

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

1. IDENTIFICATION OF THE INFORMATION COLLECTION

1(a). Title of the Information Collection

Soil and Non-Soil Fumigant Risk Mitigation

OMB Control No.: 2070-0197

EPA No.: 2451.02

Docket ID No.: EPA-HQ-OPP-2018-0423

1(b). Short Characterization/Abstract

Pursuant to section 4(g) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), the Environmental Protection Agency (“EPA” or “the Agency”) determined that several soil and non-soil fumigants are eligible for reregistration only if specific risk mitigation measures, are adopted and adequately implemented. This ICR documents the Paperwork Reduction Act (PRA) activities that users, registrants, and participating states must conduct to implement fumigant risk mitigation measures for the chemicals identified in this document.

The PRA burden activities discussed in this ICR include: 1) registrant activities to develop and implement training for fumigators in charge of fumigations, develop and disseminate safety information for handlers, develop and implement community outreach and education programs, and develop and implement first responder training; and 2) labeling activities for fumigant products; including user posting requirements concerning fumigant applications around the use site, providing notice of soil fumigant applications to applicable states, preparing a Fumigant Management Plan (FMP) and Post-Application Summary (PAS) as needed, participating in an EPA-approved fumigant training program, and disseminating fumigant safe handling information to handlers.

2. NEED FOR AND USE OF THE COLLECTION

2(a). Need/Authority for the Collection

In general, authorizing legislation is contained in Section 3 of FIFRA, with implementing regulations in 40 CFR parts 152 (registration standards and general requirements), 156 (labeling), 158 (data requirements) and part 171 (certified applicators of restricted use products). Application of the requirements applied to the registration of soil and non-soil fumigants is discussed in EPA’s Fumigant Reregistration Eligibility Decisions and Supporting Documents, which can be accessed using the docket numbers provided in Attachment C. See also the EPA website dedicated to soil fumigants (<http://www.epa.gov/soil-fumigants>) and the webpage dedicated to the regulatory status of fumigants in general (<https://www.epa.gov/soil-fumigants/regulatory-status-fumigants>).

Overview of Mandates Applicable to Registered Pesticides

Sections 3(a) and 12(a)(1) of FIFRA require a person to register a pesticide product with the EPA before the pesticide product may be lawfully sold or distributed in the U.S. A pesticide registration

is a license that allows a pesticide product to be sold and distributed for specific uses under specified terms and conditions such as use instructions and precautions. The proponent of initial or continued registration always bears the burden of demonstrating that a pesticide product meets the statutory standard for registration. A pesticide product may be registered or remain registered only if it meets the statutory standard for registration given in section 3(c)(5) of FIFRA, which is as follows:

- A.) Its composition is such as to warrant the proposed claims for it.
- B.) Its labeling and other material required to be submitted comply with the requirements of this Act.
- C.) It will perform its intended function without unreasonable adverse effects on the environment.
- D.) When used in accordance with widespread and commonly recognized practice it will not generally cause unreasonable adverse effects on the environment.

Section 2(bb) of FIFRA defines “unreasonable adverse effects on the environment” as (1) “any unreasonable risk to man or the environment, taking into account the economic, social, and environmental costs and benefits of the use of any pesticide, or (2) a human dietary risk from residues that result from a use of a pesticide in or on any food inconsistent with the standard under section 408 of the Federal Food Drug and Cosmetic Act.”

Section 4 of FIFRA requires EPA to reassess the health and safety data for all pesticide active ingredients registered before November 1, 1984, to determine whether these “older” pesticides meet the criteria for registration that would be expected of a pesticide being registered today for the first time. Section 4 directs EPA to use section 3(c)(2)(B) authority to obtain the required data. Section 4(g)(2)(A) of FIFRA calls for EPA to determine, after submission of relevant data concerning an active ingredient, whether pesticides containing the active ingredient are eligible for reregistration. As part of this reassessment, the agency developed mitigation measures as needed to reduce risks of concern, such as limiting or eliminating certain uses of the pesticide, requiring buffer zones around areas to be treated, or requiring protective clothing for pesticide workers. The results of EPA’s reviews were summarized in Reregistration Eligibility Decisions (REDs). The agency continues to implement these decisions.

The information and activities represented in this ICR are the result of the Agency exercising the authority of section 3(c)(2)(B) (Attachment A) or section 3(c)(5) (Attachment B) of FIFRA, which authorizes EPA to require pesticide registrants to generate and submit data to the Agency, when such data are needed to maintain an existing registration of a pesticide. Failure of a registrant to comply with the terms and conditions of registration would lead to cancellation of its fumigant products pursuant to FIFRA section 6(b) for failure to meet the section 3(c)(5) criteria for registration. Users must comply with pesticide labeling or face civil and criminal penalties pursuant to FIFRA sections 12(a)(2)(G) and 14, and certified applicators may also be sanctioned by suspension or revocation of certification (40 CFR 171.7(b)(iii)(A)).

Overview of Mandates Specific to Soil Fumigants

In completing its review of several soil fumigants pursuant to FIFRA section 4(g), EPA determined that certain uses of these soil fumigants are eligible for reregistration only if specific risk mitigation measures as outlined in the REDs are adopted and implemented by the registrants.

EPA completed the REDs for a group of soil fumigant chemicals in 2009, after an extensive review and public participation process. The Agency’s decision takes into account the best available information on the potential risks and benefits of soil fumigant use. EPA considered these soil

fumigants as a group to ensure that similar risk assessment tools and methods were used for all soil fumigants and that risk management approaches were consistent. The chemicals included in the 2009 review are metam sodium, metam potassium, dazomet, chloropicrin, methyl isothiocyanate, and methyl bromide. The Agency had also completed a RED for another soil fumigant in 1998, 1,3-dichloropropene (Telone ®), and registered the soil fumigant dimethyl disulfide (DMDS) in 2010.

Documents which support the reregistration or registration actions for the eight soil fumigants can be found in the public docket at www.regulations.gov under the docket numbers provided in Attachment C. This ICR documents the PRA paperwork burdens for the risk mitigation activities (as listed in section 4 of this ICR), and the PRA costs (as presented in section 6 of this document) for the eight soil fumigants listed in this section.

Overview of Mandates Specific to Non-Soil Fumigants

The Agency reviewed five non-soil fumigants (methyl bromide, aluminum phosphate, magnesium phosphate, phosphine, and sulfuryl fluoride) separately and completed updates for reregistration labels after an extensive review and public participation process.

In 2009, the EPA expanded restrictions on aluminum and magnesium phosphide products to reduce potential exposure to phosphine fumigants. These restrictions included the requirement of developing FMPs for applications. The updated labels for products containing these active ingredients were approved by EPA in 2010. Documents regarding the requirement of FMPs on these labels are included in the public docket located at regulations.gov using Docket ID No. EPA-HQ-OPP-2013-0081.

In 2008, the EPA completed a RED for methyl bromide, which in turn was amended in 2009. Since the completion of the RED, the FMP section has been updated to include statements similar to those on other commodity and structural fumigant product labels. Updated labels for Tolerance Reassessment Eligibility Decision (TRED)/RED requirements for non-soil fumigant applications were approved in 2015. Additional information and documents regarding the reregistration of methyl bromide are available in the public docket located at regulations.gov using Docket ID No. EPA-HQ-OPP-2013-0269.

In 2016, the EPA Office of Inspector General released a report on sulfuryl fluoride and made recommendations to control risks associated with residential fumigations to reduce the risk of injury or death (Attachment D). Among the recommendations, the OIG requested that EPA implement labeling changes for all three brands of sulfuryl fluoride that would require the development of FMPs for sulfuryl fluoride applications and to define the criteria for meeting an applicator stewardship training requirement. The Agency is actively working with the sulfuryl fluoride registrants involved in the development and implementation of stewardship training programs and materials recommended in the report. Information about EPA's registration review of sulfuryl fluoride is available at regulations.gov using Docket ID No. EPA-HQ-OPP-2009-0136.

Documents which support the Agency's reregistration or registration actions for the five non-soil fumigants can be found in the public docket at www.regulations.gov under the docket numbers provided in Attachment C. This ICR documents the PRA paperwork burdens for the risk mitigation activities (as listed in section 4 of this ICR), and the PRA costs (as presented in section 6 of this document) for the non-soil fumigants listed in this section.

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

The information and activities required of registrants are an essential component of the Agency's pesticide registration and reregistration review programs. If the risk mitigation measures are not implemented, these soil and non-soil fumigant chemicals do not meet the requirements to be eligible for registration or reregistration under FIFRA. These measures were designed to enhance risk mitigation activities by decreasing the likelihood of exposures for the population of concern to these chemicals while maintaining their benefits to U.S. agriculture. As discussed in detail below, the users of fumigant risk mitigation information and activities can be users, handlers, applicators, or bystanders - the population of concern is anyone who might be exposed to the fumigant.

Background on Soil Fumigants

Soil fumigants are restricted use pesticides (RUPs) that, when applied to soil, form a gas to control pests that live in the soil and can disrupt plant growth and crop production. The fumigants are either volatile chemicals that become gases at relatively low temperatures, around 40 degrees Fahrenheit, or volatile chemicals that react to produce such a gas (e.g., dazomet and metam sodium converting to methyl isothiocyanate, or MITC). Soil fumigants are used on many high value crops, including vegetables, fruits, nuts, forest seedlings, ornamentals, and nursery crops, to control a wide range of pests including nematodes, fungi, bacteria, insects, and weeds. Benefits analyses have indicated that fumigant use is important in a variety of crops. If these fumigants could not be used, there would likely be significant negative economic impacts. (These analyses are included in the Fumigant Reregistration Eligibility Decisions and Supporting Documents, which can be accessed using the docket numbers provided in Attachment C.)

Because of the broad range of pests controlled, soil fumigants are used as part of the production of a wide variety of crops and provide high benefits for many growers. As gases, however, fumigants move from the soil to the air at the application site and may pose risks to handlers, re-entry workers, and bystanders as delineated in the Fumigant Reregistration Eligibility Decisions and Supporting Documents, including sensory irritation (stinging in eyes, nose, throat), nausea, vomiting, dizziness, headache, weakness, and collapse, and at the extreme, death. To reduce these exposures and address risks of concern, the Agency requires a number of mitigation measures designed to work together to address all risks but focus on the acute human inhalation risks that have been identified in the revised risk assessments for these fumigants. Since the exposure pathway of concern is inhalation, the population of concern is anyone who might be exposed through this pathway, which includes applicators and handlers involved in the fumigant application, and bystanders (anyone nearby the treated field).

The Agency requires a number of mitigation measures (as described in Section 4 of this document) that may result in a burden to those participating in soil fumigant applications, to those enforcing soil fumigant label requirements, and to those who register soil fumigant products. These measures were designed to decrease the likelihood of exposures for the population of concern to these chemicals while maintaining their benefits to U.S. agriculture. For example, measures such as FMPs are designed to reduce workplace injuries and accidents by prescribing a series of operational requirements and criteria. Also, training is required to ensure applicators across the country receive the same basic level of information prior to making an application. Although there are some areas of the country where training is currently available from states or registrants, there is currently no consistent training standard across states and regions where soil fumigation is conducted. For the most part, people living and working near areas where fumigation is taking place do not have much knowledge about these types of

applications. In several incidents, even emergency first responders who have responded to incidents involving soil fumigants do not understand the unique chemical properties of these chemicals and have in some cases increased the exposure of bystanders to these chemicals following an incident.¹

In general, more information on the soil fumigants, including links to all of the public comments received during the reregistration process for this group of chemicals, can be found at <http://www.epa.gov/soil-fumigants>.

Background on Non-Soil Fumigants

The non-soil fumigants are also volatile chemicals that become gases at relatively low temperatures, or they are chemicals that react to produce such gases (e.g., aluminum and magnesium phosphide converting to phosphine). All of the non-soil fumigants subject to the information collection activities of this ICR are classified as RUPs.

Specific uses of non-soil fumigants are of particular concern for a range of pest controls. Use patterns for non-soil fumigants include space fumigation for homes, railcars, mills, etc., as well as commodity fumigations on nuts, cocoa, and some fruits and vegetables. For the non-soil fumigants subject to this ICR, sulfuryl fluoride has very high benefits for its use as a termite control fumigant. Aluminum phosphide and magnesium phosphide can be used for burrowing rodent control. Methyl bromide has been used by the United States Department of Agriculture's (USDA) Animal and Plant Health Inspection Service (APHIS) to treat quarantined commodities for export.

At present, EPA is only accounting for the existing information collection burdens associated with sulfuryl fluoride (labeling requirements for FMPs and stewardship training), aluminum phosphide, magnesium phosphide, and phosphine (labeling requirements for FMPs), and methyl bromide (labeling requirements for FMPs). For more information about the non-soil fumigants subject to these requirements and the registration review process for each, their respective docket identification numbers are provided online at <https://www.epa.gov/soil-fumigants/regulatory-status-fumigants> and in Attachment C.

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

3(a). Non-duplication

Respondents will not be asked to collect or provide information that has been or is currently being collected by EPA, other federal or state agencies or proprietary sources, or is available elsewhere. The information collected is unique and is not duplicative of previous information collection requests.

3(b). Public Notice

Pursuant to 5 CFR 1320.8(d), EPA published a notice in the Federal Register (83 FR 48611; September 26, 2018) announcing the proposal to renew this information collection activity, providing a 60-day public comment period. The FR notice, supporting statement, and supporting attachments provided during the public comment period are available at <http://www.regulations.gov> using the docket identifier EPA-HQ-OPP-2018-0423. EPA did not receive any comments during the comment period.

¹ Summary Fumigants Group Incident Report. R. Allen. 4/17/07. <http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OPP-2005-0125-0075>

3(c). Consultation Required Prior to ICR Submission to OMB

In addition to the Federal Register notice seeking public comment and as required under 5 CFR 1320.8(d)(1), the Agency sent consultation requests to seven stakeholders familiar with EPA's program and decisions on fumigants. EPA staff sought feedback on the burden estimates in the ICR, the clarity of instructions provided, and other questions pertaining to the requirements of the program. Two industry stakeholders provided feedback. While briefly summarized here, a copy of the original stakeholder responses to the consultation questions are provided in the docket for this action under Attachment E.

EPA received comments indicating that a factual error occurred on Page 4 of the proposed renewal supporting statement noting that "In 2017, EPA approved updated labels for sulfuryl fluoride products incorporating these recommendations." The commenter states that "no such label updates have been approved yet." EPA intended to highlight two registered products with a stewardship program or a FMP requirement that have been on the label for several years. However, the labeling language for the two products were not approved as part of the ongoing Registration Review or in response to the OIG audit as the original paragraph may have suggested. To eliminate the confusion, EPA removed this sentence from the supporting statement.

One commenter felt that the estimate for preparing a non-soil FMP (EPA proposed 4 hours) was understated but did not provide sufficient basis or a counter estimate for this claim. However, another commenter provided information stating that to complete a typical non-soil FMP (either initial or subsequent applications) depends upon the available information for preparing the FMPs, which can take from 15 minutes to 2 hours. EPA's original estimate assumed that subsequent non-soil FMP applications will take less time to complete than initial applications. However, EPA did not have data on the proportion of initial to subsequent applications, so this was not included in previous calculations. EPA is using the new information received and has modified the estimates to reflect that about 50% of non-soil applications are subsequent applications and the higher estimate of 2 hours is used. EPA's estimate for the non-soil initial application FMP of 4 hours remains unchanged. EPA believes this is a reasonably conservative compromise between the data provided by the two commenters (e.g. as opposed to using 2 hours [maximum] for initial estimates and 68 min [mid-point] or 15 min [minimum] for subsequent applications based on the data provided).

The annual estimate of non-soil applications was reduced based on new information received^{2,3}. The previous estimate was comprised mostly of structural, non-soil applications with a significant amount of non-soil commodity applications. Conversely, the new annual estimate of non-soil applications includes structural applications, but with a significant reduction in the number of

2. CA – commodity: 78,900 , structural: 121,400 ; FL – structural: 62,900

Sources: California Department of Pesticide Regulation: <https://calpip.cdpr.ca.gov/main.cfm> , 2011-2015 ; Florida Department of Agriculture & Consumer Services: <https://www.freshfromflorida.com/Business-Services/Pest-Control> , 2015-2018

3 CA - structural: 121,400 ; FL – structural: 62,900 ; National commodity/quarantine estimates based on Methyl Bromide and Phosphine port applications: 18,000

Sources: California Department of Pesticide Regulation: <https://calpip.cdpr.ca.gov/main.cfm> , 2014-2016 ; Florida Department of Agriculture & Consumer Services: <https://www.freshfromflorida.com/Business-Services/Pest-Control> , 2015-2018 ; US Department of Agriculture APHIS, 2015-2017, database not publicly available, but may be available upon request <https://www.aphis.usda.gov/aphis/banner/contactus>

commodity applications. A subsequent review of the previously used commodity applications for one state, along with new estimates of national commodity applications received, shows that the prior estimate needed to be revised. Since the previous estimate was only for one ‘high fumigation’ state serving as a partial proxy for fumigant applications at the national level in lieu of more complete data, an argument could be made for keeping the higher estimate. However, this seemed inappropriate as the structural application estimates were very similar regardless of the source and the best available data should be used.

One commenter noted that an estimate of the burden associated with applicators attending training was included for the soil, but not for non-soil fumigations. In response, EPA created Tables 23 and 24 to address this concern. The commenter also provided feedback on the hours and frequency of training which was used as the basis for these tables, so EPA has modified the estimate which now reflects 4 hours of initial training and 2 hours of subsequent training done on an annual basis.

One commenter provided estimates for the applicator training also provided counter estimates for the amount of time spent revising training materials since they had already been developed, suggesting that estimates exceed 160 hours annually. Although the major parameters on the relevant labels do not change significantly each year, EPA accepted this change as it is based on a real-world scenario and not a proximate estimation (i.e., from soil fumigation training material development), which is what EPA had previously used. Those hours reported (160) were used for technical labor (previously 53 hours to develop and 10 hours to maintain) to revise the materials. The previous technical time that was devoted to maintaining the training was used as the new basis of for management since it was zero before when the focus was on developing training materials. The clerical staff estimate for maintaining the training stayed the same.

One commenter stated, without submitting any supporting data, that the labor rate for technical labor was “nearly twice that rate” what EPA had estimated (i.e., \$73 vs. \$146). However, the second commenter noted that while labor wage rates tend to fluctuate from job to job and region to region, they believed that the rates EPA used appear to be within reason. EPA uses BLS median wages that are “fully loaded” (see section 6(a) for more details) with the total cost (i.e., not just “direct” labor/salary costs) for employees in this industry (Attachment F). Since neither commenter submitted supporting data regarding the wage rates, EPA has not revised its wage rate estimates.

3(d). Effects of Less Frequent Collection

The Agency is not requiring regular reporting on the status of these tasks back to the Agency which will significantly reduce the burden on the respondents. Information is reported only when needed and cannot be collected less frequently and still maintain necessary risk mitigation. For example, certified applicators must only give FMPs to state enforcement officials when requested.

3(e). General Guidelines

The information collection activities discussed in this ICR comply with all regulatory guidelines under 5 CFR 1320.5(d)(2). Respondents are required to retain records, but respondents will not be required to retain records for more than 2 years.

3(f). Confidentiality

None of the information collected by EPA under this ICR comprises confidential business information.

3(g) Sensitive Questions

No sensitive information is collected under this Information Collection.

4. THE RESPONDENTS AND THE INFORMATION REQUESTED

(a). Respondents/NAICS Codes

Respondents affected by the collection activities under this ICR are **soil and non-soil fumigant users**, specifically certified applicators and agriculture pesticide handlers (NAICS 111000 – Agriculture, Forestry, Fishing, and Hunting); **soil and non-soil fumigant registrants** (NAICS 325300 - Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing); and **state and tribal lead agencies** (NAICS 999200 – State Government).

(b) Respondent Categories

The required mitigation measures may result in a burden, applicable under the Paperwork Reduction Act (PRA), on those participating in soil fumigant applications, on those enforcing soil fumigant label requirements, and on the registrants of soil fumigant products. These measures are designed to decrease the likelihood of exposures to these chemicals while maintaining important benefits to U.S. agriculture. To ensure that risk mitigation measures are adequately implemented, the respondents identified below must complete the following activities:

- **Users:** Users of soil fumigants include both certified applicators and pesticide handlers. Applicators must understand the requirements, complete application information on posting signs, provide notice of fumigant applications to applicable states, prepare FMP and PAS, participate in an EPA-approved fumigant training program, and disseminate fumigant safe handling information to handlers. Handlers may help in the posting of buffer zone signs, and must also complete a fumigant training program.
- **Registrants:** Registrants of soil fumigant products must develop and implement training for fumigators in charge of fumigations, develop and disseminate safety information for handlers, develop and implement community outreach and education programs, and develop and implement first responder training.
- **States:** States are involved in the enforcement of soil fumigant label requirements, and would receive notification of fumigations in their state if they have selected this option.

In addition to the requirements for soil fumigants, the Agency has adopted similar risk mitigation measures and labeling requirements over the past several years for five non-soil fumigant chemicals. These measures are required to be collected pursuant to their re-registration decisions. To ensure that the risk mitigation measures are adequately implemented, the respondents identified below must complete the following activities:

- **Users:** Users of certain non-soil fumigants must prepare a FMP for each application. Specific non-soil fumigant users must also participate in an EPA-approved fumigant stewardship training program.
- **Registrants:** Registrants of certain non-soil fumigants must develop an EPA-approved fumigant stewardship training program for users to complete.

Without the complete suite of measures, these soil and non-soil fumigant chemicals do not meet the requirements to be eligible for registration or reregistration under FIFRA. The programs and activities represented in this ICR are the result of the Agency exercising the authority of section 3(c)(2)(B) (Attachment A) or section 3(c)(5) (Attachment B) of FIFRA, which authorizes EPA to require pesticide registrants to generate and submit data to the Agency, when such data are needed to maintain an existing registration of a pesticide. Due to the high benefits of these chemicals, there could be significant economic impact if these fumigant products are no longer available.

Soil and non-soil fumigant users subject to the ICR are considered “applicators” and “handlers.” Fumigants are only allowed to be applied by, or under direct supervision of, specially trained and certified applicators. Certification programs are conducted by states, territories, and tribes in accordance with national standards. Fumigant handlers are identified as workers working in a fumigant application block or buffer zone that performs certain kinds of tasks as specified on fumigant labels.

Users of soil fumigants containing the active ingredients are listed in Table 1, and non-soil fumigants are listed in Table 2. Both are subject to the collection activities specified in this ICR.

Table 1: Soil Fumigant Active Ingredients Subject to this ICR

Active Ingredient	Pesticide Chemical (PC) Code
1, 3-dichloropropene	029001
Chloropicrin	081501
Dazomet	035602
DMDS	000011
Metam potassium	039002
Metam sodium	039003
Methyl bromide	053201
Methyl isothiocyanate	068103

Table 2: Non- Soil Fumigant Active Ingredients Subject to this ICR

Active Ingredient	Pesticide Chemical (PC) Code
Aluminum Phosphide	066501
Magnesium Phosphide	066504
Methyl bromide	053201
Phosphine	066500
Sulfuryl Fluoride	078003

4(b). Information Collected

In order to be eligible for continued registration under FIFRA section 4(g), EPA determined that certain additional risk mitigation measures were necessary as terms and conditions of those registrations. The registrants have amended their registrations to address the specific terms and conditions that are now being applied to all soil fumigant registrations. Information about EPA’s soil fumigant program is available at <http://www.epa.gov/soil-fumigants>. The activities are grouped according to the applicable respondent group.

Users of soil and non-soil fumigants will need to engage in the activities identified in Table 3 and 4, respectively, to assure compliance with fumigant label requirements. Note that compliance with the label-required training is a condition of product use. Because these soil and non-soil fumigants are RUPs, only certified applicators or handlers under their supervision may purchase or use them. Users must comply with pesticide labeling or face civil and criminal penalties pursuant to FIFRA sections 12(a)(2)(G) and 14, and certified applicators may also be sanctioned by suspension or revocation of certification (40 CFR 171.7(b)(iii)(A)).

Table 3: User (applicators and/or handlers) Activities for Soil Fumigants

Burden	Description
Understand the requirements (applicator’s responsibility)	Learn/refresh understanding of fumigant requirements applicable to users that are provided on the fumigant product labels, and additional information on these requirements available at http://www.epa.gov/soil-fumigants/what-are-soil-fumigants .
Posting (applicator or handler’s responsibility)	As specified on the product label, obtain signs from product dealers (provided to dealers by registrants); fill in (1) product name, and (2) contact information for the fumigator; place signs at usual points of entry and along likely routes of approach unless a physical barrier (fence, wall) prevents access to the buffer; remove signs after buffer zone time period has ended. Information on buffer zone posting can be found at http://www.epa.gov/soil-fumigants/buffer-zone-fact-sheets .
Notify State Lead Agencies (SLAs) (applicator’s responsibility)	Applicators must check the EPA fumigant website for a list of states that require notification. If applicable, provide the following to the SLA: contact information for the fumigator and owner/operator; location of the field to be treated; product name and registration number; and when the fumigation is expected to occur. Information on notification to SLAs can be found at http://www.epa.gov/soil-fumigants/complying-required-state-and-tribal-notification-soil-fumigation
Fumigant Management Plan (FMP) and a post-application summary	As specified on the product label, prepare a written FMP for each fumigation to include the following: information on the site, fumigator, and owner/operator; fumigation procedures; buffer determinations; information on worker protection; procedures for air monitoring, posting, communication

Burden	Description
<p>(PAS)</p> <p>(applicator's responsibility)</p>	<p>among key parties; and record keeping; emergency response plans and procedures for addressing accidental fumigant releases.</p> <p>Results of air monitoring for handlers, air monitoring results between buffers and bystanders, as well as any deviations from the FMP must be recorded in a PAS.</p> <p>Both documents must be filed and retained by both the certified applicator and the property owner for at least 2 years, and available to disclose to enforcement personnel or handlers participating in the application if requested.</p> <p>Information on FMPs can be found at http://www.epa.gov/soil-fumigants/introduction-soil-fumigant-management-plan</p>
<p>Applicator Training</p> <p>(applicator's responsibility)</p>	<p>Applicators must attend a soil fumigant training program designed by the registrant and approved by EPA to specifically cover the following topics: how to correctly apply the fumigant, how to protect handlers and bystanders, how to determine buffer zone distances, how to develop an FMP and post-fumigation summary report, how to determine when unfavorable conditions exist, and how to comply with the required GAPS.</p> <p>The applicators participation in the training must be documented in the FMP.</p> <p>Information on applicator training can be found at http://www.epa.gov/soil-fumigants/soil-fumigant-training-certified-applicator</p>
<p>Disclosure to Handlers</p> <p>(applicator and handler's responsibilities)</p>	<p>Applicators are responsible for disseminating fumigant specific information prior to each fumigation to every handler participating in the application.</p> <p>Information on handler information can be found at http://www.epa.gov/soil-fumigants/safety-information-fumigant-handler</p>

Table 4: User (applicators and/or handlers) Activities for Non-Soil Fumigants

Burden	Description
<p>Fumigant Management Plan (FMP)</p> <p>(applicator’s responsibility)</p> <p>Required only for the following commodity fumigants:</p> <ul style="list-style-type: none"> • sulfuryl fluoride, • methyl bromide, • phosphine, aluminum phosphide, and magnesium phosphide 	<p>As specified on the product label, prepare a written FMP for each fumigation to include the following as specified on individual product labels: information on the site, fumigator, and owner/operator; fumigation procedures; buffer determinations; information on worker protection; procedures for air monitoring, posting, communication among key parties; and record keeping; emergency response plans and procedures for addressing accidental fumigant releases.</p> <p>FMPs must be filed and retained by both the certified applicator and the property owner, and available to disclose to enforcement personnel or handlers participating in the application if requested.</p>
<p>Stewardship Training</p> <p>(applicator’s responsibility)</p> <p>Required only for</p> <ul style="list-style-type: none"> • sulfuryl fluoride structural fumigations 	<p>Applicators must attend a fumigant stewardship training program designed by the registrant and approved by EPA.</p>

Registrants of soil and non-soil fumigants will need to engage in the activities identified in Table 5 and 6 in order for their product to remain eligible for registration under FIFRA section 3. Paperwork burden activities associated with fumigant risk mitigation actions documented in this ICR are separate and distinct from the activities associated with the DCI ICR (OMB Control No. 2070-0174). The DCI ICR burden activities which acquire data that has been deemed necessary for the Agency’s statutorily mandated review of a pesticide’s registration, to assess whether the continued registration of an existing pesticide causes an unreasonable adverse effect on human health or the environment and whether the Agency will pursue appropriate regulatory measures is not duplicated in this ICR.

Table 5: Registrant Activities for Soil Fumigants

Burden	Description
<p>Training: Develop/update and</p>	<p>Prepare training materials, develop channels for training fumigators, and design and implement mechanisms for tracking fumigators who</p>

Burden	Description
implement training for fumigators in charge of fumigations	<p>successfully complete training. Update training materials periodically. Disseminate training materials (either electronically, by paper, or in person). This may be done by registrants individually, or collaboratively through a soil fumigant registrant task force or group.</p> <p>As discussed in Table 2, information on applicator training, including already approved courses that are available, can be found at http://www.epa.gov/soil-fumigants/soil-fumigant-training-certified-applicator</p>
Handler Information: Develop/update and disseminate safety information for handlers	<p>Prepare safety training materials for handlers and make them available to fumigators to provide to fumigant handlers under their supervision. Update safety information periodically. Disseminate training materials (either electronically or by paper)</p> <p>As discussed in table 2, information on handler information can be found at http://www.epa.gov/soil-fumigants/safety-information-fumigant-handler.</p>
Community Outreach: Develop/update and implement community outreach and education programs	<p>Design and implement outreach programs to provide communities with information about soil fumigants, buffer zones, early signs of exposure, and what to do in case of an exposure, emergency, or incident; Update community outreach program periodically.</p> <p>Information on community outreach can be found at http://www.epa.gov/soil-fumigants/community-outreach-and-education-soil-fumigant</p>
First Responder Training: Develop/update and implement first responder training	<p>Identify communities in which fumigants are used which do not already have information or training on appropriate response to soil fumigant incidents, and develop and incorporate training for first responders into existing programs; Update first responder training periodically.</p> <p>Information on first responder training can be found at http://www.epa.gov/soil-fumigants/community-outreach-and-education-soil-fumigant</p>

Table 6: Registrant Activities for Non-Soil Fumigants

Burden	Description
Stewardship Training: Develop/update and	Prepare training materials, develop channels for training fumigators, and design and implement mechanisms for tracking fumigators who

Burden	Description
implement stewardship training for fumigators in charge of fumigations Applies only to registrants of: <ul style="list-style-type: none"> • sulfuryl fluoride structural products. 	successfully complete training. All registrants must have a documented stewardship program and provide initial and recurrent AI-specific training for fumigators as a condition of sale. The training curriculum and content must be developed by each registrant and must have a tracking system to verify condition of sale.

State Lead Agencies (SLAs) may engage in the activities identified in Table 7. Although not required, pesticide SLAs may also provide applicators EPA-approved alternatives to registrant-sponsored training.

Table 7: State Activities for Soil Fumigants Only

Burden	Description
Receive Notice to States	State Lead Agencies (SLAs) have the option to receive notice prior to soil fumigant applications. As discussed in table 2, information on notification to SLAs can be found at http://www.epa.gov/soil-fumigants/complying-required-state-and-tribal-notification-soil-fumigations

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

5(a). Agency Activities

This ICR primarily involves activities conducted for the purpose of submitting or providing information to third parties. EPA, however, does receive and review training and safety information materials developed or updated by registrants prior to their distribution to third parties. EPA implements the fumigant mitigation measures as part of the reregistration program.

Table 8: Agency Activities

Burden	Description
EPA Review, Coordination, and Implementation Responsibilities	EPA has the responsibility to implement the fumigant mitigation measures, review and approve training and safety materials that are submitted, and coordinate reviews among experienced professionals.

5(b). Collection Methodology and Management

This ICR primarily involves activities conducted for the purpose of submitting or providing information to third parties. For the information that EPA may collect in the future under this ICR (i.e., training and safety information materials), registrants will submit the materials as needed, and EPA will track, review and approve any new or updated materials consistent with current Agency processes and procedures for the submission of pesticide information to the Agency.

5(c). Small Entity Flexibility

The reregistration eligibility of the soil and non-soil fumigants depends upon applicators receiving the various information and training required in the fumigant labels. These cannot be reduced for small establishments without seriously compromising the protections offered to applicators and bystanders. As such, small entities are required to follow the same requirements as larger establishments.

5(d). Collection Schedule

This ICR primarily involves activities conducted for the purpose of submitting or providing information to third parties. For registrants who must submit training and safety information materials to the Agency for review, there is no set collection schedule as registrants submit materials only when developed or updated. EPA periodically checks the fumigant risk mitigation measures as a part of the registration review program.

6. ESTIMATING THE BURDEN AND COST OF THE COLLECTION

6(a). Methodology for Estimating Respondent Labor Cost

Respondent cost is based on the burden as described above and summarized below, which includes the wages, benefits, and overhead for all labor categories for affected industries, state government, and EPA employees. This approach uses a transparent and consistent methodology and current publicly-available data to provide more accurate estimates and allow easy replication of the estimates of wages, benefits, and overhead.

Methodology: The methodology uses data on each sector and labor type for an *unloaded wage rate* (hourly wage rate), and calculates the *loaded wage rate* (unloaded wage rate + benefits), and the *fully loaded wage rate* (loaded wage rate + overhead). Costs are indexed to 2017 dollars.

Wage Rates: Wages are estimated for occupations (management, technical, and clerical) within applicable sectors. The Agency uses average unloaded wage data for the relevant sectors available in the National Industry-Specific Occupational Employment and Wage Estimates from the Bureau of Labor Statistics (BLS) at http://www.bls.gov/oes/current/oes_nat.htm. For loaded wage rates, benefits represent 46.5% of unloaded wage rates, based on benefits for all civilian non-farm workers, from <http://www.bls.gov/news.release/ecec.t01.htm>. Fully loaded wage rates include an additional 50% on top of the loaded wage rate to capture overhead costs (EPA guidelines 20-70%). The data and calculations for wage rates used in this document are presented in Attachment F.

Sectors: The specific North American Industry Classification System (NAICS) code and website for each sector is included in that sector's wage rate table. Within each sector, the wage data are provided by Standard Occupational Classification (SOC). The SOC system is used by Federal statistical agencies to classify workers into occupational categories for the purpose of collecting, calculating, or disseminating data (see http://www.bls.gov/oes/current/oes_stru.htm).

There are three categories of respondents: certified applicators and handlers, registrants and states. The cost associated with each is described in this section.

6(b). Estimating Soil Fumigant Respondent Burden

The burden associated with this collection of information is described in detail in the following sections. The respondents include certified applicators, pesticide handlers, fumigant registrants and states. To estimate the respondent burden, the Agency used current information and statistics from a variety of sources as explained in this chapter, on the number of fumigant applications made annually, the number of certified applicators and pesticide handlers that apply or handle fumigants, and the number of fumigant registrants. This information comes from a variety of sources including state reports, previous EPA analyses, and other EPA databases.

Certified applicators and pesticide handlers have paperwork burden associated with fumigant application activities, such as understanding the requirements, posting treatment areas and developing a FMP. For pesticide handlers, burden is estimated per application, where an application is the delivery of a pesticide to a field or application block. It is estimated that the burden associated with the first application after the labels have been updated with the new mitigation measures will be highest, mostly due to the time necessary to develop the FMP (12 hours). Each of the other paperwork related activities is estimated to take no more than an hour. Total burden for the first application following the changes to the label is estimated to be nearly 15 hours, while each subsequent application using the updated labels is estimated to take less than 4 hours. The Agency estimates 12,651 soil fumigant applications are made in the U.S. each year.

Requirements currently exist to ensure that certified applicators and agricultural handlers possess general pesticide use and safety information. Applicators must be determined to be competent to become certified, and to maintain their certification they must either receive training or be recertified by exam on a schedule determined by the state (Certification of Pesticide Applicators, 40 CFR 171). That schedule ranges, depending on the state, from 1 to 5 years. Under the agricultural Worker Protection Standard (40 CFR 170), agricultural handlers are required to receive general pesticide safety training at least once every 5 years. Burdens from those requirements are included in currently-approved ICRs for those two rules (Certification of Pesticide Applicators (OMB Control No. 2070-0029) and Worker Protection Standard Training and Notification (OMB Control No. 2070-0148)) and are not included here.

The soil fumigant label revisions establish training requirements specific to soil fumigation for certified applicators and handlers on the safe and appropriate use of these products. Soil fumigant applicators are required by the product labels approved in accordance with 3(c)(5) to receive this fumigant-specific training every 3 years; handlers involved in soil fumigant application must be provided with the specific safe handling information annually in accordance with fumigant product labels approved under EPA's authority under 3(c)(5). Burdens from these fumigant-specific

requirements are included in this ICR and are separate and distinct from the requirements cited above under the Certification of Pesticide Applicators ICR (OMB Control No. 2070-0029) and the agricultural Worker Protection Standard ICR (OMB Control No. 2070-0148). There are an estimated 4,884 certified applicators applying soil fumigants and 14,652 pesticide handlers of soil fumigants subject to these training requirements as specified by product labels approved in accordance with 3(c)(5). This is based on an estimate of three pesticide handlers per one certified applicator.

Registrant burden is associated with the development and dissemination of fumigant application, handler safety, and first responder training materials. They must also develop and implement a community outreach program. The majority of the burden associated with these activities is in the one-time development of the materials. The one-time material development costs were included in the previous ICR. The annual or “on-going” costs are the ones included in this ICR. The annual dissemination of fumigant training and handler safety materials is estimated to take 22 hours per registrant for each activity, while the implementation of the community outreach program is estimated to take 120 hours per registrant annually, and the dissemination of first responder training is estimated to take 120 hours per registrant annually. Registrants have the option of forming task forces if it is in their interest, and may provide data submissions through this collective group. There are currently six task forces that were established by the registrants, at the discretion of the registrants, prior to the activities associated with the label mitigation measures identified in this data collection request. These same task forces are responsible for disseminating the required materials.

States are responsible for enforcement and compliance of the fumigant application-related requirements. It is estimated that states will spend an average of 15 minutes per application on enforcement and compliance activities. Given the EPA’s estimate of 12,651 fumigant applications made per year, state activities amount to more than 3,000 hours per year. Estimates and methodology are addressed in Tables 15 and 16.

The detailed burden estimates and calculations are presented below for each respondent group, along with costs. The burden for certified applicators and pesticide handlers is shown in Tables 9, 10, 11, and 12; burden for registrants of soil fumigant products in Tables 13 and 14; and burden for states in Tables 15 and 16.

(1) Certified Applicators and Pesticide Handlers

The estimated costs of paperwork activities for certified applicators and pesticide handlers are shown in Tables 9, 10, 11, and 12, along with burden. Tables 9 and 10 list the estimated costs associated with paperwork for user application activities, while Tables 11 and 12 list the costs associated with training activities. Wage rates are based on NAICS code 111000 - Agriculture, Fishing, Forestry, and Hunting. Wages are loaded to account for some benefits paid by the employer but do not account for overhead. The loaded wage rate for certified applicators (\$37.31) is based on the scientist/technician labor category, while the pesticide handler wage is based on an average of the loaded wage rate for the scientist/technician and agriculture worker labor categories $((\$37.31 + \$17.40)/2) = \$27.35$, reflecting a higher skilled worker (see Attachment F).

(1a) User Application Activities for Soil Fumigant Applications

Table 9 summarizes the burden and cost for paperwork activities per soil fumigant application for certified applicators and pesticide handlers. Table 10 summarizes the burden and cost per year. The annual burden and cost is based on the number of applications made per year. EPA estimates 12,651

applications are made per year by certified applicators and pesticide handlers based on historical pesticide usage data for the soil fumigants.

In addition to the hourly burden and cost of compliance with the product labels as approved in accordance with FIFRA section 3(c)(5), applicators are required to purchase signs for the posting requirement and tubes and pumps for the air monitoring requirement. BEAD previously estimated that the sign cost is \$0.09 per sheet⁴ and assuming 4 sheets per application (posting at 2 points of entry to the treated field and 2 postings along routes of approach to the treated field on average), the cost per application is \$0.36. The total annual material cost for posting, assuming 12,651 applications per year, is \$4,554. When this sign cost estimate is inflated to 2017, to account for the general increase in price-level since that time, the total annual cost is \$5,566 (i.e., \$0.11 per sheet). This cost is inflated using the CPI (consumer price index) inflation calculator from BLS⁵. With 37,953 applications over 3 years, the total estimated 3-year cost is \$16,699.

Monitoring devices must be used during methyl bromide applications and if sensory irritation occurs while applying other fumigants. Each application requires a pump to be on-site, and a new tube is necessary for every measurement. BEAD previously estimated that the cost of a Draeger tube for monitoring the air at an application site is \$16 on average⁵ and the cost of a Draeger pump is \$405⁶. When these costs are adjusted to reflect 2017 price levels, the cost for the tube is \$17 and \$435 for the pump. Assuming one tube per application, the total annual cost of the tubes is \$217,332 (\$17 per tube per application multiplied by 12,651 applications). Over 3 years, the total cost of the tubes is \$651,995. Assuming each certified applicator (there are an estimated 4,884 certified applicators) purchases one new pump every 3 years, the total 3-year cost for the pumps is \$2,123,807, for an average of \$707,936 per year. The 3-year total cost of materials is \$2,792,501 (sign posts: \$16,699, tubes: \$651,995, and pumps: \$2,123,807).

4

53 Draeger tubes are sold in packages of 10 for as much as \$160 per package. Source: AFC International, Inc., 2012.

6 Source: AFC International, Inc., 2012.

5 https://www.bls.gov/data/inflation_calculator.htm

Table 9. Certified Applicator and Pesticide Handler Burden and Cost for User Application Activities per Soil Fumigant Application, By Activity (4,884 certified applicators and 14,652 handlers)

Category	Activity	Frequency	Certified applicators		Pesticide handlers		Total	
			Hours	Cost (\$37.31 /hr) ¹	Hours	Cost (\$27.35 /hr) ¹	Hours	Cost ²
Read the Label	Learn/refresh understanding of fumigant requirements	Annual	0.50	\$18.66	0.00	\$0.00	0.50	\$18.66
Posting	Fill In Information on Signs	Per application	0.13	\$4.85	0.00	\$0.00	0.13	\$4.85
	Post and remove the Signs	Per application	0.00	\$0.00	1.00	\$27.35	1.00	\$27.35
Check EPA website to determine if notice is required and provide notice of applications to applicable SLAs	Prepare the information required in the notice.	Per application	0.17	\$6.34	0.00	\$0.00	0.17	\$6.34
	Send the notice via paper or electronic means.	Per application	0.05	\$1.87	0.00	\$0.00	0.05	\$1.87
Prepare a Fumigant Management Plan (FMP) and a post-application summary (PAS)	Prepare Initial Plan	Per initial application	12.00	\$447.72	0.00	\$0.00	12.00	\$447.72
	Prepare Subsequent Plan	Per subsequent Application	1.00	\$37.31	0.00	\$0.00	1.00	\$37.31
	Create Post Fumigation Report	Per application	1.00	\$37.31	0.00	\$0.00	1.00	\$37.31
	File and Disclose Plan	Per application	0.05	\$1.87	0.00	\$0.00	0.05	\$1.87
Total Burden and Cost Per Initial and Subsequent Application³								
		Initial Application	13.90	518.61	1.00	27.35	14.90	\$545.96
		Subsequent Application	2.90	108.20	1.00	27.35	3.90	\$135.55

Numbers may not add due to rounding.

1 - Cost is equal to the hours times the wage rate (\$/hr).

2 - Total hours and cost are the sum of certified applicator and pesticide handler hours and cost.

3 – Initial Application is equal to the sum of each activity less prepare subsequent plan. Subsequent application hours and cost is equal to the sum of each activity less prepare initial application.

Table 10. Total Annual Certified Applicator and Pesticide Handler Burden and Cost for User Application Activities (4,884 certified applicators and 14,652 handlers)

Year	Certified applicators		Pesticide handlers		Total	
	Hours	Cost (\$37.31 /hr) ¹	Hours	Cost (\$27.35 /hr) ¹	Hours	Cost ²
Year 1	175,849	\$6,560,922	12,651	\$346,005	188,500	\$6,906,927
Year 2	175,849	\$6,560,922	12,651	\$346,005	188,500	\$6,906,927
Year 3	106,268	\$3,964,874	12,651	\$346,005	118,919	\$4,310,879
3 Year Annual Average	152,655	\$5,695,573	12,651	\$346,005	165,306	\$6,041,578
3 Year Total	457,966	\$17,086,719	37,953	\$1,038,015	495,919	\$18,124,733

Numbers may not add due to rounding.

1 - Cost is equal to the total hours and cost for the initial and subsequent application as listed in rows 11 and 12 of Table 6 multiplied times the number of applications. EPA assumes that fumigations occur once every two years, and that 100% of fumigations in year 1 and 2 are first time fumigation, and 50% of fumigations are first time fumigations starting in year 3. The estimated number of applications per year is as follows:

	<u>Initial Applications</u>	<u>Subsequent Applications</u>
Year 1	12,651	0
Year 2	12,651	0
Year 3	6,326	6,326
3 Year Average	10,543	2,109
3 Year Total	31,628	6,326

For Example: For certified applicators in Year 3 the hours are equal to following:

Certified applicator: (13.90 hours/application x 6,326 applications) + (2.90 hours/application x 6,326 applications)

2 - Total hours and cost are the sum of certified applicator and pesticide handler hours and cost.

(1b) Training Activities Related to Soil Fumigations

Table 11 summarizes the burden and cost for certified applicators and pesticide handlers for training activities per trainee, while Table 12 summarizes the burden and cost per year of training activities. The annual burden and cost is based on the number of certified applicators and pesticide handlers involved with soil fumigant applications. EPA estimates that there are 4,884 certified applicators and 14,652 handlers. This is based on data submitted to EPA on the number of certified applicators and the assumption of three pesticide handlers per certified applicator.

Table 11. Certified Applicator and Pesticide Handler Burden and Cost for Training Activities per Applicator, By Activity (4,884 certified applicators and 14,652 handlers)

Category	Activity	Frequency	Certified applicators		Pesticide handlers		Total	
			Hours	Cost (\$37.31 / hr) ¹	Hours	Cost (\$27.35 /hr) ¹	Hours	Cost ²
Applicators must take registrant developed, and EPA approved fumigant training	Training as required by product labels approved in accordance with 3(c)(5)	Once Every 3 Years	8.00	\$298.48	0.00	\$0.00	8.00	\$298.48
	Retain training documentation as required by product labels approved in accordance with 3(c)(5)	Once Every 3 Years	0.05	\$1.87	0.00	\$0.00	0.05	\$1.87
Handlers must receive fumigant specific information	Fumigant specific safety information as required by product labels approved in accordance with 3(c)(5)	Annual ³	0.08	\$2.98	1.00	\$27.35	1.08	\$30.33

Numbers may not add due to rounding.

1 - Cost is equal to the hours times the wage rate (\$/hr).

2 - Total hours and cost are the sum of certified applicator and pesticide handler hours and cost.

3 – Information is disseminated to pesticide handlers on a per application basis. Estimates presented here are the total estimated annual burden of all applications conducted by a certified applicator or pesticide handler in a given year.

Table 12. Total Annual Certified Applicator and Pesticide Handler Burden and Cost for Training Activities (4,884 certified applicators and 14,652 handlers)

Year	Certified applicators		Pesticide handlers		Total	
	Hours	Cost (\$37.31 /hr) ¹	Hours	Cost (\$27.35 /hr) ¹	Hours	Cost ²
Year 1	39,707	\$1,481,465	14,652	\$400,732	54,359	\$1,882,197
Year 2	391	\$14,578	14,652	\$400,732	15,043	\$415,310
Year 3	391	\$14,578	14,652	\$400,732	15,043	\$415,310
3 Year Annual Average	13,496	\$503,540	14,652	\$400,732	28,148	\$904,272
3 Year Total	40,488	\$1,510,621	43,956	\$1,202,197	84,444	\$2,712,817

Numbers may not add due to rounding.

1 - Cost is equal to the total hours and costs as listed Table 8 times the number of certified applicators and pesticide handlers that apply or handle soil fumigants. For Example: For certified applicators in Year 1 the hours are equal to following:

Certified applicator: (8.00 hours/applicator + 0.05 hours/applicators + 0.08 hours/applicator) x (4,884 applicators)

2 - Total hours and cost are the sum of certified applicator and pesticide handler hours and cost.

(1c) Registrants of Soil Fumigant Products

The estimated paperwork costs for soil fumigant registrants are shown in Tables 13 and 14. Wage rates are for NAICS 325300 - Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing and are fully loaded to account for benefits and overhead. EPA estimates that there are 6 registrant task forces that will develop and distribute the required materials based on correspondence with these task forces. Table 13 shows the estimates of burden and cost per registrant task force to distribute training materials; prepare and distribute safety information; implement community outreach, and distribute first responder training materials. Table 14 shows the annual cost across all registrants of the activities taking into account the frequency of the activity. The management wage rate is \$140.57/hr. The technical wage rate is \$72.88 /hr. The clerical wage rate is \$47.30 /hr.

Table 13. Soil Fumigant Registrant Burden and Cost, By Activity

Category	Activity	Frequency	Management		Technical		Clerical		Total	
			Hours	Cost ¹	Hours	Cost ¹	Hours	Cost ¹	Hours	Cost ²
Fumigant Training Handler Safety Information	Maintain/ Disseminate training materials (either electronic, paper, or in person)	Annually	0.00	\$0.00	10.00	\$729	12.00	\$568	22.00	\$1,296
	Disseminate training materials (either electronic or paper)	Annually	0.00	\$0.00	0.00	\$0.00	12.00	\$568	12.00	\$568
Community Outreach Program	Implement the program in high fumigant use areas	Annually	40.00	\$5,623	40.00	\$2,915	40.00	\$1,892	120.00	\$10,430
First Responder Training	Disseminate the training in high fumigant use areas	Annually	0.00	\$0.00	0.00	\$0.00	120.00	\$5,676	120.00	\$5,676
Fumigant Training	Maintain/ Disseminate training materials (either electronic, paper, or in person)	Annually	0.00	\$0.00	10.00	\$729	12.00	\$568	22.00	\$1,296

Numbers may not add due to rounding.

1 - Cost is equal to the hours times the wage rate (\$/hr). Management wage rate is \$140.57/hr. Technical wage rate is \$72.88 /hr. Clerical wage rate is \$47.30 /hr.

2 - Total hours and cost are the sum of managerial, technical and clerical hours and cost.

Table 14. Total Annual Registrant Burden and Cost (6 registrant task forces)

Year	Managerial		Technical		Clerical		Total	
	Hours	Cost (\$140.57/hr) ¹	Hours	Cost (\$72.88/hr) ¹	Hours	Cost (\$47.30/hr) ¹	Hours	Cost ²
Year 1	240	\$33,737	300	\$21,864	1,104	\$52,219	1,644	\$107,820
Year 2	240	\$33,737	300	\$21,864	1,104	\$52,219	1,644	\$107,820
Year 3	240	\$33,737	300	\$21,864	1,104	\$52,219	1,644	\$107,820
3 Year Annual Average	240	\$33,737	300	\$21,864	1,104	\$52,219	1,644	\$107,820
3 Year Total	720	\$101,210	900	\$65,592	3,312	\$156,658	4,932	\$323,460

Numbers may not add due to rounding.

1 - Cost is equal to the total hours and cost in Table 13 multiplied times the estimated number of registrant task forces (6). There are 14 registrants represented by the 6 registrant task forces. For Example: The Year 1 number of managerial hours is equal to the hours per registrant for each of the activities times 6: (80 hours/registrant+0 hours/registrant+40 hours/registrant+0 hours/registrant+80 hours/registrant+40 hours/registrant+80 hours/registrant+0 hours/registrant) x (6 registrants)

2 - Total hours and cost are the sum of managerial, technical and clerical hours and cost.

(1d) State Activities Related to Soil Fumigations

The burden for states per application for compliance and enforcement activities is shown in Table 15. Wage rates are for NAICS 999200 – State Government and are fully loaded to account for benefits and overhead. EPA’s requirements are for only those states with high fumigant use⁷, and currently, EPA estimates that there are 15 states that account for the majority of fumigant use and are considered high use: California, Washington, Idaho, Oregon, Wisconsin, Michigan, Florida, Minnesota, North Carolina, Virginia, Arizona, Nevada, Georgia, Colorado, and North Dakota. This is based on an EPA analysis of fumigant pesticide usage and U.S. crop acreage grown which showed that a majority of soil fumigant usage occurred in 15 states.⁸ Costs are measured on a per application basis. Annual burden, assuming more than 12,651 fumigant applications per year, is shown in Table 16. The Agency estimates that all of the paperwork burden for responding to this ICR will be conducted by clerical (or administrative) staff.

⁷ For additional information on determining high-use areas, see Attachment H, “Identifying Fumigant High-Use Areas Using Metam-Sodium as an Example”

⁸ The EPA document can be found at <http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OPP-2005-0125-0516>.

Table 15. State Burden and Cost per Application

Year	Activity	Frequency	Clerical		Total	
			Hours	Cost (\$43.68 /hr) ¹	Hours	Cost ²
State Compliance and Enforcement	Paperwork for Compliance and Enforcement	Annually	0.25	\$10.92	0.25	\$10.92

Numbers may not add due to rounding. State management and technical staff are not estimated to be impacted by this ICR.

1 - Cost is equal to the hours times the wage rate (\$/hr).

2 - Total hours and cost are the sum of managerial, technical and clerical hours and cost. Since only clerical staff is impacted, the total hours and cost are equal to the clerical hours and cost.

Table 16. Total Annual State Burden and Cost

Year	Clerical		Total	
	Hours	Cost (\$43.68 /hr) ¹	Hours	Cost ²
Year 1	3,163	\$138,149	3,163	\$138,149
Year 2	3,163	\$138,149	3,163	\$138,149
Year 3	3,163	\$138,149	3,163	\$138,149
3 Year Annual Average	3,163	\$138,149	3,163	\$138,149
3 Year Total	9,488	\$414,447	9,488	\$414,447

Numbers may not add due to rounding. State management and technical staff are not estimated to be impacted by this ICR.

1 - Cost is equal to the total hours and cost per application as listed in Table 15 multiplied times the number of applications. EPA assumes that fumigations occur once every two years and that 100% of fumigations in year 1 and 2 are first time fumigation, and 50% of fumigations are first time fumigations starting in year 3. The estimated number of applications per year as follows:

	<u>Initial Applications</u>	<u>Subsequent Applications</u>
Year 1	12,651	0
Year 2	12,651	0
Year 3	6,326	6,326
3 Year Average	10,543	2,109
3 Year Total	31,628	6,326

For Example: For states in Year 1, the hours are equal to the following: (0.25 hours/application x 12,651 applications)

2 - Total hours and cost are the sum of managerial, technical and clerical hours and cost. Since only clerical staff is impacted, the total hours and cost are equal to the clerical hours and cost.

6(c). Estimating Agency Burden and Cost for Soil Fumigations

Agency burden is shown in Tables 17 and 18. To determine Agency costs, the Agency used the Bureau of Labor Statistics estimates of labor rates for the North American Industry Classification System code for the Federal Executive Branch (NAICS 999100). Wage rates are fully loaded to account for benefits and overhead. Table 17 shows the burden and cost per activity for the Agency, while Table 18 is the annual burden and cost across all activities. Agency costs are based on managerial and technical hours spent on compliance and enforcement activities.

Table 17. Agency Burden and Cost

Category	Activity	Frequency	Managerial		Technical		Total	
			Hours	Cost (\$129.84 /hr) ¹	Hours	Cost (\$85.51 /hr) ¹	Hours	Cost ²
Federal Compliance and Enforcement	Compliance Training and Stakeholder Engagement	Annually	104	\$13,503.36	1,092	\$93,376.92	1,196	\$106,880.28

Numbers may not add due to rounding. Agency clerical staff are not impacted by this ICR.

1 - Cost is equal to the hours times the wage rate (\$/hr).

2 - Total hours and cost are the sum of managerial, technical hours and cost.

Table 18. Total Annual Agency Burden and Cost

Year	Managerial		Technical		Total	
	Hours	Cost (\$129.84 /hr) ¹	Hours	Cost (\$85.51 /hr) ¹	Hours	Cost ²
Year 1	104	\$13,503	1,092	\$93,377	1,196	\$106,880
Year 2	104	\$13,503	1,092	\$93,377	1,196	\$106,880
Year 3	104	\$13,503	1,092	\$93,377	1,196	\$106,880
3 Year Annual Average	104	\$13,503	1,092	\$93,377	1,196	\$106,880
3 Year Total	312	\$40,510	3,276	\$280,131	3,588	\$320,641

Numbers may not add due to rounding.

1 - Cost is equal to the total hours and cost across activities based on frequency from Table 17. For example, Years 1 to 3 only include the activities incurred annually (104 hours).

2 - Total hours and cost are the sum of managerial and technical hours and cost.

6(d). Bottom Line Burden Hours and Cost for Soil Fumigations

Tables 19 and 20 summarize the total annual respondent and Agency burden for soil fumigations, respectively. Including the cost to applicators for the materials required for compliance with the posting and air monitoring requirements (\$2,792,501), the total 3 year respondent cost is \$24,367,959.

Table 19. Total Annual Respondent Burden and Cost for Soil Fumigations

Information Collection	Respondent	No. of Responses	Burden Hours	Costs
Fumigant User Application Activities (Table 9)	Certified Applicators	12,651	152,655	\$5,695,573 ¹
	Pesticide Handlers	12,651	12,651	\$346,005
Fumigant Training Activities (Table 11)	Certified Applicators	4,884	13,496	\$503,540
	Pesticide Handlers	14,652	14,652	\$400,732
Distribution of Training & Informational Materials (Table 13)	Registrants	6	1,644	\$107,820
Paperwork for Compliance and Enforcement in High Use States (Table 15)	State Agencies	12,651	3,163	\$138,149
Total Annual Average		57,495	198,262	\$7,191,819

¹ Costs for certified applicators also include the capital costs for purchasing buffer zone signs and air monitoring equipment (pumps and tubes). See section 6(b)(1a) and Table 7.

Table 20. Total Annual Agency Burden and Cost for Soil Fumigations

Year	Total Hours ¹	Total Cost ¹
Year 1	1,196	\$106,880
Year 2	1,196	\$106,880
Year 3	1,196	\$106,880
3 Year Annual Average	1,196	\$106,880
3 Year Total	3,588	\$320,641

1 – Total hours and cost are a sum of total hours and cost for the Agency. See Table 18.

6(e). Estimating Non-Soil Fumigant Respondent Burden

Table 21 summarizes the burden and cost for paperwork activities per non-soil fumigant application for certified applicators and pesticide handlers for the five non-soil active ingredients subject to this ICR as listed in Table 2. The annual burden and cost are based on the time it takes to make a non-soil fumigation application and the number of applications made per year. Based feedback and data from external sources and registrants⁹, EPA determined that there are annually at least 192,600 non-soil fumigant applications. In addition, each initial non-soil fumigant application is estimated to take 4 hours, and subsequent applications to the same site are expected to take 2 hours.

Table 22 summarizes the burden and cost per year for all non-soil fumigations. The wage rates used for all respondents in this section, non-soil fumigation, are the same as those used earlier for soil fumigations. There are an estimated 23,378 applicators applying non-soil fumigants and 70,134 pesticide handlers of non-soil fumigants. This is based on an estimate of three pesticide handlers per one certified applicator. Data available to EPA show that on average each certified applicator is doing less

9 Sources: California Department of Pesticide Regulation ; Florida Department of Agriculture & Consumer Services ; US Department of Agriculture: APHIS ; Degesch America ; Douglass Products ; National Pest Management Association

than one fumigation per month or about 8.24 /year¹⁰. This is based on structural, non-soil fumigation data from two states (CA- 121,400 and FL- 62,900) with a high number of fumigations annually, and national commodity, non-soil fumigation data from USDA APHIS (18,000 methyl bromide and phosphine commodity/quarantine applications at ports)¹¹. Since comprehensive national level data on the total number of non-soil fumigations is not available to EPA, these data provide a low-end estimate of the annual average number of fumigations. One of the primary reasons why getting a comprehensive estimate (annual or otherwise) for non-soil fumigations is difficult is due to the nature of the sites, i.e. structures (houses, grain silos, railway cars, buildings in whole or part, etc.) and commodities (strawberries, ham, almonds, quarantine items, etc.). Some homes, buildings, and commodities may be fumigated every year by the same pest control company or under contract, such that the time required for all subsequent similar applications to that same site is reduced significantly. The current data does not make a distinction between initial and subsequent applications, but the annual number of applications by type (structural or commodity) does not fluctuate significantly, which lends some support to the fact that subsequent applications are occurring. In addition, information from one of the registrants stated that around 50% of applications are made to substantially similar sites. This information was used to refine the burden estimate below such that the first-year accounts for all applications, or 192,600, and the following years (2 and 3) are divided equally between initial (96,300) and subsequent (96,300) applications. Also, as noted earlier, each initial non-soil fumigant application is estimated to take 4 hours, and each subsequent application is estimated to take 2 hours.

Table 21. Certified Applicator and Pesticide Handler Burden and Cost for User Application Activities per Non-Soil Fumigant Application, By Activity (23,378 certified applicators and 70,134 handlers)

Category	Activity	Frequency	Certified applicators		Pesticide handlers		Hours	Cost ²
			Hours	Cost (\$37.31 /hr) ¹	Hours	Cost (\$27.35 /hr) ¹		
Read the Label	Learn/refresh understanding of fumigant requirements	Annual	0.50	\$18.66	0	\$0.00	0.5	\$18.66
Prepare a Fumigant Management Plan (FMP)	Prepare Initial Plan	Per initial application	4.00	\$149.24	0	\$0.00	4	\$149.24
	Prepare Subsequent Plan	Per subsequent Application	2.00	\$74.62	0	\$0.00	2	\$74.62
	File and Disclose Plan	Per application	0.05	\$1.87	0	\$0.00	0.05	\$1.87
Posting	Fill in information on Signs	Per application	0.13	\$4.85	0	\$0.00	0.13	\$4.85

¹⁰ 192,600 annual non-soil fumigant applications / 23,378 certified applicators = 8.24 /year

¹¹ Sources: California Department of Pesticide Regulation: <https://calpip.cdpr.ca.gov/main.cfm> , 2014-2016 ; Florida Department of Agriculture & Consumer Services: <https://www.freshfromflorida.com/Business-Services/Pest-Control> , 2015-2018 ; US Department of Agriculture APHIS, 2015-2017, [database not publicly available, but may be available upon request <https://www.aphis.usda.gov/aphis/banner/contactus>]

	Post and remove the Signs	Per application	0.00	\$0.00	1	\$27.35	1	\$27.35
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Numbers may not add due to rounding.

1 - Cost is equal to the hours times the wage rate (\$/hr).

2 - Total hours and cost are the sum of managerial, technical hours and cost.

Table 22. Total Annual Certified Applicator and Pesticide Handler Burden and Cost for Non-Soil User Application Activities (23,378 certified applicators and 70,134 handlers)

Year	Certified applicators		Pesticide handlers		Total	
	Hours	Cost (\$37.31 /hr) ¹	Hours	Cost (\$27.35 /hr) ¹	Hours	Cost ²
Year 1	816,757	\$30,473,204	192,600	\$5,267,610	1,009,357	\$35,740,814
Year 2	624,157	\$23,287,298	192,600	\$5,267,610	816,757	\$28,554,908
Year 3	624,157	\$23,287,298	192,600	\$5,267,610	816,757	\$28,554,908
3 Year Annual Average	624,157	\$23,287,298	192,600	\$5,267,610	816,757	\$28,554,908
3 Year Total	2,065,071	\$77,047,799	577,800	\$15,802,830	2,642,871	\$92,850,629

Numbers may not add due to rounding.

1 - Cost is equal to the hours times the wage rate (\$/hr).

2 - Total hours and cost are the sum of managerial, technical hours and cost.

(1a) Training Activities Related to Non-Soil Fumigations

Table 23 summarizes the burden and cost for certified applicators and pesticide handlers for training activities per trainee, while Table 24 summarizes the burden and cost per year of training activities. The annual burden and cost is based on the number of certified applicators and pesticide handlers involved with non-soil fumigant applications. EPA estimates that there are 23,378 certified applicators and 70,134 handlers. This is based on data submitted to EPA on the number of certified applicators and the assumption of three pesticide handlers per certified applicator. Information submitted to the EPA by a registrant who conducts sulfuryl fluoride trainings stated that the initial training takes about 4 hours and subsequent annual trainings take about 2 hours.

Table 23. Certified Applicator and Pesticide Handler Burden and Cost for Training Activities per Applicator, By Activity (23,378 certified applicators and 70,134 handlers)

Category	Activity	Frequency	Certified applicators		Pesticide handlers		Hours	Cost ²
			Hours	Cost (\$37.31 /hr) ¹	Hours	Cost (\$27.35 /hr) ¹		
Applicators must take registrant developed, and EPA approved fumigant training	Training as required by product labels	Initial Training	4.00	\$149.24	0.00	\$0.00	4.00	\$149.24
	Training as required by product labels	Subsequent/ Annual Training	2.00	\$74.62	0.00	\$0.00	2.00	\$74.62
	Retain/file training documentation as required by product labels	Annual	0.05	\$1.87	0.00	\$0.00	0.05	\$1.87
Handlers must receive fumigant specific information	Fumigant specific safety information as required by product labels	Annual	0.08	\$2.98	1.00	\$27.35	1.08	\$30.33

Numbers may not add due to rounding.

1 - Cost is equal to the hours times the wage rate (\$/hr).

2 - Total hours and cost are the sum of managerial, technical hours and cost.

Table 24. Total Annual Certified Applicator and Pesticide Handler Burden and Cost for Training Activities (23,378 certified applicators and 70,134 handlers)

Year	Certified applicators		Pesticide handlers		Total	
	Hours	Cost (\$37.31 /hr) ¹	Hours	Cost (\$27.35 /hr) ¹	Hours	Cost ²
Year 1	96,551	\$3,602,323	70,134	\$1,918,165	166,685	\$5,520,488
Year 2	49,795	\$1,857,857	70,134	\$1,918,165	119,929	\$3,776,022
Year 3	49,795	\$1,857,857	70,134	\$1,918,165	119,929	\$3,776,022
3 Year Annual Average	65,380	\$2,439,345	70,134	\$1,918,165	135,514	\$4,357,510
3 Year Total	196,141	\$7,318,036	210,402	\$5,754,495	406,543	\$13,072,531

Numbers may not add due to rounding.

1 - Cost is equal to the hours times the wage rate (\$/hr).

2 - Total hours and cost are the sum of managerial, technical hours and cost.

(1b) Registrants of Selected Non-Soil Fumigant Products with Stewardship Training Requirements

Table 25 below gives the burden estimate for sulfuryl fluoride registrants with structural fumigation products to complete and implement a stewardship plan for their products as describes as listed in Table 6. There are two sulfuryl fluoride registrants with registrations that make them subject to this stewardship requirement. Information submitted to the EPA by a registrant who conducts sulfuryl fluoride trainings stated that the technical labor hours for maintaining the trainings that currently occur are at least 160 hours. This is much higher than prior EPA estimates for the development of non-soil training materials. This high end estimate should be sufficient to cover the burden of materials development for the other registrant(s) (although it is possible that they have already developed materials or may cost share through a task force or agreement with other registrant(s)). Table 26 below shows that the average annual burden to both registrants is expected to be 364 hours and \$27,268.

Table 25. Non-Soil Fumigant Registrant Burden and Cost, By Activity (2 registrants)

Category	Activity	Frequency	Management		Technical		Clerical		Total	
			Hours	Cost \$141 /hr	Hours	Cost \$73 /hr	Hours	Cost \$47 /hr	Hours	Cost
	Develop/Maintain/ Disseminate training materials (either electronically, on paper, or in person)	Annually	10	\$1,406	160	\$11,661	12	\$568	182	\$13,634

Numbers may not add due to rounding.

1 - Cost is equal to the hours times the wage rate (\$/hr).

2 - Total hours and cost are the sum of managerial, technical hours and cost.

Table 26. Total Annual Non-Soil Fumigant Registrant Burden and Cost (2 registrants)

Year	Managerial		Technical		Clerical		Total	
	Hours	Cost (\$140.57/hr) ¹	Hours	Cost (\$72.88/hr) ¹	Hours	Cost (\$47.30/hr) ¹	Hours	Cost ²
Year 1	20	\$2,811	320	\$23,322	24	\$1,135	364	\$27,268
Year 2	20	\$2,811	320	\$23,322	24	\$1,135	364	\$27,268
Year 3	20	\$2,811	320	\$23,322	24	\$1,135	364	\$27,268
3 Year Annual Average	20	\$2,811	320	\$23,322	24	\$1,135	364	\$27,268
3 Year Total	120	\$8,434	960	\$69,965	72	\$3,406	1,092	\$81,805

Numbers may not add due to rounding.

1 - Cost is equal to the hours times the wage rate (\$/hr).

2 - Total hours and cost are the sum of managerial, technical hours and cost.

Table 27 summarizes the total average annual respondent burden and cost for non-soil fumigations. Burden hours and costs for Fumigant User Application Activities are measured on a per application basis for certified applicators and handlers. Burden hours and costs for Fumigant User Training Activities are measured on a per trainee basis for certified applicators and handlers. Burden hours and costs for Development, Maintenance and Distribution of Training & Informational Materials Activities are measured on a per stewardship plan basis for registrants. The average number of responses for all respondents is expected to be around 478,714. The burden hours are estimated to be 952,635 and the cost associated with this amount of time for all respondents is estimated to be \$32,939,686 annually.

Table 27. Total Annual Average Respondent Burden and Cost for Non-Soil Fumigations

Information Collection	Respondent	No. of Responses	Burden Hours	Burden Costs
Fumigant User Application Activities (Table 22)	Certified Applicators	192,600	624,157	\$23,287,298
	Pesticide Handlers	192,600	192,600	\$5,267,610
Fumigant User Training Activities (Table 24)	Certified Applicators	23,378	65,380	\$2,439,345
	Pesticide Handlers	70,134	70,134	\$1,918,165
Development, Maintenance and Distribution of Training & Informational Materials Activities (Table 26)	Registrants	2	364	\$27,268
Total Annual Average		478,714	952,635	\$32,939,686

6(f). Estimating Agency Burden and Cost for Non-Soil Fumigations

Table 28 shows the Agency burden for non-soil fumigations. The Agency will review the stewardship plans related to sulfuryl fluoride’s structural uses annually. This review is expected to take 124 hours and cost \$10,664.

Table 28. Agency Non-soil Fumigation Burden and Cost

Category	Activity	Frequency	Managerial		Technical		Total	
			Hours	Cost (\$129.84 /hr) ¹	Hours	Cost (\$85.51 /hr) ¹	Hours	Cost ²
Federal Compliance and Enforcement	Review stewardship plans	Annual	2	\$288.53	10	\$10,375.21	124	\$10,664

Numbers may not add due to rounding. Agency clerical staff are not impacted by this ICR.

1 - Cost is equal to the hours times the wage rate (\$/hr).

2 - Total hours and cost are the sum of managerial, technical hours and cost.

6(g). Bottom Line Burden Hours and Cost for Fumigations (Soil and Non-Soil)

Tables 29 and 30 summarize the total annual respondent and Agency burden for all fumigations (soil and non-soil), respectively. The total annual respondent burden hours for fumigation is 1,150,897, of which 198,261 hours are related to soil fumigations and 952,635 hours are related to non-soil fumigations. The total annual respondent burden cost for fumigation is \$40,131,505, of which \$7,191,819 is related to soil fumigations and \$32,939,686 is related to non-soil fumigations.

The total annual Agency burden hours for fumigations is 1,320, of which 1,196 are related to soil fumigations, and 124 are related to non-soil fumigations. The total annual Agency burden cost for fumigation is \$117,544, of which \$106,880 is related to soil fumigations, and \$10,664 is related to non-soil fumigations.

Table 29. Total Annual Respondent Burden Hour and Cost for Fumigations (Soil and Non-soil)

Respondent	Burden Hours	Burden Costs
<i>Soil Fumigations</i>		
Certified Applicators	166,152	\$6,199,113 ¹
Pesticide Handlers	27,303	\$746,737
Registrants	1,644	\$107,820
State Agencies	3,163	\$138,149
<i>Total (soil)</i>	<i>198,261</i>	<i>\$7,191,819</i>
<i>Non-soil Fumigations</i>		
Certified Applicators	689,537	\$25,726,643
Pesticide Handlers	262,734	\$7,185,775
Registrants	364	\$27,268
<i>Total (non-soil)</i>	<i>952,635</i>	<i>\$32,939,686</i>
Total (soil and non-soil)	1,150,897	\$40,131,505

Numbers may not add due to rounding.

¹ Costs for certified applicators also include the capital costs. See section 6(b)(1a) and Table 7.

Table 30. Total Annual Agency Burden Hour and Cost for Fumigations (Soil and Non-soil)

Fumigation Type	Burden Hours	Burden Costs
Soil Fumigation	1,196	\$106,880
Non-soil Fumigation	124	\$10,664
Total	1,320	\$117,544

Numbers may not add due to rounding.

6(f). Reasons for Change in Burden

For the soil fumigations, the change in burden hours from 197,646 to 198,261 is primarily due to updating the estimate of the number of applicators certified and handlers for soil fumigations. The change in cost is due to updating the wages to 2017 based on BLS data as described in section 6 (b). For the non-soil fumigations, the increase in burden from 0 to 952,635 hours is related to the implementation of statutory responsibilities associated with the registration review of pesticides. Certain uses of non-soil fumigants are eligible for continued registration, provided that the risk mitigation measures outlined in Proposed Interim Decisions are adopted. The activities covered by this ICR will be used to ensure that the soil and non-soil fumigant risk mitigation measures are adequately implemented, and accounts for the burden on respondents to adopt those risk mitigation measures.

The annual respondent burden for this ICR is estimated to be 1,150,897 burden hours for both soil (198,261) and non-soil fumigations (952,635). The difference in burden hours for these two types of fumigations is driven by the annual estimate of applications and number of certified applicators. It is estimated that there are on average 12,651 soil and 192,600 non-soil fumigation applications in a year. It is estimated that there are 4,884 soil and 23,378 non-soil certified applicators.

6(g). Burden Statement

The total estimated annual soil fumigation respondent paperwork burden to comply with this information collection activity is 198,261 hours. This estimate includes the time needed for certified applicators (166,152 hours), pesticide handlers (27,303 hours), registrants (1,644 hours), and states (3,163 hours) to conduct soil fumigant application related paperwork activities. For certified applicators, the burden for this collection is estimated to be 2.9 to 13.9 hours per soil fumigant application, and 0.08 to 8.13 hours per certified applicator per year for training. For pesticide handlers, the burden for this collection is estimated to average 1 hour per soil fumigant application, and 1 hour per pesticide handler per year for safety training. The burden for registrant task forces to implement fumigant training and distribute informational materials is estimated to be 274 hours per task force per year. For states, the burden for this collection is estimated to average 0.25 hours per application.

The total estimated annual non-soil fumigation respondent paperwork burden to comply with this information collection activity is 952,635 hours. This estimate includes the time needed for certified applicators (689,537 hours), pesticide handlers (262,734 hours), and registrants (364 hours) to conduct non-soil fumigant application related paperwork activities. For certified applicators, the burden for this collection is estimated to be 4.68 hours per non-soil fumigant application for initial applications and 2.68 for subsequent ones. For pesticide handlers, the burden for this collection is estimated to average 1 hour per application. The burden for sulfuryl fluoride registrants (structural uses only) to implement stewardship plans and distribute informational materials is estimated to be 182 hours per registrant per year. There is no state burden associated with non-soil fumigation as it relates to this collection request.

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 in title 40 of the CFR, after appearing in the **Federal Register**, are listed in 40 CFR Part 9, and included on the related collection instrument or form, if applicable.

To comment on the Agency's need for this information, the accuracy of the provided burden estimates and any suggested methods for minimizing respondent burden, including the use of automated collection techniques, EPA has established a public docket for this ICR under docket ID No. EPA-HQ-OPP-2018-0423, which is available for public viewing at the OPP Docket in the EPA Docket Center,

EPA West, Rm. 3334, 1200 Pennsylvania Ave, NW, Washington, DC 20460-0001. This docket facility is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The OPP Docket telephone number is (703) 305-5805. An electronic version of the public docket is available through Federal eRulemaking Portal, <http://www.regulations.gov>. Follow the online instructions for viewing documents and submitting comments. You can also send comments to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW, Washington, DC 20503, Attention: Desk Office for EPA. Please include the docket ID No. EPA-HQ-OPP-2018-0423 and OMB control number 2070-0197 in any correspondence.

7. ATTACHMENTS TO THE SUPPORTING STATEMENT

Attachments to the supporting statement are available in the public docket established for this ICR under docket identification number EPA-HQ-OPP-2018-0423. These attachments are available for online viewing at www.regulations.gov or otherwise accessed as described in section 6(f) of the supporting statement.

- Attachment A: 7 U.S.C. 136a - FIFRA section 3(c)(2)(B). Available online at <https://www.gpo.gov/fdsys/granule/USCODE-2011-title7/USCODE-2011-title7-chap6-subchapII-sec136a> or as part of this docket.
- Attachment B: 7 U.S.C. 136a - FIFRA Section 3(c)(5). Available online at <https://www.gpo.gov/fdsys/granule/USCODE-2011-title7/USCODE-2011-title7-chap6-subchapII-sec136a> or as part of this docket.
- Attachment C: Docket Numbers for Fumigant Reregistration Eligibility Decisions and Supporting Documents
- Attachment D: EPA OIG Report: Additional Measures Can Be Taken to Prevent Deaths and Serious Injuries From Residential Fumigations. Available online at https://www.epa.gov/sites/production/files/2016-2/documents/epaoig_20161212-17-p-0053.pdf or as part of this docket.
- Attachment E: Consultation Questionnaire Responses for the “Soil and Non-Soil Fumigant Risk Mitigation” Renewal ICR
- Attachment F: Worksheet for Estimating OPP ICR Wage Rates for Industry, State and EPA Labor Costs
- Attachment G: Fumigant Management Plans (FMP) Information and Templates. Available online only at <https://www.epa.gov/soil-fumigants/fumigant-management-plan-templates-phase-2-files-listed-chemical>
- Attachment H: Identifying Fumigant High-Use Areas Using Metam-Sodium as an Example