SUPPORTING STATEMENT FOR THE INFORMATION COLLECTION REQUIREMENTS IN THE 1,3-BUTADIENE STANDARD (29 CFR 1910.1051) OFFICE OF MANAGEMENT AND BUDGET (OMB) CONTROL NO. 1218-0170 (February 2009)

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" (29 U.S.C. 651). To achieve the objective, the OSH Act authorizes "the development and promulgation of occupational safety and health standards" (29 U.S.C. 651). The OSH Act specifically authorizes information collection by employers as necessary or appropriate for the enforcement of the Act or for developing information regarding the causes and prevention of Occupational accident and illnesses" (29 U.S.C. 657).

For toxic substances, the OSH Act contains specific statutory language. Thus, as appropriate, health standards must include provisions for monitoring and measuring employee exposure, medical examinations and other tests, control and technological procedures, suitable protective equipment, labels and other appropriate forms of warning, and precautions for safe use or exposure (29 U.S.C. 655 and 657). In this regard, the OSH Act mandates "regulations requiring employers to maintain accurate records of employee exposures to potentially toxic materials or other harmful physical agents that are required to be monitored and measured," and further requires that employers notify employees exposed to concentrations over prescribed limits of this fact, and of the corrective actions they are taking (29 U.S.C. 657).

Under the authority granted by the OSH Act, the Occupational Safety and Health Administration (OSHA) published a health standard governing employee exposure to 1,3-Butadiene (BD) (29 CFR 1910.1051). A copy of the information collection requirements of the 1,3-Butadiene Standard ("BD Standard" or "Standard") is attached to this supporting statement.

BD is a colorless, noncorrosive, flammable gas with a mild aromatic odor at standard ambient temperatures and pressure. It is produced commercially by three processes: Catalytic dehydrogenation of n-butane and n-butene; oxidative dehydrogenation of n-butene; and recovery as a by-product from the C_4 co-product stream during the steam-cracking process used to manufacture ethylene, which is the major product of the petrochemical industry. Studies of workers exposed to BD in the synthetic-rubber industry show an excess cancer mortality from leukemia/lymphoma, raising concerns that BD is a potential occupational carcinogen. There is also evidence that BD may affect germ cells and somatic cells, raising concerns regarding reproductive and developmental toxicity. The specific information collection requirements of this Standard are fully discussed under items 2 and 12 below. The BD standard, including its recordkeeping requirements are, in part, based on recommendations from industry and unions.

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 (§ 1910.1051(d))

Employers must perform initial monitoring to determine the extent of BD exposure in their workplace. The employer must conduct representative exposure sampling to determine if employee's are exceeding the 15- minute Short-term exposure limit (STEL) or the 8hr-Time-weighted average (TWA). Initial monitoring results will be used to determine the extent of periodic monitoring an employer must perform. Where the action level (AL), is exceeded, but the 8-hr TWA and STEL are not exceeded, the employer must perform monitoring every 12 months. Where initial monitoring reveals exposures to be above the 8-hour TWA, the employer must monitor at least every 3 months. Where initial monitoring reveals exposures to be above the STEL, the employer must monitor at least every three months.

Additional monitoring is required when there have been changes in processes, materials, or environmental conditions resulting in additional exposures to airborne concentration levels of BD. By using periodic monitoring, employers can evaluate the effectiveness of selected control methods. In addition, these measurements remind both the employer and employees of the continuing need to protect against the hazards that could result from an employee's overexposure to BD. Finally, periodic monitoring samples inform an examining physician or other licensed health-care professional of the existence and extent of potential sources of occupational diseases.

Where or when accidental spills or leaks, ruptures, or other breakdowns, occur that may lead to employee exposure above the 8-hr (TWA) limit or above the STEL, the employer must perform additional monitoring after the incident has been corrected. Such monitoring ensures that the work area is safe, or alerts the employer that protection, usually personal protective equipment, may still be needed.

Notification of Monitoring Results (§ 1910.1051(d)(7))

The employer must notify each employee of the exposure-monitoring results within 15 working days after the receipt of the results. Employers may notify employee's either individually in writing, or by posting the monitoring results in an appropriate location that is accessible to affected employees. If the results exceed the 8-hour time weighted average (TWA) or the STEL, the employer must, within 15 working days after receiving these results, provide the affected employees with written information regarding the corrective action taken by the employer to reduce exposures below the TWA or STEL and the schedule for completion of this action.

Written Compliance Plan (§ 1910.1051(f)(2))

Employers must establish and implement a written plan to reduce employee BD exposure to or below the permissible exposure limits (PELs)[1] using primarily engineering and work-practice controls, and then respiratory protection if required or permitted by the Standard. The compliance plan must include a schedule for developing and implementing engineering and work-practice

[1]"Permissible exposure limits" are either the 8-hour Time Weighted Average (TWA) or the Short-Term Exposure Limit (STEL).

controls, including periodic leak-detection surveys. The plan must be reviewed at least annually, and updated as necessary to reflect significant changes in the status of the employer's compliance program. Upon request, the written plan must be provided to OSHA, the National Institute for Occupational Safety and Health (NIOSH), affected employees, and designated employee representatives. This requirement commits the employer to evaluating employee exposure and establishing an organized and complete plan for reducing employee exposure to the PELs. The requirement to prepare and update a compliance plan is designed to remind the employer to implement and maintain the exposure-control methods required to comply with the Standard.

Exposure-Goal Program (§ 1910.1051(g))

If employees are exposed to BD above the action level, the Standard requires the employer to have a written exposure-goal program. This program is intended to limit employee exposures to below the action level during normal operations. The plan must be updated as necessary to reflect significant changes in the status of the exposure-goal program. Respirator use is not required in the exposure-goal program. The program must consist of the following elements:[2] A leak-prevention, detection, and repair program; a program for maintaining the effectiveness of local-exhaust ventilation systems; the use of pump exposure control technology such as, but not limited to, mechanical double-sealed or seal-less pumps; gauging devices designed to limit employee exposure, such as magnetic gauges on rail cars; unloading devices designed to limit employee exposure, such as a vapor-return system; and a program to maintain BD concentration below the action level in control rooms by use of engineering controls.

Respirator Program (§ 1910.1051(h)(2))

If respirators are required, the employer must establish a respiratory-protection program in accordance with 29 CFR 1910.134, paragraphs (b) through (d) (except (d)(1)(iii) and (d)(3)(iii)(B)(1) and (2)), and (f) through (m). Paragraph (c) of 29 CFR 1910.134 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 implement a respirator program that meets the needs of their employees.

Burden hours and costs resulting from these respiratory-program requirements are incurred under OSHA's Respiratory Protection Standard ICR (29 CFR 1910.134), OMB Control Number 1218-0099.

Filter Element Labeling (§ 1910.1051(h)(2)(iv))

Employers must attach a label to each respirator filter element to indicate the date and time it is first installed on the respirator. The purpose of this label is to inform employees when to replace a filter element, thereby preventing overexposure to BD.

[2]Unless the employer can demonstrate that an element is not feasible, will have no significant effect on reducing employee exposures, or is not necessary to achieve exposures below the action level.

Emergency-Situation Plan (§ 1910.1051(j))

Employers must develop and implement a written plan for managing emergencies involving substantial releases of BD. Emergency plans provide employees information to maximize their personal protection and minimize the hazard under these conditions.

Medical Surveillance (§ 1910.1051(k))

The Standard requires employers to provide medical screening and surveillance programs for employees whose duties expose them to BD at concentrations at or above the action level for 30 or more days a year. These programs must also be made available to those employees who have, or who may have, exposure to BD at or above the PELs for 10 or more days a year. Medical surveillance must also be made available to certain employees who had more than 10 years of exposure to BD in the past.

Documentation and maintenance of medical examinations provide a continuous record of employee health. Records of medical examinations are used by physicians or other licensed health care professionals (PLHCPs) who periodically examine employees exposed to BD to determine the extent to which the employees have experienced adverse health effects since their last examination. Further, when symptoms of damage appear, the PLHCP often needs information about an employee's previous medical conditions to make an accurate diagnosis of the new condition, its apparent cause, and the course of treatment required. Medical records also ensure that physicians can determine whether or not treatment or other interventions are needed for occupational exposures to BD.

Information Provided to Physicians or Other Licensed Health-Care Professionals
(§ 1910.1051(k)(6))

The employer must provide PLHCPs with the following information: A copy of the Standard, including the appendices; a description of the affected employee's duties as they relate to the employee's BD exposure; the employee's actual or representative BD exposure level during employment tenure, including exposure incurred in an emergency situation; a description of personal protective equipment used or to be used by the employee; and information from previous employment related medical evaluations of the affected employee that is not otherwise available to the PLHCP.

Making the required information available to the PLHCP will aid in the evaluation of the employee's health and fitness for specific job assignments involving BD exposure. As noted earlier, if symptoms of damage appear, the PLHCP often needs information about an employee's previous medical conditions to make an accurate diagnosis of the new condition, its apparent cause, and the course of treatment required. Information provided to the PLHCP also ensures that physicians can determine whether or not treatment or other interventions are needed for occupational exposures.

Written Medical Opinion (§ 1910.1051(k)(7))

Employers must ensure that a PLHCP provides a copy of the written medical opinion to the employer and to the employee within 15 working days of the evaluation. The purpose of this requirement is to aid in determining the initial placement of employees, and to assess an employee's ability to use protective clothing and equipment. The PLHCP's opinion will also provide information to the employer about whether or not the employee has a medical condition indicating overexposure to BD. The requirement that a PLHCP's opinion be written will ensure that the information is properly maintained for later reference. The requirement that employees be provided with a copy of the medical opinion will ensure that they are informed of the results of the medical examination.

Employee Information and Training (§ 1910.1051(l)(2))

Employers must provide training to all employees exposed to BD in accordance with the requirements of OSHA's Hazard Communication Standard (29 CFR 1910.1200). Training must be provided prior to, or at the time of, initial assignment to a job potentially involving exposure to BD at or above the action level or STEL; training must also be provided at least annually thereafter. Training enables employees to recognize how and where they may be occupationally exposed to BD, and what steps they can take to limit BD exposure. Workers must be provided with information on the location and use of BD, as well as work practices and health hazards associated with BD.

Training is essential to inform employees of the hazards to which they are exposed, and to provide them with information they can use to minimize the health hazards of BD. Training also serves to explain and reinforce the information presented to employees on signs, labels and MSDSs, which will be useful and effective only when employees understand the health hazards of BD and are aware of the actions they can take to avoid or minimize BD exposures.

Section (l)(2)(ii) requires the employer to maintain a record of the contents of the training program. This requirement permits employees and OSHA compliance officers to determine the topics for which employees have received training.

Recordkeeping (§ 1910.1051(m))

Objective Data (§ 1910.1051(m)(1))

Employers exempted from certain provisions under paragraph (a)(2) may choose to rely on objective data instead of initial monitoring. These employers must maintain this data for the duration of the employer's reliance on such data. Documenting and retaining objective data demonstrates the appropriateness of the employer's reliance on objective data in lieu of initial monitoring. Access to the record enables employees and their representatives to ensure that the employer's application of the exemption is reasonable. Maintaining a record of the objective data determinations will permit OSHA to ascertain whether compliance with the Standard has been achieved.

Exposure Monitoring and Medical Records (§ 1910.1051(m)(2) and (4))

Employers must establish and maintain exposure-monitoring records and employee medical records. This information may be used to determine the cause and prevention of occupational illness. The medical and exposure-monitoring records required by this Standard will aid the employee and their physicians or other (PLHCPs) in determining whether or not treatment or other interventions are needed as a result of employee exposure to BD.

Exposure-monitoring records must be maintained for at least 30 years, and medical records must be kept for the duration of employment plus 30 years. Records must be kept for extended periods because of the long latency period associated with the development of diseases caused by chronic exposures such as cancer. In addition, this retention is consistent with §1910.1020.

Respirator Fit-Testing Records (§ 1910.1051(m)(3))

The employer must keep a record of quantitative (QNFT) respirator fit tests administered to employees. This record must contain the following information: The name of the employee; type of respirator; brand and size of respirator; date of the fit test; and, when a QNFT is used, the fit factor, strip-chart recording or other recording of the results of the test. Employers must maintain the fit-test record until the next fit test is administered. This record enables OSHA to determine if the employer: Complied with the fit-testing requirement; performed the fit test before the employee started using the respirator (and under specific conditions thereafter); accurately determined the protection afforded to the employee; and ensured that the employee is using the correct respirator. Burden hours and costs resulting from these respiratory-program requirements are incurred under the ICR for OSHA's Respiratory Protection Standard (29 CFR 1910.134), OMB Control Number 1218-0099.

Availability (§ 1910.1051(m)(5))

Employee medical and exposure-monitoring records must be provided, upon written request, to OSHA and the National Institute for Occupational Safety and Health (NIOSH). Access to these records must be granted in accordance with 29 CFR 1910.1020(e).

Transfer of Records (§ 1910.1051(m)(6))

Paragraph (m)(6) of the BD Standard requires employers who cease to do business and have no successor employer to notify NIOSH at least three months before disposing of any records, and transmit them to NIOSH if requested. These employers also must comply with any additional requirements specified in 29 CFR 1910.1020(h) related to transfer of medical and exposure records. These records may be used by NIOSH for research purposes and by employees for health assessments and other reasons.

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.

Employers may use improved information technology whenever appropriate when making, keeping, and preserving required records. The Standard is written in performance language, i.e., in terms of what data must be collected rather then 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 2 above.

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

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

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 information collection requirements frequencies specified by the Standard are the minimum OSHA believes are necessary to ensure that the employer and OSHA can effectively monitor the exposure and health status of employees exposed to BD.

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 statistical data classification that has not been reviewed and approved by OMB;**
- **That includes a pledge of confidentially 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 prove that it has instituted procedures to protect the information's confidentially to the extent permitted by law.**

Employers are required to inform employees of exposure monitoring results within 15 working days after receiving the results either by posting the results in an appropriate location or individually in writing (29 CFR 1910.1051(d)(7)). If exposure monitoring indicates that an employee has been exposed above the PELs, employers must notify their employees in writing of the exposure-monitoring results and the steps being taken to reduce the exposure to within the PELs. This notification must be provided to the employees within 15 working days after receipt of the exposure monitoring results. These requirements help ensure that employees are notified as soon as possible of exposure results and an employer's plans to reduce exposures to below the PELs.

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 those comments. Specifically address comments received on cost and hour burdens.

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 three 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 **Federal Register** on March 20, 2009 (74 FR 11974, Docket No. OSHA-2008-0004) notice on requesting public comment on its proposed extension of the information collection requirements contained in the Standard on 1,3-Butadiene (29 CFR 1910.1051). This notice is 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 above standard. In response to this notice, the Agency received one comment from National College, Dayton, Ohio Campus (Exhibit Number - 8092f29c). The commenter expressed the overall need for and the importance of the collection of information requirements contained in the 1,3 - Butadiene Standard.

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 data are kept confidential. Agency practices and procedures governing OSHA's 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 form whom the information is requested, and any steps to be taken to obtain their consent.

There are no provisions in the Standard that require 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 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.**

The Agency determined average wage rates for 1,3-Butadiene using average hourly earnings, including benefits, to represent the cost of employee time. 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 29.4 percent of total employee compensation in the private sector. The costs of labor used in this analysis are therefore estimates of total hourly compensation. These hourly wages are:

Professional/Manager	$40.51
Employee	$27.67
Clerical/Secretary	$21.51

Table A

Summary of Burden Hours and Cost Estimates

Information Collection Requirement	Existing Burden Hours	Requested Burden Hours	Difference	Requested Cost
(A) Exposure Monitoring				
1. Initial Monitoring	0	0	0	$0
2. Periodic Monitoring	68	68	0	$2,755
3. Additional Monitoring	7	7	0	$284
4. Notification of Results				
Initial Notification	0	0	0	$0
Periodic Notification	1	1	0	$22
Additional Notification	1	1	0	$22
Notification of Corrective Action	0	0	0	$0
(B) Written Compliance Plan	0	0	0	$0
(C) Exposure-Goal Program	7	7	0	$284
(D) Respirator Program				
1. Filter Element Labeling	4	4	0	$111
2. Respirator Fit Testing[3]	0	0	0	$0
(E) Emergency Situation Plan	0	0	0	$0
(F) Medical Surveillance				
1. Periodic Examinations[4]	426	426	0	$11,787
2. Emergency Examinations	116	116	0	$3,210
3. Additional Examinations	86	86	0	$2,380
4. Information Provided to Physicians or Other Licensed Health-Care Professionals	132	132	0	$2,839

(G) Employee Information and Training				
Record of Program Content	0	0	0	$0
(H) Recordkeeping				
1. Objective Data	11	11	0	$237
2. Exposure Monitoring	0	0	0	$0
Periodic Monitoring	32	32	0	$688
Additional Monitoring	3	3	0	$65
3. Respirator Fit-Testing Records	0	0	0	$0
4. Medical Examinations	42	42	0	$903
5. Employee Access	15	15	0	$323
6. Federal Access	1	1	0	$41
7. Transfer of Records	3	3	0	$65
TOTAL	955	955	0	$26,016

[3]The respirator fit-testing provision, including the recordkeeping requirements associated with this provision specified in paragraph (m)(3) of the Standard, have been superseded by the respirator fit-testing requirements specified in OSHA's Respiratory Protection Standard (29 CFR 1910.134).

[4]This determination includes the burden for completing initial medical examinations; OSHA considers the initial medical examination to be the first examination administered in a series of periodic examinations.

Table 1. **Information for Burden and Cost Analysis**[3]

Industry Sector	No. of Shifts/ Facility	No. of Samples/ Shift/Year	No. of Job Categories/ Facility	No. of Facilities/ Industry Sector	Total No. of Job Categories in All Facilities
Monomer	2	4	5	12	60
Polymer	2	4	8	71	568
Crude	2	4	5	27	135
Stand-alone	2	4	3	5	15
TOTAL				**115**	**778**

(A) Exposure Monitoring (§ 1910.1051(d))

According to the Final Economic Analysis (FEA) of the BD Standard, the Petroleum Refining Sector has potential exposures to BD that are low and of extremely short duration. Therefore, for the purposes of analyzing the monitoring provisions of the Standard, the Petroleum Refining Sector will incur no burden.

1. Initial Monitoring (§ 1910.1051(d)(2))

The Standard requires each employer to perform initial monitoring to determine the airborne concentrations of BD to which employees may be exposed. Employers exempted from certain provisions by paragraph (a)(2) may instead rely on objective data to estimate employee exposure levels. Also, if an employer has monitored within two years prior to the Standard's effective date, the employer may rely on these prior monitoring results to meet the requirements of paragraph (d)(2)(i), provided: The conditions under which the initial monitoring was conducted have not changed in a manner that may result in new or additional employee exposures; and the monitoring meets all other requirements of the Standard.

The Agency assumes there are no new BD facilities requiring initial monitoring; therefore, no burden hours have been attributed to this provision.

[3]The *2008 World Butadiene Analysis*--published by Chemical Market Associates Incorporated (CMAI)—reports 13 facilities in the U.S. producing finished (or refined) butadiene, while the *2008 Directory of Chemical Producers*--published by SRI Consulting--reports 11 facilities in the U.S. producing 1,3-Butadiene; neither firm is able to provide updated data regarding the current number of polymer, stand alone, or crude production facilities. Given that OSHA received no comments on estimates contained in the previous ICR and that the estimated number of butadiene monomer facilities appears consistent with previous figures, OSHA is retaining the estimated number of facilities per industry sector. OSHA also assumes that the ratio of polymer, stand-alone and crude facilities to monomer production facilities has remained constant.

2. Periodic Monitoring (§ 1910.1051(d)(3))

According to the FEA for the BD Standard, there are no firms with exposures above the PELs. However, the Agency assumes there are facilities that have exposures above the action level, and these facilities must conduct annual monitoring. The FEA estimated the total number of job categories (industry wide) that would require annual monitoring after engineering controls are implemented; for each industry sector, the number is: Monomer, 6; Polymer, 28; Crude, 14; and Stand-alone, 2.

For each job category, OSHA assumes employers will use passive dosimeters to collect four samples during each of two shifts--two samples for the 8-hour TWA and two samples for the STEL--and that the employer will collect these samples annually; therefore, the total number of samples collected across the four industry sectors each year under this requirement would be 400 (50 job categories × 8 samples per job category). The Agency also assumes that it will take a manager--earning $40.51 per hour--ten minutes (.17 hour) to administer and collect the passive dosimeters. The burden hours and cost of this provision are provided in Table 2:

Table 2. Burden Hours and Costs for Periodic Monitoring

Industry Sector	No. of Shifts	No. of Samples/ Shift/Year	No. of Job Categories in All Facilities (Annual Monitoring)	Burden Hours / Sample	Burden Hours / Industry Sector	Estimated Cost
Monomer	2	4	6	.17	8.16	$331
Polymer	2	4	28	.17	38.08	$1,543
Crude	2	4	14	.17	19.04	$771
Stand Alone	2	4	2	.17	2.72	$110
TOTAL			**50**		**68.00**	**$2,755**

3. Additional Monitoring (§ 1910.1051(d)(5))

For the purposes of this ICR, OSHA assumes that 10 percent of the job categories will have a change in process or personnel each year that requires additional exposure monitoring; the total number of job categories affected by this requirement, therefore, would be five (10% of 50 job categories), resulting in a total of 40 additional samples collected across the four industry sectors each year (5 job categories × 8 samples per job category).

Burden hours: 40 samples × .17 hours = 7 hours
Cost: 7 hours × $40.51 = $284

4. Notification of Results (§ 1910.1051(d)(7)(i))

The Standard requires the employer, within 15 working days after receiving exposure-monitoring results, to notify the affected employee of these results. If the results indicate that an employee has been exposed above the 8-hour TWA or STEL, regardless of whether or not respirators are used, employers must notify the employees in writing of the results and the steps being taken to reduce their exposure to within the PELs. This notification must be provided to the employees within 15 working days after receiving the results. The Agency assumes that the employer will post the results in an accessible location.

Initial Monitoring Notification

Based on the Agency's assumption that initial exposure monitoring is no longer needed (see discussion under "Initial Monitoring" above), employee notification of these results is not required; therefore, no burden hours have been attributed to this requirement .

Periodic Monitoring Notification

For the purposes of this ICR, OSHA assumes that employers post their exposure-monitoring results, and that one posting will contain the monitoring results for all job classifications and for each shift. To determine the number of facilities required to post periodic monitoring results, the Agency: divided the number of job categories involved in periodic exposure monitoring (50) (see Table 2 above) by the total number of job categories in the four industry sectors (778) (see Table 1 above), resulting in 6.4 percent; and multiplied the total number of facilities in the four industry sectors (115) (see Table 1 above) by 6.4 percent, resulting in 7 facilities. Therefore, the Agency estimates that about 7 facilities would post annual monitoring. In addition, OSHA estimates a secretary earning $21.51 per hour, will take 5 minutes (.08 hour) to post the monitoring results.

Burden hours: 7 facilities × 1 posting/year × .08 hour = 1 hour
Cost: 1 hour × $21.51 = $22

Additional Notification

The Agency used the same procedure described above in "Periodic Monitoring Notification" to determine the number of facilities required to notify (by posting) employees of additional exposure-monitoring results. In this regard, employers would be required to post such results for 5 job categories (see table 2 above), or about 1 percent of all job categories. Multiplying the total number of facilities (115) by 1% resulted in only one facility being required to post additional monitoring results. However, OSHA acknowledges that all 5 job categories may not occur in just one facility. For the purposes of calculating burden hours and costs for this requirement, OSHA assumes that there will be one job category per facility that will require additional posting.

Burden hours: 5 facilities × 1 posting/year × .08 hour = 1 hour
Cost: 1 hour × $21.51 = $22

Notification of Corrective Action

Where exposure-monitoring results indicate that the PELs have been exceeded, employers must provide employees in writing, with information on the corrective action being taken by the employer to reduce employee exposure within 15 working days. According to the Final Economic Analysis, no employees are exposed above the 8-hour TWA, or STEL; therefore, no burden hours have been attributed to this requirement.

(B) Compliance Program (§ 1910.1051(f)(2))

If employee exposures exceed the PELs, the employer must establish and implement a written program to reduce employee exposure to or below the PELs; this program must reduce exposures using primarily engineering and work-practice controls as required by paragraph (f)(1) of the Standard, and then respiratory protection as required or permitted by the Standard. The Final Economic Analysis found that all facilities are below the 8-hour TWA and the STEL; therefore, no burden hours have been attributed to this provision.

(C) Exposure-Goal Program (§ 1910.1051(g))

In addition to compliance with the PELs, the employer must implement and update an exposure-goal program to limit employee exposure at or below the action level during normal operations. The Agency assumes that a professional, earning $40.51 an hour, will take 1 hour each year to update a facility's exposure-goal program. As noted above (see "Periodic Monitoring Notification"), a total of 7 facilities have employee exposures above the action level and, therefore, require periodic monitoring.

Burden hours: 7 facilities × 1 hour = 7 hours
Cost: 7 hours × $40.51 = $284

(D) Respirator Program (§ 1910.1051(h)(2))

The Standard requires employers to implement a respiratory protection program in accordance with the provisions of OSHA's Respiratory Protection Standard (29 CFR 1910.134). The burden for this requirement is taken under the ICR for the Respiratory Protection Standard, OMB Control Number 1218-0099.

1. Respirator Filter Element Labeling (§ 1910.1051(h)(4))

Labels must be attached to each respirator filter element to indicate the date and time it is first installed on the respirator. Employers must provide respirators during the following:

1) Periods necessary to install or implement feasible engineering and work practice controls;

2) Non-routine work operations that are performed infrequently and for which employee exposures are limited in duration;

3) Work operations for which feasible engineering and work-practice controls are not yet sufficient to reduce employee exposure to or below the PELS; and,

4) Emergencies.

The Final Economic Analysis found that all facilities are below the 8-hour TWA and the STEL; therefore, no employees are wearing respiratory protection on every shift for 52 weeks a year. Activities that trigger additional monitoring (§ 1910.1051(d)(5)), may require employees to temporarily wear respirators. These activities include changes in the production, process, control equipment, or work practices that may result in new or additional exposure to BD, or when the employer has any reason to suspect that a change may result in new or additional exposures. Also, during and after emergency incidents employees are likely to be wearing respirators.

OSHA estimates that five facilities conduct additional monitoring (See discussion above, (A)**.** Exposure Monitoring (§ 1910.1051(d), Additional Monitoring § 1910.1051(d)(5)). A limited number of employees perform those activities stated in additional monitoring. OSHA estimates 2 persons per facility, for a total of 10 employees (five facilities × 2 employees) wear respirators that require labeling during such activities. OSHA also estimates that 58 employees will be involved in an emergency (See the following discussion, (F). Medical Surveillance (§ 1910.1051(k)).

2. Emergency Examinations (§ 1910.1051(k)(4)).

To determine the number of filter-element labels required, the Agency assumes that each employee uses 2 filter elements (cartridges) per shift, and that the employee (making $27.67 per hour) takes 15 seconds (.004 hour) to write the date and time on each new cartridge label. The number of days employees wear respirators is dependent upon the type of additional monitoring activity or emergency. For purposes of calculating burden hours and costs, the Agency assumes that the maximum time employees would wear respirators is a week.

Burden hours: 2 cartridges/shift × 68 employees (10 + 58, see above) × .004 (15 seconds) × 7 days = 4 hours (rounded)
Cost: 4 hours × $27.67 = $111

(E) Emergency Situation Plan (§ 1910.1051(j))

The burden for this requirement is taken under the ICR for OSHA's HAZWOPER (Hazardous Waste Operations and Emergency Response) Standard (29 CFR 1910.120), OMB Control Number 1218-0202.

(F) Medical Surveillance (§ 1910.1051(k))

The Standard requires that employees exposed above the action level receive a medical examination once every 3 years after their initial physical examination; they must also complete a health questionnaire and a complete blood count (CBC) every year. According to the Final Economic Analysis, a total of 426 employees remain exposed to BD above the action level, but

below the PELs, after employers implement engineering and work-practice controls; for each industry sector, the number of exposed employees is: Monomer, 54; Polymer, 341; Crude, 14; and Stand-alone, 17. Employees exposed to emergency situations must receive: A CBC within 48 hours of BD exposure, and then monthly for 3 months; and a medical examination if they report irritation to the eyes, nose, throat, lungs, or skin, blurred vision, coughing, drowsiness, nausea, or headache.

1. Periodic Examinations (§ 1910.1051(k)(3)(i)(C))

The burden for medical surveillance is the lost work time incurred by the employer while an employee is away from work receiving the required medical examination. Based on estimates in the Final Economic Analysis, OSHA assumes that each year 142 employees (426 employees divided by 3 years), at a wage rate of $27.67 per hour, will spend 1.5 hours away from the job for this purpose; this estimate includes employee travel time, the medical examination, and any other tests deemed necessary by the examining physician or other licensed health-care professional. The Agency also estimates that the annual health questionnaire and complete blood count (CBC) take an additional half hour for each of the 426 employees to complete.

Burden hours: (142 employees × 1.5 hour/exam) + (426 employees × .5 hour/questionnaire-CBA) = 426 hours
Cost: 426 hours × $27.67 = $11,787

2. Emergency Examinations (§ 1910.1051(k)(4))

The Agency assumes that one-half of the 115 facilities (58 facilities) will have an employee who requires an emergency medical examination (1.5 hours) and 4 CBCs (.5 hour total) each year.

Burden hours: 58 facilities × 2 hours = 116 hours
Cost: 116 hours × $27.67 = $3,210

3. Additional Examinations (§ 1910.1051(k)(5))

The Agency assumes that each year 43 employees (10% of the 426 employees who are exposed above the action level) will require a referral to a medical specialist; OSHA assumes that an employee would take 2 hours to complete a specialist's evaluation.

Burden hours: 43 employees × 2 hours per exam = 86 hours
Cost: 86 hours × $27.67 = $2,380

4. Information Provided to the PLHCP (§ 1910.1051(k)(6))

Employers must provide the PLHCP with specific information on each employee examined. OSHA assumes that this requirement would take 15 minutes (.25 hour) of a secretary's time (at a wage rate of $21.51 per hour) to send the information on each examination to the PLHCP. The

total number of examinations each year is 527 (426 periodic, 58 emergency, and 43 additional examinations).

Burden hours: 527 examinations × .25 hours = 132 hours
Cost: 132 hours × $21.51 = $2,839

(G) Employee Information and Training (§ 1910.1051(l)(2)(ii))

Under this provision, employers must develop and maintain a record of the contents of their training program. For the purposes of this ICR, OSHA assumes that this is a one-time burden and that employers have already met this requirement; therefore, no burden hours have been attributed to this provision.

(H) Recordkeeping (§ 1910.1051(m))

1. Objective Data (§ 1910.1051(m)(1))

According to the Final Economic Analysis (FEA), the only sector that would be excepted from the exposure-monitoring requirements of the Standard under paragraph (a)(2) is Petroleum Refining, which the FEA estimated had 140 facilities. OSHA assumes that all of these facilities use objective data, which they have already collected. Additionally, the Agency estimates that a secretary, at a wage rate of $21.51 per hour, will take 5 minutes (.08 hour) each year to maintain these data records at each facility.

Burden hours: 140 facilities × .08 hours = 11 hours
Cost: 11 hours × $21.51 = $237

2. Exposure Monitoring (§ 1910.1051(m)(2))

Periodic Monitoring

As noted earlier under "Periodic Monitoring," 400 exposure-monitoring samples are collected each year across the 4 industry sectors. The Agency estimates that a secretary, at a wage rate of $21.51 per hour, will take 5 minutes (.08 hour) to maintain the records for these samples.

Burden hours: 400 samples × .08 hours = 32 hours
Cost: 32 hours × $21.51 = $688

Additional Monitoring

The previous determination performed under "Additional Monitoring" showed that 40 additional exposure-monitoring samples will be collected each year across the 4 industry sectors. The Agency estimates that a secretary, at a wage rate of $21.51 per hour, takes 5 minutes (.08 hour) to maintain the records for these samples.

Burden hours: 40 samples × .08 hours = 3 hours
Cost: 3 hours × $21.51 = $65

3. Respirator Fit-Testing (§ 1910.1051(m)(3))

Burden hours and costs resulting from this respiratory-program requirement are incurred under the ICR for OSHA's Respiratory-Protection Standard (29 CFR 1910.134), OMB Control Number 1218-0099.

4. Medical Examinations (§ 1910.1051(m)(4))

Based on the determination made above (see "Information Provided to the PLHCP"), a total of 527 medical records must be maintained annually by all employers. The Agency considers negligible the requirement to maintain previous medical records of employees who are no longer covered by the medical-surveillance provision. OSHA estimates that a secretary, at a wage rate of $21.51 per hour, takes 5 minutes (.08 hour) to maintain each medical record which may consist of medical examination results, tests, CBCs, and questionnaires.

Burden hours: 527 records × .08 hour = 42 hours
Cost: 42 hours × $21.51 = $903

5. Employee Access (§ 1910.1051(m)(5))

The Final Economic Analysis determined that 1,906 employees are subject to the exposure-monitoring and/or medical-surveillance provisions of the Standard. OSHA estimates that 10% of these employees (190 employees) will request access to these records. The Agency estimates that a secretary, at a wage rate of $21.51 per hour, takes 5 minutes (.08 hour) to respond to such a request.

Burden hours: 190 employees × .08 hours = 15 hours
Cost: 15 hours × $21.51 = $323

6. Federal Access (§ 1910.1051(m)(5))

The Standard specifies that employers must make all required records available to the Assistant Secretary (usually an OSHA compliance officer) or to NIOSH upon request. The Agency estimates that a professional, at a wage rate of $40.51 per hour, will spend about 5 minutes (.08 hour) during an OSHA inspection informing an OSHA compliance officer of the location of the requested records, and that such a request is made by a compliance officer during one (1) OSHA inspection annually.

Burden hours: 1 inspection × .08 hour = 1 hour (rounded)
Cost: 1 hour × $40.51 = $41

7. Transfer of Records (§ 1910.1051(m)(6))

If an employer ceases to do business and no successor employer is available to receive and retain exposure-monitoring and medical records for the specified periods, the employer must notify NIOSH, at least 3 months prior to disposal, and transmit them to NIOSH if requested.

OSHA assumes that 3 employers will send records to NIOSH, and that a secretary, earning $21.51 per hour, will spend 1 hour preparing and sending these records. Therefore, the estimated burden hour for this provision is 3 hours, at a cost of $65.

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 respondent (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.**

OSHA estimates that the total annual cost to respondents is $95,288: $43,120 for exposure monitoring, $52,128 to administer medical examinations and questionnaires, and $40 for employers to transfer records to NIOSH.

1. Exposure Monitoring

According to the Final Economic Analysis, it costs employers $98 to collect and analyze BD samples using a vapor badge.[4]

Periodic Monitoring: 400 samples × $98 = $39,200

[4]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 of each badge, including laboratory analysis, was $92; given the 6.3% increase in the price of professional medical services, it was assumed that the cost of each badge and laboratory analysis increased by 6.3% as well.

Additional Monitoring: 40 samples × $98 = $3,920

Total Cost: $43,120

2. Medical Examinations

The Agency estimates that a questionnaire costs $37 to administer, and a medical examination, not including a medical questionnaire, costs $138.[5]

Periodic Examinations:	426 questionnaires × $37 = $15,762; 142 medical examinations × $138 = $19,596. The total for medical examinations and questionnaires is $35,358
Emergency Examinations:	58 examinations × (medical questionnaires $37 + medical examinations, $138) = $7,095
Additional Examinations:	43 examinations × (medical questionnaires $37 + medical examinations, $138) = $9,675

Total Cost: $52,128

3. Transfer of Records to NIOSH

Under paragraph (m)(6)(1) of the Standard, employers who cease to do business and have no successor employer must notify NIOSH before disposing of exposure-monitoring and medical records, and transfer these records to NIOSH if so requested. OSHA estimates that 3 sets of records, weighing 5 lbs., will cost approximately $13.28 to mail to NIOSH via the United States Postal Service.

Transfer of Records to NIOSH: 3 sets of records × $13.28 = $40 (rounded)

Grand Total Cost: $95,288

14. Provide estimates of the 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 into a single table.

1. Federal Access

The Agency estimates that it will conduct 2 inspections each year in which a compliance officer reviews information required under the information collection provisions of the BD Standard. The cost of these inspections is based on the average time (5 minutes (.08 hour)) that an OSHA

[5]The previous ICR estimated that the cost to administer a questionnaire was $35, while the cost of a medical examination, not including a questionnaire, was $130; given the 6.3% increase in the price of professional medical services described previously, it was assumed that the cost of both the medical questionnaire and examination increased by 6.3% as well.

compliance officer (GS-12/5, with an hourly wage rate of $39.70) spends reviewing this information during an inspection.

Burden hours: 2 inspections × .08 = .16 hour (10 minutes)
Cost: .16 hour × $39.70 = $6

2. Transfer of Records to NIOSH

Under paragraph (m)(6)(1) of the Standard, employers who cease to do business and have no successor employer must notify NIOSH at least 3 months before disposing of exposure-monitoring and medical records, and transmit these records to NIOSH if so requested. NIOSH received no BD records from employers during the last 3 years. Based on previous ICRs for this Standard, and to account for possible transfer burden during the upcoming clearance period, OSHA assumes that NIOSH will receive 3 sets of records, and that a secretary earning $21.51 per hour will take 4 minutes (.07 hour) to process each set of records.

Burden hours: 3 sets of records × .07 hour = .21 hour (13 minutes)
Cost: .21 hour × $21.51 = $5

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

There was a data entry error made in the ROCIS system that inadvertently stated a burden hour total of 956 hours, however, the previously approved information collection request consistently states the correct burden hour estimate of 955 hours. Therefore, there is no adjustment to the burden hours which remain at 955 hours. However, the Agency is requesting an increase in cost of $4,288, from $91,000 to $95,288. The increase is a result of updating costs for exposure monitoring which increased from $92 to $98, administering medical examinations which increased from $130 to $135, and medical questionnaires which increased from $35 to $37. Lastly, the costs for employers to transfer records to NIOSH increased from $37 to $40.

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 information collected under the BD Standard 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 identified in ROCIS.

OSHA is not seeking an exception to the certification statement specified ROCIS.