

**SUPPORTING STATEMENT FOR THE
COLLECTION OF INFORMATION REQUIREMENT IN THE
PROPOSED EXPLOSIVES STANDARD (29 CFR 1910.109)¹**

JUSTIFICATION

- 1. Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection. Attach a copy of the appropriate section of each statute and regulation mandating or authorizing the collection of information.**

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

Section 6(b)(7) of the Act specifies that “[a]ny standard promulgated under this subsection shall prescribe the use of labels or other appropriate forms of warnings as are necessary to insure that employees are apprised of all hazards to which they are exposed, relevant symptoms and appropriate emergency treatment, and proper conditions and precautions of safe use or exposure.” This provision goes on to state that “[t]he Secretary, in consultation with the Secretary of Health and Human Services, may by rule promulgated pursuant to section 553 of title 5, United States Code, make appropriate modifications in the foregoing requirements relating to the use of labels or other forms of warning . . . as may be warranted by experience, information, or medical or technological developments acquired subsequent to the promulgation of the relevant standard” (29 U.S.C. 655).

With regard to recordkeeping, the Act specifies that “[e]ach employer shall make, keep and preserve, and make available to the Secretary . . . such records . . . as the Secretary . . . may prescribe by regulation as necessary or appropriate for the enforcement of this Act” (29 U.S.C. 657.) The Act states further that “[t]he Secretary . . . shall prescribe such rules and regulations as [he/she] may deem necessary to carry out [his/her] responsibilities under this Act, including rules and regulations dealing with the inspection of an employer’s establishment” (29 U.S.C. 657).

Therefore, under the authority granted by the OSH Act, the Occupational Safety and Health Administration (i.e., “OSHA” or “the Agency”) is proposing to revise 29 CFR 1910.109, currently titled “Explosives and blasting agents.” The proposed revision (hereafter, “the Proposal”) would enhance the protection provided to employees engaged in the manufacture, storage, sale and transportation, handling and use of explosives. The

¹The purpose of this Supporting Statement is to analyze and describe the burden hours and costs associated with provisions of the proposed 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.

Proposal updates and clarifies the regulatory language, addresses regulatory inconsistencies between OSHA and other Federal agencies, incorporates updated consensus standards, and provides the regulated community with greater compliance flexibility.

- 2. Indicate how, by whom, and for what purpose the information is to be used. Except for a new collection, indicate the actual use the agency has made of the information received from the current collection.**

The Proposal addresses the reduction and avoidance of employee injuries and deaths during storage, handling, transportation, and use of explosives (including blasting agents and pyrotechnics), and enhances the protections provided to employees engaged in the manufacture, storage, sale, transportation, handling, and use of explosives. After a thorough review of the Proposal, the Agency identified one new collection of information requirement that may impose additional burden hours and costs on the employer.

The proposed collection of information requirement (§ 1910.109(f)(1)(iv)) would prohibit an employer, whenever blasting operations are being conducted in close proximity to gas, electric, water, telephone, or other similar utilities, from commencing such blasting operations until receiving and documenting approval from the appropriate utility representatives.²

OSHA's existing Explosives Standard only requires notification to the affected utility 24 hours in advance of blasting. It does not require a response from the utility prior to the employer beginning blasting. Thus, the employer may have already begun or even completed the blasting operation before a utility has had adequate time to identify a potential problem with the blasting operation and communicate this fact to the employer, which could endanger employees working in blasting operations near utility lines. Obtaining and documenting approval from the utility prior to blasting is important to employee safety. The approval process will vary by locality depending on already established procedures and may, in fact, often take less than 24 hours. Documentation may be in the form of a fax, e-mail, or record of a conversation. Employers only need to maintain the documentation for the duration of the blasting operation.

OSHA has determined preliminarily that the following proposed provisions are either not collection of information requirements or would impose no additional burden hours or cost on employers.

²This proposed provision has an implied requirement for employers to notify utility representatives of blasting operations; however, OSHA considers such notification to be a usual and customary practice by the industry, and is not taking burden for it.

A. General provisions (§1910.109(c))

Labels (§1910.109(c)(5))

§1910.109(c)(5)(i) - The employer shall communicate hazards associated with explosives in accordance with the requirements of the Hazard Communication Standard, §1910.1200.³ Where labeling of explosives is required under §1910.1200, Globally Harmonized System (GHS) labels shall be used as shown in Figure 1 below for different divisions of explosives. The labels shall have a signal word, a hazard statement, and either a division designation or a pictogram as shown in the figure below. The pictogram shall be black on a white background with a red frame sufficiently large to be clearly visible.⁴

§1910.109(c)(5)(ii) - The employer shall ensure that DOT markings, placards, and labels are retained in accordance with §1910.1201.^{3,5}

Figure 1 - GHS Labels for Explosives

Unstable explosives	Division 1.1	Division 1.2	Division 1.3	Division 1.4	Division 1.5	Division 1.6
					1.5 (on orange background)	1.6 (on orange background)
Danger	Danger	Danger	Danger	Warning	Danger	
Unstable explosives	Explosive; mass explosion hazard	Explosive; severe projection hazard	Explosive; fire, blast or projection hazard	Fire or projection hazard	May mass explode in fire	

B. Storage of ammonium nitrate (§1910.109(d))

Storage of ammonium nitrate in bags and containers (§1910.109(d)(3)) - The employer shall ensure that:

§1910.109(d)(3)(i) - Bags and containers used for ammonium nitrate storage are:

³The paperwork requirement is contained in the referenced standard.

⁴The requirement is exempt from the definition of a collection of information because the Government provides specific language for signs/labels for disclosure to employees (5 CFR 1320.3(c)(2)).

⁵This proposed provision does not require employers to develop or affix markings, placards or labels; therefore, OSHA is taking no burden hours or costs for this provision.

§1910.109(d)(3)(i)(B) - Labeled in accordance with DOT regulations (49 CFR chapter I) or §1910.1200, as applicable.³

Storage of bulk ammonium nitrate (§1910.109(d)(4)) - The employer shall ensure the following:

§1910.109(d)(4)(v) - Ammonium nitrate bulk storage bins or piles are clearly identified by signs reading "Ammonium Nitrate" with letters at least 2 inches (5.1 cm) high.⁴

C. Transportation of explosives (§1910.109(e))

General provisions §1910.109(e)(1) - The employer shall ensure that:

§1910.109(e)(1)(iii) - Explosives are not transferred from one vehicle to another without informing local fire and police departments. A competent person shall supervise the transfer of explosives. In the event of breakdown or collision, the local fire and police departments shall be promptly notified.⁶

Vehicles (§1910.109(e)(2))

§1910.109(e)(2)(ii) - The employer shall ensure that any vehicle containing explosives or oxidizers located at a private facility or blast site has exterior markings or placards designed and displayed in accordance with the regulations of DOT (49 CFR chapter I).³

§1910.109(e)(2)(v) - For each vehicle used for carrying explosives, the employer shall ensure the following:

§1910.109(e)(2)(v)(A) - Fire extinguishers are used, maintained, and tested in accordance with §1910.157.⁷

D. Use of explosives for blasting (§1910.109(f))

General provisions (§1910.109(f)(1))

§1910.109(f)(1)(i) - The employer shall ensure that the blaster-in-charge:

§1910.109(f)(1)(i)(A) - Is trained, knowledgeable, and experienced in the storage, transportation, handling, and use of explosives;

⁶This requirement is a usual and customary business activity that imposes no new burden hours or costs on employers (5 CFR 1320.3(b)(2)).

⁷This collection of information has been taken in §1910.157(f)(16) and §1910.157(e)(3), OMB Control Numbers 1218-0218 and 1218-0238, respectively.

§1910.109(f)(1)(i)(B) - Is knowledgeable about relevant federal, state, and local regulations pertaining to explosives;

§1910.109(f)(1)(i)(C) - Is trained, knowledgeable, and experienced in the use of each type of blasting method being used; . . .⁸

§1910.109(f)(1)(ii) - The employer shall ensure the following:

§1910.109(f)(1)(ii)(F) - Signs are posted warning against the use of mobile radio transmitters or cellular phones on all roads within 350 feet (106.7 m) of the blasting operations. The signs shall read:

WARNING
EXPLOSIVES HAZARD
DO NOT USE MOBILE RADIO TRANSMITTERS
OR CELLULAR PHONES⁴

Loading of explosives in drill holes (§1910.109(f)(3))

§1910.109(f)(3)(vii) - After the loaded drill holes are connected but prior to them being connected to a source of initiation:

§1910.109(f)(3)(vii)(A) - The blast area shall be barricaded and posted, guarded, or both. If barricaded and posted, the posted sign shall read “DANGER - EXPLOSIVES HAZARD - DO NOT ENTER” or equivalent language.⁴

E. Blasting agents, water gels, slurries, and emulsions (§1910.109(g))

Bulk delivery vehicle operation (§1910.109(g)(3)(iii)) - The employer shall ensure the following requirements are met for bulk delivery vehicle operation:

§1910.109(g)(3)(iii)(A) - The driver of the vehicle is trained and capable of safely operating the vehicle;

§1910.109(g)(3)(iii)(B) - The operator, whether the driver or another employee, is trained and capable of safely operating the mixing, conveying, and related equipment on the vehicle.⁸

F. Training (§1910.109(j)(1-9))

§1910.109(j)(1) - The employer shall provide information and training on safe work practices for each employee prior to or at the time of the employee’s initial job assignment involving the manufacture, storage, sale, transportation, handling, or use of explosives, including repair or maintenance of related facilities and equipment.

⁸This training requirement is performance-oriented, and is not considered a collection of information.

§1910.109(j)(2) - The employer shall ensure that the training provided under paragraph (j) of this section is specific to each employee's unique work duties.

§1910.109(j)(3) - In addition to the information and training requirements of §1910.1200, Hazard Communication, the employer shall inform each employee of the requirements in §1910.109 that apply to the employee's work duties and make a copy of the §1910.109 standard available to the employee.^{3,8}

§1910.109(j)(4) - Employers shall train employees in all safety practices, including applicable emergency procedures that relate to their work and are necessary for their safety.⁸

§1910.109(j)(5) - Whenever there are workplace changes, such as the institution of new or modified procedures or products, employees shall be retrained as necessary to ensure that each employee has the requisite proficiency in the relevant safe work practices.⁸

§1910.109(j)(6) - The employer shall conduct retraining whenever the employer has reason to believe that there are inadequacies in the employee's knowledge of or performance of safe work practices.⁸

§1910.109(j)(7) - The employer shall provide information and training in a manner that is understandable to each employee.

§1910.109(j)(8) - The employer shall determine that each employee has demonstrated proficiency in all aspects of the training required by paragraph (j) of this section.

§1910.109(j)(9) - An employer is deemed to be in compliance with an employee training provision in paragraph (j) of this section if an identical training provision has been satisfied for that employee under §1910.1200, Hazard Communication or DOT training requirements (49 CFR part 172).³

- 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.**

The Proposal would allow employers performing blasting operations in close proximity to utilities to electronically develop, obtain, and maintain documentation that they received approval from the appropriate utility representative prior to the blasting operation. Employers also could use faxed or hand-written documentation from utility representatives to fulfill the requirement.

- 4. Describe efforts to identify duplication. Show specifically why any similar information already available cannot be used or modified for use for the purpose described in Item 2 above.**

The information required to be collected and documented is specific to the employer involved and is not duplicated by any other source.

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 requirement specified in the Proposal 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 requirement specified by the Proposal is the minimum frequency necessary to ensure employee safety.

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.**

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

8. If applicable, provide a copy and identify the date and page number of publication in the Federal Register of the agency's notice, required by 5 CFR 1320.8(d), soliciting comments on the information collection prior to submission to OMB. Summarize public comments

received in response to that notice and describe actions taken by the agency in response to these comments. Specifically address comments received on cost and hour burden.

Describe efforts to consult with persons outside the agency to obtain their views on the availability of data, frequency of collection, the clarity of instructions and recordkeeping, disclosure, or reporting format (if any), and on the data elements to be recorded, 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 specific situations. These circumstances should be explained.

In accordance with 5 CFR 1320.11, OSHA is submitting an information collection request (ICR) to the Office of Management and Budget (OMB) for the Proposal. A copy of the Proposal is attached to this Supporting Statement. Members of the public who wish to comment on this ICR must submit written comments to the Office of Information and Regulatory Affairs, New Executive Office Building, Office of Management and Budget, Room 10235, 725 17th Street, NW., Washington, DC 20503, Attn: OSHA Desk Officer (RIN 1218- AC09)).

OSHA also encourages the public to submit copies of their comments on the ICR to the rulemaking docket (Docket No. OSHA-2007-0032). All comments received on the ICR will be made a part of the record of the Proposal. For information on how to submit comments and access the rulemaking docket, see the Notice of Proposed Rulemaking at <http://www.regulations.gov> or contact the OSHA Docket Office, Room N-2625, 200 Constitution Avenue, NW., Washington, DC 20210; telephone (202) 693-2350 (OSHA's TTY number is (877) 889-5627).

The Agency will summarize the comments on the ICR, and will include the summary in its request to OMB for final approval for the ICR.

- 9. Explain the decision to provide any payments or gifts to respondents, other than reenumeration of contractors or grantees.**

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

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

The paperwork requirement specified by the Proposal for which OSHA is taking burden does not involve confidential information.

- 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. The 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.**

Documenting approval from a utility representative prior to blasting does not involve sensitive information.

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

- **Indicate the number of respondents, frequency of response, annual hour burden, and an explanation of how the burden was estimated. Unless directed to do so, agencies should not conduct special surveys to obtain information on which to base hour burden estimates. Consultation with a sample (fewer than 10) of potential respondents is desirable. If the hour burden on respondents is expected to vary widely because of differences in activity, size, or complexity, show the range of estimated hour burden, and explain the reasons for the variance. Generally, estimates should not include burden hours for customary and usual business practices.**
- **If this request for approval covers more than one form, provide separate hour burden estimates for each form and aggregate the hour burdens in Item 13 of OMB Form 83-I.**
- **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 13.**

Wage Rate

OSHA assumes that an extractive supervisor⁹ would either prepare or obtain written approval from the appropriate utility representative prior to blasting operations. The Agency determined that the average wage rate is \$27.82¹⁰ for an extractive supervisor.

Burden-Hour and Cost Determination

A. Use of explosives for blasting (§1910.109(f))

Proposed paragraph (f)(1)(iv) would prohibit employers from commencing blasting operations in close proximity to gas, electric, water, telephone, or other similar utilities until they receive and document approval from the appropriate utility companies. General industry blasting operations that would require an employer to contact a utility company occur in outdoor, non-construction applications such as rock blasting, stump removal, pond excavation, and grave digging.

The Agency estimates that about 1,000 companies perform blasting operations. OSHA assumes that 90% of the 1,000 companies conduct blasting operations in the construction and mining industries, leaving 10% of the companies conducting blasting for general industry. OSHA estimates that each of these 100 companies would perform about five blasting operations annually that would require the employer to document approval provided by a utility representative prior to initiating blasting operations. The supervisor

⁹Extractive Occupations – E613 Supervisors; place and detonate explosives to demolish structures or to loosen, remove, or displace earth, rock, or other materials. *National Compensation Survey*, U.S. Department of Labor, Bureau of Labor Statistics, June 2005.

¹⁰This wage rate includes fringe benefits based on the Bureau of Labor Statistics “Employer Costs for Employee Compensation,” June 2005.

would take an average of three minutes (.05 hour) to develop and/or obtain, and maintain, the approval documentation. Therefore, the estimated burden hours and cost each year for this proposed collection of information would be:

Burden hours: 100 companies x 5 documentations per year x .05 hour = 25 hours
Cost: 25 hours x \$27.82 = \$696

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 service 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.**

All cost for complying with the proposed collection of information requirement are included under Item 12.

14. **Provide estimates of annualized costs 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.**

OSHA estimates that a compliance officer (GS-12, step 5) with an hourly wage rate of \$36.26 would spend about three minutes (.05 hour) during an inspection reviewing any documented approval that an employer has maintained. The Agency estimates that its compliance officers would perform approximately one regulated inspection each year of

establishments covered by this ICR.¹¹ OSHA considers other expenses, such as equipment, overhead, and support staff salaries, to be normal operating expenses that would occur even without the paperwork requirements specified in the Proposal. Therefore, the total cost of these paperwork requirements to the Federal government would be:

Cost: 1 inspection x .05 hour x \$36.26 = \$2

15. Explain the reasons for any program changes or adjustments reported in Items 13 or 14 of the OMB Form 83-I.

The proposed collection of information requirement would result in a program increase of 25 new burden hours compared to the existing standard. OSHA took no cost under Item 14 of the OMB Form 83-I.

16. For collections of information whose results will be published, outline plans for tabulation, and publication. Address any complex analytical technique that will be used. Provide the time schedule for the entire project, including beginning and ending dates of the collection of information, completion of report, publication dates, and other actions.

OSHA will not publish the information to be collected under the Proposal.

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

No forms are available on which to display the expiration date.

18. Explain each exception to the certification statement identified in Item 19, "Certification for Paperwork Reduction Act Submission," of OMB 83-I.

OSHA is not requesting any exemptions from the certification statement identified in Item 19 of OMB Form 83-I.

¹¹The Agency estimated the number of inspections by determining the inspection rate (1.4%) for all establishments under the jurisdiction of the Act (including both Federal OSHA and approved State-Plan States), and then multiplied the total number of establishments conducting blasting operations by this percentage (i.e., 100 establishments x 1.4% inspection rate = 1 inspection).