**2021 Supporting Statement for OMB 0596-0182**

Qualified Product List for Wildland Fire Chemicals

**A. Justification**

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.

**Laws, Statutes, and Regulations**

* Forest Service Handbook (FSH) 5109.16 – Fire Management Equipment, Supplies and Chemicals Handbook

The policy of the Forest Service is stated in Forest Service Handbook (FSH 5109.16, chapters zero code, 10, 20, and 30), “Use only evaluated, approved and qualified fire chemicals.” This policy requires the Agency to evaluate all wildland fire chemicals before use in fire management activities on lands managed by the FS. Additionally, the Agency needs “to have available and utilize adequate types and quantities of qualified fire chemical products to accomplish fire management activities safely, efficiently, and effectively.” To accomplish this objective, the Forest Service evaluates fire chemical products available for use in direct wildland-fire management operations prior to such use on lands managed by the Agency. (FSH5109.16, zero code, sections 02 and 03).

Safe products do not contain ingredients that create an increased risk to firefighters or the public in typical use. The decisions regarding product effects are based on acute toxicity determinations of the products, a review of lists of known and suspected carcinogens, and risk assessments conducted on each product. The safety of firefighters’ equipment, either ground-based or aircraft, is also considered (i.e., uniform and intergranular corrosion tests, effects on non-metallic materials, etc.).

Safety to the environment in terms of aquatic (fish, clean water) and terrestrial environments (wildlife, plants) is also considered. Acute toxicity tests identify potential acute toxicity concerns. Risk-determinations assist in identifying products that with typical use do not increase danger to the environment.

Effectiveness tests for long-term fire retardants measure a product’s ability to reduce fire spread and intensity even after the water has evaporated.

Effectiveness tests for Class A foams include determining the relationships between the amount of the foam concentrate in water and the resulting wetting and foaming ability and the stability of the resulting foam.

Effectiveness tests for water enhancers (gels) include determining the relationships between the amount of the concentrate in water and the resulting viscosity and cohesiveness and the stability of these characteristics.

The product concentrate and mixtures of product concentrate in water are assessed to determine whether the product can be stored, mixed, and used with readily existing facilities and equipment as typical in wildland fire operations.

Finally, evaluation and qualification of products is based upon meeting the standards identified in the appropriate fire chemical specification.

1. 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.
2. **What information will be collected - reported or recorded? (If there are pieces of information that are especially burdensome in the collection, a specific explanation should be provided.)**

Each item of information is collected ***one time only***, from the submitter, when a request to test a new product is made. The following information is collected:

**The Manufacturer’s Safety Data Sheet (MSDS)**

The MSDA shall be provided

By the individual or company submitting a product(s) for testing/evaluation

For each of the individual ingredients incorporated in the product. These are prepared and available electronically from the ingredient supplier/manufacturer and typically accompany every shipment)

**Form FS-5100-32, Water Enhancer (Gel) Formulation Disclosure Sheet**

* Product name
* Formulation identification
* Submitting company
* Date submitted
* Submitted by (name and signature)
* Title of submitter
* Recommended mix ratio range
* Formulation ingredients (including water, and using common chemical name)
* Whether the ingredient or supplier is proprietary (if proprietary, explanation is required)
* Manufacturer, process, and quality/grade
* Chemical Abstract Services (CAS) number or other technical identification (must be accepted industry standard)
* Percent by weight in wet or dry concentrate
* Percent by weight in solution across the recommended use-level range
* Patent or Trade Mark number (and copy of the patent)
* Remarks

**FS-5100-33, Water Enhancer (Gel) Technical Data Sheet**

* Product name
* Submitting company
* Formulation identification
* Mix ratio range
* Physical properties of the concentrate (if liquid) and mixed product
* Recommended method for the laboratory preparation of the product (including equipment, techniques, and precautions), attach laboratory bulletin if needed
* Recommended methods for field mixing, handling, package, and proposed hardware; attach equipment bulletin if available.

**FS-5100-34, Water Enhancer (Gel) Technical Data Sheet – Thickened Products**

* Product name
* Submitting company
* Formulation identification
* Mix ratio range
* If submitted product is result of a chemical reaction, provide information explaining the reaction process and typical residual quantities of the reaction ingredients.
* Data, graphs or tables (as indicated) for each mix ratio being evaluated:
	+ Water-enhancer mixture viscosity versus time since mixing, at a temperature of 70 degrees Fahrenheit;
	+ A table of enhanced water mixture viscosity versus temperature of water used for mixing: Viscosity shall be measured at 10 minutes, 30 minutes, 1 hour, and 24 hours following mixing;
	+ A table of enhanced water mixture viscosity at 70 degrees Fahrenheit, 1 hour and 24 hours following mixing, versus the mix ration from 0.25 percent below the lowest concentration to 0.25 percent above the highest concentration; and
	+ A table of hardness and conductivity versus viscosity of the enhanced water mixture at 70 degrees Fahrenheit for 10 minutes, 30 minutes, 45 minutes, and 1 hour after mixing.
	+ Other data the submitter considers relevant and useful to the evaluation.
* Information regarding the residual content of potentially toxic substances remaining after the reaction process that created the ingredient: Water enhancers are unique in utilizing such “reacted” ingredients. The information is normally available to water enhancer product manufacturers from the ingredient manufacturer and can be forwarded to the Forest Service via letter or copies of documentation.

Form FS-5100-35, Class A Foam Formulation Disclosure Sheet

* Product name
* Formulation identification
* Submitting company
* Date submitted
* Submitted by (name and signature)
* Title of submitter
* Recommended mix ratio range
* Formulation ingredients (including water, and using common chemical name)
* Whether the ingredient or supplier is proprietary (if proprietary, explanation is required)
* Manufacturer, process, and quality/grade
* Chemical Abstract Services (CAS) number or other technical identification (must be accepted industry standard)
* Percent by weight in wet concentrate
* Percent by weight in solution across the recommended use-level range
* Patent or Trade Mark number (and copy of the patent)
* Remarks

**FS-5100-36, Class A Foam Technical Data Sheet**

* Product name
* Submitting company
* Formulation identification
* Mix ratio range
* Physical properties of the concentrate (if liquid) and mixed product
* Recommended method for the laboratory preparation of the product (including equipment, techniques, and precautions), attach laboratory bulletin if needed
* Recommended methods for field mixing, handling, packaging, and proposed hardware; attach equipment bulletin if available.

**Form FS-5100-37, Long-Term Retardant Formulation Disclosure Sheet**

* Product name
* Formulation identification
* Submitting company
* Date submitted
* Submitted by (name and signature)
* Title of submitter
* Recommended mix ratio
* Formulation ingredients (including water, and using common chemical name)
* Whether the ingredient or supplier is proprietary (if proprietary, explanation is required)
* Manufacturer, process, and quality/grade
* Chemical Abstract Services (CAS) number or other technical identification (must be accepted industry standard)
* Percent by weight in wet or dry concentrate
* Percent by weight in solution at recommended use-level
* Patent or Trade Mark number (and copy of the patent)
* Remarks
1. **FS-5100-38, Long-Term Retardant Technical Data Sheet**
* Product name
* Submitting company
* Formulation identification
* Mix ratio
* Physical properties of the concentrate (if liquid) and mixed product
* Recommended method for the laboratory preparation of the product (including equipment, techniques, and precautions), attach laboratory bulletin if needed
* Recommended methods for field mixing, handling, packaging, and proposed hardware; attach equipment bulletin if available.
1. **FS-5100-39, Long-Term Retardant, Hydration – Viscosity Curves, Technical Data Sheet**
* Product name
* Submitting company
* Formulation identification
* Mix ratio
* Data, graphs or tables (as indicated) for a mixture of concentrate and water at the ratio being evaluated:
	+ Mixed retardant viscosity versus time since mixing, at a temperature of 70 degrees Fahrenheit;
	+ A table of mixed retardant viscosity versus temperature of water used for mixing: Viscosity shall be measured at 10 minutes, 30 minutes, 1 hour, and 24 hours following mixing;
	+ A table of mixed retardant viscosity at 70 degrees Fahrenheit, 1 hour and 24 hours following mixing, versus the mix ratio from 0.25 percent below the lowest concentration to 0.25 percent above the highest concentration; and
	+ Other data the submitter considers relevant and useful to the evaluation.
1. **From whom will the information be collected? If there are different respondent categories (e.g., loan applicant versus a bank versus an appraiser), each should be described along with the type of collection activity that applies.**

Table 1 - Respondents

|  |  |  |  |
| --- | --- | --- | --- |
| **Information Collected** | **Description** | **Information Provided to:** | **Prepared by** |
| Material Safety Data Sheet | Material Safety Data Sheet for the submitted Wildfire Chemical Product | FS, Wildland Fire Chemical Systems | Wildfire Chemical Product manufacturer (respondent) |
| Material Safety Data Sheets | Material Safety Data Sheets for each individual ingredient, provided by ingredient manufacturer/supplier | Individual ingredient manufacturer/supplier to the respondent; submitted to FS by the Wildfire Chemical Product manufacturer (respondent) |
| FS-5100-32 | Water Enhancer (Gel) Formulation Disclosure Sheet | Wildfire Chemical Product manufacturer (respondent) |
| FS-5100-33 | Water Enhancer (Gel) Technical Data Sheet |
| FS-5100-34 | Water Enhancer (Gel) Technical Data Sheet; Part 2 |
| FS-5100-35 | Class A Foam Formulation Disclosure Sheet |
| FS-5100-36 | Class A Foam Technical Data Sheet |
| FS-5100-37 | Long-Term Retardant Formulation Disclosure Sheet |
| FS-5100-38 | Long-Term Retardant Technical Data Sheet |
| FS-5100-39 | Long-Term Retardant Technical Data Sheet; Part 2 |

1. **What will this information be used for - provide ALL uses?**

The information provided will allow the Forest Service to search and determine if any of the ingredients are on the:

* + List of unacceptable ingredients as defined in US Forest Service Specification 5100-304c, section 2.2 and amendments
	+ List of unacceptable ingredients as defined in US Forest Service Specification 5100-306a, section 2.2 and amendments
	+ List of unacceptable ingredients as defined in US Forest Service Specification 5100-307a, section 2.2 and amendments
	+ List of Known and Suspected Carcinogens, or
	+ The U.S. Environmental Protection Agency’s List of Extremely Hazardous Materials

If an ingredient does occur in sufficient quantity for concern, it may trigger an additional risk analysis to determine risk to human/environmental health by typical use of the product or to Forest Service employees evaluating the product.

Should a risk analysis be necessary, the submitter may be asked to provide funding to cover any associated costs. The Forest Service may require that the risk analysis be completed prior to performing the product evaluation in order to identify risks to the people doing the evaluation.

**How will the information be collected (e.g., forms, non-forms, electronically, face-to-face, over the phone, over the Internet)? Does the respondent have multiple options for providing the information? If so, what are they?**

Forms FS-5100-32, FS-5100-33, FS-5100-34, FS-5100-35, FS-5100-36, FS-5100-37, FS-5100-38, and FS-5100-39 are all available in either electronic form via e-mail or in hardcopy provided by the Forest Service, as the respondent prefers. All forms may be completed by hand or typewriter, or electronically. Material Safety Data Sheets are typically available in hard copy and/or electronically. Responses can be submitted by e-mail, USPS, fax, or by other standard business methods.

1. **How frequently will the information be collected?**

Information is collected for each formulation or reformulation once, upon the respondent’s initial request for evaluation. For the purposes of this information collection, it is anticipated on average five respondents will submit ten new responses during a twelve-month period.

1. **Will the information be shared with any other organizations inside or outside USDA or the government?**

Any proprietary information submitted to the Forest Service will be kept in locked files. All available information may be shared and discussed with representative of US Fish and Wildlife Service and NOAA-Fisheries as part of Forest Service consultation with these agencies as required by the National Environmental Protection Act, Endangered Species Act, and the Notice of Decision under the Environmental Impact Statement on the use of Long-Term Retardant. Basic information on product performance and characteristics will be provided to potential users such as the Department of the Interior’s wildland fire agencies, state wildland fire agencies, and international wildland fire cooperators (i.e., Canada and Australia) only if the product successfully completes the evaluation.

1. **If this is an ongoing collection, how have the collection requirements changed over time?**

As the product specification has evolved, the Forest Service has reduced the amount of information collected. The Agency has identified the information necessary to evaluate the products, including that needed by Fish & Wildlife Service and NOAA Fisheries for consultation under the EIS. In the case of potentially hazardous residual content created in development of an ingredient, the Agency asks for additional information necessary to address the potential risk to either the environment or human health.

The basic collection of specific information one time for each product submitted has not changed.

1. **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.**

The Forest Service forms used to collect information from respondents are available electronically. The Agency accepts electronic and hard copy submissions of required information. Nearly all respondents submit information electronically, although some pre-printed manufacturer/supplier’s individual ingredient Material Safety Data Sheets are submitted in hardcopy.

The data collected is unique to each formulation and is the minimum necessary to determine potential hazardous effects. Generally, a portion of the data collected is proprietary and may not be appropriate for a fully automated collection process. When several similar products are submitted at the same time and use some of the same individual ingredients, submitters may send a single copy of an individual ingredient Material Safety Data Sheet rather than one for each formulation.

1. **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.**

The Forest Service is unaware of any other information source. The data collected is often proprietary in nature and not available through any other source within the Agency, USDA, other government source, or outside of government. Although the MSDSs for the ingredients may be available from the respondent’s supplier, to ensure the FS receives the correct MSDS for the specific ingredient it is best practice for the respondent to provide them.

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

All potential respondents are from the private sector. Small businesses typically submit a single formulation for evaluation, while large businesses typically submit several formulations, and thus responses, at a time. Out of the 5 respondents, 2 are small businesses.

The Agency has attempted to reduce the burden for all entities by limiting the collected information to the minimum necessary for Forest Service scientists to make informed decisions on human health and environmental risk; or that necessary to correctly mix and handle the product to provide a fair evaluation.

1. **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.**

Without this information, the Forest Service would not be able to assess the safety of wildland fire chemicals used to manage fires on Agency lands because specific ingredients and the quantity of each are not public information. This would result in the Agency failing to meet Forest Service Manual direction (FSM 5162.02) to utilize, “…fire chemical products to accomplish fire management activities **safely**, efficiently, and effectively.” *[Emphasis added.]* The information provided to agency personnel allows them to determine whether formulations contain hazardous ingredients in sufficient quantity to increase the risk to human health or to natural ecosystems to unacceptable levels.

The first safety item that must be addressed by the Agency is to determine whether there are ingredients in the formulation that could be hazardous to the laboratory personnel doing the evaluation. The next concern is the use of the product in wildland fire fighting and the potential exposure to the firefighters, the public at large, and to the environment. Knowledge of specific ingredients and their respective quantity in a product allows the Forest Service to make informed decisions regarding the human health and environmental risk of these products.

1. **Explain any special circumstances that would cause an information collection to be conducted in a manner:**
* **Requiring respondents to report information to the agency more often than quarterly;**

Submission information is required once for each formulation, at the time of submission. Respondents would report information more often only if respondent wishes to modify the formulation, in which case it is considered a new formulation. We request that the submitter notify us of revisions to the product Material Safety Data Sheet that may occur as part of the regular information review as required by the Occupational Safety & Health Administration, but this is not required.

* **Requiring respondents to prepare a written response to a collection of information in fewer than 30 days after receipt of it;**
* **Requiring respondents to submit more than an original and two copies of any document;**
* **Requiring respondents to retain records, other than health, medical, government contract, grant-in-aid, or tax records for more than three years;**
* **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;**
* **Requiring the use of a statistical data classification that has not been reviewed and approved by OMB;**
* **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**
* **Requiring respondents to submit proprietary trade secret, 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.**

When a supplier wishes to submit a new product or a variation of an existing product, an evaluation is required ONCE. The change may be as minor as using a new “brand” of one ingredient or may be a completely new product. The evaluation takes 18-24 months.

Before we can begin the laboratory evaluation, we require full disclosure – in great detail – of the composition of the product. This includes the manufacturer, quantity, grade/quality of every ingredient. If any of this information changes, we consider it to be a new product, requiring a full evaluation.

All of the information provided is considered to be trade secret and is held in a secure location. We discuss this information only with the supplier, the people that do the risk assessments that we require on all products, and representatives of Fish and Wildland Service and National Marine Fisheries. This is required for all products that may be applied on land or water under the control of these agencies.

1. **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 by the agency in response to these comments. Specifically address commitments received on cost and hour burden.**

**Describe efforts to consult with persons outside the agency to obtain their views on the availability of data, frequency of collection, the clarity of instructions and record keeping, disclosure, or reporting format (if any), and on the data elements to be recorded, disclosed, or reported.**

This unit does not perform the type of work described. The information we receive is ONLY from an entity that wishes to submit a new product, designed to help in wildland firefighting, for use by the Forest Service and other wildland fire fighting agencies.

**Consultation with representatives of those from whom information is to be obtained or those who must compile records should occur at least once every 3 years even if the collection of information activity is the same as in prior periods. There may be circumstances that may preclude consultation in a specific situation. These circumstances should be explained.**

A Federal Register Notice notifying the public of the 60-day comment period for this information collection renewal was published in Volume 86, No. 93, page 26689-26690 on May 17, 2021. The Forest Service did not receive any public notice and comments.

The following businesses (and their listed representatives) have submitted products for evaluation and provided the information that is required prior to the evaluation. In a 3 year period, we may receive requests for evaluation of no products or as many as 20 or more. We do not solicit products for evaluation, except through the FedBizOps notices above.

Since the existence of a product submitted for evaluation is confidential until a product is approved, the list below should not be published.

Perimeter Solutions

Ms. Melissa Kim; Director of R&D

10667 Jersey Blvd; Rancho Cucamonga, CA 91737
Office: 909-983-0772
Cell: 909-721-5990
melissa.kim@perimeter-solutions.com

<https://www.perimeter-solutions.com/>

Fortress Fire Retardant Systems, LLC

Robert Burnham, CEO

PO Box 401

Carnelian Bay, CA 96410

775-225-9292

rjb@[f](https://gcc02.safelinks.protection.outlook.com/?url=http%3A%2F%2Fsnvcinc.com%2F&data=04%7C01%7C%7C938a02ff2843482b3a6608d9463a36db%7Ced5b36e701ee4ebc867ee03cfa0d4697%7C0%7C0%7C637618038105280794%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=qPAvJN%2BwqzIRPDTiv0zi3HjOLq1GgGnJeQeCqenf5wE%3D&reserved=0)[ortressfrs.com](https://gcc02.safelinks.protection.outlook.com/?url=http%3A%2F%2Fortressfrs.com%2F&data=04%7C01%7C%7C938a02ff2843482b3a6608d9463a36db%7Ced5b36e701ee4ebc867ee03cfa0d4697%7C0%7C0%7C637618038105280794%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=xkxFMi0SyHLHg4mtrNk5BwTCMbeSth3WQDucbPXd6l4%3D&reserved=0)

<https://www.fortressfrs.com/>

Komodo Fire Systems, Inc.

Shawn Sahbari

PO Box 320072

Los Gatos, CA 95032

888-563-4523

shawn@komodo-fire.com

<https://komodo-fire.com/>

The Forest Service continually seeks comments on specifications and includes the information collection forms in the packages sent electronically to manufacturers expressing an interest in submitting a product for evaluation. Notices are placed in FedBizOps at least every other year requesting additional products and at least every other year requesting comments to assist the Agency to improve the specifications. All comments are reviewed by representatives of the Forest Service and other Federal and state wildland firefighting agencies. The Forest Service consults individually with company representatives who wish to comment on the requirements of the specification or submission procedures, submit a product for evaluation, to obtain clarification of the information requested.

There is general agreement among the company representatives that most of the information requested is proprietary and therefore not available except through the respondent.

The manufacturer’s Material Safety Data Sheets (MSDSs) may be available elsewhere, but obtaining them from the respondent assures we have correct information.

In general the effort of providing the information requested was considered reasonable, although some respondents required more time than others.

The time required to complete the forms varied greatly depending on the level of experience, complexity of the product, and whether the supplier prepared it or used outside facilities/operators for production. Individual response time varies from 30 minutes to 4 hours.

1. **Explain any decision to provide any payment or gift to respondents, other than re-enumeration of contractors or grantees.**

The FS does not provide any payment or gift to respondents for the information provided.

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

The information regarding specific ingredients and quantities of ingredients is proprietary information belonging to the respondent. Information collection occurs after the respondent and the Forest Service both have signed a Collection Agreement. The information is kept in a secure location and requests for information are processed under the Freedom of Information Act (FOIA), which exempts such information from disclosure under exemption 4. FOIA exemption 4 covers trade secret information that is privileged or confidential (refers to business information received from outside individuals/businesses).

The proprietary information is not shared with other agencies except as described in US Forest Specification and required during consultation with the US Fish and Wildlife Service and NOAA-Fisheries under the National Environmental Protection Act or Endangered Species Act. The information as to whether a product may increase the risk to human health or environmental health is provided from the data the US Forest Service obtains during the product evaluation.

1. **Provide additional justification for any questions of a sensitive nature, such as sexual behavior or 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.**

The information required from the respondents is related to the composition of the product they submit. It does not include any questions of a sensitive nature, such as sexual behavior or attitudes, religious beliefs, and other personal matters commonly considered private.

1. **Provide estimates of the hour burden of the collection of information. Indicate the number of respondents, frequency of response, annual hour burden, and an explanation of how the burden was estimated.**

Please refer to the responses above. We cannot predict how many products, if any, will be submitted for evaluation in any single year or three year period. The numbers reported are our best average of submission within the last 3 years. It is common for us to have no submissions of a specific product type in any given year and sometimes there is only 1 in a three year period.

The burden will vary greatly depending on experience of the personnel completing the submission for their company. Some people have been working of this for 10-20 years, and many submission and others have never done it before. It obviously takes these people longer to complete the required information. I have tried to estimate the burden for 1 entity to submit 1 product for evaluation. This is based on conversations with the people involved. In some cases there were no submissions of a product type within the 3 year reporting period. This is just the reality of the industry.

**• Indicate the number of respondents, frequency of response, annual hour burden, and an explanation of how the burden was estimated. If this request for approval covers more than one form, provide separate hour burden estimates for each form.**

**a) Description of the collection activity**

**b) Corresponding form number (if applicable)**

**c) Number of respondents**

**d) Number of responses annually per respondent,**

**e) Total annual responses (columns c x d)**

**f) Estimated hours per response**

**g) Total annual burden hours (columns e x f)**

Table 2 – Estimated Burden Hours

| **(a)****Description of the Collection Activity** | **(b)****Form Number** | **(c)****Number of Respondents** | **(d)****Number of responses annually per Respondent** | **(e)****Total annual responses** **(c x d)** | **(f)****Estimate of Burden Hours per response** | **(g)****Total Annual Burden Hours** **(e x f)** |
| --- | --- | --- | --- | --- | --- | --- |
| Material Safety Data Sheets (MSDS) for product and components Formulation Disclosure Sheets Water Enhancer (Gel) Class A Foam Long-Term RetardantMixing & Handling Req Water Enhancer (Gel)Class A Foam Long-Term Retardant | FS-5100-32 FS-5100-35 FS-5100-37FS-5100-33FS-5100-36 FS-5100-38 | 3 | 3 | 9 | 4.5 | 40.5 |
| **Totals (a given)** |  | **3** | **9** | **4.5** | **40.5** |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | 1 of the above 3 may complete one or both of these forms as part of their submission package.  |  |  |  |  |
| Water Enhancer (Gel) Viscosity-Hydration-Water Quality Curves | FS-5100-34 | 1 | 1 | 1.0 | 1.0 |
| Long-term Retardant, Hydration-Viscosity Curves | FS-5100-39 | 1 | 1 | .50 | 1.50 |
| **Totals (possible addition)** |  | **1** |  |  | **1.50**  |  |

Responses for similar activities / forms were combined since they required the same information for different categories of products and the burden was for the same activity.

A small number of product submissions, typically less than 10 usually only 1, are received each year. Of the three respondents, one may complete FS-5100-34 and/or FS-5100-39 as part of the complete package to be counted as part of the three respondents, not an additional respondent. This is not a given, and therefore, not a certain in the calculations. In that case, that one respondent’s time would go from 4.5 hours to 6 hours for their response.

**• Record keeping burden should be addressed separately and should include columns for:**

**a) Description of record keeping activity:**

**b) Number of record keepers:**

**c) Annual hours per record keeper:**

**d) Total annual record keeping hours (columns b x c):**

**• Provide estimates of annualized cost to respondents for the hour burdens for collections of information, identifying and using appropriate wage rate categories.**

Table 3 – Estimated Annual Cost to Respondents

| **(a)****Description of the Collection Activity** | **(b)****Estimated Total Annual Burden on Respondents (Hours)** | **(c)****Estimated Average Income per Hour** | **(d)****Estimated Cost to Respondents** |
| --- | --- | --- | --- |
| FS-5100-32 | 1.0 | $ 50.00 | $ 50.00 |
| FS-5100-33 | 0.5 | $ 50.00 | $ 25.00 |
| FS-5100-34 | 2.0 | $ 50.00 | $ 100.00 |
| Copies of MSDSs for Water Enhancer (Gel) & ingredients  | 7.0 | $ 25.00 | $ 175.00 |
| Sub Total for Gels | 10.5 | --- | $ 350.00 |
|  |
| FS-5100-35 | 1.0 | $ 50.00 | $ 50.00 |
| FS-5100-36 | 0.5 | $ 50.00 | $ 25.00 |
| Copies of MSDSs for Class A Foam & ingredients | 1.50 | $ 25.00 | $ 37.50 |
| Sub Total for Class A Foam | 3.0 | --- | $ 112.50 |
|  |
| FS-5100-37 | 4.0 | $ 50.00 | $ 200.00 |
| FS-5100-38 | 6.0 | $ 50.00 | $ 300.00 |
| FS-5100-39 | 13.0 | $ 50.00 | $ 650.00 |
| Copies of MSDSs for Long-Term Retardant & each ingredient  | 4.0 | $ 25.00 | $ 100.00 |
| Sub Total for Long-Term Retardants | 27.0 | --- | $1250.00 |
|  |
| Combined Total for All Product Types | 40.5 | --- | $1712.50 |
|  |

The estimate of $50.00/hr to accomplish the collection activity for the forms assumes a chemist is performing these duties, based upon a review of their development work. The salary was determined by asking a respondent if an annualized salary of approximately $100,000 was appropriate for the individuals preparing the collection forms. The response was that this was a correct approximation, considering the cost to the company per year (including benefit package). The average daily cost was calculated by dividing the annual salary of $100,000 by 261 workdays per year[[1]](#footnote-1). The daily cost was divided by 8 (number of hours in an average workday) and rounded up to nearest $5.00 to determine an hourly cost.

To determine the estimated average income for a clerical employee to collect the Material Safety Data Sheets from individual ingredient manufacturers, $25.00 was chosen as being the approximate average of the hourly cost of a GS-5 and GS-6 salary.

1. **Provide estimates of the total annual cost burden to respondents or record keepers resulting from the collection of information, (do not include the cost of any hour burden shown in items 12 and 14). The cost estimates 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.**

There are no capital operation and maintenance costs.

1. **Provide estimates of annualized cost to the Federal government. Provide a description of the method used to estimate cost and any other expense that would not have been incurred without this collection of information.**

**The response to this question covers the actual costs the agency will incur as a result of implementing the information collection. The estimate should cover the entire life cycle of the collection and include costs, if applicable, for:**

1. **Employee labor and materials for developing, printing, storing forms**
2. **Employee labor and materials for developing computer systems, screens, or reports to support the collection**
3. **Employee travel costs**
4. **Cost of contractor services or other reimbursements to individuals or organizations assisting in the collection of information**
5. **Employee labor and materials for collecting the information**
6. **Employee labor and materials for analyzing, evaluating, summarizing, and/or reporting on the collected information**

Table 4: Estimated Annual Cost to the Government

| **ACTION ITEM** | **PERSONNEL** | **GS LEVEL** | **HOURLY RATE** | **HOURS** | **SALARY** |
| --- | --- | --- | --- | --- | --- |
| Employee labor and materials for analyzing, evaluating, summarizing, and/or reporting on the collected information | Chemist | GS-12/10 | $45.71 | 20 | $ 597.19 |
| Total annual cost | $1,194.38 |

1. **Explain the reasons for any program changes or adjustments reported in items 13 or 14 of OMB form 83-I.**

All similar requirements were combined during the analysis. This resulted in saving since multiple similar calculations were not required. This renewal requests approval for a combined total of 9 responses and 40.5 burden hours.

1. **For collections of information whose results are planned to be published, outline plans for tabulation and publication.**

There are no plans for the Forest Service to publish the results of this information collection activity.

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

The Forest Service requests approval to omit the expiration date for OMB approval from the forms associated with this information collection. The forms are used rarely, are not expected to change, and are usually collected one time only for each formulation. An expiration date may cause respondents confusion, as they may interpret this as an expiration date for the information provided, which is not the case.

1. **Explain each exception to the certification statement identified in item 19, "Certification Requirement for Paperwork Reduction Act."**

The Forest Service is able to certify compliance with all provisions under item 19.

1. **Collections of Information Employing Statistical Methods**

This information collection does not employ statistical methods.

1. Average number of workdays in a calendar year [↑](#footnote-ref-1)