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

# EXECUTIVE SUMMARY

## Identification of the Information Collection – Title and Numbers

|  |  |
| --- | --- |
| **Title:** | Soil and Non-Soil Fumigant Risk Mitigation (Renewal) |
| **EPA ICR No.:** | 2451.03 |
| **OMB Control No.:** | 2070-0197 |
| **Docket ID No.:** | EPA-HQ-OPP-2022-0150 |

## Abstract

Pursuant to section 4(g) and section 3(g) of the Federal Insecticide, Fungicide, and Rodenticide Act (“FIFRA”, 7 U.S.C. § 136 et seq.), the Environmental Protection Agency (“EPA” or “the Agency”) determined that several soil and non-soil fumigants are eligible for continuing registration only if specific risk mitigation measures, are adopted and adequately implemented. The information collected under this Information Collection Request (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.

### Summary Total Burden and Costs

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Information Collection** | **Total Number of Respondents** | **Total number of Responses** | **Response per Respondents** | **Annual Burden (hours)** | **Total Cost ($)** |
| Certified Applicator and Pesticide Handler User Applications – Soil Fumigants **(Table 4)** | 20,300 | 12,651 | 0.62 | 165,306 | $4,199,334 |
| Certified Applicator and Pesticide Handler Training Activities – Soil Fumigants **(Table 6)** | 20,300 | 12,651 | 0.62 | 29,249 | $691,236 |
| Development and Distribution of Training and Informational Materials – Soil Fumigant Registrations **(Table 8)** | 6 | 6 | 1.00 | 1,644 | $122,228 |
| Paperwork for Compliance and Enforcement in High Use States – States **(Table 10)** | 20 | 12,651 | 632.5 | 3,163 | $149,893 |
| Non-soil Certified Applicator and Pesticide Handler User Application **(Table 13)** | 98,108 | 221,300 | 2.26 | 494,698 | $22,521,875 |
| Non-soil Certified Applicator and Pesticide Handler User – Training **(Table 15)** | 98,108 | 98,108 | 1.00 | 142,175 | $6,372,932 |
| Non-soil Fumigant Registration Stewardship Training **(Table 17)** | 2 | 2 | 1.00 | 5,504 | $448,984 |
| **Total Respondent** | **118,436** | **357,369** |  | **841,738** | **$34,506,482** |
| **Total Agency** |  |  |  | **1,220** | **$116,537** |

# SUPPORTING STATEMENT

## 1. Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection. Attach a copy of the appropriate section of each statute and regulation mandating or authorizing the collection of information.

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**. Further information is also available on 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 United States. 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:

1. Its composition is such as to warrant the proposed claims for it.
2. Its labeling and other material required to be submitted comply with the requirements of this Act.
3. It will perform its intended function without unreasonable adverse effects on the environment.
4. 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. Under Section 3(g) of FIFRA registrations of pesticides are periodically reviewed every 15 years. As part of these reassessments, the Agency develops 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”) for section 4 reregistration assessments and/or Interim Registration Review Decisions (“IDs”) for section 3 registration review assessments. EPA’s section 4 reregistration process was completed in 2009. All fumigants are now undergoing section 3 registration review. The Agency continues to implement these interim 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) and 3(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 and/or the IDs, 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 chemicals included in the 2009 review are metam sodium, metam potassium, dazomet, chloropicrin, and methyl bromide. The Agency’s decision took 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 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.

The IDs for the soil fumigants DMDS, chloropicrin, metam sodium, metam potassium, and methyl bromide have been completed (between 2020 and 2021). For the majority of the soil fumigants, only minor language changes were made in registration review. The Agency evaluated new data required by the REDs in order to refine its understanding of factors that affect fumigant emissions. Additionally, new technologies to reduce emissions continue to evolve.

Documents which support the reregistration or and registration review for the seven 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 seven soil fumigants listed in this section.

**Overview of Mandates Specific to Non-Soil Fumigants**

The Agency reviewed nine non-soil fumigants (methyl bromide, propylene oxide, sulfur dioxide, sodium metabisulfite, ethylene oxide, aluminum phosphate, magnesium phosphate, phosphine, and sulfuryl fluoride) separately pursuant to FIFRA sections 4(g) and 3(g). EPA determined that certain uses of these non-soil fumigants are eligible for continued registration only if specific risk mitigation measures, as outlined in the REDs and/or the IDs, are adopted and implemented by the registrants.

EPA’s 1998 RED for phosphine, aluminum and magnesium phosphide products included requirements for placarding of fumigated enclosures. In 2010, registrants voluntarily added label restrictions to reduce potential exposure to phosphine fumigants. These restrictions included the requirement of developing FMPs for applications. The Proposed Interim Decision (PID) for the phosphine fumigants, signed in 2020, included updates to the FMP language. Documents regarding the FMPs on these labels are included in the public docket located at regulations.gov using Docket No. EPA-HQ-OPP-2013-0081.

In 2006, EPA completed a RED for propylene oxide, which was corrected in 2008 and 2009. The RED outlined restrictions including placarding of fumigated enclosures for applications. In the 2021 ID for propylene oxide, EPA expanded restrictions to include requiring development of site-specific FMPs for applications of the products. Documents regarding these mitigation measures are included in the public docket located at regulations.gov using Docket No. EPA-HQ-OPP-2013-0156.

EPA’s 2008 RED for ethylene oxide outlined label restrictions for products in order to reduce potential exposure. These restrictions, which EPA implemented subsequent to the RED, include safety and awareness training. Documents regarding the training requirements on these labels are included in the public docket located at regulations.gov using Docket No. EPA-HQ-OPP-2013-0244.

In 2008, the EPA completed a RED for methyl bromide, which was amended in 2009. The 2020 the methyl bromide ID included updates to the FMP language (first required in the 2006 TRED)/RED) to include more specific language on what should be documented (e.g., expanding the emergency response plan requirements, credentials, or personnel) and how to help further mitigate risks to bystanders, handlers, and workers, and to help track incidents. Additional information and documents regarding the registration review of methyl bromide are available in the public docket located at regualtions.gov using Docket No. EPA-HQ-OPP-2013-0269.

In 2016, the EPA Office of Inspector General (“OIG”) 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 suggested that EPA implement labeling changes for all three brands of sulfuryl fluoride that would require the development of FMPs for sulfuryl fluoride applications, and that the Agency clearly define the criteria for meeting an applicator stewardship training requirement. In May 2021, the Agency proposed mitigation measures in the Sulfuryl Fluoride Draft Interim Re-entry Mitigation Measures Memorandum in response to the OIG recommendations. EPA is currently refining aspects of the mitigation and preparing a Response to Comments on the early mitigation, which it anticipates publishing in Spring 2023. The Agency will continue to work with sulfuryl fluoride registrants in the development and implementation of stewardship training programs and materials recommended in the OIG report, including additional elements beyond those recommended in the report. Information about EPA’s registration review of sulfuryl fluoride is available at regulations.gov using Docket No. EPA-HQ-OPP-2009-0136.

In the 2021 ID for sodium metabisulfite and sulfur dioxide, EPA added restrictions to reduce potential exposure, including the development of FMPs for applications of sulfur dioxide. Documents regarding the FMPs on the sulfur dioxide labels are included in the public docket located at regulations.gov using Docket No. EPA-HQ-OPP-2013-0598.Documents which support the Agency’s reregistration or registration actions for the nine non-soil fumigants can be found in the public docket at [www.regulations.gov](http://www.regulations.gov) under the docket numbers provided in **Attachment C**. This ICR documents the PRA paperwork burdens for the risk mitigation activities, and the PRA costs (as presented in question 12 of this document) for the non-soil fumigants listed in this section.

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

The information and activities required of registrants are an essential component of the Agency’s pesticide reregistration and registration 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 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, orchemicals 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. Analyses of the benefits of the fumigants 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 to the Interim Registration Review Decisions, 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 including sensory irritation (stinging in eyes, nose, throat), nausea, vomiting, dizziness, headache, weakness, and collapse, and at the extreme, death, to handlers, other workers who re-enter the treated area, and bystanders as delineated in the Fumigant REDs, IDs, and Supporting Documents described above. To reduce these exposures and address risks of concern, the Agency requires a number of mitigation measures designed to work together to address most risks, with a 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 toreduce 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. Prior to the REDs, although training was available in some areas of the country from states or registrants, there was 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]](#footnote-3)

In general, the existing information collection summarized for the soil fumigants in the previous ICR[[2]](#footnote-4) matches the information collection summarized here. The language for the mitigation measures has been updated but the PRA burdens remain the same. More information on the soil fumigants, including links to all of the risk mitigation implemented during the reregistration and registration review 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). Most 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. 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.

In the previous ICR2, EPA only accounted 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). Since the previous ICR, the Agency completed Interim Registration Review Decisions for propylene oxide, sulfur dioxide and sodium metabisulfite. As such updates for these cases are included in this ICR. 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. Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submission of responses, and the basis for the decision for adopting this means of collection. Also describe any consideration of using information technology to reduce burden.

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.

## 4. Describe efforts to identify duplication. Show specifically why any similar information already available cannot be used or modified for use for the purposes described in Item 2 above.

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.

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

The registration 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.

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

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.

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

***a) requiring respondents to report information to the agency more often than quarterly;***

***b) requiring respondents to prepare a written response to a collection of information in fewer than 30 days after receipt of it;***

***c) requiring respondents to submit more than an original and two copies of any document;***

***d) requiring respondents to retain records, other than health, medical, government contract, grant-in-aid, or tax records, for more than three years;***

***e) in connection with a statistical survey, that is not designed to produce valid and reliable results that can be generalized to the universe of study;***

***f) requiring the use of a statistical data classification that has not been reviewed and approved by OMB;***

***g) that includes a pledge of confidentiality that is not supported by authority established in statute or regulation, that is not supported by disclosure and data security policies that are consistent with the pledge, or which unnecessarily impedes sharing of data with other agencies for compatible confidential use; or***

***h) requiring respondents to submit proprietary trade secrets, or other confidential information unless the agency can demonstrate that it has instituted procedures to protect the information's confidentiality to the extent permitted by law.***

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.

## 8. If applicable, provide a copy and identify the date and page number of publication in the Federal Register of the agency’s notice, required by 5 CFR 1320.8(d), soliciting comments on the information collection prior to submission to OMB. Summarize public comments received in response to that notice and describe actions taken in response to the comments. Specifically address comments received on cost and hour burden.

## Describe efforts to consult with persons outside EPA to obtain their views on the availability of data, frequency of collection, the clarity of instructions and recordkeeping, disclosure, or reporting format (if any), and on the data elements to be recorded, disclosed, or report.

Pursuant to 5 CFR 1320.8(d), EPA published a notice in the Federal Register on June 24, 2022 (87 FR 37856; FRL-9513-01-OCSPP), announcing the planned renewal of this information collection activity, soliciting public comment on specific aspects of the ICR and providing a 60-day public comment period.

The EPA also consulted nine stakeholders, specifically asking them for their assessment of the regulatory burden estimates expressed by the Agency in this ICR **Attachment D**. Four stakeholders provided responses. The stakeholders consulted were:

1. Douglas Products
2. Bergson & Campbell LLC
3. Georgia Department of Agriculture
4. Wiley Rein LLP
5. Degesch America, Inc
6. AAPCO/SFIREG
7. National Pest Management Association
8. STERIS
9. Clemson University

Of those consulted, EPA received comments from Douglas Products, the Florida Pest Management Association (FPMA), National Pest Management Association (NPMA), and Pest Control Operators of California (PCOC). Substantive comments, comments of a broader regulatory nature, and the Agency’s responses to those comments are summarized below. The Agency thanks all commenters for their comments and has considered them in developing this ICR.

**Stakeholder Comments:** Commenters claim the ICR omits the impact of EPA’s Proposed Mitigation Measures for sulfuryl fluoride. The current ICR Supporting Statement does not account for the information collection burdens associated with EPA’s proposed mitigation measures for sulfuryl fluoride products registered for residential fumigation. Commenters provided attachments including comments they had previously submitted to the sulfuryl fluoride docket, EPA-HQ-OPP-2009-0136, in response to the Agency’s, *Sulfuryl Fluoride* *Draft Interim Re-Entry Mitigation Measures Memorandum* in 2021. Specific concerns listed in the comments including the “Assessment of Sulfuryl Fluoride Draft Interim Re-Entry Mitigation Measures,” initiated by Douglas Products, outline the proposed mitigation they consider unnecessary, including the proposal to require Fumigant Management Plans (FMPs) for residential fumigations, which are currently not required.

**Agency Response:** The Agency thanks the commenters for their comments on the potential ICR burden on industry from the May 2022 Sulfuryl Fluoride Draft Interim Re-entry Mitigation Measures Memorandum. The Agency is aware that some of the proposals described in the early mitigation proposal for sulfuryl fluoride, if finalized, could result in additional paperwork or other burden to a portion of the fumigation industry, specifically related to residential fumigations. However, at this time the Agency is still considering the comments on the early mitigation proposal for sulfuryl fluoride and is working on refinements to the mitigation that will be published in a Final Re-entry Mitigation Measures Memorandum. Until the final document publishes, there are no additional paperwork requirements or additional burden to the fumigation industry from this proposal. Specifics listed in the comments previously submitted to the sulfuryl fluoride docket EPA-HQ-OPP-2009-0136, which were intended as the response to the Agency’s Draft Interim Re-Entry Mitigation Measures Memorandum, will be addressed in the response to that proposal and will not be addressed here. The Agency is committed to working with stakeholders to minimize any potential impacts from future requirements by considering timed implementation requirements to be included as part of the Final Re-entry Mitigation Measures Memorandum.

**Stakeholder Comments:** Commentors also provided specific examples of current requirements for residential fumigation, including comments on the current burden estimates, the estimate provided for non-soil fumigants in Tables 12 through 14 for hourly cost for Certified Applicator (Certified Operator and Special Identification [SPID] cardholder in Florida) and Pesticide Handler (Second trained person - Fumigation Identification [FID] cardholder in Florida) are inadequate.In Florida, the hourly cost for a Certified Operator or SPID is about $50.00/hour and for a second trained personal (FID) is about $40.00/hour. These estimates include wages, benefits, workman’s compensation insurance, and costs to maintain employee certifications. In California, the hourly cost for a Field representative (i.e., certified applicator in the California structural fumigation industry) is about $50.00/hour and for a second trained personal (i.e., pesticide handler) is about $40.00/hour. These estimates include wages, benefits, workman’s compensation insurance, and costs to maintain employee certifications. Additionally, these states also provided information on their number of non-soil sulfuryl fluoride fumigations. Each year, on average about 120,000 structural fumigations are performed in California, and 70,000 in Florida.

**Agency Response:** The Agency thanks the commenters for their comments on the potential ICR burden on industry from the May 2022 Sulfuryl Fluoride Draft Interim Re-entry Mitigation Measures Memorandum. The wages provided for non-soil handlers and applicators were used to update the relevant tables with associated wages in this ICR.

**Stakeholder Comments:** NPMA provided information on the number of sulfuryl fluoride fumigated dwellings in both Florida and California. Each year, on average about 120,000 structural fumigations are performed in California and 60,000 in Florida. It is uncommon for an individual dwelling to be fumigated for drywood termites every year. However, certain non-residential facilities which fumigate for stored product pests, may have scheduled, or contracted services. Examples of non-residential facilities include warehouses, and food processing plants.

**Agency Response:** The Agency thanks the commenters for their comments on the potential ICR burden on industry from the May 2022 Sulfuryl Fluoride Draft Interim Re-entry Mitigation Measures Memorandum. The information provided on the number of non-soil applications with sulfuryl fluoride were used to update EPA’s estimates for non-soil applications, along with information provided from the states of California and Florida about their non-soil applications.

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

This question is not applicable to this ICR

## 10. Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation, or agency policy. If the collection requires a system of records notice (SORN) or privacy impact assessment (PIA), those should be cited and described here.

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

## 11. Provide additional justification for any questions of a sensitive nature, such as sexual behavior and attitudes, religious beliefs, and other matters that are commonly considered private. This justification should include the reasons why the agency considers the questions necessary, the specific uses to be made of the information, the explanation to be given to persons from whom the information is requested, and any steps to be taken to obtain their consent.

No information of a sensitive or private nature is requested in conjunction with these information collection activities, and these information collection activities comply with the provisions of the Privacy Act of 1974 and OMB Circular A-108, as amended, “Responsibilities for the Maintenance of Records about Individuals by Federal Agencies.”

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

1. **Indicate the number of respondents, frequency of response, annual hour burden, and an explanation of how the burden was estimated. Unless directed to do so, agencies should not conduct special surveys to obtain information on which to base hour burden estimates. Consultation with a sample (fewer than 10) of potential respondents is desirable. If the hour burden on respondents is expected to vary widely because of differences in activity, size, or complexity, show the range of estimated hour burden, and explain the reasons for the variance. Generally, estimates should not include burden hours for customary and usual business practices.**
2. **If this request for approval covers more than one form, provide separate hour burden estimates for each form and aggregate the hour burdens.**
3. **Provide estimates of annualized cost to respondents for the hour burdens for collections of information, identifying and using appropriate wage rate categories. The cost of contracting out or paying outside parties for information collection activities should not be included here. Instead, this cost should be included under ‘Annual Cost to Federal Government’**

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 or are/will be in the process of amending 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 in **Attachment H**.

|  |  |  |
| --- | --- | --- |
| **Affected Respondents** | **NAICS Code** | **Definition** |
| **\*Soil and non-soil fumigant users** | NAICS 111000 | Agriculture, Forestry, Fishing, and Hunting |
| **Soil and non-soil fumigant registrants** | NAICS 325300 | Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing |
| **State and Tribal lead agencies** | NAICS 999200 | State Government |

**\*specifically certified applicators and agriculture pesticide handlers**

The required mitigation measures may result in a burden, applicable under the 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 and Tribes: States and Tribes are involved in the enforcement of soil fumigant label requirements and would receive notification of fumigations in their state if required.

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 nine non-soil fumigant chemicals. These measures are required to be implemented 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 understand the requirements, post buffer signs, and prepare an 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 for continued registration or reregistration under FIFRA. The programs and activities described 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.” Most fumigants are RUPs, which must be applied by, or under the 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 | 035602 |
| Metam potassium | 039002 |
| Metam sodium | 039003 |
| Methyl bromide | 053201 |

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

|  |  |
| --- | --- |
| **Active Ingredient** | **Pesticide Chemical (PC) Code** |
| Aluminum Phosphide | 066501 |
| Ethylene Oxide | 042301 |
| Magnesium Phosphide | 066504 |
| Methyl bromide | 053201 |
| Phosphine | 066500 |
| Propylene Oxide | 042501 |
| Sodium Metabisulfite | 111409 |
| Sulfur Dioxide | 077601 |
| Sulfuryl Fluoride | 078003 |

Users of soil and non-soil fumigants will need to engage in the activities (identified in **Attachment H: Table 1 and 2**), respectively, to assure compliance with fumigant label requirements. Note that compliance with the label-required training is a condition of product use. Because most 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 pursuant to 40 CFR 171.7(b)(iii)(A).

Registrants of soil and non-soil fumigants will need to engage in the activities (identified in **Attachment H: Table 3 and 4**) 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.

State Lead Agencies (SLAs) may engage in the activities (Identified in **Attachment H: Table 5**). Although not required, pesticide SLAs may also provide applicators EPA-approved alternatives to registrant-sponsored training.

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.

**Estimating Respondent Labor Cost**

* *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 2021 dollars. Since the last ICR renewal, there are new NAICS codes available that better align with some of the sectors included in this ICR. The availability of newer and more specific NAICS codes led to an update this ICR cycle for certified applicators and pesticide handlers.
* *Wage Rates:* Soil fumigant 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 45.0% 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 the soil fumigant wage rates used in this document are presented in **Attachment E**. The non-soil fumigant wages were increased to $50/hour for certified applicators, and $40/hour for pesticide handlers based on comments received on the draft of this ICR. It was reported that these non-soil fumigant wage estimates include wages, benefits, workman’s compensation insurance, and the costs to maintain employee certifications.
* *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 providedby 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 pesticide handlers, registrants, and states. The cost associated with each is described in this section.

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 an 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 pesticide 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), pesticide handlers are required to receive general pesticide safety training annually. 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. 2070-0190)) 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. 2070-0190). There are an estimated 5,075 certified applicators applying soil fumigants and 15,225 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 a 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 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 9 and 10**.

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 3, 4, 5, and 6**; burden for registrants of soil fumigant products in **Tables 7 and 8**; and burden for states in **Tables 9 and 10**.

### (1) Certified Applicators and Pesticide Handlers

The estimated costs of paperwork activities for certified applicators and pesticide handlers are shown in Tables 3, 4, 5, and 6, along with burden. Tables 3 and 4 list the estimated costs associated with paperwork for user application activities, while Tables 5 and 6 list the costs associated with training activities.

The wage rates for certified applicators and pesticide handler have been updated to new NAICS codes which better align with these job titles. Whereas in the past, they were based on NAICS code 111000 - Agriculture, Fishing, Forestry, and Hunting, now certified applicators are based 37-3012 Pesticide Handlers, Sprayers, and Applicators, Vegetation, and pesticide handlers are based on 45-2092 Farmworkers and Laborers, Crop, Nursery, and Greenhouse.[[3]](#footnote-5) Similar to what was done in the past, wages are still loaded to account for some benefits paid by the employer, but do not account for overhead.

### 1(a) User Application Activities for Soil Fumigant Applications

**Table 3** summarizes the burden and cost for paperwork activities per soil fumigant application for certified applicators and pesticide handlers. **Table 4** summarizes the burden and cost per year. The annual burden and cost are 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. EPA previously estimated that the sign cost is $0.09 per sheet3 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 2021, to account for the general increase in price-level since that time, the total annual cost is $6,153. This cost is inflated using the CPI (consumer price index) inflation calculator from BLS4. With 37,953 applications over 3 years, the total estimated 3-year cost is $18,459.

Monitoring devices must be used during methyl bromide and chloropicrin applications and is required 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 $405[[4]](#footnote-6). When these costs are adjusted to reflect 2021 price levels, the cost for the tube is $19 and $481 for the pump. Assuming one tube per application, the total annual cost of the tubes is $240,369 ($19 per tube per application multiplied by 12,651 applications). Over 3 years, the total cost of the tubes is $721,107. Assuming each certified applicator (there are an estimated 5,075 certified applicators) purchases one new pump every 3 years, the total 3-year cost for the pumps is $2,441,075, for an average of $813,692 per year. The 3-year total cost of materials is $ 3,180,641 (sign posts: $18,459, tubes: $721,107, and pumps: $2,441,075). The annual total cost of materials $1,060,214.

**Table 3. Certified Applicator and Pesticide Handler Burden and Cost for User Application Activities per Soil Fumigant Application, By Activity (5,075 certified applicators and 15,225 handlers)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Category** | **Activity** | **Frequency** | **Certified applicators** | | **Pesticide handlers** | | **Total** | |
| **Hours** | **Cost**  **($25.71 /hr)1** | **Hours** | **Cost ($21.72**  **/hr)1** | **Hours** | **Cost2** |
| Read the Label | Learn/refresh understanding of fumigant requirements | Annual | 0.50 | $12.85 | 0.00 | $0.00 | **0.50** | **$12.85** |
| Posting | Fill In Information on Signs | Per application | 0.13 | $3.34 | 0.00 | $0.00 | **0.13** | **$3.34** |
| Post and remove the Signs | Per application | 0.00 | $0.00 | 1.00 | $21.72 | **1.00** | **$21.72** |
| 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 | $4.37 | 0.00 | $0.00 | **0.17** | **$4.37** |
| Send the notice via paper or electronic means. | Per application | 0.05 | $1.29 | 0.00 | $0.00 | **0.05** | **$1.29** |
| Prepare a Fumigant Management Plan (FMP) and a post-application summary (PAS) | Prepare Initial Plan | Per initial application | 12.00 | $308.50 | 0.00 | $0.00 | **12.00** | **$308.50** |
| Prepare Subsequent Plan | Per subsequent Application | 1.00 | $25.71 | 0.00 | $0.00 | **1.00** | **$25.71** |
| Create Post Fumigation Report | Per application | 1.00 | $25.71 | 0.00 | $0.00 | **1.00** | **$25.71** |
| File and Disclose Plan | Per application | 0.05 | $1.29 | 0.00 | $0.00 | **0.05** | **$1.29** |
| **Total Burden and Cost Per Initial and Subsequent Application3** | | | | | | | | |
|  |  | Initial Application | 13.90 | 357.35 | 1.00 | 21.72 | **14.90** | **$379.07** |
|  |  | Subsequent Application | 2.90 | 74.55 | 1.00 | 21.72 | **3.90** | **$96.28** |

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 4. Total Annual Certified Applicator and Pesticide Handler Burden and Cost for User Application Activities (5,075 certified applicators and 15,225 handlers)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Year** | **Certified applicators** | | **Pesticide handlers** | | **Total** | |
| **Hours** | **Cost**  **($25.71 /hr)1** | **Hours** | **Cost**  **($21.72/hr)1** | **Hours** | **Cost2** |
| Year 1 | 175,849 | $4,520,811 | 12,651 | $274,792 | 188,500 | $4,795,604 |
| Year 2 | 175,849 | $4,520,811 | 12,651 | $274,792 | 188,500 | $4,795,604 |
| Year 3 | 106,268 | $2,732,001 | 12,651 | $274,792 | 118,919 | $3,006,794 |
| **Annual Average** | **152,655** | **$3,924,541** | **12,651** | **$274,792** | **165,306** | **$4,199,334** |
| **3 Year**  **Total** | **457,966** | **$11,773,624** | **37,953** | **$824,377** | **495,919** | **$12,598,001** |

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 Table 4 from Attachment H 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:

Initial Applications Subsequent Applications

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.

### 1(b) Training Activities Related to Soil Fumigations

**Table 5** summarizes the burden and cost for certified applicators and pesticide handlers for training activities per trainee, while **Table 6** summarizes the burden and cost per year of training activities. The annual burden and cost are based on the number of certified applicators and pesticide handlers involved with soil fumigant applications. EPA estimates that there are 5,075 certified applicators and 15,225 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 5. Certified Applicator and Pesticide Handler Burden and Cost for Training Activities per Applicator, By Activity (5,075 certified applicators and 15,225 handlers)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Category** | **Activity** | **Frequency** | **Certified applicators** | | **Pesticide handlers** | | **Total** | |
| **Hours** | **Cost**  **($25.71 /hr)1** | **Hours** | **Cost ($21.72**  **/hr)1** | **Hours** | **Cost2** |
| 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 | $205.67 | 0.00 | $0.00 | **8.00** | **$205.67** |
| Retain training documentation as required by product labels approved in accordance with 3(c)(5) | Once Every 3 Years | 0.05 | $1.29 | 0.00 | $0.00 | **0.05** | **$1.29** |
| Handlers must receive fumigant specific information | Fumigant specific safety information as required by product labels approved in accordance with 3(c)(5) | Annual3 | 0.08 | $2.06 | 1.00 | $21.72 | **1.08** | **$23.78** |

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 6. Total Annual Certified Applicator and Pesticide Handler Burden and Cost for Training Activities (5,075 certified applicators and 15,225 handlers)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Year** | **Certified applicators** | | **Pesticide handlers** | | **Total** | |
| **Hours** | **Cost**  **($25.71 /hr)1** | **Hours** | **Cost**  **($21.72 /hr)1** | **Hours** | **Cost2** |
| Year 1 | 41,260 | $1,060,726 | 15,225 | $330,702 | 56,485 | $1,391,429 |
| Year 2 | 406 | $10,438 | 15,225 | $330,702 | 15,631 | $341,140 |
| Year 3 | 406 | $10,438 | 15,225 | $330,702 | 15,631 | $341,140 |
| **Annual Average** | **14,024** | **$360,534** | **15,225** | **$330,702** | **29,249** | **$691,236** |
| **3 Year**  **Total** | **42,072** | **$1,081,602** | **45,675** | **$992,107** | **87,747** | **$2,073,708** |

Numbers may not add due to rounding.

1 - Cost is equal to the total hours and costs as listed Table 5 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 (5,075 applicators)

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

### 1(c) Registrants of Soil Fumigant Products

The estimated paperwork costs for soil fumigant registrants are shown in **Tables 7 and 8**. 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 7 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 8 shows the annual cost across all registrants of the activities taking into account the frequency of the activity.

**Table 7. Soil Fumigant Registrant Burden and Cost, By Activity**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Category** | **Activity** | **Frequency** | **Management** | | **Technical** | | **Clerical** | | **Total** | |
| **Hours** | **Cost**  **($151.47**  **/hr)1** | **Hours** | **Cost**  **($81.43**  **/hr)1** | **Hours** | **Cost ($55.66**  **/hr)1** | **Hours** | **Cost2** |
| Fumigant Handler Safety Information | Disseminate training materials (either electronic or paper) | Annually | 0.00 | $0.00 | 0.00 | $0.00 | 12.00 | $668 | **12.00** | **$668** |
| Community Outreach Program | Implement the program in high fumigant use areas | Annually | 40.00 | $6,059 | 40.00 | $3,257 | 40.00 | $2,226 | **120.00** | **$11,542** |
| First Responder Training | Disseminate the training in high fumigant use areas | Annually | 0.00 | $0.00 | 0.00 | $0.00 | 120.00 | $6,679 | **120.00** | **$6,679** |
| Fumigant Training | Maintain/Disseminate training materials (either electronic, paper, or in person) | Annually | 0.00 | 0.00 | 10.00 | $814 | 12.00 | $668 | **22.00** | **$1,482** |

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, and clerical hours and cost.

#### **Table 8. Total Annual Registrant Burden and Cost (6 registrant task forces)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Year** | **Managerial** | | **Technical** | | **Clerical** | | **Total** | |
| **Hours** | **Cost**  **($151.47**  **/hr)1** | **Hours** | **Cost**  **($81.43**  **/hr)1** | **Hours** | **Cost**  **($55.66**  **/hr)1** | **Hours** | **Cost2** |
| Year 1 | 240 | 36,352 | 300 | 24,430 | 1,104 | $61,447 | 1,644 | $122,228 |
| Year 2 | 240 | 36,352 | 300 | 24,430 | 1,104 | $61,447 | 1,644 | $122,228 |
| Year 3 | 240 | 36,352 | 300 | 24,430 | 1,104 | $61,447 | 1,644 | $122,228 |
| **Annual Average** | **240** | **$36,352** | **300** | **$24,430** | **1,104** | **$61,447** | **1,644** | **$122,228** |
| **3 Year**  **Total** | **720** | **$109,056** | **900** | **$73,289** | **3,312** | **$184,340** | **4,932** | **$366,685** |

Numbers may not add due to rounding.

1 - Cost is equal to the total hours and cost in Table 7 multiplied times the estimated number of registrant task forces (6). There are 14 registrants represented by the 6 registrant task forces.

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

### 1(d) State Activities Related to Soil Fumigations

The burden for states per application for compliance and enforcement activities is shown in **Table 9**. 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 use[[5]](#footnote-7), and currently, EPA estimates that there are 20 states that account for the majority of fumigant use and are considered high use: Washington, California, Idaho, Florida, Georgia, North Carolina, Oregon, Wisconsin, Minnesota, North Dakota, Michigan, South Carolina, Virginia, Arizona, Arkansas, Colorado, New Mexico, Missouri, Nebraska, and Texas. These states were selected based on an EPA analysis of fumigant pesticide usage and U.S. crop acreage grown6. Using this same methodology, the 20 aforementioned states were chosen based on the most recent usage data available to EPA for soil fumigants. Costs are measured on a per application basis. Annual burden, assuming more than 12,651 fumigant applications per year, is shown in **Table 10**. The Agency estimates that all of the paperwork burden for responding to this ICR will be conducted by clerical (or administrative) staff.

#### **Table 9. State Burden and Cost per Application**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Year** | **Activity** | **Frequency** | **Clerical** | | **Total** | |
| **Hours** | **Cost**  **($47.39/hr)1** | **Hours** | **Cost2** |
| State Compliance and Enforcement | Paperwork for Compliance and Enforcement | Per application | 0.25 | $11.85 | 0.25 | $11.85 |

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 10. Total Annual State Burden and Cost**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Year** | **Clerical** | | **Total** | |
| **Hours** | **Cost**  **($47.39 /hr)1** | **Hours** | **Cost2** |
| Year 1 | 3,163 | $149,893 | 3,163 | $149,893 |
| Year 2 | 3,163 | $149,893 | 3,163 | $149,893 |
| Year 3 | 3,163 | $149,893 | 3,163 | $149,893 |
| **Annual Average** | **3,163** | **$149,893** | **3,163** | **$149,893** |
| **3 Year Total** | **9,488** | **$449,679** | **9,488** | **$449,679** |

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 9 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:

Initial Applications Subsequent Applications

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.

**Table 11** summarize the total annual respondent burden and cost for soil fumigations. The burden hours are estimated to be 199,362 and the cost associated with this amount of time for all respondents is estimated to be $6,222,905 annually.

#### **Table 11. Total Annual Respondent Burden and Cost for Soil Fumigations**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Information Collection** | **Respondent** | **No. of Responses** | **Burden Hours** | **Costs** |
| Fumigant User Application Activities (Table 4) | Certified Applicators | 12,651 | 152,655 | $4,984,755 1 |
| Pesticide Handlers | 12,651 | 12,651 | $274,792 |
| Fumigant Training Activities (Table 6) | Certified Applicators | 5,075 | 14,024 | $360,534 |
| Pesticide Handlers | 15,225 | 15,225 | $330,702 |
| Distribution of Training & Informational Materials (Table 8) | Registrants | 6 | 1,644 | $122,228 |
| Paperwork for Compliance and Enforcement in High Use States (Table 10) | State Agencies | 12,651 | 3,163 | $149,893 |
| **Total Annual Average** |  | **58,259** | **199,362** | **$6,222,905** |

1 The total cost here includes the certified applicator cost for user application activities ($3,924,541; see Table 4) and the annual capital costs for purchasing buffer zone signs and air monitoring equipment (pumps and tubes) $1,060,214.

**Table 12** summarizes the burden and cost for paperwork activities per non-soil fumigant application for certified applicators and pesticide handlers for the nine 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 on feedback and data from external sources, registrants[[6]](#footnote-8), and comments received on the draft ICR, EPA determined that there are annually at least 221,300 non-soil fumigant applications. Each initial non-soil fumigant application is estimated to take 1 hour, and subsequent applications to the same site are expected to take 1 hour.

**Table** **13** summarizes the burden and cost per year for all non-soil fumigations. The wages for non-soil fumigations were increased to $50/hour for certified applicators and $40/hour for pesticide handlers based on comments received on the draft of this ICR. There are an estimated 24,527 applicators applying non-soil fumigants and 73,581 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 than one fumigation per month or about 9 per year[[7]](#footnote-9). This is based on non-soil fumigation data from two states (CA- 120,000 and FL- 70,000 sulfuryl fluoride applications to structures) with a high number of fumigations annually, and national non-soil fumigation data from USDA APHIS (18,000 methyl bromide and phosphine commodity/quarantine applications at ports) [[8]](#footnote-10). 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 non-soil 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.). Information received in the comments for this ICR regarding sulfuryl fluoride, stated that subsequent applications are not common, roughly 7% of applications, and that it takes roughly the same amount of time to complete a FMP, whether it is the initial or secondary application. This information was used to refine the burden estimate for the state reported (CA, FL) non-soil fumigation applications. Based on this information, EPA estimated that there are at least 221,300[[9]](#footnote-11) non-soil fumigant applications annually, and that it takes about an hour to complete a non-soil FMP.

#### **Table 12. Certified Applicator and Pesticide Handler Burden and Cost for User Application Activities per Non-Soil Fumigant Application, By Activity (24,527 certified applicators and 73,581 handlers)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Category** | **Activity** | **Frequency** | **Certified applicators** | | **Pesticide handlers** | | **Hours** | **Cost2** |
| **Hours** | **Cost**  **($50 /hr)1** | **Hours** | **Cost ($40/hr)1** |
|  |  |
| Read the Label | Learn/  refresh understanding of fumigant requirements | Annual | 0.50 | $25.00 | 0 | $0.00 | 0.5 | $25.00 |
| Prepare a Fumigant Management Plan (FMP) | Prepare Initial Plan | Per initial application | 1.00 | $50.00 | 0 | $0.00 | 1 | $50.00 |
| Prepare Subsequent Plan | Per subsequent Application | 1.00 | $50.00 | 0 | $0.00 | 1 | $50.00 |
| File and Disclose Plan | Per application | 0.05 | $2.50 | 0 | $0.00 | 0.05 | $2.50 |
| Posting | Fill in information on Signs | Per application | 0.13 | $6.50 | 0 | $0.00 | 0.13 | $6.50 |
| Post and remove the Signs | Per application | 0.00 | $0.00 | 1 | $40.00 | 1 | $40.00 |

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 13. Total Annual Certified Applicator and Pesticide Handler Burden and Cost for Non-Soil User Application Activities (24,527 certified applicators and 73,581 handlers)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Year** | **Certified applicators** | | **Pesticide handlers** | | **Total** | |
| **Hours** | **Cost ($50 /hr)1** | **Hours** | **Cost ($40/hr)1** | **Hours** | **Cost2** |
| Year 1 | 24,527 | 257,704 | $12,885,175 | 221,300 | $8,852,000 | 479,004 |
| Year 2 | 24,527 | 273,398 | $13,669,875 | 221,300 | $8,852,000 | 494,698 |
| Year 3 | 24,527 | 273,398 | $13,669,875 | 221,300 | $8,852,000 | 494,698 |
| **Annual Average** | **24,527** | **273,398** | **$13,669,875** | **221,300** | **$8,852,000** | **494,698** |
| **3 Year Total** | **73,581** | **804,499** | **$40,224,925** | **663,900** | **$26,556,000** | **1,468,399** |

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.

### 1(e) Training Activities Related to Non-Soil Fumigations

**Table 14** summarizes the burden and cost for certified applicators and pesticide handlers for training activities per trainee, while **Table 15** summarizes the burden and cost per year of training activities. The annual burden and cost are based on the number of certified applicators and pesticide handlers involved with non-soil fumigant applications. EPA estimates that there are 24,527 certified applicators and 73,581 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 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 14. Certified Applicator and Pesticide Handler Burden and Cost for Training Activities per Applicator, By Activity (24,527 certified applicators and 73,581 handlers)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Category** | **Activity** | **Frequency** | **Certified applicators** | | **Pesticide handlers** | | **Hours** | **Cost2** |
| **Hours** | **Cost ($50 /hr)1** | **Hours** | **Cost ($40/hr)1** |
|  |  |
| Applicators must take registrant developed, and EPA approved fumigant training | Training as required by product labels | Initial Training | 4.00 | $200.00 | 0.00 | $0.00 | 4.00 | $200.00 |
| Training as required by product labels | Subsequent/ Annual Training | 2.00 | $100.00 | 0.00 | $0.00 | 2.00 | $100.00 |
| Retain/file training documentation as required by product labels | Annual | 0.05 | $2.50 | 0.00 | $0.00 | 0.05 | $2.50 |
| Handlers must receive fumigant specific information | Fumigant specific safety information as required by product labels | Annual | 0.08 | $4.00 | 1.00 | $40.00 | 1.08 | $44.00 |

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 15. Total Annual Certified Applicator and Pesticide Handler Burden and Cost for Training Activities (24,527 certified applicators and 73,581 handlers)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Year** | **Certified applicators** | | **Pesticide handlers** | | **Total** | |
| **Hours** | **Cost ($50 /hr)1** | **Hours** | **Cost ($40/hr)1** | **Hours** | **Cost2** |
| Year 1 | 101,297 | $5,064,826 | 73,581 | $2,943,240 | 174,878 | $8,008,066 |
| Year 2 | 52,243 | $2,612,126 | 73,581 | $2,943,240 | 125,824 | $5,555,366 |
| Year 3 | 52,243 | $2,612,126 | 73,581 | $2,943,240 | 125,824 | $5,555,366 |
| **Annual Average** | **68,594** | **$3,429,692** | **73,581** | **$2,943,240** | **142,175** | **$6,372,932** |
| **3 Year Total** | **205,782** | **$10,289,077** | **220,743** | **$8,829,720** | **426,525** | **$19,118,797** |

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.

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

**Table 16** below gives the burden estimate for sulfuryl fluoride registrants with structural fumigation products to complete and implement a stewardship plan for their products as listed in Table 4. There are two sulfuryl fluoride registrants with registrations that make them subject to this stewardship requirement. Information submitted to 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 2,730 hours[[10]](#footnote-12). 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 be to cost share through a task force or agreement with other registrant(s)). **Table 17** below shows that the average annual burden to both registrants is expected to be 2,752 hours and $224,492.

#### **Table 16. Non-Soil Fumigant Registrant Burden and Cost, By Activity (2 registrants)**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Category** | **Activity** | **Frequency** | **Managerial** | | **Technical** | | **Clerical** | | **Total** | |
| **Hours** | **Cost**  **($151.47**  **/hr)1** | **Hours** | **Cost**  **($81.43**  **/hr)1** | **Hours** | **Cost ($55.66**  **/hr)1** | **Hours** | **Cost** |
|  | Develop/Maintain/Disseminate training materials (either electronically, on paper, or in person) | Annually | 10 | $1,515 | 2,730 | $222,309 | 12 | $668 | 2,752 | $224,492 |

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 17. Total Annual Non-Soil Fumigant Registrant Burden and Cost (2 registrants)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Year** | **Managerial** | | **Technical** | | **Clerical** | | **Total** | |
| **Hours** | **Cost**  **($151.47**  **/hr)1** | **Hours** | **Cost**  **($81.43**  **/hr)1** | **Hours** | **Cost ($55.66**  **/hr)1** | **Hours** | **Cost2** |
| Year 1 | 20 | $3,029 | 5,460 | $444,619 | 24 | $1,336 | 5,504 | $448,984 |
| Year 2 | 20 | $3,029 | 5,460 | $444,619 | 24 | $1,336 | 5,504 | $448,984 |
| Year 3 | 20 | $3,029 | 5,460 | $444,619 | 24 | $1,336 | 5,504 | $448,984 |
| **Annual Average** | **20** | **$3,029** | **5,460** | **$444,619** | **24** | **$1,336** | **5,504** | **$448,984** |
| **3 Year**  **Total** | **120** | **$9,088** | **16,380** | **$1,333,856** | **72** | **$4,007** | **16,512** | **$1,346,952** |

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 18** 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 540,710. The burden hours are estimated to be 642,376and the cost associated with this amount of time for all respondents is estimated to be $29,343,791annually.

#### **Table 18. 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 13)** | Certified Applicators | 221,300 | 273,398 | $13,669,875 |
|  | Pesticide Handlers | 221,300 | 221,300 | $8,852,000 |
| Fumigant User Training Activities **(Table 15)** | Certified Applicators | 24,527 | 68,594 | $3,429,692 |
| Pesticide Handlers | 73,581 | 73,581 | $2,943,240 |
| Development, Maintenance and Distribution of Training & Informational Materials Activities **(Table 17)** | Registrants | 2 | 5,504 | $448,984 |
| **Total Annual Average** | | **540,710** | **642,376** | **$29,343,791** |

Numbers may not add due to rounding.

#### **Table 19. Total Annual Respondent Burden Hour and Cost for Fumigations (Soil** **and Non-soil)**

|  |  |  |
| --- | --- | --- |
| **Respondent** | **Burden Hours** | **Burden Costs** |
| ***Soil Fumigations*** | | |
| Certified Applicators | 166,679 | $4,984,755 |
| Pesticide Handlers | 27,876 | $605,495 |
| Registrants | 1,644 | $122,228 |
| State Agencies | 3,163 | $149,893 |
| *Total (soil)* | *199,362* | *$6,222,905* |
| ***Non-soil Fumigations*** | | |
| Certified Applicators | 341,991 | $17,099,567 |
| Pesticide Handlers | 294,881 | $11,795,240 |
| Registrants | 5,504 | $448,984 |
| *Total (non-soil)* | *642,376* | *$29,343,791* |
|  | | |
| **Total (*soil and non-soil)*** | **841,738** | **$35,566,696** |

Numbers may not add due to rounding.

1 Costs for certified applicators also include the capital costs. See Attachment H: Table 5. There is $1,060,214 in capital or maintenance costs.

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

1. **The cost estimate should be split into two components: (a) a total capital and start-up cost component (annualized over its expected useful life) and (b) a total operation and maintenance and purchase of services component. The estimates should take into account costs associated with generating, maintaining, and disclosing or providing the information. Include descriptions of methods used to estimate major cost factors including system and technology acquisition, expected useful life of capital equipment, the discount rate(s), and the time period over which costs will be incurred. Capital and start-up costs include, among other items, preparations for collecting information such as purchasing computers and software; monitoring, sampling, drilling and testing equipment; and record storage facilities.**
2. **If cost estimates are expected to vary widely, agencies should present ranges of cost burdens and explain the reasons for the variance. The cost of purchasing or contracting out information collections services should be a part of this cost burden estimate. In developing cost burden estimates, agencies may consult with a sample of respondents (fewer than 10), utilize the 60-day pre-OMB submission public comment process and use existing economic or regulatory impact analysis associated with the rulemaking containing the information collection, as appropriate.**
3. **Generally, estimates should not include purchases of equipment or services, or portions thereof, made: (1) prior to October 1, 1995, (2) to achieve regulatory compliance with requirements not associated with the information collection, (3) for reasons other than to provide information or keep records for the government, or (4) as part of customary and usual business or private practices.**

There is $**1,060,214** in capital or maintenance and operational costs.

## 14. Provide estimates of annualized cost to the Federal government. Also, provide a description of the method used to estimate cost, which should include quantification of hours, operational expenses (such as equipment, overhead, printing, and support staff), and any other expense that would not have been incurred without this collection of information. Agencies may also aggregate cost estimates from Items 12, 13, and 14 in a single table.

The Agency burden for soil fumigations is shown in **Tables 20** and **21**. 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 19 shows the burden and cost per activity for the Agency, while Table 20 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 20. Agency Burden and Cost for Soil Fumigations**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Category** | **Activity** | **Frequency** | **Managerial** | | **Technical** | | **Total** | |
| **Hours** | **Cost**  **($138.48 /hr)1** | **Hours** | **Cost ($91.35**  **/hr)1** | **Hours** | **Cost2** |
| Federal Compliance and Enforcement | Compliance  Training and Stakeholder  Engagement | Annually | 104 | $14,402 | 1,092 | $99,754.20 | 1,196 | $114,156 |

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 21. Total Annual Agency Burden and Cost for Soil Fumigations**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Year** | **Managerial** | | **Technical** | | **Total** | |
| **Hours** | **Cost**  **($129.84 /hr)1** | **Hours** | **Cost**  **($85.51/hr)1** | **Hours** | **Cost2** |
| Year 1 | 104 | $14,402 | 1,092 | $99,754 | 1,196 | $114,156 |
| Year 2 | 104 | $14,402 | 1,092 | $99,754 | 1,196 | $114,156 |
| Year 3 | 104 | $14,402 | 1,092 | $99,754 | 1,196 | $114,156 |
| **3 Year**  **Annual Average** | **104** | **$14,402** | **1,092** | **$99,754** | **1,196** | **$114,156** |
| **3 Year**  **Total** | **312** | **$43,206** | **3,276** | **$299,263** | **3,588** | **$342,469** |

Numbers may not add due to rounding.

1 - Cost is equal to the total hours and cost across activities based on frequency from Table 19. 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.

**Table 22** shows the Agency burden for non-soil fumigations. The Agency will review the stewardship plans related to sulfuryl fluoride’s structural uses annually. There are two registrants subject to the burden estimated in Table 22. This review is expected to take 24 hours and cost $2,381.

#### **Table 22. Agency Burden and Cost for Non-soil Fumigations**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Category** | **Activity** | **Frequency** | **Managerial** | | **Technical** | | | **Total** | |
| **Hours** | **Cost**  **($129.84 /hr)1** | **Hours** | **Cost ($85.51**  **/hr)1** | **Hours** | | **Cost2** |
| Federal Compliance and Enforcement | Review stewardship plans | Annual | 2 | $276.96 | 10 | $913.50 | 12 | | $1,190 |

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

|  |  |  |
| --- | --- | --- |
| **Fumigation Type** | **Burden Hours** | **Burden Costs** |
| Soil Fumigation | 1,196 | $114,156 |
| Non-soil Fumigation | 24 | $2,381 |
| **Total** | **1,220** | **$116,537** |

Numbers may not add due to rounding.

## 15. Explain the reasons for any program changes or adjustments reported in hour or cost burden.

For the soil fumigations, the increase in burden hours from 198,261 to 199,362 is primarily due to updating the estimate of the number of certified applicators and handlers for soil fumigations. The change in burden cost for soil fumigation is due to updating the wages to 2021 based on BLS data as described in question 12 and the NAICS codes for certified applicators and pesticide handler. Under the old NAICS code in the previous ICR, the loaded wage per hour was estimated to be $37 for certified applicators and $27 for pesticide handlers. Under the new NAICS codes in this ICR, the loaded wage per hour is estimated to be $26 for certified applicators and $22 for pesticide handlers.

For the non-soil fumigations, the decrease in burden from 952,635 to 642,376 hours is primarily due to a reduction in the estimated time to complete an FMP based on comments received on this ICR by two states (CA and FL) that conduct a significant proportion of the non-soil fumigations in the U.S. In the previous ICR, initial non-soil FMPs were estimated to take 4 hours and subsequent ones to the same structure were estimated to take 2 hrs. Based on feedback from the comments, the time to complete a FMP is the same, whether it is the first or second time. In addition, the estimated time that it takes to complete a FMP is much lower, roughly about an hour. In addition, this ICR renewal updated the estimate of the number of non-soil fumigations, and the number of certified applicators and handlers for non-soil fumigations. The comments also led to a change in the wages for non-soil fumigations, which were increased to $50/hour for certified applicators and $40/hour for pesticide handlers. This wage change is the primary driver for the increase in burden cost for non-soil fumigations.

The annual respondent burden for this ICR is estimated to be **841,738** burden hours for both soil (199,362) and non-soil fumigations (642,376). 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 221,300 non-soil fumigation applications in a year. It is estimated that there are 5,075 soil and 24,527 non-soil certified applicators based on data submitted by various states to the EPA. There is also an increase of capital and/or maintenance costs by **$129,380**.

In summary, the increase for Soil Fumigants burden (1,101 hours) and decrease for Non-Soil Fumigants burden (310,258 hours), together adds up to a decrease of 309,158 hours in the burden. This decrease is the same as the difference between 1,150,896 (Current approved burden) minus 841,738 (New overall burden).

## 16. For collections whose results will be published, outline the plans for tabulation and publication. Address any complex analytical techniques that will be used. Provide the time schedule for the entire project, including beginning and ending dates of the collection of information, completion of report, publication dates, and other actions.

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.

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

This question not applicable to this ICR

## 18. Explain each exception to the certification statement identified in “Certification for Paperwork Reduction Act submissions”

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

# SUPPLEMENTAL INFORMATION

PRA Burden Statement for Collection Instruments

This collection of information is approved by OMB under the Paperwork Reduction Act, 44 U.S.C. 3501 et seq. (OMB Control No. 2070-0197). Responses to this collection of information are mandatory for certain persons, as specified at 40 CFR Parts 152, 156, 158, and 171. 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 public reporting and recordkeeping burden for this collection of information is estimated to be **1-3.24** hours per response. Send comments on the Agency’s need for this information, the accuracy of the provided burden estimates and any suggested methods for minimizing respondent burden to the Regulatory Support Division Director, U.S. Environmental Protection Agency (2821T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed form to this address.

To comment on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques, EPA has established a public docket for this ICR under Docket ID Number EPA-HQ-OPPT-2022-0150, which is available at <https://www.regulations.gov>. This site can be used to submit or view public comments, access the index listing of the contents of the public docket, and to access those documents in the public docket that are available electronically. When in the system, select “search,” then key in the Docket ID Number identified above.

You can also provide comments to the Office of Information and Regulatory Affairs, Office of Management and Budget via <https://www.reginfo.gov/public/do/PRAMain>. Find this particular information collection by selecting ‘‘Currently under 30-day Review—Open for Public Comments’’ or by using the search function.

All comments received by EPA will be included in the docket without change, including any personal information provided, unless the comment includes profanity, threats, information claimed to be Confidential Business Information (CBI), or other information whose disclosure is restricted by statute. Do not submit electronically any information you consider to be CBI or other information whose disclosure is restricted by statute.

For the latest status information on EPA/DC services and docket access, visit https://www.epa.gov/dockets.

# LIST OF ATTACHMENTS

The attachments listed below can be found in the docket for this ICR or by using the hyperlink that is provided in the list below. The docket for this ICR is accessible electronically through http://www.regulations.gov using Docket ID Number: EPA-HQ-OPP-2022-0150.

| **Attachment** | **Description** |
| --- | --- |
| **A** | **7 U.S.C. 136a - FIFRA section 3(c)(2)(B) and** **7 U.S.C. 136a - FIFRA Section 3(c)(5).** <https://www.gpo.gov/fdsys/granule/USCODE-2011-title7/USCODE-2011-title7-chap6-subchapII-sec136a> |
| **B** | **Docket Numbers for Fumigant Reregistration Eligibility Decisions and Supporting Documents** |
| **C** | **EPA OIG Report: Additional Measures Can Be Taken to Prevent Deaths and Serious Injuries From Residential Fumigations**. <https://www.regulations.gov/document/EPA-HQ-OPP-2018-0423-0011> |
| **D** | **Consultation & Comments from Stakeholders** |
| **E** | **Worksheet for Estimating OPP ICR Wage Rates for Industry, State and EPA Labor Costs** |
| **F** | **Fumigant Management Plans (FMP) Information and Templates.** <https://www.epa.gov/soil-fumigants/fumigant-management-plan-templates-phase-2-files-listed-chemical> |
| **G** | **Identifying Fumigant High-Use Areas Using Metam-Sodium as an Example** |
| **H** | **Information Activities Collected in the Soil and Non-Soil Fumigants ICR** |

1. Summary Fumigants Group Incident Report. R. Allen. 4/17/07. <http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OPP-2005-0125-0075> [↑](#footnote-ref-3)
2. Fumigant ICR Supporting Statement 2nd FRN Final 2009. https://www.regulations.gov/document/EPA-HQ-OPP-2018-0423-0015 [↑](#footnote-ref-4)
3. <https://www.bls.gov/oes/current/oes373012.htm>. https://www.bls.gov/oes/current/oes452092.htm [↑](#footnote-ref-5)
4. 3 Draeger tubes are sold in packages of 10 for as much as $160 per package. Source: AFC International, Inc., 2012.

   4 https://www.bls.gov/data/inflation\_calculator.htm

   5 Source: AFC International, Inc., 2012. [↑](#footnote-ref-6)
5. For additional information on determining high-use areas, see Attachment G, “Identifying Fumigant High-Use Areas Using Metam-Sodium as an Example.” The EPA document can be found at http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OPP-2005-0125-0516. [↑](#footnote-ref-7)
6. 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 [↑](#footnote-ref-8)
7. ### 221,300 annual non-soil fumigant applications / 24,527 certified applicators = 9.02 /year

   [↑](#footnote-ref-9)
8. Sources: EPA received comments from Douglas Products, The Florida Pest Management Association (FPMA), National Pest Management Association (NPMA), and Pest Control Operators of California (PCOC). 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>] [↑](#footnote-ref-10)
9. [120,000 + 70,000] \* 1.07 + 18,000) [↑](#footnote-ref-11)
10. 45 initial trainings X 10 hours per session + 380 annual trainings X 6 hours per session = 2,730 hours

    Source: EPA received comments from Douglas Products, which were used to update this table. [↑](#footnote-ref-12)