Supporting Statement For The Hazard Communication Standard¹ (29 CFR 1910.1200, 1915.1200, 1917.28, 1918.90, 1926.59, and 1928.21) (October 2017)

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.

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 et. seq.). 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 Act of 1970, 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 1,414,636 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 Hazard Communication 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. The collections of information requirements are approved by the Office of Management and Budget (OMB) under OMB Control Number 1218-0072.

2. Indicate how, by whom, and for what purpose the information is to be used.

¹ The purpose of this Supporting Statement is to analyze and describe the burden hours and costs associated with the proposed revisions to the existing Hazard Communications information collection request.

> Except for a new collection, indicate the actual use the agency has made of the information received from the current collection.

The HCS standard affects employers and employees in many different industries across the economy. The HCS covers over five million workplaces² in which employees are potentially exposed to hazardous chemicals.

The following paragraphs identify the paperwork requirements contained in the HCS. Estimated burden hours and costs are discussed under Item 12.

Hazard Classification §1910.1200(d)

§1910.1200(d)(1) - Chemical manufacturers and importers shall evaluate chemicals produced in their workplaces or imported by them to classify the chemicals in accordance with this section. For each chemical, the chemical manufacturer or importer shall determine the hazard classes, and, where appropriate, 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) — When classifying mixtures they produce or import, chemical manufacturers and importers of mixtures may rely on the information provided on the current safety data sheets of individual ingredients except where the chemical manufacture or importer knows, or in the exercise of reasonable diligence should know, that the safety data sheet misstates or omits information required by this section.

Written Hazard Communication Program § 1910.1200(e)

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

All employers who have workers exposed to hazardous chemicals³ must develop, implement and maintain a written hazard communication program. The written hazard communication program must describe how the criteria specified in the following paragraphs are met: paragraphs (f) *Labels and other forms of warning*, (g) *Safety Data Sheets*, and (h) *Employee information and training*⁴. Also, the written plan must include a list of the hazardous chemicals known to be present using an identity that is referenced on the appropriate SDSs, and the methods the employer uses to inform workers of the hazards on non-routine tasks and the hazards associated with chemicals contained in unlabeled pipes in their work areas.

For multi-employer worksites the hazard communication program must also include the following: methods the employer will use to provide other employers(s) on-site access to SDSs for each hazardous chemical the other employer(s)' workers may be expose to while working; the methods the employer will use to inform the other employer(s) of any precautionary measures that need to be taken to protect workers during the workplace's normal operating and in foreseeable emergencies; and the methods the employer will use to inform the other employer(s) of the labeling system used in the workplace. Employers may use an existing hazard communication program to meet these requirements provided the plan meets the requirements described in the preceding paragraph.

On request, the employer must make their hazard communication program available to workers, their designated representatives, OSHA compliance officers, and the National Institute for Occupational Safety and Health (NIOSH).

A written program provides a structure upon which to evaluate programs. Employers develop criteria they use in developing their programs, as well as the means used to meet those criteria. The written program serves as a useful reference for workers. Having the program in writing makes it easier to determine if the intent of the Standard is being met. Employers need not update their hazard communication programs as long as they meet the criteria established in paragraph (e) of the Standard.

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 hazardous chemicals leaving the workplace is labeled, tagged, or marked. Hazards not otherwise classified do not have to be addressed on the container. Where the chemical manufacturer or importer is required to label, tag or mark the following information shall be provided:

³ Hazardous chemical means any chemical which is a physical hazard or a health hazard.

⁴ OSHA is not taking a burden for the training requirements specified by paragraph (h) of the HCS because these requirements are no longer considered collection of information requirements.

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

 $\S1910.1200(f)(2)$ - 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).

 $\S1910.1200(f)(3)$ - The chemical manufacturer, importer, or distributor shall ensure that the information provided under paragraphs (f)(1)(ii) through (iv) is located together on the label, tag, or mark.

§1910.1200(f)(4)

 $\S1910.1200(f)(4)(i)$ - 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;

 $\S1910.1200(f)(4)(ii)$ - 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)(4)(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)(5) - 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 (\S 1910.1200(f)(\S 0) - Except as provided in paragraphs (\S 1)(7) and (\S 1) of this section, the employer shall ensure that each container of hazardous chemicals in the workplace is labeled, tagged or marked with either:

 $\S1910.1200(f)(6)(i)$ - The information specified under (f)(1)(i) through (v) for labels on shipped containers; or,

§1910.1200(f)(6)(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)(7) - 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) (6) 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)(8) - 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.

 $\S1910.1200(f)(9)$ - 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.

 $\S1910.1200(f)(10)$ - 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.

 $\S1910.1200(f)(11)$ - 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 six 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)

 $\S1910.1200(g)(1)$ Chemical manufacturers and importers shall obtain or develop a safety data sheet for each hazardous chemical they produce or import. Employers shall have a safety data sheet in the workplace for each hazardous chemical which they use.

§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 at least 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.)

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\S1910.1200(g)(2)(i) - Section 1, Identification;
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§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;

 $\S1910.1200(g)(2)$ (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;

 $\S1910.1200(g)(2)(x)$ - 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.

 $\S1910.1200(g)(5)$ - 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.

 $\S1910.1200(g)(11)$ - 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 $\S1910.1020(e)$.

Trade Secrets (§1910.1200(i))

Chemical manufacturers, importers, or employers who withhold the specific chemical identity or the exact concentration, must immediately disclose the chemical identity or exact concentration where a treating physician or nurse determines that a medical emergency exists and that information is necessary for emergency or first-aid treatment. Chemical manufacturers, importers, or employers generating a SDS, may request a written statement of need and confidentiality in accordance with paragraphs (i)(3) and (i) (4) of the Standard as soon as circumstances permit.

In non-emergency situations, chemical manufacturers, importers, withholding specific chemical identity or exact percentage must disclose the hazardous chemical identity or exact percentage to a health professional providing the medical or other occupational health services to exposed workers, provided the request in writing. The request must describe with reasonable detail one of the items in paragraphs (i)(3)(ii). If the health professional, worker, or designated representative who receives the trade secret information chooses to provide the information to OSHA, they must inform the chemical manufacturer, importer, or employers who prepare SDSs that they are providing the information to OSHA.

Chemical manufacturers, importers, or employers who prepare SDSs, may prepare a written denial for disclosure of specific chemical identity or exact percentage. Written denials must contain the information stated in paragraph (i)(7) of the Standard.

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, OSHA standards minimize burdens on employers, including technical and legal burdens. OSHA is aware that employers have developed a number of options to sort, collect, and store hazard communication information, and that many software programs have been marketed to assist employers in accomplishing these tasks. The Standard allows for electronic access, and other alternatives to 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.

OSHA is considering developing a SDS web application that would assist employers in formatting and printing their SDS.

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. OSHA has an MOU with the EPA dated April 12, 2012, that addresses EPA's Federal Insecticide, Fungicide, and Rodenticide Act's labels and safety data sheets. Each of these regulatory authorities operates under different statutory mandates, and has adopted distinct hazard communication requirements.

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

As part of the GHS rulemaking, OSHA analyzed the potential impact of the final rule on small entities, and prepared a Regulatory Flexibility Analysis (RFA) in conjunction with the rulemaking describing the potential effects on small entities. As a result of the analysis of the potential impact on small entities, OSHA concluded and certified that the rulemaking did not have a significant impact on a substantial number of small entities. OSHA believes this is still the case in this submission

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 workers exposed to chemical hazards. Making this information available to workers provides some protection to them in the absence of substance-specific rules; the vast majority of hazardous chemicals to which workers are exposed are not regulated by a substance-specific standard. A reduction in the number of incidents of chemical-source illnesses and injuries in workers exposed to chemical hazards occur from the improved protections implemented by employers because of the HCS, and from workers 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.

As required by the Paperwork Reduction Act of 1995 (44 U.S.C. 3506(c)(2)(A)), OSHA published a notice in the *Federal Register* on April 27, 2015 (80 FR 23300, Docket No. OSHA-2009-0014) requesting public comment on its proposed extension of the collection of information requirements contained in the Hazard Communication Standard. This notice was part of a preclearance consultation program intended to provide those interested parties the opportunity to comment on OSHA's request for an extension by the Office of Management and Budget (OMB) of a previous approval of the collection of information requirements found in the Standard. The Agency received no public comments in response to this notice.

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

The Agency will <u>not</u> 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 importers to limit disclosure of this information based on their need and ability to maintain confidentiality (See 29 CFR 1910.1200 paragraph (i)).

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 specified by the Standard do<u>not</u> 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.

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 13.

Burden Hour and Cost Determination

Explanation of Method of Estimating the Annual Burden

As with the currently approved ICR, OSHA is maintaining some of the previous assumptions for this ICR that rely on an older RIA. While other assumptions rely on data obtained during the GHS rulemaking.

Exhibit A. Sources for the Analysis Values

Exhibit A-1, below, shows the basic values used in this analysis. These values were derived as follows:

Number of affected establishments: The number of affected establishments is based on the data from the HCS/GHS final economic analysis, "the FEA."

New establishments as a percentage of all establishments (rate of entry): The number of affected new establishments is based on the FEA.

Total Number of Workers: The total number of workers is based on the FEA.

Number of chemical products: The number of chemical products was taken from the FEA.

Percentage of new chemical products annually⁵: Based on the RIA, new chemical products are assumed to be 8 percent of all chemical products.

Number of chemical products per establishment: The RIA estimated that the typical manufacturing establishment has 22 hazardous chemicals, and that the typical non-manufacturing establishment has 15 hazardous chemicals.

Number of Shipped Containers of Hazardous Chemicals: Based on the FEA, the number of shipped containers of hazardous chemicals is 949 million.

Number of in-plant containers: The number of containers of hazardous chemicals used entirely in-plant was assumed to be 10 percent of the number of shipped containers of hazardous chemicals.

Percentage of establishments already in compliance: The RIA found that 60 percent of all establishments were in compliance with the basic provisions of the HCS, primarily as a result of state laws existing prior to the OSHA standard. Hence, HCS is assumed to account for (1-.6) or 40 percent of the burdens and costs since, in the absence of HCS, 60 percent of the burden would continue as a result of state statutes.

Exhibit A-1 Basic Values for the Analysis

Number of Affected Establishments

Manufacturing 90,628 Non-Manufacturing 5,312,650

⁵ This estimate includes those instances when chemical manufacturers, importers, distributors or employers become aware of any significant information regarding the hazards of a chemical and they are required to revise labels for the chemical.

New Establishments as a percentage of all Establishments

Manufacturing 6,525 (7.2%)

Non-Manufacturing 674,707 (12.7%)

Total Workers 129,924,808

Number of Chemicals Products 1,414,636

Percentage of New Chemicals Products Annually 8.0%

Number of Hazardous Chemicals Products per Establishment

Manufacturing 22 Non-Manufacturing 15

Number of Shipped Containers of Hazardous Chemicals 949,000,000

Number of In-Plant Containers 94,900,000 Percentage of Establishments Already in Compliance as a Result of State Standards 60%

Compensation Wage Rates

The Agency determined average wage rates using average hourly earnings, including benefits, to represent the cost of worker time. The Agency adopted the mean wage rates from "May 2014 National Industry-Specific Occupational Employment and Wage Estimates," U.S. Department of Labor, Bureau of Labor Statistics. Total compensation for these occupational categories includes an adjustment of 31.7 percent (Employment Costs Index, March 2015 http://www.bls.gov/schedule/archives/ecec_nr.htm#current) for fringe benefits; this figure represents the average level of fringe benefits in the private sector. The costs of labor used in this analysis are, therefore, estimates of total hourly compensation. These hourly wages are:

Supervisors/Managers \$64.36⁷ Logistic Workers \$48.65⁸

⁶ The Agency uses 40% in burden hour and cost equations to reflect that 60% of the establishments already in compliance with State law.

⁷ This mean hourly wage rate (\$48.87) corresponds to SOC code 11-3051, "Industrial Production Managers." (Source: *May 2014 National Occupational Employment and Wage Estimates, United States*, U.S. Department of Labor, Bureau of Labor Statistics.) http://www.bls.gov/oes/tables.htm

⁸This mean hourly wage rate (\$36.94) corresponds to SOC code 13-1081, "Logisticians." (Source: *May 2014 National Occupational Employment and Wage Estimates, United States*, U.S. Department of Labor, Bureau of Labor Statistics.) http://www.bls.gov/oes/tables.htm

Clerical/Secretary

\$21.85⁹

1. Written Hazard Communication Programs (§ 1910.1200(e)) (New Establishments)

Written Hazard Communication Program: All affected establishments must have a written hazard communication program explaining how the establishment meets the criteria of the standard with respect to labeling, safety data sheets (SDSs), and worker information and training as discussed under paragraph (e) of the standard. The RIA estimates manufacturing plants take an average of 5 hours (4 professional hours and 1 clerical hour) to develop a written hazard communication program while nonmanufacturing facilities take an average of 2.5 hours (2 hours professional and .5 clerical).

To determine the total number of *new* manufacturing and non-manufacturing establishments the agency multiplied the total number of manufacturing and non-manufacturing establishments by the rate of entry.

In addition, since sixty percent of establishments were in compliance prior to the promulgation of the HCS as a result of State Standards, the total number of new establishments was multiplied by 40% to reflect burden hours and costs attributed to the HCS.

Number of new establishments affected:

New manufacturing establishments: 90,628 manufacturing establishments x .072 (rate of entry) x 40% = 2,610 affected new manufacturing establishments.

New non-manufacturing establishments: 5,312,650 non-manufacturing establishments $\times .127$ (rate of entry) $\times 40\% = 269,883$ affected new non-manufacturing establishments

Burden Hours and Costs:

Manufacturing:

Burden hours:

2,610 affected new establishments x 4 hours professional = 10,440 hours

⁹This mean hourly wage rate (\$16.59) corresponds to SOC code 43-6014, "Secretaries and Administrative Assistants, except Legal, Medical, and Executive." (Source: *May 2014 National Occupational Employment and Wage Estimates, United States*, U.S. Department of Labor, Bureau of Labor Statistics.) http://www.bls.gov/oes/tables.htm

2,610 affected new establishments x 1 hour clerical = 2,610 hours **Total burden hours** = 13,050 hours

Cost:

10,440 hours x \$64.36 professional wage rate hour = \$671,918 2,610 hours x \$21.85 clerical wage rate = \$57,029 **Total cost** = \$728.947

Non-Manufacturing:

Burden hours:

269,883 affected new establishments x 2 hours professional = 539,766 hours 269,883 affected new establishments x .5 clerical = 134,942 hours **Total burden hours** = 674,708 hours

Cost:

539,766 hours x \$64.36 professional wage rate = \$34,739,340 134,942 hours x \$21.85 clerical wage rate = \$2,948,483

Total cost: \$37,687,823

Total Burden Hours and Costs:

		Non-	
	Manufacturing	Manufacturing	<u>TOTAL</u>
Burden hours:	13,050	674,708	687,758
Cost:	\$728,947	\$37,687,823	\$38,416,770

2. Written Hazard Communication Program (§ 1910.1200(e)) (Existing Establishments)

OSHA estimates existing manufacturing establishments take 1 hour and non-manufacturing establishments .5 hour to update and maintain their hazard communication programs. Forty percent of the establishments incur burden hours and costs as a result of the HCS.

Number of Existing Establishments Affected:

Existing manufacturing establishments affected: 90,628 manufacturing establishments x 40% = 36,251 affected establishments; 36,251 affected establishments - 2,610 new manufacturing establishments affected = 33,641 existing establishments affected.

Existing non-manufacturing establishments affected: 5,312,650 non-manufacturing establishments x 40% = 2,125,060 affected establishments; then 2,125,060 affected establishments - 269,883 new non-manufacturing establishments affected = 1,855,177 existing establishments affected.

Manufacturing:

Burden hours: 33,641 existing establishments x 1 hour = 33,641 hours

Cost: 33,641 hours x \$64.36 = \$2,165,135

Non-Manufacturing:

Burden hours: 1,855,177 establishments x .5 hour = 927,589 hours

Cost: 927,589 hours x \$64.36 = \$59,699,628

Total Burden hours and costs

Non-

ManufacturingManufacturingTOTALBurden hours:33,641927,589961,230Costs:\$2,165,135\$59,699,628\$61,864,763

3. Hazard Classification (§ 1910.1200(d))

Chemical manufacturers and importers must evaluate chemicals produced in their workplaces or imported by them to classify the chemicals in accordance with the standard. For each chemical, the chemical manufacturer or importer must determine the hazard classes, and, *where appropriate*, 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. On average, a professional takes 8 hours to conduct the hazard classification and to develop the necessary labels and SDSs.

The total number of affected chemical products 565,854 is determined by multiplying the total number of chemical products 1,414,636 by 40 percent. The percentage of new chemical products annually is 8% of the total affected chemical products which is 45,268.

Burden hours: 45,268 new hazardous products x 8 hours = 362,144 hours **Cost**: 362,144 hours x \$64.36 = \$23,307,588

4. Sending of SDSs (§ 1910.1200(g)) (Sending SDSs for new hazardous chemicals to existing establishments)

Manufacturers, importers, or employers distributing hazardous chemicals or products must send SDSs to establishments receiving the new hazardous chemical or product. OSHA estimates a manufacturer, importer, or employer generating the SDS takes .14 clerical hours to distribute a SDS. Only 8% of the hazard chemicals will be new annually.

To determine the number of new hazardous chemicals existing establishments receive, OSHA estimated that, on average, each manufacturing establishment has 22 hazardous chemicals. Therefore, the number of new chemicals per manufacturing establishment averages 1.76 new chemicals.

Manufacturing:

Burden hours: 33,641 establishments x 1.76 new hazardous chemicals x .14 hour =

8,289 hours

Cost: 8,289 hours x \$21.85 = \$181,115

For non-manufacturing establishments, there are 15 hazardous chemicals, assuming an eight percent new chemical rate; the number of new chemicals for non-manufacturing establishments is 1.2.

Non-Manufacturing:

Burden hours: 1,855,177 establishments x 1.2 new hazardous chemicals x .14 hour =

311,670 hours

Cost: 311,670 hours x \$21.85 = \$6,809,990

Total Burden hours and cost:

Non-

 Manufacturing
 Manufacturing
 Total

 Burden Hours:
 8,289
 311,670
 319,959

 Cost:
 \$181,115
 \$6,809,990
 \$6,991,105

5. Sending of SDSs (§ 1910.1200(g)) (Sending SDSs for all hazardous chemicals to new establishments)

Manufacturers, importers, or employers developing SDSs, must distribute SDSs to new establishments for all initial hazardous chemicals and for new chemical products they may receive during the year. The clerical time required to send SDSs to new establishments is the same as for existing establishments, .14 hours. OSHA recognizes that the time it takes for manufacturers, importers, or employers to transmit SDSs is overestimated because some are sent electronically.

Manufacturing:

OSHA estimates that the new manufacturing establishments receive an average of 22 SDSs; 22 hazardous chemicals for purchasing initially, plus the 1.76 for the new hazardous chemicals establishments purchases annually.

Burden hours: 2,610 new establishments x 23.76 hazardous chemicals x .14 hour = 8,682

hours

Cost: 8,682 hours x \$21.85 = \$189,702

Non-manufacturing:

Non-manufacturing establishments receive an estimated 16.2; (15 SDSs + 1.2 new hazardous chemicals)

Burden hours: 269,883 new non-manufacturing establishments x 16.2 hazardous

chemicals x .14 hour = 612,095 hours

Cost: 612,095 hours x \$21.85= \$13,374,276

Total Burden hours and cost:

Non-

Manufacturing Manufacturing Total

Burden hours: 8,682 612,095 620,777 Cost: \$189,702 \$13,374,276 \$13,563,978

5. (a) Sending of SDSs (§ 1910.1200(g)) (Sending SDSs for existing hazardous chemicals to existing establishments)

Manufacturers, importers, or employers distributing hazardous chemicals or products must send SDSs to establishments receiving the hazardous chemical or product. OSHA estimates a manufacturer, importer, or employer generating the SDS takes .14 clerical hours to distribute an existing SDS to a manufacturer deciding to use an existing hazardous chemical that they had not previously used. OSHA estimates that, on average, half of establishments (the equivalent of every existing establishment newly using .5 existing chemicals) will newly use an existing chemical.

Manufacturing:

Burden hours: 33,641 establishments x .5 existing hazardous chemicals x .14 hour =

2,355 hours

Cost: 2,355 hours x \$21.85 = \$51,457.

For non-manufacturing establishments, OSHA also estimates that, on average, half of establishments (the equivalent of every existing establishment newly using .5 existing chemicals) will newly use an existing chemical.

Non-Manufacturing:

Burden hours: 1,855,177 establishments x .5 new hazardous chemicals x .14 hour =

129,862 hours

Cost: 129,862 hours x \$21.85 = \$2,837,485

Total Burden hours and cost:

Non-

 Manufacturing
 Manufacturing
 Total

 Burden Hours:
 2,355
 129,862
 132,217

 Cost:
 \$51,457
 \$2,837,485
 \$2,888,942

5. (b) Revising SDSs

The Agency estimated a few SDSs, and accompanying labels as necessary, will need to be revised. OSHA estimates that one-half of one percent (.005) of the SDS would need to be revised. Given the standardized format of the SDS and that any new significant information that chemical manufacturers, importers, distributors, or employers would become aware of would not require a comprehensive revision of the SDS. For the purposes of estimating burden hours, OSHA estimates it will take 15 minutes for a supervisor/manager to update the SDS, and if necessary the associated label.

Burden hours: 1,414,636 SDS x .5% x .25 hour = 1,768 hours

Cost: 1,768 hours x \$64.36 wage hour professional = \$113,788

6. Obtaining & Maintaining SDSs (§ 1910.1200(g)) (Existing Establishments)

All existing establishments that have hazardous chemicals must maintain SDSs, and may need to obtain SDSs. Smaller establishments or establishments with fewer chemicals spend less time to obtain and maintain SDSs, while larger companies, companies with a greater number of chemicals, and construction companies having to keep SDSs at various job sites take a greater amount of time obtaining and maintaining SDSs. To account for this variance in time, OSHA estimates an average of 1 hour of clerical time per establishment is needed to obtain and maintain SDSs. OSHA assumes 40 percent of the establishments incur burden hours and costs as a result of the HCS.

Manufacturing:

Burden hours: 33,641 existing establishments affected x 1 hour = 33,641 hours **Cost**: 33,641 hours x \$21.85 = \$735,056

Non-Manufacturing:

Burden hours: 1,855,177 existing establishments affected x 1 hour = 1,855,177

hours

Cost: 1,855,177 hours x \$21.85 = \$40,535,617

Total Burden hours and costs:

ManufacturingNon-ManufacturingTOTALBurden hours: 33,6411,855,1771,888,818Costs: \$735,056\$40,535,617\$41,270,673

7. Obtaining & Maintaining SDS (§ 1910.1200(g)) (New Establishments)

All new establishments receive and maintain SDSs for hazardous chemicals at their locations. On occasion new establishments may need to obtain SDSs. A clerical worker

spends an average of .14 hour per SDS to obtain and maintain the SDSs. The Agency recognizes that the .14 hour is an over estimate given numerous employers receive, obtain, and maintain SDSs electronically.

The number of new manufacturing establishments affected by the HCS is 2,610, and the number of new non-manufacturing establishments affected is 269,883 (see number 1 "Written Hazard Communication Program (New Establishments))." OSHA estimates that new manufacturing establishments require a total of 23.76 SDSs, and non-manufacturing establishments require 16.2 SDSs. The burden hours are determined by multiplying the number of establishments by the total number of SDSs per establishment by the time to obtain and maintain SDSs.

Manufacturing:

Burden hours: 2,610 establishments x 23.76 SDSs x .14 hour = 8,682 hours **Cost**: 8,682 hours x \$21.85 = \$189,702

Non-Manufacturing:

Burden hours: 269,883 establishments x 16.2 SDSs x .14 hour = 612,095 hours

Cost: 612,095 hours x \$21.85 = \$13,374,276

Total Burden hours and costs

No	n-
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	Manufacturing	Manufacturing	TOTAL
Burden hours:	8,682	612,095	620,777
Cost:	\$189,702	\$13,374,276	\$13,563,978

8. Labeling Shipping Containers (§ 1910.1200(f))

There is no burden for affixing labels to off-site containers because it is usual and customary practice for manufacturers to affix labels to containers being shipped.

9. Labeling of In-Plant Containers (§ 1910.1200(f)(5))

Labeling in-plant containers: Employers must ensure that portable containers that are transferred from the workers who filled them to other workers are labeled. It is estimated that approximately 12 seconds (.0033 hour) of workers time per container. OSHA assumes 40 percent of the containers incur burden hours and costs as a result of the HCS.

Burden hours: 94,900,000 (# of containers) x 40% x .0033 hours per container =

125,268 hours

Cost: 125,268 hours x \$48.65 (worker) = \$6,094,288

10. Access to Trade Secrets (§ 1910.1200(i))

Burden hours are estimated for employers to respond to requests from workers, their representatives, and health professionals for trade secret information. The Agency estimates an average of 7 situations requiring access to trade secrets per 10,000 workers working in establishments with hazardous chemicals. OSHA estimates there are 129,924,808 workers¹⁰ covered by the HCS, therefore, the Agency estimates there are 63,656 access requests (129,924,808 workers/10,000 workers x 7 situations), and that a professional requires 4 hours to respond to each request.

Burden hours: 90,947 requests x 4 hours = 363,788 hours **Cost**: 363,788 hours x \$64.36 = \$23,413,396

11. Employee Access (§ 1910.1200(d),(c) and §1910.1200(e)(4))

OSHA estimates an average of 1.5 requests per establishment for worker access to the written programs and SDSs. OSHA estimates a clerk takes 10 minutes (.167 hour) to show the worker the relevant documents and to return them to a file after the worker has examined them. OSHA assumes 40 percent of the establishments (5,403,378 establishments \times 40% = 2,161,351 establishments) incur burden hours and costs for providing workers access as a result of the HCS.

Burden hours: 2,161,351 establishments x 1.5 response x .167 hours = 541,418 hours Cost: 541,418 hours x \$21.85 = \$11,829,983

12. Federal Access

Usually, OSHA requests access to records during an inspection. Information collected by the Agency during the investigation is not subject to the PRA under 5 CFR 1320.4(a)(2). Therefore, OSHA takes no burden hours or cost.

13. Revisions due to 2012 HCS rulemaking

Labels - Chemical manufacturers, importers, distributors, or employers who become newly aware of any significant information regarding the hazards of a chemical must revise the labels for the chemical within six months of becoming aware of the new information, and must ensure that labels on containers of hazardous chemicals shipped after that time contain the new information.

SDS - Chemical manufacturers, importers, distributors, or employers who become newly aware of any significant information regarding the hazards of a chemical must revise the SDS for the chemical within six months of becoming aware of the new information, and must ensure that SDSs of hazardous chemicals shipped after that time contain the new information.

Most safety data sheets and labels were revised as a result Hazard Communication Standard --Incorporating Globally Harmonized System of Classification and Labelling of

¹⁰ Estimate of 129,924,808 total workers comes from FEA.

Chemicals rulemaking. As a result of employers having five years to complete final revisions to SDS, OSHA has annualized the original 2012 HCS/GHS burden estimate 3,415,680 hours, (see Table 1 below) over a five year period, resulting in 683,136 hours annually for employers to complete necessary modifications to SDSs/labels.

Burden hours: 3,415,680 hours/ five years = 683,136 **Cost**: 683,136 x \$64.36 = \$43,996,633

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	Total Burden Cost
1-19	164,102	7	\$66	1%	99%	1,137,227	\$75,056,982
20-99	122,764	7	\$66	5%	95%	816,381	\$53,881,146
100-499	205,415	5	\$66	25%	75%	770,306	\$50,840,196
500+	922,355	3	\$66	75%	25%	691,766	\$45,656,556
Total	1,414,636					3,415,680	\$228,434,880

14. Familiarization of with HCS

OSHA believes all employers have read and become familiar with the HCS/GHS final rule.

Table 1 Summary of Annual Burden and Cost

Sammary of Amnual Burden und Cost										
Information Collection Requirement	Existing Burden Hours	Requested Burden Hours	Adjustment Change	Estimated Costs	Responses					
1.Written Hazard Communication Program (New Establishments)	687,758	687,758	0	\$38,416,770	544,986					
2. Written Hazard	961,230	961,230	0	\$61,864,763	1,888,818					

Communication Program					
(Existing					
Establishments)					
3.Hazard Classification	362,144	362,144	0	\$23,307,588	45,268
4. Sending SDSs for new hazardous chemicals existing establishments	319,959	319,959	0	\$6,991,105	2,285,421
5. Sending SDSs (New Establishments)	620,77 7	620,777	0	\$13,563,978	4,434,119
5. (a) Sending SDS (Existing Establishments)	0	132,217	132,217	\$2,888,942	944,409
5. (b) Revising SDSs (Existing Establishments)	0	1,768	1,768	\$113,788	0
6. Obtaining and Maintaining SDSs (Existing Establishments)	1,888,818	1,888,818	0	\$41,270,673	1,888,818
7. Obtaining and Maintaining (New Establishments)	620,777	620,777	0	\$13,563,978	4,434,118
8. Labeling Shipped Containers	0	0	0	\$0	0
9. Labeling of In-Plant Containers	125,268	125,268	0	\$6,094,288	37,960,000
10. Access to Trade Secrets	363,788	363,788	0	\$23,413,396	90,947
11. Employee Access	541,408	541,418	10	\$11,828,983	3,242,027
12. Federal Access	6,052	0	-6,052	\$0	0
13. Revisions to the Safety Data Sheets and Labeling	1,138,560	683,136	-455,424	\$43,966,633	663,737
14. Familiarization and implementation of the revisions to the hazard communication program.	3,052,709	0	-3,052,709	0	0
TOTAL	10,689,248	7,309,058	-3,380,190	\$287,285,885	58,422,667

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 like); 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.

Transmitting SDSs

The cost to develop and transmit SDSs varies depending on transmission of SDSs. Many importers and manufacturers of hazardous chemicals send SDSs electronically. In these situations, there are no costs to importers and manufactures to transmit the SDSs downstream to employers, including distributors. Importers and manufacturers also send paper copies of SDSs with their hazardous chemicals. Many employers copy SDSs in-house for distribution. Based on the cost of toner and paper; the cost for importers and manufacturers is approximately 7 cents per page (\$.07). To estimate costs for the various production and distribution of SDSs, OSHA assumes that all SDSs are transmitted by paper. The cost for SDSs are determined by totaling the number of SDSs distributed then multiplying the total by \$.07

Under Item 12, number 4 titled "Sending SDSs for new hazardous chemicals, to existing establishments" OSHA estimates that a total of 59,208 SDSs¹¹ are sent to existing manufacturing establishments and 2,226,212 SDSs are sent to non-manufacturing establishments¹². Therefore, the total number of SDSs received by existing manufacturing and non-manufacturing establishments is 2,285,420.

Under Item 12, number 5 titled "Sending SDSs for all hazardous chemicals to new establishments," OSHA estimates a Total of 62,104 SDSs are sent to new manufacturing establishments and 4,372,105 SDSs are sent to new non-manufacturing establishments. ¹³ The total number of SDSs sent to new establishments is 4,434,209 SDSs.

¹¹ Existing manufacturers receive a total of 59,208 SDSs (33,641 affected establishments x 1.76 new/revised SDSs).

¹² Existing non-manufacturers receive a total of 2,226,212 SDSs (1,855,177 affected establishments x 1.2 new/revised SDSs).

¹³ New manufacturers receive a total of 62,014 SDSs (2,610 establishments x 23.76 SDSs) and new non-manufacturing receive a total of 4,372,105 SDSs (269,883 establishments x 16.2 SDSs).

Under Item 12, number 5(a) titled "Sending SDSs for existing hazardous chemicals to exiting establishments," OSHA estimates a total of 16,821 existing SDSs are sent to existing manufacturing establishments and 927,589 existing SDSs are sent to existing non-manufacturing establishments. ¹⁴. The total number of SDSs is 944,410.

The total number of SDSs is 7,644,039 (2,285,420 +4,434,209 + 944,410) **Cost:** 7,644,039 SDSs x 2 pages x .07 dollar = \$1,072,965

Printing Cost-for Labels:

The total estimated for color printer cost is \$24,074,395 for all establishments. See Table 2, *Summary of Color Printing Costs*. The cost of colored printers and printing is only for labels and not SDSs, as SDSs may be printed in black and white and still remain in compliance. Labels with pictograms require color printing for the red borders of the pictograms.

The total cost for producing and transmitting SDS (\$1,072,965), and developing color labels (\$24,074,436) is \$25,147,401.

		Table 2 Summary of Color	r Printing Costs			
Size Category	Annualized	Annualized	Total	Total Annualized	Total Annualized	
	Printer Cost	Cartridge/Ribbon/Stock	Annualized	Costs per Establishment	Costs, All Establishments	
	per Label	Costs per Label	Costs per Label	Establishment	Establishments	
Category 1: Co	mpanies Printing (Only B&W and No Color Printe				
			_			
Very Small	\$0.01	\$0.13	\$0.14	\$91.74	\$1,489,571	
Small	\$0.01	\$0.13	\$0.13	\$570.41	\$2,552,483	
Medium	\$0.01	\$0.01	\$0.01	\$142.02	\$321,896	
Large	\$0.01	\$0.01	\$0.02	\$1,091.86	\$806,560	
Category 2: Co	mpanies Printing l	B&W but Own Color Printer				
Very Small	\$0.01	\$0.13	\$0.14	\$91.74	\$496,524	
Small	\$0.00	\$0.13	\$0.13	\$551.81	\$823,074	
Medium	\$0.00	\$0.01	\$0.01	\$123.42	\$93,242	
Large	\$0.01	\$0.01	\$0.02	\$905.80	\$2,007,345	
Category 3: Co	mpanies Using Pre	- Printed Stock/Labels				
Very Small	\$-	\$0.03	\$0.03	\$22.28	\$482,349	
Small	\$-	\$0.03	\$0.03	\$144.11	\$859,807	
Medium	\$-	\$0.03	\$0.03	\$431.02	\$1,302,548	
Large	\$-	\$0.03	\$0.03	\$1,738.06	\$12,839,037	
Category 4: Co	mpanies Printing	Color Labels				
Very Small	\$-	\$-	\$-	\$-	\$-	
Small	\$-	\$-	\$-	\$-	\$-	
Medium	\$-	\$-	\$-	\$-	\$-	
Large	\$-	\$-	\$-	\$-	\$-	
Total					24,074,436	

¹⁴ Existing manufacturers receive a total of 16,821 SDSs (33,641 establishments x .5 SDSs) and new non-manufacturing receive a total of 927,589 SDSs (1,855,177 establishments x .5 SDSs).

1 – Includes the cost of printers annualized over five years and the cost of printing supplies incurred over a 20-year period beginning four years after the rule is published\$ - entries indicated no costs, while \$0.000 entries are non-zero fractions of a penny.

Source: Office of Regulatory Analysis, OSHA based on ERG (2011).

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 may 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.

Usually, OSHA requests access to records during an inspection. Information collected by the Agency during the investigation is not subject to the PRA under 5 CFR 1320.4(a)(2). Therefore, OSHA takes no burden or cost in Item 14 of this Supporting Statement for disclosing information during an inspection.

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

OSHA is requesting an adjustment decrease of -3,380,190. The decrease is primarily due to removing burden hours for employers completing revisions to their safety data sheets and time associated with familiarization with the GHS/HCS final standard. OSHA is retaining 683,136 hours for manufacturers, importers, or employers distributing hazardous chemicals or products, to send existing SDSs to existing establishments receiving the hazardous chemical or product. These hours reflect that employers had five years to comply with the SDs/labeling provisions in the GHS/HCS rulemaking.

OSHA is also requests a cost adjustment decrease of \$25,596,060 from \$50,743,461 to \$25,147,401. The cost reduction results from employers completing purchasing or modifying software that can be used to classify chemical and to produce corresponding SDS and labels.

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.

The information required to be collected by the Hazard Communication Standard will not

¹⁵ To reflect the five years employers have to come into compliance with revising SDS and labels, OSHA has annualized the total burden by five years, 684,904.

have results that will be published for statistical use.

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 expiration date.

18. Explain each exception to the certification statement.

OSHA is not requesting an exception to the certification statement.

B. COLLECTION OF INFORMATION EMPLOYING STATISTICAL METHODS

These collection of information requirements employ no statistical methods.

Table 10 Industry Profile

NAICS Code	Industry	Total Number of Firms	Number of Affected Firms	Total Number of Establishments	Number of Affected Establishments	Total Employees	Employees to be Trained	Number of SDSs Produced
11	Agriculture, Forestry, Fishing & Hunting							
113	Forestry & Logging	10,303	10,303	10,491	10,491	64,445	17,638	0
114	Fishing, Hunting and Trappinig	2,380	856	2,389	862	9,244	1,637	0
115	Support Activities for Ag & Forestry	10,271	4,412	10,765	4,895	100,513	12,278	0
211	Oil and Gas Extraction							
211111	Crude petroleum & natural gas extraction	6,424	6,424	7,221	7,221	133,286	82,953	56,995
211112	Natural gas liquid extraction	139	130	321	311	8,218	6,919	6,145
212	Mining (except Oil & Gas)	4,465	4,465	7,008	7,008	218,044	174,991	0
213	Support Activities for Mining	9,809	9,809	11,652	11,652	341,034	252,262	0
22	Utilities							
2211	Electric Power Gen, Trans & Distrib	1,687	1,687	9,611	9,611	503,134	245,715	0
2212	Natural Gas Distribution	507	507	2,283	2,283	79,354	34,240	0
2213	Water, Sewage, & Other Systems	3,998	3,998	4,780	4,780	40,269	21,875	0
23	Construction							
236	Construction of Buildings	242,322	242,322	244,862	244,862	1,672,254	1,148,424	0
237	Heavy Construction	49,228	49,228	51,421	51,421	1,016,407	617,651	0
238	Special Trade Contractors	508,722	508,722	515,169	515,169	4,579,222	3,610,532	0
31	Manufacturing							
311	Food Manufacturing	21,591	21,591	25,796	25,796	1,439,266	1,116,334	0
312	Beverage &Tobacco Prod. Manuf.	3,466	3,466	4,069	4,069	156,114	90,970	0
313	Textile Mills	2,690	2,690	3,092	3,092	164,082	138,640	0
314	Textile Product Mills	6,471	6,471	6,732	6,732	152,978	124,024	0
315	Apparel Manufacturing	10,151	10,151	10,368	10,368	350,439	275,995	0
316	Leather & Allied Product Manufac.	1,348	1,348	1,392	1,392	36,671	29,133	0
321	Wood Product Manufacturing	14,608	14,608	16,622	16,622	527,565	429,838	0

322	Paper Manufacturing	3,259	3,259	5,037	5,037	425,096	329,797	0
323	Printing and Related Support	31,655	31,655	33,281	33,281	631,771	461,828	0
324	Petroleum & Coal Prod. Manufac.							
324110	Petroleum refineries	258	258	374	374	64,263	39,080	26,740
324121	Asphalt paving mixture & block mfg	481	481	1,386	1,386	14,457	10,739	132,545

Table VI-2.

NAICS Code	Industry	Total Number of Firms	Number of Affected Firms	Total Number of Establishments	Number of Affected Establishments	Total Employees	Employees to be Trained	Number of SDSs Produced
324	Petroleum & Coal Prod. Manufac.							
324122	Asphalt shingle & coating materials mfg	126	126	229	229	11,598	8,503	18,415
324191	Petroleum lubricating oil & grease m	290	290	329	329	10,136	5,426	559,300
324199	All other petroleum & coal products mfg	72	72	90	90	3,123	2,370	5,030
325	Chemical Manufacturing							
325110	Petrochemical mfg	41	39	58	55	8,393	4,123	4,498
325120	Industrial gas mfg	89	60	553	60	304	192	4,877
325131	Inorganic dye & pigment mfg	71	59	92	65	2,649	1,713	833
325132	Synthetic organic dye & pigment mfg	90	90	107	107	5,128	2,867	2,308
325181	Alkalies & chlorine mfg	33	33	49	49	4,483	2,748	374
325182	Carbon black mfg	10	10	30	30	1,708	121	222
325188	All other basic inorganic chemical mfg	383	383	612	612	42,063	25,891	16,038
325191	Gum & wood chemical mfg	43	43	51	51	2,139	1,128	2,505
325192	Cyclic crude & intermediate mfg	26	26	31	31	5,074	2,979	356
325193	Ethyl alcohol mfg	222	222	245	245	5,957	4,334	2,545
325199	All other basic organic chemical mfg	541	541	712	712	68,867	39,150	25,119
325211	Plastics material & resin mfg	561	561	799	799	61,199	38,855	84,337
325212	Synthetic rubber mfg	127	127	150	150	8,455	6,053	1,801
325221	Cellulosic organic fiber mfg	16	16	17	17	2,365	1,876	21

325222	Noncellulosic organic fiber mfg	85	85	110	110	24,214	13,956	0
325311	Nitrogenous fertilizer mfg	132	132	157	157	1,117	772	202
325312	Phosphatic fertilizer mfg	30	30	41	41	688	483	65
325314	Fertilizer (mixing only) mfg	341	341	467	467	8,551	5,313	3,871
325320	Pesticide & other agricultural chemical mfg	185	185	241	241	10,668	5,868	5,758
325411	Medicinal & botanical mfg	342	342	366	366	27,475	13,584	3,610
325412	Pharmaceutical preparation mfg	798	798	1,002	1,002	158,124	68,144	12,765
325413	In-vitro diagnostic substance mfg	199	199	244	244	27,215	10,254	26,620
325414	Biological product (except diagnostic) mfg	221	221	314	314	28,525	13,544	3,236
325510	Paint & coating mfg	1,081	1,081	1,318	1,318	41,177	17,728	83,050
325520	Adhesive mfg	446	446	588	588	21,316	13,117	27,450

Table VI-2.

NAICS Code	Industry	Total Number of Firms	Number of Affected Firms	Total Number of Establishments	Number of Affected Establishments	Total Employees	Employees to be Trained	Number of SDSs Produced
325	Chemical Manufacturing							
325611	Soap & other detergent mfg	649	649	710	710	23,660	14,519	15,825
325612	Polish & other sanitation good mfg	507	507	551	551	16,670	9,207	11,014
325613	Surface active agent mfg	130	130	154	154	6,135	2,706	5,795
325620	Toilet preparation mfg	767	767	826	826	57,957	37,288	17,586
325910	Printing ink mfg	250	250	482	482	12,821	6,224	48,172
325920	Explosives mfg	50	50	77	77	5,431	4,236	2,204
325991	Custom compounding of purchased resin	477	477	588	588	21,942	13,686	5,169
325992	Photographic film, paper, plate, & chemical mfg	384	368	407	407	7,319	4,177	2,667
325998	All other miscellaneous chemical product & preparation mfg	1,091	1,091	1,246	1,246	35,765	20,617	48,145
326	Plastics and Rubber Products Man.	11,187	11,187	14,233	14,233	855,483	667,348	36,591
327	Nonmetallic Mineral Prod. Manufac.	11,351	11,351	17,472	17,472	472,128	370,139	45,544
331	Primary Metal Manufacturing	4,304	4,304	5,267	5,267	438,921	344,209	13,396

332	Fabricated Metal Prod. Manufac.	55,545	55,545	59,637	59,637	1,565,866	1,163,554	0
333	Machinery Manufacturing	23,736	23,736	26,198	26,198	1,137,540	701,517	0
334	Computer & Electronic Prod Man.	12,689	12,689	14,478	14,478	1,043,288	463,175	0
335	Electric Equipment, Appliance Man.	5,291	5,291	6,144	6,144	406,259	292,852	0
336	Transportation Equip. Manufacturing	10,708	10,708	12,857	12,857	1,574,147	1,127,395	0
337	Furniture & Related Product Man.	20,952	20,952	21,717	21,717	517,401	408,165	0
339	Miscellaneous Manufacturing	29,816	29,816	31,160	31,160	680,848	430,024	44,897
42	Wholesale Trade							
423	Durable Goods	178,898	178,898	247,339	247,339	3,395,277	956,215	0
424	Nondurable Goods	102,988	102,988	130,640	130,640	2,228,049	835,103	0
42469	Other Chemicals & AlliedProducts	6,169	6,169	9,647	9,647	103,928	38,954	0
4247	Petroleum & petroleum Products	4,890	4,890	7,024	7,024	94,845	35,549	0
42495	Paint, Varnish, & Supplies	1,207	1,207	2,183	2,183	19,875	7,449	0
44-45	Retail Trade							
441	Motor vehicle & parts dealers	94,291	94,291	127,331	127,331	1,938,266	660,987	0
442	Furniture & home furnishings stores	46,532	45,755	65,485	63,265	596,538	129,479	0
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Table VI-2.

NAICS Code	Industry	Total Number of Firms	Number of Affected Firms	Total Number of Establishments	Number of Affected Establishments	Total Employees	Employees to be Trained	Number of SDSs Produced
44-45	Retail Trade							
443	Electronics & appliance stores	30,657	12,356	52,470	32,940	500,780	44,615	0
444	Building material & garden equipment & supplies dealers	62,011	62,011	88,304	88,304	1,373,961	284,191	0
445	Food & beverage stores	116,280	67,664	151,031	101,410	2,881,783	389,067	0
446	Health & personal care stores	43,864	43,864	89,406	89,406	1,069,187	423,319	0
447	Gasoline stations	66,431	39,008	115,533	86,524	888,705	96,582	0
448	Clothing & clothing accessories stores	67,035	6,754	155,371	29,316	1,648,157	29,316	0
451	Sporting goods, hobby, book, & music stores	41,057	10,899	60,145	28,027	639,694	34,108	0

452	General merchandise stores	10,460	3,163	47,456	40,015	2,897,472	198,992	0	
453	Miscellaneous store retailers	97,730	43,045	123,374	66,575	813,827	87,799	0	
454	Nonstore retailers	40,168	32,492	47,723	39,680	511,558	105,840	0	
48-49	Transportation & Warehousing								
481	Air transportation	2,929	1,775	5,730	4,537	480,648	67,816	0	
483	Water transportation	1,476	1,476	1,928	1,928	68,947	43,190	0	
484	Truck transportation	106,632	106,632	121,419	121,419	1,476,397	1,191,682	0	
485	Transit & ground passenger transportation	15,536	7,500	18,322	10,265	440,623	38,072	0	
486	Pipeline transportation	241	241	2,775	2,775	42,445	20,810	0	
487	Scenic & sightseeing transportation	2,680	1,944	2,781	1,979	17,747	4,351	0	
488	Support activities for transportation	30,332	30,332	38,566	38,566	610,641	295,204	0	
492	Couriers & messengers	8,073	8,073	13,845	13,845	569,190	367,737	0	
493	Warehousing & storage	7,410	7,410	14,440	14,440	679,077	415,296	0	
51	Information								
511	Publishing industries	22,876	16,911	31,508	25,398	1,034,709	152,798	0	
512	Motion picture & sound recording industries	21,258	3,565	24,883	7,091	320,647	12,811	0	
515	Broadcasting (except Internet)	5,108	2,098	10,415	7,292	293,968	11,379	0	
516	Internet Publishing and Broadcasting	9,590	2,753	50,078	43,091	1,201,922	46,525	0	
517	Telecommunications	2,400	426	2,746	731	46,627	977	0	
518	Internet Service Providers, Web Search Portals, and Data Processing Services	11,613	2,669	19,922	8,960	446,781	9,362	0	
519	Other Information Services	3,408	611	4,227	1,130	54,659	1,145	0	
Table VI-2.									
			Industry	Profile (continued)					
NAICS Code	Industry	Total Number of Firms	Number of Affected Firms	Total Number of Establishments	Number of Affected Establishments	Total Employees	Employees to be Trained	Number of SDSs Produced	
52	Finance & Insurance								
521	Monetary authorities - central bank	68	27	104	62	19,919	567	0	
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522	Credit intermediation & related activities	66,462	6,003	232,716	15,948	3,226,219	15,948	0
523	Securities intermediation & related activities	57,933	2,107	90,065	4,566	942,086	4,566	0
524	Insurance carriers & related activities	138,876	14,205	181,528	48,000	2,326,944	48,000	0
525	Funds, trusts, & other financial vehicles (part)	2,213	389	3,678	1,038	33,396	1,098	0
53	Real Estate & Rental and Leasing							
531	Real estate	270,268	218,115	312,524	257,057	1,554,163	482,590	0
532	Rental & leasing services	28,435	28,435	65,046	65,046	638,277	183,927	0
533	Lessors of intangible assets, except copyrighted works	2,476	802	2,568	888	31,735	1,687	0
54	Professional, Technical & Technical							
5411	Legal services	181,525	4,757	191,351	5,435	1,206,577	5,435	0
5412	Accounting, tax return prep, bookkeeping, & payroll services	108,428	12,421	123,415	24,952	1,357,368	27,843	0
5413	Architectural, engineering, & related services	101,108	26,500	117,115	42,049	1,434,803	64,179	0
5414	Specialized design services	34,485	10,849	34,783	11,089	134,739	14,769	0
5415	Computer systems design & related services	104,469	6,144	116,769	11,112	1,297,710	11,112	0
5416	Management, scientific, & technical consulting services	143,228	26,431	151,766	34,479	1,015,109	63,181	0
5417	Scientific R&D Serv.	14,009	5,971	17,787	9,640	688,052	47,136	0
5418	Advertising & related services	36,980	13,199	40,275	16,329	445,590	37,736	0
5419	Other professional, scientific, & technical services	64,704	64,704	74,295	74,295	599,993	214,139	0
55	Management of Companies							
551111	Offices of bank holding companies	1,049	777	1,313	1,032	20,046	2,065	0
551112	Offices of other holding companies	7,438	4,423	8,238	5,198	178,577	18,393	0
551114	Corporate, subsidiary, & regional managing offices	20,807	19,949	41,092	40,201	2,922,779	301,043	0
56	Adm and Support & Waste Managmt							

561	Administrative and Support Serv.	311,675	311,675	363,043	363,043	9,628,468	4,589,001	0
562	Wastemanagement & Remediation Serv.	17,156	17,156	21,458	21,458	355,193	248,661	0
61	Educational Services							
6111	Elementary & secondary schools	18,666	15,913	21,066	18,291	827,165	69,423	0
6112	Junior colleges	468	346	862	740	80,568	4,642	0

Table VI-2.

NAICS Code	Industry	Total Number of Firms	Number of Affected Firms	Total Number of Establishments	Number of Affected Establishments	Total Employees	Employees to be Trained	Number of SDSs Produced
6113	Colleges, universities, & professional schools	2,456	2,091	4,022	3,657	1,572,333	185,456	0
6114	Business schools, & computer & management training	6,995	649	7,640	857	65,818	857	0
6115	Technical & trade schools	6,681	2,476	8,019	3,741	119,020	6,307	0
6116	Other schools & instruction	35,969	4,555	38,506	5,477	302,908	5,477	0
6117	Educational support services	6,071	973	6,781	1,557	71,573	1,814	0
62	Healthcare and Social Assistance							
621	Ambulatory health care services	467,925	467,925	547,183	547,183	5,817,039	3,423,528	0
622	Hospitals	4,164	4,164	7,352	7,352	5,477,818	3,846,705	0
623	Nursing & residential care facilities	34,648	34,648	75,606	75,606	3,043,133	1,941,252	0
624	Social assistance	113,068	88,641	154,090	129,034	2,459,657	332,342	0
71	Arts, Entertainment & Recreation							
711	Performing arts, spectator sports, & related industries	43,415	14,721	44,260	15,491	436,072	52,870	0
712	Museums, historical sites, & similar institutions	6,823	3,905	7,312	4,358	128,539	14,892	0
713	Amusement, gambling, & recreation industries	66,499	54,547	73,650	61,474	1,443,956	251,213	0
72	Accommodation & Food Services							
721	Accommodation	53,300	53,300	63,903	63,903	1,907,554	658,752	0
722	Foodservices & drinking places	423,999	71,510	568,586	127,312	9,657,310	127,312	0
81	Other Services							

811	Repair & maintenance	208,647	208,647	226,131	226,131	1,322,952	909,073	0
811121	Automotive body, paint, & interior repair & maintenance	34,683	34,683	35,850	35,850	222,381	152,810	0
812	Personal & laundry services	172,890	132,555	212,530	169,669	1,380,284	272,379	0
812320	Drycleaning & laundry services (except coin-operated)	23,180	20,821	26,370	23,120	167,447	33,043	0
812921	Photofinishing laboratories (except one-hour)	1,050	928	1,139	964	10,647	2,101	0
813	Religious/grantmaking/civic/professional & similar org	296,045	125,355	305,591	134,330	2,816,537	228,997	0
99	State and Local Government							
9992	State Government	n.a.	n.a.	n.a.	n.a.	2,242,536	324,618	0
9993	Local Government	n.a.	n.a.	n.a.	n.a.	6,706,471	1,841,671	0
Total		6,146,382	4,223,431	7,720,753	5,403,278	129,924,808	43,770,092	1,414,636
Total for fir	ms producing SDSs	74,781	74,616	91,367	90,628	3,423,801	2,358,340	1,414,636
Total for fir	ms not producing SDSs	6,071,601	4,148,815	7,629,386	5,312,650	126,501,007	41,411,752	0