

**Revision to the  
The Vinyl Chloride Standard  
(29 CFR 1910.1017)  
Supporting Statement**

The Standards Improvement Project–Phase III (SIP-III) is the third in a series of rulemaking actions to improve and streamline OSHA standards. The Standard Improvement Projects remove and revise individual requirements in standards that are confusing, outdated, duplicative or inconsistent.

The SIP-III final rule removed from 25 of OSHA’s substance-specific standards (see 29 CFR 1910, subpart Z) the requirements for employers to transfer employee exposure-monitoring and medical records to the National Institute for Occupational Safety and Health (NIOSH), and to notify NIOSH prior to disposal of such records. As a result of removing these transfer and notification requirements, OSHA is revising the 25 corresponding Information Collection Requests (ICRs)<sup>1</sup> to reduce the burden-hour and cost estimates associated with these provisions.

Edits to this supporting statement consists of strikethroughs and highlighted yellow text. These edits indicate removal of the requirement for employers to transfer records to NIOSH. Language deleted from this Supporting Statement is struck-through. Language added to the supporting statement appears highlighted in yellow.

---

<sup>1</sup> The section of the preamble in the final SIP-III rule titled, *Office of Management and Budget Review Under the Paperwork Reduction Act of 1995* lists the 27 ICRs being revised. The 27 ICRs are being revised as follows: 23 ICRs are revised as a result of removing the requirements for employers to transfer records to NIOSH; two ICRs are being revised to remove both the requirements for employers to transfer records to NIOSH and for employers to prepare training certifications; and, two additional ICRs are being revised to remove only training certifications.

**SUPPORTING STATEMENT FOR THE  
INFORMATION-COLLECTION REQUIREMENTS IN  
THE VINYL CHLORIDE STANDARD (29 CFR 1910.1017)  
OFFICE OF MANAGEMENT AND BUDGET  
(OMB) CONTROL NO. 1218-0010 (May 2011))<sup>2</sup>**

**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 employee exposure to vinyl chloride (VC) and polyvinyl chloride (PVC) (29 CFR 1910.1017). The specific collection requirements of this standard are fully 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 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.

---

<sup>2</sup> 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.

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 over-exposure. 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 employee 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 over-exposure.

The employer must perform additional monitoring whenever there has been a change in VC production, process, or control that may result in an increase in the release of VC. Employers must also conduct additional monitoring when they have any reason to suspect that any employee may be exposed to VC 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 employees are exposed above the VC permissible exposure limit (PEL).<sup>3</sup> 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 employee 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 employees' exposures and developing an organized and complete plan of reducing employee exposure to the PEL. There may be cases

---

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

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 29 1910.134, paragraphs (b) through (d) (except (d)(1)(iii) and (d)(3)(iii)(B)(1) and (2)) and (f) through (m). Paragraph 29 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 employees.

### **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 employees' personal protection and minimize the hazards of an emergency.

### **Medical Surveillance (§1910.1017(k))**

#### Medical Examinations (k)(1)(2)

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 employee health. Medical exam records are used by physicians who must examine employees exposed to VC. Without records of previous medical examinations, the physician may not be able to determine whether employees 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 employees can determine whether or not treatment or other interventions are needed for occupational exposures. The long-term maintenance of medical records is necessary because of the lengthy latency periods associated with the manifestation of health effects caused by VC exposure.

Paragraph (k)(6) specifies that laboratory analyses for all biological specimens included in

medical examination shall be performed by accredited laboratories.

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

Employers must promptly obtain a statement from the examining physician of each employee'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 employee.

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 employees, and to assess an employee's ability to use protective clothing and equipment. The physician's opinion will also provide information to the employer about whether the employee 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 employees 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))**

##### Warning Signs (2)

The employer must post warning signs outside regulated areas and areas containing hazardous operations, or where emergency conditions exist. Posting warning signs serves to warn employees that they are entering a hazardous area. Such signs warn employees 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 employees receive under this standard.

#### **Recordkeeping (§1910.1017(m))**

##### Exposure Monitoring and Medical Records (i) & (iii)

Employers must maintain employee exposure and medical records. Medical and monitoring records are maintained principally for employee access, but are designed to provide valuable information to both employees and employers. The medical and monitoring records required by this standard will aid employees 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 employees 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.

### Transfer of Records (m)(3)

-

~~Paragraph (m)(3) of the VC Standard requires that employers who cease to do business and have no successor employer transfer existing exposure monitoring and medical records to the Director of the National Institute for Occupational Safety and Health (NIOSH). This employer also must notify individual employees in writing of the transfer, and comply with any additional requirements specified in §1910.1020. These records may be used by NIOSH for research purposes, and by employees for health assessments and other reasons.~~

### **Employee Exposure Notification (§1910.1017(n))**

Employers must inform each employee of their exposure-monitoring results within 15 working days after receiving these results. Employers may notify employees either individually in writing or by posting the monitoring results in an appropriate location that is accessible to the employees. In addition, if the exposure-monitoring results show that an employee's exposure exceeds the PEL, the employer must inform the exposed employee of the corrective action the employer is taking to prevent such overexposure.

- 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 employees 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, employees 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.**

The SIP-III notice of proposed rulemaking (NPRM; 75 FR 38645) proposed to revoke existing collection-of-information (paperwork) requirements contained in 27 existing Information-Collection Request (ICRs) approved by the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1995 (PRA-95). OSHA prepared and submitted one ICR for the SIP-III proposal to the OMB for review in accordance with 44 U.S.C. 3507(d). For SIP-III Final, OSHA is submitting separate ICRs to OMB.

The NPRM proposed to remove provisions that require employers to transfer employee exposure-monitoring and medical records to NIOSH and for employers to contact NIOSH prior to disposing of such records. No comments were received opposing this revision; therefore, OSHA is removing §1910.1017(m)(3) to remove the associated burden hours and costs from this ICR.

**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 and NIOSH have taken steps to assure that the medical records data are kept confidential. Agency practices and procedures governing OSHA access to employee 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 12 vinyl chloride monomer (VC) production facilities and 20 polyvinyl chloride (PVC) polymer production facilities operating in the United States<sup>4</sup>. Therefore, the total number of workers in the 12 VC facilities is 1,776, and the total number of workers in the 20 PVC production facilities is 3,560. The number of employees in both VC and PVC facilities totals 5,336.

The following hourly wage rates for the relevant occupational categories have been derived from the National Compensation Survey (NCS), published by the Bureau of Labor Statistics. These wages have been adjusted to reflect the fact that fringe benefits comprise roughly 29.3 percent of total employee compensation in the private sector<sup>5</sup>.

- Worker: \$31.02
- Managers: \$45.62
- Supervisors: \$39.42
- Clerical/Secretary: \$20.02
- Chemical Technician: \$25.89

---

4 <sup>4</sup>Source: SRI International, *Directory of Chemical Producers*, 2007. Available online at: [http://www.sriconsulting.com/DCP/Public/prod\\_search.htm](http://www.sriconsulting.com/DCP/Public/prod_search.htm)

<sup>5</sup>To estimate updated wage rates, OSHA compared the mean hourly wage for all workers from the July 2003 and July 2005 National Compensation Surveys. The resulting 4.9% wage increase evidenced over this period was applied to those wages in the previous ICR to determine updated wage rates for each occupation.

**Table 1**

**SUMMARY OF BURDEN HOURS AND COSTS**

<b>Information Collection Requirements</b>	<b>Existing Burden Hours</b>	<b>Proposed Burden Hours</b>	<b>Change</b>	<b>Proposed Estimated Costs</b>
<b>(A) Exposure Monitoring</b>				0
1. Initial and Periodic Monitoring	318	318	0	\$ 8,233
2. Additional Monitoring	32	32	0	\$828
3. Notification of Monitoring Results	7	7	0	\$140
<b>(B) Written Compliance Program</b>	96	96	0	\$3,560
<b>(C) Respirator Program</b>	0	0	0	\$0
<b>(D) Emergency Plan</b>	0	0	0	\$0
<b>(E) Medical Surveillance</b>				0
(1) Medical Exams	212	212	0	\$6,576
(2) Physician's Opinion	9	9	0	\$180
<b>(F) Communication of Hazards</b>				0
1. Warning Signs and Labels	0	0	0	\$0
<b>(G) Recordkeeping</b>				0
1. Exposure Monitoring	28	28	0	\$560
2. Medical Surveillance	8	8	0	\$160
3. Federal Access	1	1	0	\$46
—4. Federal Transfer *	1	0	-1	\$0 \$20
<b>Totals</b>	<b>712</b>	<b>711</b>	<b>-1</b>	<b>\$20,303</b> <b>\$20,283</b>

\*Indicates removal of 29 CFR 1910.1017(m)(3) requiring employers to comply with transferring worker exposure monitoring and medical surveillance records to the National Institute for Occupational Safety and Health (NIOSH) or notifying NIOSH prior to disposal of such records.

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

As in past information collection requests, OSHA assumes that 1% of all employees are exposed between the action level and the permissible exposure level, and another 1% are exposed above the PEL. Employees exposed between the action level and the PEL must be monitored quarterly,

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 employees' 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 employees exposed above the action level but below the PEL to be monitored semiannually.

**Burden hours:**  $53 \text{ employees} \times 2 \text{ times per year} \times 1 \text{ hour} = 106 \text{ hours}$   
**Cost:**  $106 \text{ hours} \times \$25.89 = \$2,744$

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

**Burden hours:**  $53 \text{ employees} \times 4 \text{ times per year} \times 1 \text{ hour} = 212 \text{ hours}$   
**Cost:**  $212 \text{ hours} \times \$25.89 = \$5,489$

### 2. Additional monitoring

**Burden hours:**  $32 \text{ employers} \times 1 \text{ time per year} \times 1 \text{ hour} = 32 \text{ hours}$   
**Cost:**  $32 \text{ hours} \times \$25.89 = \$828$

### 3. Notification of monitoring results

The standard requires employers to notify employees of their exposure-monitoring results. Notification must occur within 15 working days after the employer receives the results either by providing each employee with a written copy of their results or by posting the results in an appropriate location that is accessible to the employees. OSHA estimates that it requires five minutes (.08 hour) of secretary time to notify each employee exposed above the PEL.

Exposure above the action level, but below the PEL

**Burden hours:**  $8 \text{ employers} \times .08 \text{ hour} \times 2 \text{ times per year} = 1 \text{ hour}$   
**Cost:**  $1 \text{ hours} \times \$20.02 \text{ hour} = \$20$

Exposure above the PEL

**Burden hours:**  $8 \text{ employers} \times .08 \text{ hour} \times 4 \text{ times per year} = 3 \text{ hours}$   
**Cost:**  $3 \text{ hours} \times \$20.02 = \$60$

Additional monitoring

**Burden hours:** 32 employers × .08 hr × 1 annually = 3 hours

**Cost:** 3 hours × \$20.02 = \$60

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

Employers who cannot use engineering and work-practice controls immediately to reduce employee 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 employee 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 manager's time, and four hours of clerical time, to update an existing plan. The previous ICR estimated that 20—or 25% of the total 80—facilities must update their written plans annually. OSHA assumes that this ratio has remained constant.

**Burden hours:** 8 facilities × 12 hours × 1 annually = 96 hours

**Cost:** 8 facilities × ((8 manager hours × \$45.62) + (4 secretary hours × 20.02)) × 1 time per year = \$3,560

### **(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 employees exposed to VC in excess of the action level. Burden hours are attributed to the time employees

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 employees was determined from the number of employee monitoring records.

**Burden hours:** 106 employees × 1 annually × 2 hours = 212 hours

**Cost:** 212 hours × \$31.02 = \$6,576

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

Employers are required to obtain, and provide to each employee, a copy of a physician's statement regarding the employee'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 employee. The number of exams was determined from the figures in "Medical exams" above.

**Burden hours:** 106 examinations × .08 hour = 9 hours

**Cost:** 9 hours × \$20.02 = \$180

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

### **1. 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:**  $53 \text{ employees} \times 2 \text{ times per year} \times .08 \text{ hour} = 8 \text{ hours}$   
**Cost:**  $8 \text{ hours} \times \$20.02 = \$160$

Exposure above the PEL

**Burden hours:**  $53 \text{ employees} \times 4 \text{ times per year} \times .08 \text{ hour} = 17 \text{ hours}$   
**Cost:**  $17 \text{ hours} \times \$20.02 = \$340$

Additional monitoring

**Burden hours:**  $32 \text{ employers} \times 1 \text{ annually} \times .08 \text{ hour} = 3 \text{ hours}$   
**Cost:**  $3 \text{ hours} \times \$20.02 = \$60$

## 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:**  $106 \text{ employees} \times 1 \text{ annually} \times .08 \text{ hour} = 8 \text{ hours}$   
**Cost:**  $8 \text{ hours} \times \$20.02 = \$160$

## 3. Federal access

The VC standard requires that employers make available monitoring, measuring, and medical records at the request of the Assistant Secretary (usually an OSHA compliance officer).

The Agency estimates that its compliance officers will conduct one inspection annually at facilities covered by the Standard and that they will request all required records at this site.<sup>6</sup> OSHA believes that a manager, at \$45.62 per hour, will expend approximately five minutes (0.08 hour) to inform an OSHA compliance officer of the location of the various records during an inspection. The Agency estimates that it will request access to VC records during four inspections.

**Burden hours:**  $1 \text{ employer} \times .08 \text{ hour} = 1 \text{ hour (rounded to one hour)}$   
**Cost:**  $1 \text{ hour} \times \$45.62 = \$46$

## 4. Transfer of records

~~In the event that an employer ceases to do business and there is no successor employer to receive and retain the medical and exposure records for the specified periods, these records must be~~

---

6

transmitted by registered mail to the Director of NIOSH. The employer also must notify each employee individually in writing of this transfer. The employer shall also comply with any additional requirements set forth in 29 CFR 1910.1020(h).

In the past, NIOSH has received no VC-related medical or exposure records. However, for the purposes of this clearance, OSHA assumes that one employer will send records to NIOSH each year, and that a secretary would spend one hour to prepare and send the records to NIOSH and to inform employees of this transfer. Burden estimate is one hour, at a cost of \$20.02, rounded down to \$20.00.

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 employees 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 employees 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 \$98.<sup>7</sup>

Exposure above the action level, but below the PEL

**Cost:** 53 employees × 2 times per year × \$98 = \$10,388

Exposure above the PEL

**Cost:** 53 employees × 4 times per year × \$98 = \$20,776

Additional monitoring

**Cost:** 32 employers × 1 time per year × \$98 = \$3,136

### **Medical Exams**

The Agency assumes that each medical exam, which includes the physician's written opinion, costs the employer \$138.<sup>8</sup> Approximately 106 medical exams will be given each year at a total cost of \$14,628.

**Cost:** 106 examinations × \$138 = \$14,628

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

The costs to the Federal government are as follows:

OSHA does not take costs for ~~other~~ occupational expenses, such as equipment, overhead, and support staff expenses, since these costs are normal operating expenses and would have occurred without these collections of information requirements.

---

<sup>7</sup>The Consumer Price Index (CPI) indicated a 6.3% increase in the price of professional medical services from 2005 to 2007. The previous ICR estimated that the cost for the badge and lab analysis was \$92; given the 6.3% increase in the price of professional medical services, it was assumed that the cost of exposure monitoring increased by 6.3% as well.

<sup>8</sup>The previous ICR estimated that the cost for each medical exam was \$130. Given the 6.3% increase in the price of professional medical services from 2005 to 2007, it was assumed that the cost of each medical exam increased by 6.3% as well.



## Federal Access

In fulfilling its enforcement responsibilities under paragraph (m), the Agency estimates that a compliance officer (GS-12, step 5), at an hourly wage rate of \$31.34,<sup>9</sup> spends about five minutes (0.08 hour) during an inspection reviewing the records required by the Standard. According to footnote 4 above, OSHA believes that its compliance officers conduct 1 inspection annually. The cost to the Federal government associated with the collection of the VC information requirements described in this supporting statement is \$3.

**Costs:**            1 inspection × .08 hour × \$31.34 = \$3

## Transfer of Records to NIOSH

The VC Standard requires that if an employer ceases to do business and there is no successor employer to maintain employee records for the required periods of time, the medical and exposure records must be transmitted to NIOSH. Also, after the retention periods for these records end, employers must notify NIOSH at least three months prior to disposing of records, and transmit the records to NIOSH if required to do so by a specific occupational safety and health standard. The cost to the Federal government consists of the costs associated with processing records transmitted to NIOSH. During the past year, NIOSH did not receive any records from employers. However, we allowed a burden of one hour for transfer of records to NIOSH during the period covered by this clearance. NIOSH estimated that 15 records can be processed in one hour at a cost \$15.00 per hour. Therefore, the Federal cost for records transfer is estimated to be \$15.00 per year.

The total cost to the Federal government is estimated to be \$18.00.

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

OSHA removed the requirement that employers who cease to do business or those with records with expired retention periods, transfer these records to the National Institute for Occupational Safety and Health (specified in paragraph 29 CFR 1910.1017(m)(3), under the Standards Improvement Project-Phase III rule. As a result of this rulemaking, the Agency requests a program change reduction of 1 hour.

### 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.

No forms are available for the Agency to display the expiration date.

### 18. Explain each exception to the certification statement.

---

<sup>9</sup>Salary Table 2008-GS (GS-12, Step 5), *U.S. Office of Personnel Management*

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.