SUPPORTING STATEMENT FOR THE INFORMATION COLLECTION REQUIREMENTS IN THE VINYL CHLORIDE STANDARD (29 CFR 1910.1017)[1] OFFICE OF MANAGEMENT AND BUDGET (OMB) CONTROL NO. 1218-0010 (March 2015)

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 Occupational Safety and Health Act's (OSH Act) main objective 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." As one means in achieving this objective, the Act specifically authorizes "the development and promulgation of occupational safety and health standards" to ensure that employees will be furnished "employment and a place of employment . . . free from recognized hazards that are causing or likely to cause death or serious physical harm."

For toxic substances, the OSH Act contains specific statutory language. Thus, as appropriate, health standards are required to include provisions for monitoring and measuring employee exposure, medical examinations and other tests, control and other technological procedures, suitable protective equipment, labels and other appropriate forms of warning, and precautions for safe use or exposure (paragraph (6)(b)(7)). In addition, the OSH Act specifically mandates issuing "regulations requiring employers to maintain accurate records of employee exposures to potentially toxic materials or other harmful physical agents which are required to be monitored and measured," and further requires that employees exposed to concentrations over prescribed limits be notified of this fact, and of the corrective action being taken (paragraphs (8)(c)(1) and (c)(3)).

Pursuant to its statutory authority, the Occupational Safety and Health Administration (OSHA) published a health standard governing worker exposure to vinyl chloride (VC) and polyvinyl chloride (PVC) (29 CFR 1910.1017). The specific collection of information requirements of this standard are discussed under Items 2 and 12.

VC is a flammable gas at room temperature. It is usually encountered as a cooled liquid. The colorless liquid forms a vapor that has an ethereal odor. VC may be used as a vinyl monomer in the manufacture of PVC and other resins, as a chemical intermediate, or as a solvent. Vinyl

1 [?]The purpose of this Supporting Statement is to analyze and describe the burden hours and costs associated with provisions of this Standard that contain paperwork requirements; this Supporting Statement does not provide information or guidance on how to comply with, or how to enforce, these provisions.

chloride gas is absorbed by inhalation; skin absorption has also been suggested. Chronic exposure to VC may cause cancer in a variety of organs, including liver, lung, brain, and kidney.

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.

Exposure Monitoring (§1910.1017(d))

Employers must perform initial monitoring to determine the extent of VC exposure in their workplace. Initial monitoring assists employers in identifying areas of operation that may require additional efforts to reduce worker exposure and to come into compliance with the standard. Initial monitoring results also assist employers in determining the necessity for using engineering controls, instituting or modifying work practices, and in selecting appropriate respiratory protection to prevent workers from overexposure. If the initial monitoring exceeds the standard's action level, then the employer must conduct periodic monitoring.

Subparagraphs 1910.1017(d)(2)(i) and (d)(2)(ii) require that employers conduct exposure monitoring at least quarterly if the results of initial exposure monitoring show that worker exposures are above the PEL, and no less than semiannually if these results indicate exposures that are at or above the action level.

Periodic monitoring is appropriate because minor changes in process, materials, or environmental conditions might change the VC airborne concentration levels. By using periodic monitoring, employers can evaluate the effectiveness of selected control methods. In addition, these measurements remind both the employer and workers of the continuing need to protect against the hazards that could result from workers' overexposure.

Subparagraph 1910.1017(d) requires employers to conduct additional monitoring whenever there has been a production, process or control change which may result in an increase in the release of vinyl chloride, or the employer has any other reason to suspect that any employee may be exposed in excess of the action level. Such monitoring ensures that work areas are safe, or alerts the employer that protection may still be needed. Also, exposure monitoring will inform the examining physician about the existence and extent of potential hazards.

Written Compliance Plan (§1910.1017(f)(2) and (f)(3))

Employers must establish and implement a written compliance plan when workers are exposed above the VC permissible exposure limit (PEL).[2] Employers must review and/or revise the compliance plan at least annually, to describe the program's current status. The compliance plan must describe the methods the employer will use to reduce worker exposure to, or below, the PEL in their workplace. The purpose of requiring an employer to establish a written compliance plan is to effectively promote required compliance with the standard's PEL.

This requirement commits the employer to evaluating workers' exposures and developing an

2 VC permissible exposure limit: No worker may be exposed to vinyl chloride at concentrations greater than 1 part per million (ppm) averaged over any 8-hour period, and no worker may be exposed to VC at concentrations greater than 5 ppm averaged over any period not exceeding 15 minutes. Also, no worker may be exposed by direct contact with liquid VC. (29 CFR 1910.1017(c)(1)\, (c)(2), (c)(3).)

organized and complete plan of reducing worker exposure to the PEL. There may be cases when the employer cannot immediately institute the engineering and work practice controls required by the standard, and must instead use respiratory protection as an interim measure. The requirement to prepare and update a compliance plan ensures that exposure-control methods are planned on a continuing basis, and revised as necessary.

Respiratory Program (§1910.1017(g)(2))

When respirators are required, the employer must establish a respiratory protection program in accordance with 1910.134, paragraphs (b) through (d) (except (d)(1)(iii) and (d)(3)(iii)(B)(1) and (2)) and (f) through (m). Paragraph 1910.134 (c) requires the employer to develop and implement a written respiratory protection program with worksite-specific procedures and elements for respirator use. The purpose of these requirements is to ensure that employers establish a standardized procedure for selecting, using, and maintaining respirators for each workplace where respirators will be used. Developing written procedures ensures that employers develop a respirator program that meets the needs of their workers.

Emergency Plan (§1910.1017(i))

Employers must develop a written operational plan for dealing with emergencies; the plan must address the storage, handling, and use of VC as a liquid or compressed gas. In the event of an emergency, appropriate elements of the plan must be implemented. Emergency plans must maximize workers' personal protection and minimize the hazards of an emergency.

Training (§1910.1017(j))

Subparagraph 1910.1017(j)(2) requires that employers provide all training related materials to OSHA and NIOSH upon request. Providing such material to OSHA and NIOSH assists the Agencies in determining the effectiveness of the employers training program**.**

Medical Surveillance (§1910.1017(k))

Medical Examinations--(k)(1), (2), and (3)

Employers must provide initial examinations for each worker exposed in excess of the action level. Medical examinations must be provided in accordance with paragraph (k) at least annually. Each worker exposed to an emergency must also be afforded appropriate medical surveillance.

Medical examinations and the related information collection requirements provide for periodic monitoring of worker health. Medical exam records are used by physicians who must examine workers exposed to VC. Without records of previous medical examinations, the physician may not be able to determine whether workers have experienced adverse health effects since their last examination. Further, when symptoms of organic damage appear, the physician often needs information about the patient's previous medical conditions to make an accurate diagnosis of the new problem, its apparent cause, and the course of treatment required. Medical records also

ensure that workers can determine whether or not treatment or other interventions are needed for occupational exposures. The long-term maintenance of medical for records is necessary because of the lengthy latency periods associated with the manifestation of health effects caused by VC exposure.

Physician's Written Opinion--(k)(4)

Employers must promptly obtain a statement from the examining physician of each worker's suitability for continued exposure to VC, including the use of personal protective equipment and respirators. A copy of this statement must be provided to the worker.

The purpose of requiring the employer to obtain a written opinion from the examining physician is to provide the employer with medical information to aid in determining the initial placement of workers, and to assess a worker's ability to use protective clothing and equipment. The physician's opinion will also provide information to the employer about whether the worker may be suffering from over exposure to VC. The requirement that a physician's opinion be written will ensure that the information is properly memorialized. The requirement that workers be provided with a copy of the physician's written opinion will ensure that they are informed of the results of the medical examination so that they can assist in determining the need for, and evaluate the effectiveness of, treatment or other interventions.

Communication of VC Hazards (§1910.1017(l))

(1) *Hazard communication—general.* The employer shall include vinyl chloride and polyvinyl chloride in the program established to comply with the Hazard Communication Standard (HCS) (§1910.1200). The employer shall ensure that each employee has access to labels on containers of chemicals and substances associated with vinyl and polyvinyl chloride and to safety data sheets, and is trained in accordance with the provisions of HCS and paragraph (l) of this section. The employer shall ensure that at least the following hazard is addressed: Cancer.

(2) *Signs.* (i) The employer shall post entrances to regulated areas with legible signs bearing the legend:

DANGER

VINYL CHLORIDE

MAY CAUSE CANCER

AUTHORIZED PERSONNEL ONLY

(ii) The employer shall post signs at areas containing hazardous operations or where emergencies currently exist. The signs shall be legible and bear the legend:

DANGER

VINYL CHLORIDE

MAY CAUSE CANCER

WEAR RESPIRATORY PROTECTION AND PROTECTIVE CLOTHING IN THIS AREA

AUTHORIZED PERSONNEL ONLY

(iii) Prior to June 1, 2016, employers may use the following legend in lieu of that specified in paragraph (l)(2)(i) of this section:

CANCER-SUSPECT AGENT AREA

AUTHORIZED PERSONNEL ONLY

(iv) Prior to June 1, 2016, employers may use the following legend in lieu of that specified in paragraph (l)(2)(ii) of this section:

CANCER-SUSPECT AGENT IN THIS AREA

PROTECTIVE EQUIPMENT REQUIRED

AUTHORIZED PERSONNEL ONLY

Posting warning signs serves to warn workers that they are entering a hazardous area. Such signs warn workers that entry is permitted only if they are authorized to do so, and there is a specific need to enter the area. Warning signs also supplement the training workers receive under this standard.

(3) *Labels.* (i) In addition to the other requirements in this paragraph (l), the employer shall ensure that labels for containers of polyvinyl chloride resin waste from reactors or other waste contaminated with vinyl chloride are legible and include the following information:

CONTAMINATED WITH VINYL CHLORIDE

MAY CAUSE CANCER

(ii) Prior to June 1, 2015, employers may include the following information on labels of containers of polyvinyl chloride resin waste from reactors or other waste contaminated with vinyl chloride in lieu of the labeling requirements in paragraphs (l)(3)(i) of this section:

CONTAMINATED WITH VINYL CHLORIDE

CANCER-SUSPECT AGENT

(4) Prior to June 1, 2015, employers may include the following information for containers of polyvinyl chloride in lieu of the labeling requirements in paragraphs (l)(1)(i) of this section:

POLYVINYL CHLORIDE (OR TRADE NAME)

Contains

VINYL CHLORIDE

VINYL CHLORIDE IS A CANCER-SUSPECT AGENT

(5)(i) Prior to June 1, 2015, employers may include either the following information in either paragraph (l)(5)(i) or (l)(5)(ii) of this section on containers of vinyl chloride in lieu of the labeling requirements in paragraph (l)(1)(i) of this section:

VINYL CHLORIDE

EXTREMELY FLAMMABLE GAS UNDER PRESSURE

CANCER-SUSPECT AGENT

(ii) In accordance with 49 CFR Parts 170-189, with the additional legend applied near the label or placard:

CANCER-SUSPECT AGENT

(6) No statement shall appear on or near any required sign, label, or instruction which contradicts or detracts from the effect of any required warning, information, or instruction.

Records (§1910.1017(m))

Exposure Monitoring and Medical Records--(i), (ii)(iii)

Employers must maintain worker exposure and medical records, and must provide them upon request to employees, designated representatives, and the Assistant Secretary in accordance with 29 CFR 1910.1020(a) through (e) and (g) through (i). Monitoring records shall be maintained for not less than 30 years. Medical records shall be maintained for the duration of the employment of each employee plus 20 years, or 30 years whichever is longer.

Medical and monitoring records are maintained principally for worker access, but are designed to provide valuable information to both workers and employers. The medical and monitoring records required by this standard will aid workers and their physicians in determining whether or not treatment or other interventions are needed for VC exposure. The information also will enable employers to better ensure that workers are not being over exposed; such information may alert the employer that steps must be taken to reduce VC exposures.

Exposure records must be maintained for at least 30 years, and medical records must be kept for the duration of employment plus 20 years, or for a total of 30 years, whichever is longer. Records must be kept for extended periods because of the long latency associated with VC-related carcinogenesis (i.e., cancer). Cancer often cannot be detected until 20 or more years after the first exposure to VC.

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 burdens.

Employers may use improved information technology as appropriate when making, keeping, and preserving the required records. The standard is written in performance language, i.e., in terms of what data must be collected rather than how data must be collected.

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 A.2 above.

The information required to be collected and maintained is specific to each employer and worker involved, and is not available or duplicated by another source. The information required by this standard is available only from employers. At this time, there is no indication that any alternate information source is available.

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

The information collection does not have a significant impact on a substantial number of small entities.

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

The Agency believes that the information collection frequencies required by the Standard are the minimum frequencies necessary to effectively monitor the exposure and health status of workers exposed to VC, and thereby fulfill its mandate "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" as specified by the OSH Act at 29 U.S.C. 651. Accordingly, if employers do not perform the required information collections, or delay in providing this information, workers will have an increased probability of developing cancer because of their VC exposures.

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 submit more than an original and two copies of any document;**
- **requiring respondents to retain records, other than health, medical, government contract, grant-in-aid, or tax records for more than three years;**
- **in connection with a statistical survey that is not designed to produce valid and reliable results that can be generalized to the universe of study;**
- **requiring the use of a statistical data classification that has not been reviewed and approved by OMB;**
- **that includes a pledge of confidentiality that is not supported by authority established in statute or regulation, that is not supported by disclosure and data security policies that are consistent with the pledge, or which unnecessarily impedes sharing of data with other agencies for compatible confidential use; or**

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

If exposure monitoring indicates that a worker has been exposed above the PEL, regardless of whether or not respirators are used, employers must notify the worker in writing (or by posting the results in an appropriate location) of the exposure-monitoring results, and the steps being taken to reduce the exposure to within the PEL. This notification must be provided to the worker within 15 working days.

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 December 8, 2014 (79 FR 72031, Docket No. OSHA-2011-0196) requesting public comment on its proposed extension of the information collection requirements contained in the Vinyl Chloride Standard at 29 CFR 1910.1017 (the "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 information collection requirements found in the Standard. The Agency received one comment in response to the December 8, 2014 notice.

The comment was filed by Mr. Richard Krock, Technical Director for the Vinyl Chloride Institute (VCI). Mr. Krock commented that OSHA's 2012 Hazard Communication Standard (HCS) final rule, that incorporated the United Nations' Globally Harmonized System of Classification and Labeling of Chemicals (GHS), has modified the Vinyl Chloride labeling requirements leading to possible misinterpretation. In the final rule, the Agency amended its substance-specific standards so that all labeling requirements contained in these standards adhere to the universal approach established by HCS.

Mr. Krock recommended specific changes to this supporting statement including:

- Clarifying that signs at entrance to "regulated areas" and in "areas containing hazardous operations or where emergencies currently exist" are only required where VCM emissions are in excess of the PEL or toxicologically significant levels of VCM are present.

- Revise this supporting statement " to explicitly reflect the fact that the requirement under Section 1910.1017 for a label based on the hazards of vinyl chloride is, per Section 1910.1017(l)(1)(i), solely determined by Section 1910.1200. That determination will likely depend on whether vinyl chloride is present in the PVC at a concentration of 0.1% or more although actual levels of VCM in PVC are almost always orders of magnitude lower than 0.1%."

First, as Mr. Krock indicates, OSHA requires signs at the entrance to regulated areas and are areas containing hazardous operations or where emergencies currently exist. Section 1910.1017(l)(2). The standard requires a regulated area where vinyl chloride or polyvinyl chloride is manufactured, reacted, repackaged, stored, handled or used and vinyl chloride concentrations are in excess of the permissible exposure limit. Section 1910.1017(e)(1). A hazardous operation means any operation, procedure or activity where a release of either vinyl chloride liquid or gas might be expected as a consequence of the operation or because of an accident in the operation, which would result in an employee exposure in excess of the permissible exposure limit. 1910.1017(a)(7). An emergency, for purposes of the standard, includes occurrences such as, but not limited to, equipment failures or operation of a relief device which is likely to, or does, result in a massive release of vinyl chloride. 1910.107(a)(5). OSHA believes these provisions are sufficiently clear about when signs are required and does not believe the clarification suggested by Mr. Krock is necessary.

On the second point, Mr. Krock is not correct that vinyl chloride standard's labeling requirements are based solely on the Hazard Communication Standard. Rather, the vinyl chloride standard requires certain additional labeling requirements for polyvinyl chloride resin waste from reactors or other waste contaminated with vinyl chloride. This material must, at a minimum, labeled "may cause cancer" (before June 1, 2015) or "contaminated with vinyl chloride, cancer-suspect agent" (starting June 1, 2015), regardless of whatever else is required by the HCS. Section 1910.1017(l)(3).

Additionally, Mr. Krock's statement that the labelling requirements found in section 1910.1017(l)(1) will depend on VCM in concentration of 0.1% or greater is not completely accurate. While 0.1% is the default cut-off also under the HCS for carcinogenicity, "if the classifier has information that the hazard of an ingredient will be evident (IE0 it presents a health risk) below the specified cut-off value/concentration limit the mixture containing that ingredient shall be classified accordingly." Section 1910.1200, Appx A.0.4.3.2. Therefore, even if the concentration of VCM is below 0.1% in a material but under normal conditions of use or foreseeable emergencies a worker could be exposed to airborne concentrations at the PEL, the material would need to be classified. Therefore, OSHA disagrees with Mr. Krock's interpretation and believes it would be inappropriate to include it in the ICR.

Finally, to address Mr. Krock's concern that "… the OSHA Vinyl Chloride Standard might be misinterpreted to impose labeling requirements on containers of PVC in situations where the container in question does not hold a hazardous chemical covered by the HCS." OSHA notes that the scope of the vinyl chloride standard is unchanged. It does not apply to the "handling and use of fabricated products made of polyvinyl chloride," Thus, OSHA does not believe that there is substantial room for confusion.

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

No payments or gifts will be provided to the respondents.

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

As medical records may contain private information, OSHA has taken steps to assure that the medical records' data are kept confidential. Agency practices and procedures governing OSHA access to worker medical records are contained in 29 CFR 1913.10.

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

There are no provisions in this standard requiring that questions of a sensitive nature be asked.

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 collections of information, identifying and using appropriate wage rate categories. The cost of contracting out or paying outside parties for information collection activities should not be included here. Instead, this cost should be included in Item 14.**

BURDEN-HOUR AND COST DETERMINATIONS

According to the Directory of Chemical Producers there are 13 vinyl chloride monomer (VC) production facilities and 20 polyvinyl chloride (PVC) polymer production facilities operating in the United States, of which 9 facilities produce both VC and PVC at the same location.[3]

For purposes of this ICR, the Agency assumes that there are 24 facilities covered by the Standard: 4 produce VC only, 11 produce PVC only, and 9 produce both substances. The number of workers in all facilities totals 4,017.[4]

3SOURCE: IHS Chemical, Chemical Economics Handbook (CEH) Marketing Research Report, *Polyvinyl Chloride (PVC) Resins (2011)* and CEH Product Review, *Vinyl Chloride Monomer (2012)*.

4Based on the previous ICR, the Agency estimates that there are, on average, 148 workers in each VC

The following hourly wage rates for the relevant occupational categories have been derived from the Bureau of Labor Statistics *National Occupational Employment and Wage Estimates*. These wages have been adjusted to reflect the fact that fringe benefits comprise roughly 31.2 percent of total employee compensation in the private sector.[5]

Worker:	$22.03[6]
Managers/Supervisors:	$36.68[7]
Clerical/Secretary:	$21.45[8]
Chemical Technician:	$29.39[9]

Table 1

SUMMARY OF BURDEN HOURS AND COSTS

Information Collection Requirements	Existing Burden Hours	Proposed Burden Hours	Change	Proposed Estimated Costs	Total Responses
(A) Exposure Monitoring					
1. Initial and Periodic Monitoring	240	240	-	$7,053	240
2. Additional Monitoring	26	24	-2	$705	24
3. Notification of Monitoring Results	5	5	-0	$107	60
(B) Written Compliance Program	84	72	-12	$2,275	6
(C) Respirator Program	0	0	0	$0	0
(D) Emergency Plan	0	0	0	$0	0
(E) Medical Surveillance					
(1) Medical Exams	160	160	-	$3,525	80

facility, 178 workers in each PVC facility, and 163 workers at facilities producing both substances. Therefore, the total number of workers in the 4 VC facilities is 592; the total number of workers in the 11 PVC facilities is 1,958; and the total number of workers in the 9 facilities producing both substances is 1,467.

5Source: Bureau of Labor Statistics. *Employer Costs for Employee Compensation – June 2014.*

6This mean hourly wage rate corresponds to SOC code 51-0000, "Production Occupations." (Source: *June, 2014 National Occupational Employment and Wage Estimates, United States,* U.S. Department of Labor, Bureau of Labor Statistics.) http://www.bls.gov/oes/current/oes510000.htm

7This mean hourly wage rate corresponds to SOC code 51-1011, "Production Occupations." (Source: *June , 2014 National Occupational Employment and Wage Estimates, United States,* U.S. Department of Labor, Bureau of Labor Statistics.) http://www.bls.gov/oes/current/oes511011.htm

8This mean hourly wage rate corresponds to SOC code 43-6014, "Production Occupations." (Source: *June, 2014 National Occupational Employment and Wage Estimates, United States,* U.S. Department of Labor, Bureau of Labor Statistics.) http://www.bls.gov/oes/current/oes436014.htm

9This mean hourly wage rate corresponds to SOC code 19-4031, "Production Occupations." (Source: *June, 2014 National Occupational Employment and Wage Estimates, United States,* U.S. Department of Labor, Bureau of Labor Statistics.) http://www.bls.gov/oes/current/oes194031.htm

(2) Physician's Opinion	6	6	-0	$129	80
(F) Communication of Hazards					
Warning Signs and Labels	0	0	0	$0	0
(G) Recordkeeping					
1. Exposure Monitoring	21	21	-0	$451	264
2. Medical Records	6	6	-0	$129	80
3. Access to Records	1	1	0	$37	
Totals	**548**	**535**	**-13**	**14,410**	**835**

(A) Exposure Monitoring (§1910.1017(d)(2) and (d)(3))

As in past information collection requests, OSHA assumes that 1% of all workers are exposed between the action level and the permissible exposure level, and another 1% are exposed above the PEL. Workers exposed between the action level and the PEL must be monitored semi-annually, while those exposed above the PEL must be monitored quarterly. Also, for the purposes of this clearance, it is assumed that each employer will have one change in production, process, or control method that may result in increased VC exposure; thereby, requiring that an additional monitoring sample to be taken.

OSHA assumes that employers use an organic vapor badge for monitoring because these badges do not interfere with workers' work activity. An in-house laboratory technician, on average, will spend 1 hour to administer and collect vapor badges.

1. Initial and periodic monitoring

The Vinyl Chloride standard requires workers exposed above the action level but below the PEL to be monitored semiannually.

Burden hours: 40 workers × 2 times per year × 1 hour = 80 hours
Cost: 80 hours × $29.39 = $2,351

The Vinyl Chloride standard requires workers exposed above the PEL to be monitored quarterly.

Burden hours: 40 workers × 4 times per year × 1 hour = 160 hours
Cost: 160 hours × $29.39 = $4,702

2. Additional monitoring

Burden hours: 24 workers × 1 time per year × 1 hour = 24 hours
Cost: 24 hours × $29.39 = $705

3. Notification of monitoring results

The standard requires employers to notify workers of their exposure-monitoring results.

Notification must occur within 15 working days after the employer receives the results either by providing each worker with a written copy of their results or by posting the results in an appropriate location that is accessible to the workers. The previous ICR estimated that 25% of the total facilities must notify workers of their exposure monitoring results. OSHA estimates that it requires five minutes (.08 hour) of secretary time to notify each worker exposed above the PEL.

Exposure above the action level, but below the PEL

Burden hours: 6 employers × .08 hour × 2 times per year = 1 hour
Cost: 1 hours × $21.45 hour = $21

Exposure above the PEL

Burden hours: 6 employers × .08 hour × 4 times per year = 2 hours
Cost: 2 hours × $21.45 = $43

Additional monitoring

Burden hours: 24 employers × .08 hour × 1 annually = 2 hours
Cost: 2 hours × $21.45 = $43

(B) Written Compliance Plan (§1910.1017(f)(2) and (f)(3))

Employers who cannot use engineering and work practice controls immediately to reduce worker VC exposures to a level at or below the PEL, must develop and implement a plan for doing so. If this level cannot be attained using only engineering and work-practice controls, then the written plan must explain how these controls will be used to reduce worker VC exposures to the lowest level feasible. The plan must be written and updated annually. OSHA estimates that 8 facilities must update their written plans annually, and that it takes eight hours of a manger's time, and four hours of clerical time, to update an existing plan. The previous ICR estimated that 25% of the total facilities must update their written plans annually. OSHA assumes that this ratio has remained constant.

Burden hours: 6 facilities × 12 hours × 1 annually = 72 hours
Cost: 6 facilities × ((8 manager hours × $36.68) + (4 secretary hours × 21.45)) × 1 time per year = $2,275

(C) Respiratory Program (§1910.1017(g)(2))

The standard requires that a respiratory protection program meeting the requirements of 29 CFR 1910.134 be established and maintained. The burden associated with this provision is determined under the Respiratory Protection ICR (OMB Control Number 1218-0099).

(D) Emergency Plan (§1910.1017(i))

Employers must develop a written plan addressing emergency situations for facilities that store, handle, and use VC as a liquid or a compressed gas. The development of this plan applies only to new facilities. The Agency is unaware of any new VC or PVC facilities; therefore, no burden hours have been attributed for this activity.

Employers must develop a written plan addressing emergency situations for facilities that store, handle, and use VC as a liquid or a compressed gas. The development of this plan applies only to new facilities. The Agency is unaware of any new VC or PVC facilities; therefore, no burden hours have been attributed for this activity.

(E) Medical Surveillance (§1910.1017(k))

1. Medical exams

The VC standard requires that a medical surveillance program be instituted for workers exposed to VC in excess of the action level. Burden hours are attributed to the time workers are away from work. OSHA assumes that a manufacturing worker would be away from work for a total of two hours for each surveillance event. The number of workers was determined from the number of worker monitoring records.

Burden hours: 80 workers × 1 annually × 2 hours = 160 hours
Cost: 160 hours × $22.03 = $3,525

2. Physician's written opinion (§1910.1017(k)(4))

Employers are required to obtain, and provide to each worker, a copy of a physician's statement regarding the worker's suitability for continued exposure to VC, including use of protective equipment and respirators if appropriate.

The Agency estimates a secretary will take five minutes (.08 hour) to give a copy of the physician's written opinion to an affected worker. The number of exams was determined from the figures in "Medical exams" above.

Burden hours: 80 examinations × .08 hour = 6 hours
Cost: 6 hours × $21.45 = $129

F) Communication of Hazards (§1910.1017(l))

Warning signs and labels

The standard requires that warning signs be provided and displayed outside, and at approaches to, regulated areas, areas containing hazardous operations, and where an emergency exists. Since OSHA is providing specific language in the regulation for these situations, no burden hours are attributed to this provision.

Containers of VC, PVC, and PVC resin waste generated from reactors and other waste contaminated with VC must be labeled. Specific language is provided by OSHA for these labels, so no burden hours are attributed to this provision.

(G) Recordkeeping (§1910.1017(m))

1. Exposure monitoring records and retention

Exposure monitoring records are required to include the date of monitoring, concentrations determined, identity of the instrument and methods used, and any additional information necessary to determine individual exposures if such exposures are determined by means other than individual monitoring. OSHA estimates that a secretary will take approximately five minutes (.08 hour) to maintain these records.

Exposure above the action level, but below the PEL

Burden hours: 40 workers × 2 times per year × .08 hour = 6 hours
Cost: 6 hours × $21.45 = $129

Exposure above the PEL

Burden hours: 40 workers × 4 times per year × .08 hour = 13 hours
Cost: 13 hours × $21.45 = $279

Additional monitoring

Burden hours: 24 employers × 1 annually × .08 hour = 2 hours
Cost: 2 hours × $21.45 = $43

2. Medical records

OSHA estimates that maintaining medical records requires approximately five minutes (.08 hour) of clerical time annually per record. The following equations are based on the assumptions described under "Medical exams" above.

Burden hours: 80 workers × 1 annually × .08 hour = 6 hours
Cost: 6 hours × $21.45 = $129

3. Federal access

The VC standard requires that employers make available exposure monitoring and measuring, and medical records upon request to employees and their designated employees.

OSHA does not expect that employers would receive very many requests from employees since the employer already notifies the employee of their exposure monitoring results and provides medical statements. The Agency estimates that one employer will receive an employee request to access their exposure and medical records. OSHA believes that a manager, at 36.68 per hour, will expend approximately five minutes (.08 hour) make records available to the employee.

Burden hours: 1 employer× .08 hour = 1 hour (rounded to one hour)
Cost: 1 hour × $36.68= $37.00

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 shown in Items 12 and 14).

- **The cost estimate should be split into two components: (a) a total capital and start-up cost component (annualized over its expected useful life); and (b) a total operation and maintenance and purchase of services component. The estimates should take into account costs associated with generating, maintaining, and disclosing or providing the information. Include descriptions of methods used to estimate major cost factors including system and technology acquisition, expected useful life of capital equipment, the discount rate(s), and the time period over which costs will be incurred. Capital and start-up costs include, among other items, preparations for collecting information such as purchasing computers and software; monitoring, sampling, drilling and testing equipment; and record storage facilities.**

- **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 rulemaking 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.**

Exposure Monitoring

Employers are required to conduct initial exposure monitoring to determine if there are any workers exposed in excess of the action level. Results from the initial exposure monitoring will determine if further monitoring is required. If exposure levels are above the PEL, then the employer is required to conduct at least quarterly monitoring. If the exposure readings are above the action level, but at or below the PEL, then semi-annual monitoring must be conducted. (The use of respirators cannot be considered in making these exposure determinations.)

In addition to production, process, or control changes that may result in new or additional VC exposures and an increased exposure-monitoring requirement, monitoring must also be conducted if the employer has any other reason to suspect that workers may be exposed in excess of the action level. The Agency assumes that employers will use an organic vapor badge to conduct required monitoring. The cost for the badge and the lab analysis for the badge is estimated to be $115.[10]

Exposure above the action level, but below the PEL

Cost: 40 workers × 2 times per year × $115 = $9,200

Exposure above the PEL

Cost: 40 workers × 4 times per year × $115 = $18,400

Additional monitoring

Cost: 24 employers × 1 time per year × $115 = $2,760

Total cost for exposure monitoring: $30,360

Medical Exams

The Agency assumes that each medical exam, which includes the physician's written opinion, costs the employer $162[11]. Approximately 80 medical exams will be given each year at a total cost of $12,960.

Cost: 80 examinations × $162 = **$12,960**

The total costs is $30,360 exposure monitoring + $12,960 medical examinations = **$43,320**

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

10 The Consumer Price Index (CPI) indicated a 6.7% increase in the price of professional medical services from December 2011 to 2014. The previous ICR estimated that the cost for the badge and lab analysis was $108; given the 6.7% increase in the price of professional medical services, it was assumed that the cost of exposure monitoring increased by 6.7% as well. Source: *CPI Detailed Report - February 2014* (http://www.bls.gov/cpi/cpid1402.pdf.)

11The previous ICR estimated that the cost for each medical exam was $152. Given the 6.7% increase in the price of professional medical services from2011 to 2014, it was assumed that the cost of each medical exam increased by 6.7% as well. Source: *CPI Detailed Report - February 2014* (http://www.bls.gov/cpi/cpid1402.pdf.)

incurred without this collection of information. Agencies also may aggregate cost estimates from Items 12 13, and 14 in a single table.

There are no costs to the Federal government.

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

The Agency is requesting an adjustment decrease in hours from 549 to 535, a 14 burden hour reduction. The reduction is a result of fewer VC and PVC establishments identified for this ICR. The currently approved ICR estimates a total of 26 establishments, and this proposed ICR estimates a total of 24 establishments. There is an increase in the cost under Item 13 from $40,888 to $43,320, a total increase of 2,432 dollars. The cost increase results from an increase in the cost of exposure monitoring samples and medical examinations.

16. For collections 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 information, completion of report, publication dates, and other actions.

The collection of information will not be published.

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

OSHA lists current valid control numbers in §§1910.8, 1915.8, 1917.4, 1918.4, and 1926.5 and publishes the expiration date in the Federal Register notice announcing OMB approval of the information collection requirement (See 5 CFR 1320.3(f)(3)). OSHA believes that this is the most appropriate and accurate mechanism to inform interested parties of these expiration dates.

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.

This supporting statement does not contain any collection of information requirements that employ statistical methods.