

### **Note To Reviewer**

The proposal making the requirements of the current Hazard Communication Standard consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labelling of Chemicals (GHS) would impose a one-time total burden of 2,125,414 hours with a capital cost of \$32,055,258. These costs are for firms to purchase any necessary computer software to achieve compliance with proposed revisions to hazard communication requirements (see Item 13 of this supporting statement).

Employers will have three years to comply with the proposed revisions to the collection of information requirements, incurring annually 708,471 hours at a cost of \$10,685,086 as calculated in this supporting statement. Future renewal packages would remove this burden and contain additional burden reductions due to production efficiencies in creating and revising Safety Data Sheets as a result of the modified rule.

**SUPPORTING STATEMENT FOR THE  
INFORMATION COLLECTION REQUIREMENTS IN  
THE PROPOSED REVISIONS TO THE  
HAZARD COMMUNICATIONS STANDARD  
(OMB CONTROL NO. 1218-0072 (September 2009))**

**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.**

The main objective of the Occupational Safety and Health Act of 1970 (i.e., "The Act") is to "assure so far as possible every working, man and woman in the Nation safe and healthful working conditions and to preserve our human resources" (29 U.S.C. 651). To achieve this objective, the Act authorizes "the development and promulgation of occupational safety and health standards" (29 U.S.C. 651).

Section 6(b)(7) of the Occupational Safety and Health Act of 1970, 29 U.S.C. 651 et. seq. states that any occupational safety or health standard promulgated by the Secretary of Labor under section 6(b) rulemaking authority "shall prescribe the use of labels or other appropriate forms of warning as are necessary to insure that employees are apprised of all hazards to which they are exposed, relevant symptoms and appropriate emergency treatment, and proper conditions and precautions of safe use of exposure." In promulgating substance-specific rules to address the hazards of a particular chemical, OSHA followed this Congressional directive. However, given the universe of chemicals present in American workplaces (as many as 900,000 hazardous chemical products), and the time-consuming nature of OSHA's rulemaking process, it became clear that little information would be available to employees if this substance-by-substance approach was the only avenue pursued. Workers exposed to chemicals would continue to encounter a myriad of hazards. Many chemicals cause acute injuries or illnesses such as rashes, burns and poisoning, or chronic effects such as cancer or liver damage. Also, chemicals can pose physical hazards to workers by contributing to accidents such as fires and explosions. To prevent such occupational hazards, the Agency addressed the issue of hazard information transmittal on a generic basis.

The purpose of the existing Hazard Communications Standard (HCS)(29 CFR 1910.1200) and its collection of information requirements is to ensure that the hazards of chemicals produced or imported are evaluated and that information concerning these hazards is transmitted to employers and employees. This purpose is accomplished through hazard determination, labels, material safety data sheets, written hazard communication programs and training. These collections of information requirements are currently approved by the Office of Management and Budget (OMB) under OMB Control Number 1218-0072.

The purpose of the modification to the HCS is to standardize the hazard communication requirements for products used in U.S. workplaces, and thus provide employees with consistent hazard communication information. Hazard communication is currently addressed by many different international, national, and State authorities.

The existing requirements are not always consistent and often contain different definitions of hazards and varying provisions for what information is required on labels and safety data sheets. The proposed revisions are consistent with the internationally negotiated set of criteria and provisions and therefore would facilitate international trade. The proposed standard contains a number of changes to improve the performance of the United States hazard communication system: (1) revised criteria for more consistent classification of chemical hazards; (2) standardized signal words, pictograms, hazard statements, and precautionary statements on labels; and (3) a standardized format for SDSs.<sup>1</sup>

OSHA's collection of information requirements contained in the HCS standard expires on October 31, 2009. As required by the Paperwork Reduction Act of 1995, on August 31, 2009, OSHA published a sixty day notice soliciting comments on the existing Information Collection Request. Also, in accordance with PRA, OSHA submitted a separate ICR to OMB for the HCS/GHS NPRM. To avoid confusion, a new ICR requesting a separate OMB control number was submitted to OMB for the NPRM.

- 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 proposal would affect employers and employees in many different industries across the economy. The HCS covers over five million workplaces<sup>2</sup> in which employees are potentially exposed to hazardous chemicals.

The proposed modifications would make the requirements of the current HCS consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labelling of Chemicals (GHS). In addition to standardizing the hazard communication requirements for products used in U.S. workplaces, the modifications will also define and revise specific classifications and categories of hazards.

OSHA has made a preliminary determination that the proposed modifications will improve the quality and consistency of information provided to employers and employees regarding chemical hazards and associated protective measures. Thus, modifications are expected to result in increased safety and health for the affected employees and to reduce the numbers of accidents, fatalities, injuries, and illnesses associated with exposures to hazardous chemicals.

The proposed revisions impacting the HCS paperwork requirements include: (1) revised criteria for classification of chemical hazards; (2) revised labeling provisions that include requirements for use of standardized signal words, pictograms, hazard statements, and precautionary statements; (3) a specified format for safety data sheets; and (4) related revisions to definitions of

---

<sup>1</sup> In the revised rule, the term “material safety data sheet” (MSDS) has been modified to “safety data sheet” (SDS) to reflect the terminology of the GHS.

<sup>2</sup> As shown in the PP&E report prepared under contract to the Department of Labor (and as reproduced in the preamble as Table VII-2)

terms used in the standard, requirements for employee training on labels and safety data sheets. OSHA is also proposing to modify provisions in a number of substance-specific health standards to ensure consistency with the modified HCS requirements.

The Agency assumes that additional training would be necessary to ensure that employees understand the elements of the new system. The existing standard requires that employee training include at least the details of the employer's hazard communication program, including an explanation of the labeling system and how employees can obtain and use the appropriate hazard information. The proposed modifications to the training requirements include changes to (1) revise training for new employees, (2) train employees in the new labeling for shipped containers, workplace labeling, and SDSs, including the order of information, and (3) change the written hazard communication program, if necessary, to reflect the new format and content of SDSs and labels. The Agency is therefore proposing to modify training requirements to address the new label elements and the SDS format that would be required under the revised standard. Training will support and enhance the effectiveness of the new label and SDS requirements.

While there are revisions to the training requirements, OSHA continues to maintain that the proposed revisions are considered performance-oriented since they do not specify how employers must conduct the training, or how many hours employers must expend training their employees; further, employers do not need to maintain employee training records. Therefore, the Agency is not taking a burden for the modifications to the proposed training provisions since they are performance-oriented.

The following paragraphs identify the paperwork requirements contained in the modification to the HCS. Burden hours and costs are discussed under Item 12.

#### Hazard Classification

*§1910.1200(d)(1)* - Chemical manufacturers and importers shall evaluate chemicals produced in their workplaces or imported by them to classify their health and physical hazards in accordance with this section. For each chemical, the chemical manufacturer or importer shall determine the hazard classes, and the category of each class, that apply to the chemical being classified. Employers are not required to classify chemicals unless they choose not to rely on the classification performed by the chemical manufacturer or importer for the chemical to satisfy this requirement.

*§1910.1200(d)(2)* - Chemical manufacturers, importers or employers classifying chemicals shall identify and consider the full range of available scientific literature and other evidence concerning the potential hazards. There is no requirement to test the chemical to determine how to classify its hazards. Appendix A to §1910.1200 shall be consulted for classification of health hazards, and Appendix B to §1910.1200 shall be consulted for the classification of physical hazards.

*Mixtures §1910.1200(d)(3)(i)* - Chemical manufacturers, importers, or employers evaluating chemicals shall follow the procedures described in Appendixes A and B to §1910.1200 to

classify the hazards of the chemicals, including determinations regarding when mixtures of the classified chemicals are covered by this section.

*§1910.1200(d)(3)(ii)* - A chemical manufacturer or importer of a mixture shall be responsible for the accuracy of the classification of the mixture even when relying on the classifications for individual ingredients received from the ingredient manufacturers or importers on the safety data sheets.

## **Labels and other forms of warning §1910.1200(f)**

### *Labels on shipped containers*

#### *§1910.1200(f)(1)*

The chemical manufacturer, importer, or distributor shall ensure that each container of classified hazardous chemicals leaving the workplace is labeled, tagged or marked with the following information:

§1910.1200(f)(1)(i) - Product identifier;

§1910.1200(f)(1)(ii) - Signal word;

§1910.1200(f)(1)(iii) - Hazard statement(s);

§1910.1200(f)(1)(iv) - Pictogram(s);

§1910.1200(f)(1)(v) - Precautionary statement(s); and,

§1910.1200(f)(1)(vi) - Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party.

*§1910.1200(f)(2)* - For unclassified hazards, the label shall include the name of the chemical, the name, address, and telephone number of the manufacturer, importer, or other responsible party, and, provide as supplementary information, a description of the unclassified hazards and appropriate precautionary measures to ensure the safe handling and use of the chemical.

*§1910.1200(f)(3)* - The chemical manufacturer, importer, or distributor shall ensure that the information provided under (f)(1)(i) through (v) is in accordance with Appendix C, Allocation of Label Elements, for each hazard class and associated hazard category for the hazardous chemical, prominently displayed, and in English (other languages may also be included if appropriate).

*§1910.1200(f)(4)* - The chemical manufacturer, importer, or distributor shall ensure that the information provided under (f)(1)(ii) through (iv) is located together on the label, tag, or mark.

*§1910.1200(f)(5)(i)* - For solid metal (such as a steel beam or a metal casting), solid wood, or plastic items that are not exempted as articles due to their downstream use, or shipments of whole grain, the required label may be transmitted to the customer at the time of the initial shipment, and need not be included with subsequent shipments to the same employer unless the information on the label changes;

*§1910.1200(f)(5)(ii)* - The label may be transmitted with the initial shipment itself, or with the safety data sheet that is to be provided prior to or at the time of the first shipment; and,

*§1910.1200(f)(5)(iii)* - This exception to requiring labels on every container of hazardous chemicals is only for the solid material itself, and does not apply to hazardous chemicals used in conjunction with, or known to be present with, the material and to which employees handling the items in transit may be exposed (for example, cutting fluids or pesticides in grains).

*§1910.1200(f)(6)* - Chemical manufacturers, importers, or distributors shall ensure that each container of hazardous chemicals leaving the workplace is labeled, tagged, or marked in accordance with this section in a manner which does not conflict with the requirements of the Hazardous Materials Transportation Act (49 U.S.C. 1801 et seq.) and regulations issued under that Act by the Department of Transportation.

*Workplace labeling (§1910.1200(f)(7))* - Except as provided in paragraphs (f)(8) and (f)(9) of this section, the employer shall ensure that each container of hazardous chemicals in the workplace is labeled, tagged or marked with either:

*§1910.1200(f)(7)(i)* - The information specified under (f)(1)(i) through (v) for labels on shipped containers; or,

*§1910.1200(f)(7)(ii)* - Product identifier and words, pictures, symbols, or combination thereof, which provide at least general information regarding the hazards of the chemicals, and which, in conjunction with the other information immediately available to employees under the hazard communication program, will provide employees with the specific information regarding the physical and health hazards of the hazardous chemical.

*§1910.1200(f)(8)* - The employer may use signs, placards, process sheets, batch tickets, operating procedures, or other such written materials in lieu of affixing labels to individual stationary process containers, as long as the alternative method identifies the containers to which it is applicable and conveys the information required by paragraph (f)(7) of this section to be on a label. The employer shall ensure the written materials are readily accessible to the employees in their work area throughout each work shift.

*§1910.1200(f)(9)* - The employer is not required to label portable containers into which hazardous chemicals are transferred from labeled containers, and which are intended only for the immediate use of the employee who performs the transfer. For purposes of this section, drugs which are dispensed by a pharmacy to a health care provider for direct administration to a patient are exempted from labeling.

§1910.1200(f)(10) - The employer shall not remove or deface existing labels on incoming containers of hazardous chemicals, unless the container is immediately marked with the required information.

§1910.1200(f)(11) - The employer shall ensure that workplace labels or other forms of warning are legible, in English, and prominently displayed on the container, or readily available in the work area throughout each work shift. Employers having employees who speak other languages may add the information in their language to the material presented, as long as the information is presented in English as well.

§1910.1200(f)(12) - Chemical manufacturers, importers, distributors, or employers who become newly aware of any significant information regarding the hazards of a chemical shall revise the labels for the chemical within three months of becoming aware of the new information, and shall ensure that labels on containers of hazardous chemicals shipped after that time contain the new information. If the chemical is not currently produced or imported, the chemical manufacturer, importer, distributor, or employer shall add the information to the label before the chemical is shipped or introduced into the workplace again.

### **Safety Data Sheets §1910.1200(g)**

§1910.1200(g)(2) - The chemical manufacturer or importer preparing the safety data sheet shall ensure that it is in English (although the employer may maintain copies in other languages as well), and includes the following section numbers and headings, and associated information under each heading, in the order listed (See Appendix D to §1910.1200--Safety Data Sheets, for the specific content of each section of the safety data sheet.)

§1910.1200(g)(2)(i) - Section 1, Identification;

§1910.1200(g)(2)(ii) - Section 2, Hazard(s) identification;

§1910.1200(g)(2)(iii) - Section 3, Composition/information on ingredients;

§1910.1200(g)(2)(iv) - Section 4, First-aid measures;

§1910.1200(g)(2)(v) - Section 5, Fire-fighting measures;

§1910.1200(g)(2)(vi) - Section 6, Accidental release measures;

§1910.1200(g)(2)(vii) - Section 7, Handling and storage;

§1910.1200(g)(2)(viii) -Section 8, Exposure controls/personal protection;

§1910.1200(g)(2)(ix) - Section 9, Physical and chemical properties;

§1910.1200(g)(2)(x) - Section 10, Stability and reactivity;

§1910.1200(g)(2)(xi) - Section 11, Toxicological information.

Note 1 to paragraph (g)(2): To be consistent with the GHS, an SDS must also include the following headings in this order:

Section 12, Ecological information;

Section 13, Disposal considerations;

Section 14, Transport information; and

Section 15, Regulatory information.

Note 2 to paragraph (g)(2): OSHA will not be enforcing information requirements in sections 12 through 15, as these areas are not under its jurisdiction.

§1910.1200(g)(2)(xii) - Section 16, Other information, including date of preparation or last revision.

*§1910.1200(g)(5)* - The chemical manufacturer, importer or employer preparing the safety data sheet shall ensure that the information provided accurately reflects the scientific evidence used in making the hazard classification. If the chemical manufacturer, importer or employer preparing the safety data sheet becomes newly aware of any significant information regarding the hazards of a chemical, or ways to protect against the hazards, this new information shall be added to the safety data sheet within three months. If the chemical is not currently being produced or imported the chemical manufacturer or importer shall add the information to the safety data sheet before the chemical is introduced into the workplace again.

*§1910.1200(g)(11)* - Safety data sheets shall also be made readily available, upon request, to designated representatives, the Assistant Secretary, and the Director, in accordance with the requirements of 29 CFR 1910.1020(e). OSHA does not believe the modification to the SDS will change the frequency that employees and OSHA will ask to access the records required by the Standard.

### **Trade Secrets (§ 1910.1200(i))**

The proposed rule would add percentage composition information to the Safety Data Sheet. This introduces the possibility that trade secret claims will be made for this type of information, as well as specific chemical identities. The proposal revises the text of the current rule to add consideration of percentage composition everywhere specific chemical identity is addressed in the provisions. Overall, since these provisions were promulgated in the current HCS, it appears that fewer claims of trade secrecy have been made, and fewer requests for trade secret disclosures have been received, than were anticipated during the rulemaking process. OSHA does not believe adding the percentage composition information to the SDS will increase the existing burden for employers to respond to request from employees, their representatives, and health professional for trade secret information. Burden hours and costs are accounted for under



the existing Hazard Communication Standard, OMB Control Number 1218-0072.

- 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.**

To the extent practical, the proposed modifications to the HCS minimize burdens on employers, including technical and legal burdens. The proposal allows for electronic access, microfiche, and other alternatives to developing and maintaining paper copies of the SDSs, so long as no barriers to immediate employee access are created by such options. There are no known technical or legal obstacles to reducing the information collection burden through improved information technology.

- 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.**

Within the U.S., several regulatory authorities exercise jurisdiction over chemical hazard communication. In addition to OSHA's HCS, the Department of Transportation (DOT) regulates chemicals in transport, the Consumer Product Safety Commission (CPSC) regulates consumer products, and the Environmental Protection Agency (EPA) regulates pesticides, as well as having other authority over labeling under the Toxic Substances Control Act. Each of these regulatory authorities operates under different statutory mandates, and has adopted distinct hazard communication requirements.

Tracking the hazard communication requirements of different regulatory authorities is a burden for manufacturers, importers, distributors, and transporters engaged in commerce in the domestic arena. This burden is magnified by the need to develop multiple sets of labels and safety data sheets for each product in international trade. Small businesses may have particular difficulty in coping with the complexities and costs involved. The problems associated with differing national and international requirements were recognized and discussed when the HCS was first issued in 1983. The preamble to the final rule included a commitment by OSHA to review the standard regularly to address international harmonization of hazard communication requirements.

OSHA has actively participated in a number of such efforts in the years since that commitment was made, including trade-related discussions on the need for harmonization with major U.S. trading partners. The Agency also issued a Request for Information (RFI) in the Federal Register in January 1990 to obtain input regarding international harmonization efforts, and on work being done at that time by the International Labor Organization (ILO) to develop a convention and recommendations on safety in the use of chemicals at work (55 FR 2166, January 22, 1990). On a closely related matter, OSHA published an RFI in May 1990 requesting comments and information on improving the effectiveness of information transmitted under the HCS (55 FR 20580, May 17, 1990). Possible development of a standardized format or order of information was raised as an issue in the RFI. Nearly 600 comments were received in response to this request. The majority of responses expressed support for a standardized SDS format, and the

majority of responses that expressed an opinion on the topic favored a standardized format for labels as well.

In June 1992, the United Nations Conference on Environment and Development issued a mandate (Chapter 19 of Agenda 21), supported by the U.S., calling for development of a globally harmonized chemical classification and labeling system:

A globally harmonized hazard classification and compatible labelling system, including material safety data sheets and easily understandable symbols, should be available, if feasible, by the year 2000.

This international mandate initiated a substantial effort to develop the GHS, involving numerous international organizations, many countries, and extensive stakeholder representation.

A coordinating group comprised of countries, stakeholder representatives, and international organizations was established to manage the work. This group, the Inter-organization Programme for the Sound Management of Chemicals Coordinating Group for the Harmonization of Chemical Classification Systems, established overall policy for the work and assigned tasks to other organizations to complete. The Coordinating Group then took the work of these organizations and integrated it to form the GHS. OSHA served as chair of the Coordinating Group.

The work was divided into three main parts: classification criteria for physical hazards; classification criteria for health and environmental hazards (including criteria for mixtures); and hazard communication elements, including requirements for labels and safety data sheets. The criteria for physical hazards were developed by the United Nations Subcommittee of Experts on the Transport of Dangerous Goods and were based on the already harmonized criteria for the transport sector. The criteria for classification of health and environmental hazards were developed under the auspices of the Organization for Economic Cooperation and Development. The ILO developed the hazard communication elements. OSHA participated in all of this work, and served as U.S. lead on classification of mixtures and hazard communication.

Four major existing systems served as the primary basis for development of the GHS. These systems were the requirements in the U.S. for the workplace, consumers and pesticides; the requirements of Canada for the workplace, consumers and pesticides; European Union directives for classification and labeling of substances and preparations; and the United Nations Recommendations on the Transport of Dangerous Goods. The requirements of other systems were also examined as appropriate, and taken into account as the GHS was developed. The primary approach to reconciling these systems involved identifying the relevant provisions in each system; developing background documents that compared, contrasted, and explained the rationale for the provisions; and undertaking negotiations to find an agreed approach that addressed the needs of the countries and stakeholders involved. Principles to guide the work were established, including an agreement that protections of the existing systems would not be reduced as a result of harmonization. Thus countries could be assured that the existing protections of their systems would be maintained or enhanced in the GHS.

An interagency committee under the auspices of the Department of State coordinated U.S. involvement in the development of the GHS. In addition to OSHA, DOT, CPSC, and EPA, there were a number of other agencies involved that had interests related to trade or other aspects of the GHS process. Different agencies took the lead in various parts of the discussions. Positions for the U.S. in these negotiations were coordinated through the interagency committee. Interested stakeholders were kept informed through e-mail dissemination of information, as well as periodic public meetings. In addition, the Department of State published a notice in the Federal Register that described the harmonization activities, the agencies involved, the principles of harmonization, and other information, as well as invited public comment on these issues (62 FR 15951, April 3, 1997). Stakeholders also actively participated in the discussions at the international level and were able to present their views directly in the negotiating process.

The GHS was formally adopted by the new United Nations Committee of Experts on the Transport of Dangerous Goods and the Globally Harmonized System of Classification and Labelling of Chemicals in December 2002. In 2003, the adoption was endorsed by the Economic and Social Council of the United Nations. The GHS will be updated as necessary to reflect new technology and scientific developments, or provide additional explanatory text. This proposed rule is based on Revision 3 of the GHS, published in 2009.

OSHA published an Advance Notice of Proposed Rulemaking (ANPR) on the GHS in September of 2006 (71 FR 53617, September 12, 2006). The ANPR provided information about the GHS and its potential impact on the HCS, and sought input from the public on issues related to GHS implementation. Over 100 responses were received, and the comments and information provided were taken into account in the development of the modifications to the HCS included in this proposed rule. At the same time the ANPR was published, OSHA made a document summarizing the GHS available on its website (<http://www.osha.gov>).

OSHA remains engaged in a number of activities related to the GHS. The U.S. is a member of both the United Nations Committee of Experts on the Transport of Dangerous Goods and the Globally Harmonized System of Classification and Labelling of Chemicals, as well as the Subcommittee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals. These permanent UN bodies have international responsibility for maintaining, updating as necessary, and overseeing the implementation of the GHS. OSHA and other affected Federal agencies actively participate in these UN groups. In addition, OSHA, EPA and the Department of State also participate in the GHS Programme Advisory Group under the United Nations Institute for Training and Research (UNITAR). UNITAR is responsible for helping countries implement the GHS, and has ongoing programs to prepare guidance documents, conduct regional workshops, and implement pilot projects in a number of nations. OSHA also continues to be involved in interagency discussions related to coordination of domestic implementation of the GHS, and in discussions related to international work to implement and maintain the GHS.

OSHA's basis for adopting the GHS arose due to both domestic and international regulatory concerns. The first concern was the thresholds used to classify chemicals are sometimes inconsistent from one country to another and from one federal agency to another. This usually results in chemicals being classified into entirely different hazard classes by different entities.

These differences cause confusion among workers who rely on information by several different federal agencies and cannot easily determine what precautionary steps they must take while handling, distributing, and storing hazardous chemicals. The second concern is the performance-oriented requirements of the existing hazard communication standard do not specify how the information should be presented in SDSs have led manufacturers to provide widely varying and confusing information about identical chemicals. The new standard would require that the content and format of SDSs and labels for workplace chemicals conform to the uniform GHS requirements.

**5. If the collection of information impacts small businesses or other small entities (Item 5 of OMB Form 83-I), describe any methods used to minimize burden.**

OSHA has analyzed the potential impact of the proposed rule on small entities, and has prepared an Initial Regulatory Flexibility Screening Analysis (IRFSA) in conjunction with this rulemaking to describe the potential effects on small entities. As a result of the analysis of the potential impact on small entities, OSHA concludes and certifies that the rulemaking would not have a significant impact on a substantial number of small entities.

**6. Describe the consequences 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 information required under the HCS concerning the hazards of chemicals and appropriate protective measures reduce the incidence of chemical-source illnesses and injuries in employees exposed to chemical hazards. Making this information available to employees provides some protection to them in the absence of substance-specific rules; the vast majority of hazardous chemicals to which employees are exposed are not regulated by a substance-specific standard. A reduction in the number of incidents of chemical-source illnesses and injuries in employees exposed to chemical hazards occur from the improved protections implemented by employers because of the HCS, and from employees who understand these measures better and, therefore, will take effective steps to protect themselves.

**7. 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;**

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

**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 uses; 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.**

No special circumstances exist that require employers to collect information using the procedures specified by this item. The requirements of the Standard are within the guidelines set forth in 5 CFR 1320.5.

- 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 by the agency in response to these comments. Specifically address comments 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 recordkeeping, disclosure, or reporting format (if any), and on the data elements to be recorded, disclosed, or reported.**

**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.**

The proposed modification to the existing Hazard Communication Standard contains collection of information (paperwork) requirements that are subject to review by the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1995 (PRA-95), 44 U.S.C. 3501 *et seq.*, and OMB's regulations at 5 CFR part 1320. The collection of information requirements associated with these proposed revisions have been submitted to OMB as a new collection of information. The existing collections of information are titled Hazard Communication (29 CFR parts 1910.1200, 1915.1200, 1917.28, 1918.90, 1926.59 and 1928.21), OMB Control Number 1218-0072.

As discussed under Item 4 of this Supporting Statement, OSHA has worked extensively with other Federal and International government agencies and organizations in developing the GHS proposal. The Agency also issued a Request for Information (RFI) in the Federal Register in January 1990 to obtain input regarding international harmonization efforts, and on work being done at that time by the International Labor Organization (ILO) to develop a convention and recommendations on safety in the use of chemicals at work (55 FR 2166, January 22, 1990). On a closely related matter, OSHA published an RFI in May 1990 requesting comments and information on improving the effectiveness of information transmitted under the HCS (55 FR 20580, May 17, 1990). Possible development of a standardized format or order of information was raised as an issue in the RFI.

OSHA published an Advance Notice of Proposed Rulemaking (ANPR) on the GHS in September of 2006 (71 FR 53617, September 12, 2006). The ANPR provided information about the GHS and its potential impact on the HCS, and sought input from the public on issues related to GHS implementation.

On September 30, 2009, OSHA published the NPRM on GHS. Members of the public who wish to comment on the paperwork requirements in this proposal should send their written comments to the Office of Information and Regulatory Affairs, Office of Management and Budget, Room 10235, New Executive Office Building, Washington, DC 20503; Attn: OSHA Desk Officer (RIN 1218-AC20). The Agency encourages commenters also to submit their comments on these paperwork requirements to the rulemaking docket, along with their comments on other parts of the proposed rule. Comments may be submitted by using the Federal eRulemaking portal at <http://www.regulations.gov>. Comments and submissions are posted without change; therefore OSHA cautions commenters about submitting personal information such as social security numbers and date of birth. Information on using the <http://www.regulations.gov> website to submit comments and access the docket is available at the website's "User Tips" link. Commenters have ninety days, from the publication of the NPRM to submit comments.

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

The Agency will not provide payments or gifts to the respondents.

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

The HCS requires that the specific chemical identity of a hazardous chemical be disclosed, but if such information is a valid trade secret, the rule permits chemical producers or importers to limit disclosure of this information based on their need and ability to maintain confidentiality (See 29 CFR 1910.1200 paragraph (i)). OSHA is proposing to add percentage composition information to the SDS. Employers may determine that this information is a trade secret. However, the criteria for an employer to withhold specific chemical information as a trade secret have not been modified.

In addition to the provisions of this rule, the OSH Act requires the Agency to maintain the confidentiality of trade secret information provided directly to its representatives (29 U.S. C. 664).

**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 give to persons from whom the information is requested, and any steps to be taken to obtain their consent.**

The paperwork requirements being modified by the proposal do not require collection of sensitive information.

**12. Provide estimates of the hour burden of the collection of information. The statement should:**

**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. If this request for approval covers more than one form, provide separate hour burden estimates for each form and aggregate the hour burdens in Item 13.**

**Provide estimates of annualized cost to respondents for the hour burdens for collection 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 in Item 14.**

## **Burden Hour and Cost Determination**

The burden hours and costs associated with compliance with the proposed revisions to the HCS will be incurred by the affected establishments as a one-time transition burden over the phase-in period of three years. The methodology used for estimating the number of burden hours and costs resulting from the information collection requirements of the Standard are discussed below. The burden hour estimates and cost estimates, including wage rates, are taken from the Preliminary Economic Analysis (PEA) for the proposed modifications to the HCS. Refer to Table 1 below summarizes the burden hours and costs associated with complying with the proposed revisions.

The HCS covers workplaces in which employees are potentially exposed to hazardous chemicals. For establishments producing hazardous chemicals, which are generally part of the chemical manufacturing industry, the revisions to the standard would involve reclassifying chemicals in accordance with the new classification system and revising safety data sheets (SDSs) and labels associated with hazardous chemicals, and affixing the new labels to containers containing the chemical and dispatching new SDSs with new shipment of chemicals. The agency's estimates of the number of employees covered by the standard are based on the determination that all production employees in manufacturing would be covered.

## **Safety Data Sheets and Labels**

For firms with 500 or more employees, the Agency assumes employers will spend 3 hours per SDS to reclassify their chemicals and change SDSs and labels to a GHS-compliant regulation. The agency based this time estimate on the actual experience of three firms, two firms that comply with the recent Japanese labeling regulations<sup>3</sup> and one large firm that currently uses a state-of-the-art database system.

In firms with 100-499 employees, the Agency estimates that employers will spend a total of 5 hours per SDS to convert to the new system. This estimate includes 3 hours to obtain and

---

<sup>3</sup> Several countries have already promulgated GHS-compliant regulations. Japan was the first country to comply with the GHS labeling requirements in July 2007.

reorganize the SDS's information into the 16 – section format, change the label formats, and input the data. These employers will spend 2 hours maintaining their SDSs and labels in commonly used word processing system and expect to perform chemical classification calculations in regulating simple methods. These firms are already producing 9 – section performance-oriented SDSs.

The Agency estimates that firms with 20-99 employees have not yet converted to the 16-section SDSs and therefore would not be as efficient in converting to the new system. Therefore, the Agency assumes these firms will spend 7 hours per SDS to reclassify chemicals and make changes to SDSs and labels.

Firms with 1-19 employees produce fewer products than those firms in the 20-99 and above category and also continue to use the 9-section format. The agency assumes it will take these firms 7 hours per SDS to reclassify their chemicals and revise their SDSs and labels.

OSHA is proposing to modify existing labeling requirements contained in substance-specific health standards that would require employers to insert specific information currently not required on the label. Previously, these employers incurred no burden hours and cost, under the Paperwork Reduction Act of 1995, since the Standard provides specific language for the required signs and the labels.<sup>4</sup> Burden hours and costs for those employers to create the new labels are accounted for in this analysis. Notations, if necessary, will be made to the following ICRs, stating that the burden hours and costs for employers to prepare labels are taken under the revised HCS. See Table A below for a list of the health standards with modified labeling requirements.

---

<sup>4</sup> *Controlling Paperwork Burden on the Public*, 5 CFR 1320.3(c)(2)



**Table A - Health Standards with modified labeling requirements**

Paragraph	OMB Control Number
<b>General Industry</b>	
Asbestos in General Industry §1910.1001(j)(1) and (j)(5)(i)&(ii)	1218-0134
13 Carcinogens §1910.1003 (e)(1)	1218-0085
Vinyl chloride §1910.1017 (l)(1) and (l)(3)(i)	1218-0010
Inorganic arsenic §1910.1018(j)(2)(vii) and (p)(1)	1218-0104
Lead §1910.1025(g)(2)(vii) and (m)(1)	1218-0092
Chromium §1910.1026(l)(1)	1218-0252
Cadmium §1910.1027(m)(1) and (m)(3)(i) and (ii)	1218-0185
Benzene §1910.1028(j)(1)	1218-0129
Coke oven emissions §1910.1029(l)(1) and (l)(3)	1218-0128
1,2-dibromo-3-chloropropane §1910.1044 (j)(2)(v) and (o)(1)(i)	1218-0101
Acrylonitrile §1910.1045 (p)(1) & (3)	1218-0126
Ethylene oxide §1910.1047(j)(1) and (j)(2)(ii)	1218-0108
Formaldehyde §1910.1048(h)(2)(ii)(B) and (m)(1)	1218-0145
Methylenedianiline §1910.1050(i)(2)(v) and (k)(1)	1218-0184
1,3-Butadiene §1910.1051(l)(1)	1218-0170
Methylene chloride §1910.1052(k)	1218-0179
<b>Maritime Industry</b>	
Asbestos in Shipyards §1915.1001(k)(7)(i) & (ii)	1218-0195
Chromium (VI) §1915.1026 (g)(2)(iv) & (j)(1)	1218-0252
<b>Construction Industry</b>	
Methylenedianiline §1926.60(j)(2)(v) and (l)(1)	1218-0183
Lead §1926.62(g)(2)(vii) and (l)(1)(i)	1218-0189
Asbestos §1926.1101(k)(1)(ii) and (k)(8)(ii)	1218-0134
Chromium §1926.1126(g)(2)(iv) and (j)(1)	1218-0252
Cadmium §1926.1127(i)(2)(v) and (m)(1)	1218-0186

**Table 1 - Burden Hours and Costs for Revisions to Safety Data Sheets and Labeling Requirements**

Establishment Size	# of SDSs	Hours/SDS	Hourly Wage	Pre-Compliance %	% Not in Compliance	Total Burden Hours (rounded)	Total Burden Cost
1-19	102,113	7	\$47	1%	99%	707,643	\$33,259,221
20-99	76,390	7	\$47	5%	95%	507,994	\$23,875,718
100-499	127,820	5	\$47	25%	75%	479,325	\$22,528,275
500+	573,937	3	\$47	75%	25%	430,453	\$20,231,279
<b>Total</b>	<b>880,260</b>					<b>2,125,414</b>	<b>\$99,894,505</b>

Employers will have three years to complete the proposed revisions to the HCS. Therefore, OSHA has annualized the burden hours and costs over a three year period, yielding **708,471** hours at a cost of **\$33,298,168**.

**13. Provide an estimate of the total annual cost burden to respondents or recordkeepers resulting from the collection of information. (Do not include the cost of any hour burden show in Item 12 and 14).**

The cost estimate should be split into two components: (a) a total capital and startup 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.

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 collection 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 rule making containing the information collection, as appropriate.

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.

Many of employers in the 100-500+ firm categories will incur costs to purchase or modify software that can be used to classify chemicals and to produce corresponding SDSs and labels. This software is available from a variety of vendors and may be purchased or used on a subscription basis. In addition, some firms may purchase custom or proprietary software from private vendors to achieve compliance with proposed revisions to hazard communication requirements. Based on industry data these costs were apportioned on a per-SDS basis and estimated to be \$200 per SDS, on average. The purchase of commercially available chemical management software cannot generally be justified for firms with fewer than 99 employees. Unless a firm produces 250 products and changes their SDSs at least every three years such a purchase may not, in most cases, be justifiable. Therefore, the Agency estimates that these firms will continue to rely on commonly used word processing or spreadsheet programs and will not incur any additional software costs.

Establishment Size	# of SDSs	Software Costs	% Purchasing Software	Pre-Compliance %	% Not in Compliance	Total Burden Cost
1-19	102,113	\$200	0%	0.01	0.99	\$0
20-99	76,390	\$200	0%	0.05	0.95	\$0
100-499	127,820	\$200	25%	0.25	0.75	\$4,793,250
500+	573,937	\$200	95%	0.75	0.25	\$27,262,008
<b>Total</b>	<b>880,260</b>					<b>\$32,055,258</b>

Employers will have three years to complete the proposed revisions to the HCS. Therefore, OSHA has annualized the cost yielding \$10,685,086 per year.

- 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 also may aggregate cost estimates from Items 12, 13, and 14 in a single table.**

The information collection requests in the HSC GHS Proposed Rulemaking do not impose costs on the Federal government.

- 15. Explain the reasons for any program changes or adjustments.**

OSHA has made a preliminary determination that the proposed modifications will improve the quality and consistency of information provided to employers and employees regarding chemical hazards and associated protective measures. Thus, modifications are expected to result in increased safety and health for the affected employees and to reduce the numbers of accidents, fatalities, injuries, and illnesses associated with exposures to hazardous chemicals.

The proposed rulemaking would result in an annualized program increase of 708,471 hours (see item 12 of this supporting statement) and \$10,685,086 (see item 13 of the supporting statement). The increase in burden hours and costs is associated with reclassifying chemicals, changing all safety data sheets to conform to the new regulation, and updating all labels and conversion to new software. Employers will have to gather data on hazards and other characteristics of their chemicals, apply the GHS criteria to determine the hazard categories, establish a uniform system for revising existing Safety Data Sheets and labels and make the necessary revisions. This burden will be removed in the future as employers complete reclassification of chemicals, modifying data sheets and labels.

The Agency estimates a 450,000 burden hour reduction after the Final has been in effect for three years resulting from less time developing safety data sheets and labels. Further, there will be a wage hour cost (see item 12 of the supporting statement) reduction of 21 million hours three years after publication of the Final as a result of a reduction of supervisory time.

- 16. For collection of information whose results will be published, outline 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.**

OSHA will not publish the information collected under the Standard.

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

There are no forms associated with this collection of information on which to display the expiration date.

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

OSHA is not requesting an exception to the certification statement on the OMB 83-I.