

Fatigue Subject Matter Expert Interview Guide

Assessing Fatigue and Fatigue Management in U.S. Onshore Oil and Gas Extraction

National Institute for Occupational Safety and Health

Introduction

Good day. My name is [name] and I'm here with my colleague(s) [name(s)]. We work with the National Institute for Occupational Safety and Health. Thank you for taking the time to join us today.

Overview

We invited you to this interview because we are interested in learning about the use and application of Fatigue Risk Management Systems (FRMS) in the oil and gas extraction (OGE) industry. OGE work is largely contracted out by operators to smaller contractor drilling and support companies who perform the majority of the work. The work commonly involves remote locations, long hours, shift work, irregular schedules, and long commutes. Effects of these factors on fatigue in OGE are largely unknown. This interview is part of a larger study to understand fatigue in the OGE industry, where we are also conducting on-site fatigue assessments using actigraphy watches, PVT tests, and questionnaires; worker focus groups; and key informant interviews with field level supervisors, senior HSE leadership, and subject matter experts. This interview will last approximately 60 minutes. Your responses will be used to inform the development of guidance and future directions as we work to address fatigue in the onshore OGE industry. We will share what we learn through this study with others in the scientific community and OGE companies and organizations.

Verbal Informed Consent

We sent you the consent form via email. If you have not had the opportunity to review it prior to our call, please take a moment to review the form.

Do you have any questions for us? Do you agree to be interviewed and to have the interview be recorded?

Ground Rules

If consent to record verbally obtained: During the interview, we will take notes to capture your responses and will also audio record your answers because we don't want to miss anything you say. Please refrain from naming any companies that you have worked with. If at any point you mention a company, we will take the following steps: (1) not record that information in our notes, (2) remind you not to mention any companies, and (3) will exclude that information from the interview transcript.

If declined consent to record: During the interview, we will take notes to capture your responses. Please refrain from naming any companies that you have worked with. If at any point you mention a company, we will take the following steps: (1) not record that information in our notes and (2) remind you not to mention any companies. We will then continue the interview.

Do you have any questions?

[Begin recording if consent to record was verbally obtained]

Interview guide

1. What is your experience with fatigue risk management systems (FRMS)?
 - a. What does FRMS look like to you?
 - i. Can you expand on that?
2. Does your experience with FRMS focus on any specific industries?
3. We recognize that there are several models of FRMS, for the purpose of this interview we want to boil it down to six components [**read list below and insert into the chat box**]. Can you provide examples of what each of these component looks like in the industries you have worked in? If possible, please narrow down your responses to examples in industries similar to OGE.
 - a. Policies and procedures
 - b. Roles and responsibilities
 - c. Risk Assessment/Management [Nonpunitive reporting]
 - d. Education and training
 - e. Controls action plans
 - f. Audit and evaluation
4. Can you provide an example of a well implemented FRMS components or program? Why did this work?
5. Can you provide an example of a poorly implemented FRMS components or program? Why did this not work?
6. In the previous questions, you gave us examples of FRMS components as well as good and poor implementation of the components or programs. What are some lessons learned from these experiences?
7. What are the (leading/lagging) indicators you would look at to determine if an FRMS implementation was successful?

Leading and lagging indicator examples:

 - Change in company injury rate
 - Change in worker's comp costs
 - Change in percent overtime worked?
 - Detection and treatment of sleep disorders
 - Maintenance costs on vehicle fleets
 - Staff morale
 - Absenteeism rates
 - Productivity
8. In your experience, how have you seen organizations manage fatigue in the workplace? Is there a recommended graduated plan for responding to fatigue? Can you give us specific examples?

Graduated approach example:

 - Have worker retake the alertness test
 - Move worker to another task
 - Give a warning
 - Report them
 - Move off job

9. Companies may recognize fatigue as an issue but may not be aware of their responsibility in managing fatigue risk or know what steps to take to address it. We recognize that we first need to raise awareness in order to have a successful FRMS implementation. How do you recommend we raise awareness of FRMS in the OGE industry? If a company recognizes fatigue as an issue in their organization what are the first steps they should take in their FRMS implementation journey?
10. Given what we know as the potential for benefits for FRMS, in your opinion what are the biggest barriers to implementing FRMS? Do you think any of those barriers would be harder to overcome in the OGE industry? What are some strategies for overcoming these barriers?
11. Do you have anyone else you recommend we talk to with experience implementing FRMS?

Closing

Those are all the questions I have. Thank you very much for taking the time to talk with us today.

FRMS Examples to have available:

- Such as in the AECOM Guidance Statement: Fatigue Risk Management in the Workplace
- IOGP 626 report: Managing Fatigue in the Workplace. A guide for the Oil and Gas industry
- API RP755 FRMS for personnel in the Refining and Petrochemical Industries