 1,473,724	\$ 491,241	50%

Activity Category	ICR Estimated Cost	Scenario 3 Cost	Difference in Cost	Percentage Difference Cost
Emergency				
Assistance Information	\$5,645	\$ 8,468	\$ 2,823	50%
Pesticide Safety				
Training - Workers	\$40,097,930	\$ 60,146,894	\$ 20,048,965	50%
Pesticide Safety	4			
Training - Handlers	\$9,395,073	\$ 14,092,610	\$ 4,697,537	50%
Pesticide Safety				
Training - CPHE	\$470,116	\$ 707,925	\$ 237,809	51%
Handlers				
Personal Protective				
Equipment -	¢4.007.402	ć <b>7</b> 420 <b>2</b> 00	¢ 2 562 006	F 20/
Respirator Uses (Agricultural	\$4,867,402	\$ 7,430,208	\$ 2,562,806	53%
Handler)				
Personal Protective				
Equipment -	<b>•••</b> •••••	A 600 400	<b>4 6 6 6 6 6</b>	
Respirator Uses	\$454,101	\$ 692,138	\$ 238,038	52%
(CPHE Handler)				
Exemptions - 2 Day	\$603,314	\$ 904,971	\$ 301,657	50%
Waiting Period	<i>\\</i>	<i>\$</i> 50 1 <i>j</i> 57 <u>1</u>	<i>\$</i> 001,007	5070
Exemptions - Early	\$795,885	\$ 1,286,513	\$ 490,627	62%
Entry Additional State				
Actions	\$0	\$ 22,814,840	\$ 22,814,840	N/A
Additional Train-				
the-Trainer	\$0	\$ 3,768	\$3,768	N/A
(material costs)	40	+ -). 30	+-)- 50	
Total	196,217,261	\$340,863,967	\$144,646,706	74%