

# Independent Assessment of Safety Culture Survey Methods and Interpretation at the Idaho National Laboratory

# September 2024

Office of Enterprise Assessments U.S. Department of Energy

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# Acronyms

BEA	Battelle Energy Alliance, LLC
CIT	Culture Integration Team
CRAD	Criteria and Review Approach Document
DOE	U.S. Department of Energy
DOE-ID	DOE Idaho Operations Office
EA	Office of Enterprise Assessments
EFCOG	Energy Facility Contractors Group
HPI	Human Performance Improvement
INL	Idaho National Laboratory
INPO	Institute of Nuclear Power Operations
ISM	Integrated Safety Management
OFI	Opportunity for Improvement
PER	Periodic Evaluation Report
SCOR	Safe Conduct of Research
SME	Subject Matter Expert

# INDEPENDENT ASSESSMENT OF SAFETY CULTURE SURVEY METHODS AND INTERPRETATION AT THE IDAHO NATIONAL LABORATORY

#### **Executive Summary**

The U.S. Department of Energy (DOE) Office of Enterprise Assessments (EA) conducted an independent assessment of safety culture survey methods and interpretation at the Idaho National Laboratory from April to May 2024. Battelle Energy Alliance, LLC (BEA) is the management and operating contractor at the Idaho National Laboratory. This assessment also evaluated the effectiveness of safety culture monitoring activities conducted by the Office of Nuclear Energy portion of the DOE Idaho Operations Office (DOE-ID).

DOE allows each organization to determine how it will promote and maintain a strong safety culture and assess or monitor its culture. BEA's approach to safety culture follows DOE's integrated safety management safety culture attributes, while incorporating the Battelle Safe Conduct of Research principles. A laboratory-wide survey has been used eight times since 2011 to measure perspectives on leadership, employee engagement, and safety.

EA identified the following positive attributes, including three best practices:

- Since 2011, BEA has implemented and built on lessons learned from a Leadership, Engagement, and Safety survey to consistently monitor changes in employee perceptions of key organizational factors related to safe mission accomplishment. (Best Practice)
- BEA establishes the foundation for a strong safety culture using training that emphasizes common organizational principles and values. These include the standardized Battelle corporate-wide relationship-focused leadership development program, a safety-focused supervisor development program, and employee training on safety culture. (Best Practice)
- DOE-ID includes a short safety culture summary in each periodic evaluation report for BEA, crafted to reflect DOE-ID's collective oversight of BEA's safety culture efforts, which provides a reliable structure for communicating with BEA about the topic. (Best Practice)
- BEA's leadership actively engages with employees through pre-survey communications, communicating survey results and improvement actions to facilitate direct employee feedback, and providing insight on improvement actions.
- BEA prepares detailed workbooks that document the numerical results and written comments on their surveys for each suborganization.
- DOE-ID maintains positive relationships with BEA managers and staff to encourage low-level issues, including issues related to culture, to be shared and addressed.

EA also identified some areas needing attention, as summarized below:

- Although BEA has consistently conducted safety culture surveys, BEA has not conducted a laboratory-wide safety culture assessment that also employs a combination of interviews, focus groups, and workplace observations to provide a baseline to complement the ongoing laboratory-wide surveys.
- The detailed knowledge of the BEA safety culture monitoring and survey approach is predominately expert based. There is little formal documentation of the history of survey development, holistic analysis, or how to develop improvement actions from the results.
- DOE-ID has not identified the expectations for safety culture oversight training or safety culture awareness for its staff members.

BEA's leadership actively promotes and supports healthy, self-critical evaluation of its Leadership, Engagement, and Safety survey results, with excellent communications before and after surveys and appropriate improvement actions to positively impact mission performance. DOE-ID maintains strong, positive working relationships with BEA, enabling DOE-ID to engage on culture issues through routine interactions with BEA. However, BEA has not recently conducted a safety culture assessment to complement its survey activities and has not formally documented historical survey development and analysis practices. BEA recognizes the gaps between its approach and a scientifically sound survey tool and mitigates those via a leadership that actively promotes and supports engagement in healthy, selfcritical evaluation of survey results, along with excellent communications before and after surveys and formulation of improvement actions to positively support mission performance.

# INDEPENDENT ASSESSMENT OF SAFETY CULTURE SURVEY METHODS AND INTERPRETATION AT THE IDAHO NATIONAL LABORATORY

#### **1.0 INTRODUCTION**

The U.S. Department of Energy (DOE) Office of Nuclear Safety and Environmental Assessments, within the independent Office of Enterprise Assessments (EA), conducted an assessment of safety culture survey methods and interpretation used by Battelle Energy Alliance, LLC (BEA), the management and operating contractor at the Idaho National Laboratory (INL). This assessment also evaluated the effectiveness of safety culture monitoring activities conducted by the Office of Nuclear Energy portion of the DOE Idaho Operations Office (DOE-ID). Assessment activities were conducted from April to May 2024.

The EA report, Assessment of Safety Culture Sustainment Processes at U.S. Department of Energy Sites – June 2020, is a rollup report of eight safety culture assessments performed at a cross-section of DOE sites. The rollup report identified that one of the most significant areas of variance within the DOE complex is the quality of safety culture survey instruments and the proper interpretation of gathered survey data.<sup>1</sup> In consultation with the Office of Environment, Health, Safety and Security, program offices, and local DOE field offices, EA established a goal to conduct follow-up reviews of the quality of safety culture surveys that inform safety culture decision-making, including contractors that were assessed in the rollup report and others that were not. This series of follow-up reviews is being performed in accordance with the *Plan for the Enterprise-wide Assessment of Safety Culture Survey Methods and Interpretation – February 2022*.

DOE Policy 450.4A, *Integrated Safety Management* [ISM] *Policy*, sets the expectation that all organizations embrace a strong safety culture where core values are safe work performance and worker involvement in all aspects of work performance. That culture includes, among other key considerations, establishing a safety conscious work environment in which employees feel free to raise safety concerns to management without fear of retaliation. While DOE does not set specific requirements for how organizations should promote and maintain a strong safety culture or how they should assess or monitor their culture, DOE and industry guidance documents present acceptable methods for safety culture evaluation as described in section 2.0 below.

# 2.0 METHODOLOGY

The DOE independent oversight program is described in and governed by DOE Order 227.1A, *Independent Oversight Program*, which EA implements through a comprehensive set of internal protocols, operating practices, assessment guides, and process guides. This report uses the terms "best practices" and "opportunities for improvement (OFIs)" as defined in the order. As identified in the assessment plan, EA used selected criteria from objectives SC.1 and SC.3 of criteria and review approach document (CRAD) EA CRAD 30-08, Revision 0, *Safety Culture Assessment*, to guide the assessment.

Because DOE provides guidance related to safety culture but expresses no specific requirements, EA referenced generally accepted standards and practices for safety culture surveys and monitoring. Core

<sup>&</sup>lt;sup>1</sup> Safety culture surveys, as discussed in the 2020 EA report, are quantitative instruments and associated administrative processes used to gather employee perceptions about factors important for the safe performance of work. To be helpful in decision-making, survey questions should be designed to measure the right factors, and the people participating in the survey should be representative of the full organization.

references used in this assessment included the DOE Safety Culture Improvement Panel's *Tailoring the Analysis of Safety Culture Health Monitoring Means and Methods Working Group*, January 2022; the Energy Facility Contractors Group's (EFCOG's) *A Guide to Safety Culture Evaluation*, Revision 0, September 2015; EFCOG's *Safety Culture Practitioner's Resources Guide*, Revision 1, September 2022; EFCOG's *Best Practice #249: Strategy and Design for Internal Surveys*, November 18, 2021; and the International Atomic Energy Agency's *Performing Safety Culture Self-Assessments*, Revision 0, June 2016.

EA examined approximately 400 BEA documents and exhibits related to safety culture management and surveys, including but not limited to survey questions and results, internal and external organizational effectiveness assessments, strategic and management plans, survey communications, Voluntary Protection Program reports, meeting minutes, and operational experience lessons learned. EA also reviewed documents related to DOE-ID safety culture oversight. EA interviewed BEA and DOE-ID personnel responsible for monitoring topics related to safety culture and leadership responsible for acting on the results. The combination of document reviews and interviews with involved individuals provided the data for this assessment.

The members of the assessment team, the Quality Review Board, and the management responsible for this assessment are listed in appendix A.

# 3.0 RESULTS

# 3.1 Valid and Reliable Methods to Maintain Cognizance of Safety Culture

# **Positive Attributes**

# Culture Survey Development and Survey Methods

BEA's approach to safety culture follows the DOE Guide 450.4-1C, *Integrated Safety Management System Guide*, attachment 10, *Safety Culture Focus Areas and Associated Attributes*, while incorporating the Battelle Safe Conduct of Research (SCOR) principles. In addition, for some higher-risk operations, BEA supplements their internal culture monitoring and assessment by using recognized independent external organizations that assess safety culture using their own model and processes, such as the Institute of Nuclear Power Operations (INPO).

BEA delivered its first Leadership, Engagement and Safety Survey in 2011. The Leadership, Employee Engagement and Safety Survey was patterned after DOE Guide 450.4-1C, attachment 10. BEA also started using the Gallup<sup>®</sup> employee engagement survey in 2009 to look at organizational leadership and employee engagement outside of safety culture, and then in 2013 combined the two. Since 2013, BEA has consistently used that combined survey (performing it in 2013, 2014, 2015, 2017, 2018, 2021, and 2023) to monitor changes in employee perceptions of key organizational factors related to safe mission accomplishment. Although the questions have not always remained the same, the survey administration, analysis, and use in decision-making have consistently built on the lessons learned from the previous survey administration. This approach to the survey is considered a **Best Practice** because it provides significant insight into changes in employee perceptions over time. (See **BP-BEA-1**.)

A detailed review of the 2021 and 2023 surveys revealed that the overall survey sample and response rates have been adequate. All 5,814 BEA employees were invited to take the 2023 survey, out of which 3,932 employees completed the survey, with a response rate of 67.6% (the response rate for the 2021 survey of all BEA employees was 55.5%). Response rates above 50% are generally considered high enough to confidently conclude that the results are representative of the views of the entire organization.

The survey included questions to sort and compare participants' responses based on population demographics and suborganizations. Response rates within various suborganizations (e.g., directorates, areas) typically exceeded 50%, providing confidence that the results adequately represented the views of employees within suborganizations.

Announcements regarding the survey assured survey participants that their individual responses would be kept anonymous, and names or identifiers were not collected as part of the survey. However, the survey was distributed and analyzed by BEA staff members, so some participants may have remained skeptical that their responses to the questions would truly be confidential, as that is a known challenge for self-administered surveys.

In addition to the survey, interviewees discussed how BEA uses a variety of data sources, including the contractor assurance system, self-assessments, and benchmarking from external sources, to monitor cultural factors important for safe mission performance. External benchmarking sources include monthly meetings with other Battelle laboratories, sharing within the Battelle Community of Practice, active involvement with EFCOG, including BEA membership on the board of EFCOG, and a formal relationship with INPO for information exchange, training, and independent assessment.

#### Culture Survey Results Analysis and Communication

BEA prepares detailed workbooks that document the numerical results and written comments from its surveys for each suborganization, as well as highlight the responses that are at least ten percent greater or lower than the laboratory-wide response. The suborganizations use the workbooks to identify potential areas in need of attention and to formulate improvement actions and objectives. In particular, the suborganizations are expected to review and address the written comments and develop improvement actions in response to their three least favorable survey questions. Having the suborganizations identify their own improvement actions using the provided workbooks increases ownership of the actions and cultural improvements.

BEA has established two groups to assist with survey development and communications: the Culture Integration Team (CIT) and the Leadership, Engagement, and Safety Survey points of contact. The CIT, although inactive at the time of the assessment due to personnel changes, sought to integrate each directorate's desired culture descriptions and helped to formulate survey questions relative to safety and other culture attributes. The CIT reported to the Environment, Safety, Health and Quality Director, the Chief Operating Officer, and the Human Resources Director. The CIT was comprised of eight team members representing areas of specialty to include quality assurance, inclusion and diversity, research excellence, leadership and development, safety and health, and human performance improvement (HPI). The lead role for CIT meetings rotated among the different team members. This approach allowed for a wide range of expertise to be applied to developing the survey questions. Interviewees expressed that the CIT may be re-instated prior to the next planned survey in 2025. The Leadership, Engagement, and Safety Survey points of contact include representatives from each directorate who are experts in their own local organizational culture. The group's role is to communicate information about the survey throughout the year, including planning for the survey and communicating the results once complete. Strong communication about the survey supports increased participation rates and engagement in identified improvement actions.

BEA's leaders actively engage with employees through pre-survey communications and communicating survey results and improvement actions using a variety of meetings. Formal talking points are provided to managers to facilitate consistency in communicating key survey results across the laboratory and to address positive items and new improvement actions developed from employee survey input. Survey results are also posted on the internal website. BEA's leaders also engage with the employees through

management observations, union meetings, all-employee meetings, and employee safety team meetings. These interactions facilitate direct feedback from employees on improvement actions.

#### Qualification of Responsible Personnel

Interviewed managers expressed that a majority of the management and staff have familiarity with safety culture from exposure to the Battelle SCOR principles through formal leadership development, onboarding training, or regular organizational communication of safety culture principles. This consistent exposure is combined with a safety focused supervisor development program to ensure that supervisors and managers understand how to apply safety culture principles to leadership. This multi-factor approach to maintaining safety awareness is considered a **Best Practice** because it equips BEA's leaders, including those within management and informal leaders at the employee level, with a strong set of skills and experience to effectively interpret safety culture data and take action accordingly. (See **BP-BEA-2**.) Additionally, INL was one of the first adopters of HPI in the DOE complex and maintains that focus within its nuclear operations. The principles of HPI and safety culture overlap significantly.

Individuals directly involved in the BEA survey process have strong operational experience with surveys and other forms of safety culture monitoring via academic work, military experience, prior experience in commercial nuclear power, and/or practical on-the-job training. For example, the person responsible for data collection and analysis completed university course work in statistics and has extensive experience in a variety of survey projects at INL. The Director of Organizational Learning earned a Ph.D. in industrial psychology, and several staff members in the group are qualified as organizational development specialists. One point of contact for the Leadership, Engagement, and Safety Survey is a certified industrial hygienist who commanded medical facilities in the military and is familiar with several safety culture assessment models.

#### **Areas Needing Attention**

#### Culture Survey Development and Survey Methods

BEA's significant changes in population, mission, and budget have not yet been factored into BEA's survey approach, although those responsible for survey administration discussed plans to do so. As a result of the COVID-19 pandemic, retiring workforce, and laboratory mission and associated budget increases, over 50% of BEA employees have fewer than 5 years' experience at the laboratory and 30% have fewer than 2 years' experience. The number of new employees has potential impacts on developing and interpreting surveys. Prior INL demographics were characterized by large percentages of personnel with decades of experience. The current and future employee population is anticipated to be considerably larger and more diverse than prior generations. Some managers correspondingly expressed concern that the increasing focus on innovation coupled with a loss of institutional knowledge built upon decades of operating experience is changing the nature of mission hazards, thus introducing error-prone conditions not previously experienced. (See **OFI-BEA-1**.) BEA has not conducted a laboratory-wide safety culture assessment that employs a combination of surveys, interviews, focus groups, and workplace observations, which could inform future surveys to better address the changing workforce. (See **OFI-BEA-2**.)

#### Culture Survey Results Analysis and Communication

BEA's leaders recognize that the laboratory-wide survey process does not meet the generally accepted criteria of rigor for scientifically designed organizational surveys of employee perceptions, and enhancements are currently being discussed. Limited evidence on the validity and reliability of the survey was available. No information about the psychometric properties of the instrument was provided for review as part of the workbooks or other survey records documentation, although some interviewees

gave their personal recollections on how the original survey was developed. The survey contains 32 rating-scale questions and 7 open-ended questions. However, it is unclear whether the safety questions are intended to provide valid and reliable measures of the three safety culture focus areas (i.e., leadership, employee/worker engagement, and organizational learning) recommended in DOE Guide 450.4-1C, attachment 10, or the Battelle SCOR principles. Interviewees stated that some comparison between questions and reference sources had historically been performed to ensure all aspects of safety culture were covered by the questions, but not as a regular practice. Additionally, the wording of most (78%) survey questions changed between the 2021 and 2023 survey, making it difficult to judge whether changes in responses reflected cultural changes or changes in the way questions were understood by participants. (See **OFI-BEA-3**.)

BEA does not document how qualitative data is systematically collected, analyzed, and compared to quantitative information to draw conclusions about the status of its safety culture and formulate improvement actions. The workbooks provide the average values of responses to each of the 32 ratingscale questions, and also present and summarize written comments provided by survey participants. For 2023, the workbooks included 4,404 comments related to the 32 rating-scale questions, and 7,183 responses to 7 open-ended questions about how engagement, leadership, BEA values, trust, research excellence, and processes could be improved. Importantly, the workbooks have not included qualitative trend analysis of the comment responses or comparisons with the quantitative data. Further, while the number of comments demonstrates a high degree of engagement by survey participants, interviewees involved in survey administration expressed significant challenges with addressing the high volume of comments. Experts recommend systematically collecting qualitative data, such as responses to openended questions, via interviews and focus group discussions from a representative stratified random sample. Qualitative information can then be used to help validate and provide context and a deeper understanding of quantitative survey results. Additionally, BEA has no written documentation describing how the BEA survey team analyzed the qualitative content data to identify strengths or needed culture improvements. A generally accepted practice is to include sufficient detail in survey documentation such that others would be able to replicate/validate the survey.

# Qualification of Responsible Personnel

The detailed knowledge of the BEA safety culture monitoring and survey approach is predominately expert based. Due to the significant increase in employee retirements and new employees, the knowledge and relationships that have made the BEA surveys and improvements valuable are vulnerable to loss. (See **OFI-BEA-4**.) Some key personnel responsible for survey development and execution had already retired at the time of this assessment.

# **3.2 DOE Oversight of Contractor Safety Culture Efforts**

# **Positive Attributes**

# Culture Monitoring Framework

DOE-ID includes an ISM system rating, which includes safety culture, in its periodic evaluation reports (PERs) for BEA. The PERs are developed every four months and capture all aspects of contractor operational performance, as assessed by DOE-ID. Work instruction 03.WI.04.02, *Conduct of Oversight Activities*, appendix B, *Periodic Evaluation of Contractor Operational Performance*, outlines the process for completing the PER. Appendix B includes an example performance dashboard chart that lists ISM/safety culture as a cross-cutting area. DOE-ID also documents the performance grading criteria used to determine the color code for the area. In addition to the color and detailed discussion of ISM observations, each PER includes a short safety culture summary, crafted to reflect DOE-ID's collective

oversight of BEA's safety culture efforts. The use of a safety culture summary in a periodic document like the PER is considered a **Best Practice** because it provides an effective structure for routinely communicating across the office and with the contractor on safety culture. (See **BP-DOE-ID-1**.)

DOE-ID personnel focus on maintaining positive relationships with BEA managers and staff to encourage low-level issues to be shared and addressed. Interviewees at multiple levels within DOE-ID highlighted that they felt comfortable sharing safety culture observations with their BEA counterparts and were confident that the observations would be appropriately addressed. Examples identified by interviewees included observations from walkdowns, pre-job briefings, and fact-finding discussions. Additionally, DOE-ID participates in the INL Site Steering Committee (formerly the INL Site Safety Culture Forum), which consists of DOE, union, and contractor representatives and focuses on sitewide sharing of safety culture observations, tips, and lessons learned.

#### Development of Safety Culture Competencies

DOE-ID maintains a safety culture subject matter expert (SME). The SME currently holding this position has previous experience as the DOE-ID employee concerns program manager and self-studied the DOE safety culture framework upon taking on the responsibility for safety culture oversight. The SME also participates in the INL Site Steering Committee.

During interviews, DOE-ID representatives noted that a key consideration when hiring Facility Representatives was that they have extensive experience in high-hazard work environments before joining DOE-ID. As a result, they understand the cultural influences that impact safety performance. DOE-ID also encourages technical staff to take HPI training and communicate their observations to BEA using HPI terminology that is common and familiar to BEA staff to ensure that the safety culture messages are heard and understood.

Some interviewees recalled taking safety conscious work environment training approximately 10 years ago and were still applying the lessons from that training. Newly hired technical staff in DOE-ID receive safety culture training as part of the general technical base training. Additionally, DOE-ID plans to offer TLP-200, *Safety Culture for DOE & DOE Contractor Senior Leaders*, during the summer of 2024.

#### **Areas Needing Attention**

#### Culture Monitoring Framework

Other than the safety culture summary in the PER, DOE-ID primarily communicates its safety culture observations to BEA via meetings and informal conversations. While this strategy is currently effective given the strong relationships between the two organizations, it increases reliance on maintaining these informal positive and informative relationships to ensure consistent communications.

#### Development of Safety Culture Competencies

Although new staff members receive the safety culture training incorporated into the general technical base training, DOE-ID has not identified the expectations for follow-on or periodic safety culture oversight training for technical staff members, or safety culture awareness training for non-technical members. While the safety conscious work environment training in the past and the upcoming TLP-200 training are impactful, the sporadic nature can result in knowledge gaps. (See **OFI-DOE-ID-1**.)

While it is a strength that DOE-ID has identified a safety culture SME, the associated duties are being performed in addition to an existing full-time separate role. Recent staffing changes and the departure of

the outgoing SME before the arrival of the current SME limited the ability of the current SME to learn from those with experience performing the role. (See **OFI-DOE-ID-2**.)

# 3.3 Summary

BEA has a longer and more consistent history than most DOE organizations with conducting safety culture surveys of its employees. BEA recognizes the gaps between its approach and a scientifically sound survey tool and mitigates those via a leadership that actively promotes and supports engagement in healthy, self-critical evaluation of survey results, along with excellent communications before and after surveys and formulation of improvement actions to positively support mission performance. DOE-ID maintains strong, positive working relationships with BEA, allowing DOE-ID to engage on culture issues through routine interactions with BEA.

Like many organizations across the DOE complex, a large number of BEA employees are relatively new and bring their own different cultural perspectives with them. In these circumstances it is especially important to ensure the survey process is accurately capturing the perspectives of BEA employees. Similar to BEA, DOE-ID is also experiencing employee movement and turnover, increasing the importance of training and other means of knowledge sharing.

# 4.0 BEST PRACTICES

Best practices are safety-related practices, techniques, processes, or program attributes observed during an assessment that may merit consideration by other DOE and contractor organizations for implementation. The following best practices were identified as part of this assessment:

#### **Battelle Energy Alliance, LLC**

**BP-BEA-1**: BEA has consistently built on lessons learned in implementing a Leadership, Engagement, and Safety Survey since 2011 to monitor changes in employee perceptions on key organizational factors related to safe mission accomplishment.

**BP-BEA-2**: BEA establishes the foundation for strong safety culture using a standardized leadership development program, a safety focused supervisor development program, and employee training, each emphasizing common organizational principles and values.

# **DOE Idaho Operations Office**

**BP-DOE-ID-1**: Each PER includes a short safety culture summary, crafted to reflect DOE-ID's collective oversight of BEA's safety culture efforts.

# 5.0 **OPPORTUNITIES FOR IMPROVEMENT**

EA identified the OFIs shown below to assist cognizant managers in improving programs and operations. These OFIs are offered only as recommendations for line management consideration; they do not require formal resolution by management through a corrective action process and are not intended to be prescriptive or mandatory. Rather, they are suggestions that may assist site management in implementing best practices or provide potential solutions to issues identified during the assessment.

#### **Battelle Energy Alliance, LLC**

**OFI-BEA-1**: Consider developing a culture management strategic plan to clarify and integrate how BEA uses culture as a management construct for monitoring and enhancing key social and organizational factors that influence mission performance, particularly in conditions of rapid change and innovation. A strategic plan could support the laboratory's expressed desire to simplify important concepts for employee familiarity.

**OFI-BEA-2**: Consider enhancing safety culture survey methodology through periodic use of safety culture assessments involving a combination of surveys, interviews, focus groups, and team observations of site evolutions and work processes to provide a baseline against which to further develop surveys. A variety of reliable, validated methods are available to be used, known to key laboratory personnel, and published in available DOE documents, specifically EFCOG guides.

**OFI-BEA-3**: Consider documenting the design basis for future laboratory-wide surveys. For example, consider identifying Battelle SCOR principles, INPO, or similar constructs that served as references, and explaining the basis for selecting or tailoring new questions or question revisions and how those questions were validated and tested. Likewise, describe the analysis process of both quantitative and qualitative data.

**OFI-BEA-4**: Consider conducting an analysis of the knowledge, skills, and abilities needed for the safety culture survey development, conduct, analysis, interpretation, and enhancement actions. This could serve as a prerequisite to selecting or qualifying new personnel to continue and improve BEA's approaches to culture monitoring as current personnel are replaced due to retirements or other assignments. EFCOG's Safety Culture Practitioner's Resource Guide, and EFCOG's A Guide to Safety Culture Evaluation could be helpful resources.

# **DOE Idaho Operations Office**

**OFI-DOE-ID-1**: Consider periodically offering formal safety culture training to DOE-ID staff.

**OFI-DOE-ID-2**: Consider conducting an analysis of the knowledge, skills, and abilities needed for the safety culture SME.

# Appendix A Supplemental Information

#### **Dates of Assessment**

April 22 to May 9, 2024

#### Office of Enterprise Assessments (EA) Management

John E. Dupuy, Director, Office of Enterprise Assessments William F. West, Deputy Director, Office of Enterprise Assessments Kevin G. Kilp, Director, Office of Environment, Safety and Health Assessments David A. Young, Deputy Director, Office of Environment, Safety and Health Assessments Thomas E. Sowinski, Director, Office of Nuclear Safety and Environmental Assessments Kimberly G. Nelson, Director, Office of Worker Safety and Health Assessments Jack E. Winston, Director, Office of Emergency Management Assessments Brent L. Jones, Director, Office of Nuclear Engineering and Safety Basis Assessments

#### **Quality Review Board**

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