

**Request for Approval under the “Generic Clearance for the Collection of
Routine Customer Feedback”
0920-0953**

CIO: National Institute for Occupational Safety and Health

PROJECT TITLE: Assessing and Evaluating the Effectiveness of Hazard Recognition and Risk Assessment Interventions

PURPOSE AND USE OF COLLECTION: The Centers for Disease Control and Prevention (CDC), National Institute for Occupational Safety and Health (NIOSH), Pittsburgh Mining Research Division (PMRD) seeks approval from the Office of Management and Budget (OMB) to collect feedback from surface and underground stone, sand and gravel mineworkers on EXAMiner, which is a workplace examination training program. This workplace examination training program was developed to be used by mine safety and health professionals during required training sessions (e.g., CFR Part 46 new miner and annual refresher training) as a way to improve mineworkers’ ability to recognize hazards at their workplace.

The respondents include mine safety and health professionals, frontline supervisors, and mineworkers. Information collected through this evaluation will not require rigorous statistical analysis to be beneficial to EXAMiner as the main goal of this information collection is to identify ways to improve the training program.

Since 2013, PMRD researchers have focused their efforts on performing laboratory research designed to identify differences in mineworkers’ hazard recognition ability (see Eiter et al., 2017; Protocol 15-OMSHR-02XP; OMB 0920-1121) and then develop training products to address those differences. This is critical for the mining industry because hazard recognition task results show that mineworkers, regardless of experience level, are not finding a significant number of hazards (Eiter et al.; Barrett & Kowalski, 1995). In the laboratory study conducted by PMRD researchers, experience and inexperienced mineworkers and mining engineering students, on average, only identified 53% of the hazards. The participating mine safety and health professionals—those people at the mine site tasked with ensuring that mineworkers are trained and capable of recognizing hazards—were only able to accurately identify 61% of the hazards. These identification rates are well below the previously established 90% standard for mastery (Barrett & Kowalski, 1995).

PMRD researchers developed EXAMiner, a workplace examination training program, for mining companies to use to improve hazard recognition ability so that mineworkers can find more hazards that are present at their workplace. EXAMiner and was designed to address critical competencies associated with hazard recognition ability and to give mineworkers the opportunity to practice searching for and finding hazards during a simulated workplace examination (Eiter et al., 2018). Prior to making this training product widely available to mining stakeholders, it is

critical that PMRD evaluates EXAMiner in the field to ensure that it addresses critical competencies and improves hazard recognition ability. This information collection effort is designed to evaluate EXAMiner to determine its usability, relevance to mining stakeholders, accuracy and applicability to the mining environment, and challenges and successes users have when applying information from EXAMiner to the field. The feedback received from this evaluation will be used to improve EXAMiner so that it is relevant and provides impact for the mining stakeholders.

DESCRIPTION OF RESPONDENTS:

Mine Safety and Health Professionals

Respondents will include mine safety and health professionals that work at either surface or underground stone, sand, and gravel mining operations. Responses to the interview questions (Attachment B -*EXAMiner Evaluation Interview Guide* and Attachment C -*“Are you Thinking Like an EXAMiner?” Evaluation Interview Guide*) will facilitate improvements to the training program. Mine safety and health professionals will also be interviewed to identify potential usability issues and to determine whether and how the training program improves mineworker hazard identification ability.

Mineworkers

Respondents will include mineworkers that work at either surface or underground stone, sand, and gravel mining operations. While mineworkers are required to complete training as a part of their employment, participating in training evaluation is voluntary. Responses to the training evaluation questions (Attachment A -*EXAMiner and Are you Thinking like an EXAMiner?’ Training Evaluation*) will facilitate improvements to the training program.

Frontline supervisors

Frontline supervisors will be asked to job aids in the field to evaluate their workplace for hazards. The job aids were designed for frontline supervisors and address critical competencies covered within the hazard recognition training program. Frontline supervisors are also asked to participate in two interviews. The goal of the interviews is to identify usability issues, how supervisors are successfully able to apply critical competencies to the workplace, and hurdles they encounter applying these competencies (Attachment D -*Pre-Job Aid Use Interview Guide*).

CERTIFICATION:

I certify the following to be true:

1. The collection is voluntary.
2. The collection is low-burden for respondents and low-cost for the Federal Government.
3. The collection is non-controversial and does not raise issues of concern to other federal agencies.

4. Information gathered will not be used to substantially inform influential policy decisions.
5. The study is not intended to produce results that can be generalized beyond its scope.

Name: Brianna M. Eiter, PhD

To assist review, please answer the following questions:

Personally Identifiable Information:

1. Is personally identifiable information (PII) collected? [] Yes [X] No
2. If Yes, is the information that will be collected included in records that are subject to the Privacy Act of 1974? [] Yes [] No
3. If Applicable, has a System or Records Notice been published? [] Yes [X] No

Gifts or Payments:

Is an incentive (e.g., money or reimbursement of expenses, token of appreciation) provided to participants? [] Yes [X] No

BURDEN HOURS

The following is an explanation of when respondents will complete each of the data collection instruments.

Month 1

- **Mine safety and health professionals** will use ‘EXAMiner and the Are you Thinking Like an EXAMiner’ training materials to train mineworkers.
 - After using the training, **mine safety and health professionals** will complete the ‘EXAMiner Evaluation Interview’ (Attachment B) and the ‘Are you Thinking Like an EXAMiner Evaluation Interview’ (Attachment C).
- **Mineworkers** after training, will complete the EXAMiner and Are you Thinking Like an EXAMiner? Training Evaluation form (Attachment A).
- **Frontline supervisors** will complete the Pre-Job Aid Use Interview Guide (Attachment D) and use the Job Aid for the first time (Attachment D1). The job aid is intended to be used as a field guide to help supervisors and safety professionals identify the hurdles to hazard recognition and decide which action should be put in place to control or eliminate those hurdles.

Months 2 through 3

- **Frontline supervisors** will use the job aid 2 more times (Attachment D1 –Pre-Job Aid Use Interview Guide).

Mine safety and health professionals will complete the Are you Thinking Like an EXAMiner?/Job Aid Evaluation Interview (Attachment C1). Month 4

- **Mine safety and health professionals** will complete the Are you Thinking Like an EXAMiner?/Job Aid Evaluation Interview (Attachment C2).
- **Frontline supervisors** will use the job aid a final time and complete the Post-Job Aid Use Interview Guide (Attachment D2).

The total estimated burden in hours for the information collection is 240.

Category of Respondent	Form Name	No. of Respondents	Participation Time (minutes)	Burden in Hours
Mine Safety and Health Professional	Are you Thinking Like an EXAMiner? Evaluation Interview Guide (Attachment C)	20	30/60	10
	Are you Thinking Like an EXAMiner?	20	30/60	10

	Evaluation Interview Guide (Attachment C1)			
	Are you Thinking Like an EXAMiner? And Job Aid Evaluation Interview Guide (Attachment C2)	20	20/60	7
	EXAMiner Evaluation Interview Guide (Attachment B)	20	1	20
Mineworker	EXAMiner and 'Are you Thinking Like an EXAMiner?' Training Evaluation (Attachment A)	500	15/60	125
Frontline Supervisors	Pre-Job Aid Use Interview Guide (Attachment D)	30	30/60	15
	Job Aid (Attachment D1)	30	1.5	45
	Post-Job Aid Use Interview Guide (Attachment D2)	30	30/60	15
Total		670		247

FEDERAL COST: The estimated annual cost to the Federal government is \$38,973

If you are conducting a focus group, survey, or plan to employ statistical methods, please provide answers to the following questions:

The selection of your targeted respondents

1. Do you have a customer list or something similar that defines the universe of potential respondents and do you have a sampling plan for selecting from this universe? Yes No

If the answer is yes, please provide a description of both below (or attach the sampling plan)? If the answer is no, please provide a description of how you plan to identify your potential group of respondents and how you will select them?

To recruit respondents from underground and surface stone, sand and gravel mining operations for the training evaluation, PMRD researchers will initially recruit at the level of the mining company. To do this, PMRD researchers will reach out to current/known contacts – typically mine safety and health professionals – at mining companies. PMRD researchers will also recruit mining companies through stakeholder organizations such as National Stone Sand and Gravel Association (NSSGA). Once a mining company agrees to participate, PMRD researchers will ask mine safety and health professionals to participate. During this process, mine safety and health professionals will know that participation is completely voluntary and if they choose to participate, they have the right to stop participating at any time.

Administration of the Instrument

1. How will you collect the information? (Check all that apply)

Web-based or other forms of Social Media

Telephone

In-person

Mail

Other, Explain

2. Will interviewers or facilitators be used? Yes No

All data collected in person will be collected by NIOSH researchers.

Please make sure all instruments, instructions, and scripts are submitted with the request.

Instructions for completing genIC Request for Approval for
CDC/ATSDR Formative Research and Tool Development

TITLE OF INFORMATION COLLECTION: Provide the name of the collection that is requested.

PURPOSE and USE: Provide a brief description of the purpose of this collection and how it will be used. If this is part of a larger study or effort, please include this in your explanation.

DESCRIPTION OF RESPONDENTS: Briefly describe the targeted group/groups for this collection.

CERTIFICATION: Please read the certification carefully. If you incorrectly certify, the collection will be returned as improperly submitted or it will be disapproved.

Personally Identifiable Information: Provide answers to the questions.

Gifts or Payments: If you answer yes to the question, please describe the incentive and provide a justification for the amount.

BURDEN HOURS:

Category of Respondents: Identify who you expect the respondents to be in terms of the following categories: (1) Individuals or Households; (2) Private Sector; (3) State, local, or tribal governments; or (4) Federal Government. Only one type of respondent can be selected.

Form: Provide the title of the information collection form.

No. of Respondents: Provide an estimate of the Number of respondents.

Participation Time: Provide an estimate of the amount of time required for a respondent to participate (e.g. fill out a survey or participate in a focus group).

Burden in Minutes: Multiply the Number of responses and the participation time and divide by 60.

FEDERAL COST: Estimate the annual cost to the Federal government for this collection.

If you are conducting a focus group, survey, or plan to employ statistical methods, please provide answers to the following questions:

The selection of your targeted respondents. Please provide a description of how you plan to identify your potential group of respondents and how you will select them. If the answer is yes, to the first question, you may provide the sampling plan in an attachment.

Administration of the Instrument: Identify how the information will be collected. More than one box may be checked. Indicate whether there will be interviewers (e.g. for surveys) or facilitators (e.g., for focus groups) used.