XYZ Health and Safety Culture
An Evaluation of Policies and Procedures

Ayman Aref Radi[1]

[1]Director of Construction, Chairman Trading and Contracting, Doha, Qatar, Candidate for Doctor of Business Administration – University of Northampton, Northampton, England, UK

Corresponding Author: radi_006@yahoo.com

Abstract: This study investigates how organizations can better understand employee health and safety. Considering employee well-being is essential for achieving personal and professional goals, improving organizational structure, and maintaining living conditions. Workers who feel safe and comfortable are more effective team members and perform better. Hence, promoting workplace health and safety is crucial, particularly in hazardous occupations. Additionally, respectful communication among team members enhances comfort. This research examines the importance of employee health and safety, related policies, and measures to promote it.

Keywords: Employees, Health, Safety and Environment (HSE), Occupational Health and Safety Management System (OHSMS), Organizations, Physical Health, Psychological Health, Safety.

1. Introduction

The World Health Organization (WHO, 2018) emphasizes that health is crucial for peace and security, relying on cooperation at individual and state levels. Health encompasses complete physical, mental, and social well-being, beyond the absence of illness. In organizations, health and safety culture significantly influence staff behavior and overall productivity. Despite advancements in engineering controls and regulations, reducing work-related injuries and diseases remains challenging, raising concerns about the effectiveness of health and safety management systems. The International Labour Organization highlights the need for a positive safety culture to eliminate occupational injuries and diseases. This study assesses XYZ's Occupational Health and Safety Management System (OHSMS) culture using existing literature.

2. A positive Safety Culture

Organizations often pursue safety management or behavior-based systems for performance excellence in safety. International standards like ISO 45001 focus on occupational health and safety management but may overlook the human element (Wachter & Yorio, 2014). Traditional behavior-based systems address barriers to safe acts. Kim et al. (2016) identify five characteristics of a positive safety culture: top management's commitment, safety as a core value, decentralized decision-making with safety accountability, comprehensive safety training, and integrating safety into all organizational aspects. Reporting and learning cultures, along with the Zero Philosophy, further promote a positive safety environment.

In summary, a strong safety culture, as outlined by Kim et al. (2016) and supported by other researchers, involves a clear commitment from management, communication of the role of safety as a core value, decentralized decision-making, comprehensive training, and the integration of safety into all aspects of the organization. Other models, such as reporting and learning cultures and the zero philosophy offer complementary perspectives on promoting a positive safety environment.

3. Objectives of the Study

This study aims to evaluate XYZ Qatar's OHSMS, focusing on its compatibility with a safety management approach. It investigates how XYZ's safety practices contribute to positive outcomes by engaging workers and examining their experiences and perceptions of safety. The study provides insights to improve XYZ's OHSMS through a thorough review of past practices, a survey capturing employee experiences, and an assessment of internal communication systems.

A. Rationale for the Study

As program manager for XYZ's New Hamad International Airport project, the researcher observed significant infrastructure success adhering to international HSE standards. However, a critical incident raised concerns about XYZ's overall HSE culture. The separation of the internal safety department from the project's successful health and safety team highlighted potential shortcomings. The researcher explored the Safety Management System (SMS) concept, focusing on organization-wide processes for effective risk-based decision making.

To address these concerns, the researcher turned to the concept of a Safety Management System (SMS) as defined by the Occupational Safety and Health Administration (OSHA). XYZ's policies were inspected and accredited by OSHA, which led to the consideration of how the SMS, described as "organization-wide processes for effective risk-based decision making," is reflected in XYZ's practices (Fig. 1).

Fig. 1. The Safety management system (OSHA, 2009)

B. Safety Management System Practices

Wachter & Yorio (2014) emphasize that an effective SMS reduces incidents through workers' emotional commitment and safety perceptions. Investment in safety management systems is crucial, fostering a culture that prioritizes health, safety, and environmental practices. Developing a strong HSE commitment and critically reviewing investments are essential for cultivating a true HSE culture at XYZ.

4. Literature Review

The main problem in the given situation is the apparent discrepancy in compliance with health, safety and environmental (HSE) regulations between European and USA engineers, despite the differences in their technical knowledge. The observation is that these engineers, regardless of their technical background, are expected to follow HSE guidelines with no room for deviation. This indicates a possible inconsistency in the application of safety protocols due to individual or cultural factors, which could impact the overall safety culture in the work environment.

To overcome this challenge and establish a robust HSE culture, it is necessary to understand the essential elements required to build an HSE culture. It is about identifying effective strategies others use to promote an accident-free culture in the workplace. The study by Wachter & Yorio (2014) highlights the critical role of an organization's safety management system (OHSMS) in shaping its safety culture.

The research findings point to weaknesses in existing safety management systems, noting that they may not be designed to effectively plan for, control and avert all possible errors and situations. The inability to plan and control all aspects of work due to time and economic constraints is cited as a challenge. In addition, the difficulty of applying safety management systems when hazards vary in the work carried out is highlighted. Finally, by recognizing that safety management systems are designed and implemented by imperfect humans, the human factor is introduced as a potential source of deficiencies in these systems.

The discussion touches upon the broader issue of human errors in the work environment, attributing them to various factors such as being new to the job, overconfidence, distraction, fatigue, time pressure, and mental pressure. The assertion is that human errors are symptoms of problems within human performance systems, emphasizing the importance of addressing these underlying issues to improve overall safety.

In summary, critical observation is required to achieve a more consistent application of HSE policies across individuals and cultures, focusing on understanding and addressing the weaknesses of safety management systems. The discussion highlights the complexity of creating a perfect system, recognizing the challenges associated with planning, implementation and the inherent shortcomings of human involvement in safety management.

A. Assessing the Presence of a Culture of Prevention in Occupational Safety, Health, and Environmental Practices (OSHES)

Research shows that despite detailed Occupational Safety, Health and Environment Systems (OSHES), significant disasters still occur. Notable examples include the Kings Cross fire in

London (1987) and the Clapham Junction train crash (1988). Investigations revealed that these failures were due to the organizations' "safety culture" rather than deficiencies in safety management methods, emphasizing the need for a corporate culture where safety is a clear priority (Kim et al., 2016).

Nordlof et al. (2015) also link catastrophic organizational accidents to poor safety culture, citing the 1986 Challenger and 2003 Columbia space shuttle disasters, which resulted in the loss of all crew members. These incidents highlight the critical importance of fostering a strong safety culture to reduce serious accidents.

B. Definition of a Safety Culture

Kim et al. (2016), referencing the ACSNI Human Factors Study Group, define safety culture as the collective result of individual and group values, attitudes, perceptions, competencies, and behaviors shaping an organization's health and safety management system. It includes psychological (values and beliefs), behavioral (safety methods), and situational (structures and policies) components.

Gherardi & Nicolini (2000) highlight three characteristics of a positive safety culture: a reporting culture that fosters trust for admitting mistakes, a learning culture that encourages hazard recognition and proactive problem-solving, and the importance of effective communication, as seen in the Piper Alpha disaster.

Zwetsloot et al. (2013) promote a "zero philosophy" aiming for zero injuries, emphasizing continuous risk management and learning.

Nordlof et al. (2015) identifies challenges in implementing effective occupational health and safety management systems (OHSM) due to lack of commitment, knowledge, financial resources, and formalized routines, with productivity often taking precedence.

5. Safety Management System Analysis

To evaluate a safety management system, it's crucial to examine employees' behavior, shaped by their beliefs, values, and visions regarding its design and implementation. Active employee engagement is vital for effectiveness, as it influences involvement, participation quality, and overall consistency, reducing accident likelihood and mitigating error traps

(Wachter & Yorio, 2014).

In assessing XYZ's safety culture, the researcher adapted Wachter & Yorio's (2014) model, which includes practices like employee participation, health and safety controls, safe work

based surveys were the most efficient method for collecting quantitative data. However, qualitative methods, including interviews and document reviews, were essential for gaining nuanced and in- depth insights. Thus, the study primarily

Table
Safety management system practices

Safety Management Practice	Survey questions	Safety Management Practice	Survey questions
Employees' influence/ involvement	- In creating safety practices. - Can stop work if safety is an issue. - In developing solutions to incidents due to human error. - In conducting HSE observations of other employees. - In the implementation of accident management.	Communication and information sharing	- Employees are formally informed regarding new or revised HSE work instructions. - Information about potential hazards at the workplace is shared with the employees through risk assessments. - Details of a Safe working environment are communicated to the employees. - HSE incidents and/or near misses experienced by other employees are published to all employees - When HSE incidents do occur, the results of the investigation are communicated to the employees. The following are XYZ HSE published documents on the XYZ Family site. Staff must familiarise themselves with these guidelines if their jobs are affected by these procedures. These documents are needed for your job performance: HSE Targets and Objectives & Management programs; Chemical Storage Guidelines; Safety Handbook for Contractors; Hazard-Aspect and Risk-Impact Assessment; Heat Stress Guidelines; Incident Management Report Form; Site Emergency Procedures; and Work Permits Procedure.
Pre and post-task HSE reviews	- Before the work permit is issued, the pre-task HSE evaluation is completed, which includes planning and reviewing the HSE considerations for the task. - Critical steps are reviewed. - Address identified faults and potential conditions. - Discussions on potential worst-case scenarios. - Discussing personal protective equipment (PPE) and safe working practices. - Concerned staff address and identify electric power sources requiring isolation. - Discussions on STOP work criteria.		
Employees HSE training	- Formal HSE training related to their respective jobs is provided to the employees. - All staff are given formal HSE training. - Includes fundamentals of hazard detection and prevention.		
Hiring for HSE	- XYZ HSE values and beliefs are discussed in the interviews with potential employees. - HR hires the best people to work for this organization.	Cooperation facilitation	- Employees are encouraged to work together to resolve HSE issues. - Robust communication mechanisms among co-workers are encouraged to ensure all relevant HSE information is shared. - Formal communication mechanisms are encouraged to ensure critical HSE information is communicated between off-going and on-coming shifts.
Safe task assignment	- Supervisors are given the flexibility to assign a job to the right employee. - When flexibility is allowed, past experience with the job is considered - When flexibility is allowed, the physical demands of the job are considered. - When flexibility is allowed, the risk of exhaustion or extended work hours is considered. When flexibility is allowed, the risk associated with stress or distraction is considered.	Accident investigation	- To uncover why human error might have caused the incident. - Accidents are investigated in a very short time (immediate or in a couple of hours from the time of the incident) - Carried out by a team that includes employee representative(s)., an HSE representative, and the injured employee's immediate supervisor.
HSE Detection and Monitoring	- HSE checklists have been developed to correspond to possible hazardous workplace conditions. - HSE checklists have been developed to highlight possible risk behaviors at the workplace - Observations target behaviors that deviate from safe work instructions - work instruction deviations result in adverse outcomes - Work instructions deviations are tracked and monitored.	Safe work procedures	- Routine tasks are implemented to insure safe work procedures have been developed. - Hazard analyses are conducted and completed before any high-risk job is planned for execution. - Hazard analyses performed are thorough and robust. - Safe work procedures are reviewed and - HSE "lessons learned" are considered when reviewing and updating safe work procedures Contain a warning about the potential consequences of deviation.

procedures, collaboration, HSE training, communication, accident investigation, detection and monitoring, task-employee matching, and HSE-focused hiring.

A descriptive research approach captured employees' opinions on work, safety equipment, work environment, and involvement in risky activities. Primary data came from structured questionnaires and semi-structured interviews with managers, while secondary data was sourced from the company's intranet and project environment. This dual approach aimed to comprehensively assess the organization's health, safety, and environmental systems.

6. Research Methodology

To comprehensively investigate XYZ's health, safety, and environment (HSE) culture, a mixed methods approach was employed, utilizing three primary data sources: questionnaire-based surveys, interviews, and a review of internal safety documents.

This balanced investigation combined quantitative data with qualitative findings. Given time constraints, questionnaire-

focused on quantitative research, with integrated qualitative elements to enrich the understanding of XYZ's HSE culture.

A. Management Interviews

Interviews targeted managers directly involved with XYZ's safety management system and safety culture, including executives from Human Resources, Engineering and Facilities, and External Network Planning and Installation, where safety is crucial. Although XYZ has written health and safety policies, interpretations can vary, and decisions often balance policy implementation with progress, time, and profit. The study indicates management's commitment to safety, though it sometimes takes a back seat to progress and profit, raising concerns. Annual systematic audits are conducted and accepted. The existence of a Safety department enhances the safety management system, and management supports its employees.

7. Data Collection Procedure

A. Questionnaires for Participating Staff

A questionnaire was distributed to 35 participants, including

XYZ employees and external contractors, covering various organizational levels from department managers to office staff. Participants had diverse roles: some were directly involved in project-related tasks, exposing them to external safety risks on construction sites, while others held positions unrelated to specific projects but were familiar with XYZ's safety management system and policies. This broad representation aimed to gather insights from different organizational perspectives.

B. Individual Interviews with Management Staff

Semi-structured interviews were conducted with managers directly involved in XYZ's HSE management, aiming to gain insights into safety measures implementation. Attempts were made to involve the Senior Director of Human Resources for broader perspective. Transcripts underwent coding aligned with research questions. Key areas included management's safety commitment, culture enforcement, policy communication, employee training, and policy review. This provided a comprehensive view of XYZ's HSE practices from a management standpoint.

8. Data Analysis

Descriptive data analysis is a critical first step in understanding complex datasets and concisely summarizing patterns, outliers, and key features. It serves as a bridge for disseminating results to diverse audiences and supports data exploration, hypothesis generation, and benchmarking. By revealing distribution, central tendency, and variability, it lays the groundwork for informed decision-making.

In this study, questionnaires were recorded, coded, and analyzed using SPSS software to gauge staff acceptance of system parameters. The focus was on identifying the proportion of respondents who "strongly agree" or "agree" with statements. Detailed discussions ensued for specific statements, influenced by their nature and the obtained results. Descriptive analysis serves as a cornerstone for strategic decision-making and continuous improvement efforts.

A. Section 1 of the Questionnaire

This section aimed to collect personal information to understand the diverse profiles of involved employees. Table 1 distinguishes between XYZ employees and contractors, showing that 70.8% are XYZ employees, while 29.2% are contractors. This data aids in assessing perceptions of the safety culture.

Table 2 displays the gender distribution: 87.5% male and 12.5% female. Table 3 provides insight into participants' work environment, with 70.8% working outdoors and 29.2% in offices. However, the correlation with employment type isn't direct; some contractors may work in offices despite external work demands.

Table 4 examines participants' exposure to hazardous substances, revealing that 45.8% work with hazardous materials. This nuanced information aids in understanding roles and potential occupational risks.

Table 1
Employment type

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	XYZ Employee	25	71.43	71.43	71.43
	In House Contractor	10	28.57	28.57	100.0
	Total	35	100.0	100.0	

Table 2
Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	30	85.71	85.71	85.71
	Female	5	14.29	14.29	100.0
	Total	24	100.0	100.0	

Table 3
Does your job require field (external or site) work

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	25	71.43	71.43	71.43
	No	10	28.57	28.57	100.0
	Total	35	100.0	100.0	

Table 4
Does your job require handling hazardous material

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	16	45.71	45.71	45.71
	No	19	54.29	54.29	100.0
	Total	35	100.0	100.0	

B. Section 2 of the Questionnaire

This part examines the Safety Management Practices described by Wachter & Yorio (2014).

9. Employees' influence/involvement

A. Employees are Involved in Creating Safety Practices

Table 5
Employees are directly involved in creating safety practices

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	3	8.57	8.57	8.57
	Disagree	3	8.57	8.57	17.14
	Neutral	0	0	0	0
	Agree	23	65.71	65.71	82.58
	Strongly Agree	6	17.5	17.5	100.0
	Total	35	100.0	100.0	

Table 5 illustrates the perspectives regarding employee involvement in crafting safe work instructions. The majority of respondents, comprising 65.71%, agree with active employee participation in this process, with an additional 17.14% strongly supporting it. However, a notable minority of 8.57% disagree and strongly disagree, indicating reservations or limited belief in employee involvement. These findings underscore the importance of addressing dissenting viewpoints and fostering a culture that values and encourages employee contributions to enhancing safety protocols and procedures within the

workplace.

B. Employees can Influence INTERRUPT Work Activity if Safety is an Issue (68.6 % is the Total of Agree and Strongly Agree)

Table 6
Employees can stop work if safety is an issue

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	5.7	5.7	5.7
	Disagree	2	5.7	5.7	11.4
	Neutral	7	20.0	20.0	31.4
	Agree	17	48.6	48.6	80.0
	Strongly Agree	7	20.0	20.0	100.0
	Total	35	100.0	100.0	

Table 6 presents diverse perspectives on employees' influence over work interruptions for safety reasons. While a notable majority (48.6%) strongly believe in employee involvement in safety issues, a significant minority (5.7%) express disagreement, indicating skepticism or perceived limitations in their influence. Additionally, a substantial portion (20.0%) remain neutral, reflecting uncertainty or ambivalence towards this aspect. These varied responses underscore potential differences in organizational culture or safety policies, indicating the need for further exploration and clarification to align perceptions and practices regarding employee empowerment in ensuring workplace safety.

C. Employees are Involved in Devising Solutions to Incidents that Result from Human Error

Table 7
Employees are involved in developing solutions to incidents due to human error

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	3	8.6	8.6	8.6
	Disagree	0	0.0	0.0	8.6
	Neutral	10	28.6	28.6	37.1
	Agree	22	62.9	62.9	100.0
	Strongly Agree	0	0.0	0.0	100.0
	Total	35	100	100	

Table 7 presents insights into employee involvement in developing solutions to incidents caused by human error. While a majority (62.9%) acknowledge their participation, a notable proportion (28.6%) remain neutral, possibly indicating uncertainty or a lack of awareness regarding the extent of employee involvement. Additionally, a small percentage (8.6%) strongly disagree, suggesting limited employee engagement in resolving such incidents. Although there are varying perspectives, the data highlights the recognition of employee involvement in addressing human error-related incidents, with the potential for further empowerment and clarity to enhance workplace safety measures and incident resolution strategies.

D. The Involvement of Employees in Performing Health, Safety, and Environment (HSE) Observations of their Colleagues

Table 8
Employees are involved in conducting HSE observations of other employees

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	3	8.57	8.57	8.57
	Disagree	3	8.57	8.57	17.14
	Neutral	9	25.71	25.71	42.86
	Agree	17	48.57	48.57	91.43
	Strongly Agree	3	8.57	8.57	100.0
	Total	35	100	100	

The data highlights a positive outlook among respondents regarding employees' engagement in HSE observations of their peers, with 57.14% either "Agreeing" or "Strongly Agreeing" with this process. However, 25.71% maintain a neutral stance, indicating a segment of employees with neither strong support nor opposition to colleagues' involvement in HSE observations. Conversely, 17.14% express disagreement with this practice, representing a noteworthy minority within the workforce. These findings indicate a favorable inclination toward involving employees in contributing to health, safety, and environmental awareness and practices within the workplace. However, there are varying levels of acceptance and neutrality among respondents.

E. Employees' Involvement in Accident Management within the Organization Sheds Light on the Attitudes and Perceptions of the Workforce

Table 9
Employees are involved in the implementation of accident management

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	0	0.00	0.00	0.00
	Disagree	4	11.43	11.43	11.43
	Neutral	12	34.29	34.29	45.71
	Agree	16	45.71	45.71	91.43
	Strongly Agree	3	8.57	8.57	100.0
	Total	35	100	100	

The data indicates a notable endorsement, with 54.29% of respondents either "Agree" or "Strongly Agree" with the active participation of employees in accident management initiatives. However, 34.29% of respondents adopt a neutral stance, potentially influenced by their roles not directly involving project-related tasks or activities with higher risks. While a majority recognizes the significance of employee involvement in promoting work safety practices, particularly in accident management, the prevalence of neutral responses may be influenced by staff primarily working in internal office environments, whose roles might not directly relate to project activities. This suggests the need for tailored communication and engagement strategies to ensure comprehensive involvement and understanding of safety practices across all organizational levels.

10. Pre and Post-Task HSE Reviews

A. Pre-Task HSE Evaluation for Issuing Permit-to-Work Done (I.E. Planning and Reviewing the HSE Considerations of the Task)

Table 10
Before the work permit is issued, the pre-task HSE evaluation is completed, which includes planning and reviewing the HSE considerations for the task

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	5.71	5.71	5.71
	Disagree	0	0.00	0.00	5.71
	Neutral	6	17.14	17.14	22.86
	Agree	17	48.57	48.57	71.43
	Strongly Agree	10	28.57	28.57	100.0
	Total	35	100	100	

Table 10 illustrates a solid organizational endorsement of pre-task health, safety, and environment (HSE) evaluations for issuing permits-to-work, focusing on planning and reviewing HSE considerations for tasks. A significant majority of respondents (77.14%) either "Agree" or "Strongly Agree" with the effectiveness and importance of conducting these evaluations, emphasizing the value of thorough planning and consideration of HSE factors before undertaking potentially risky tasks. While 17.14% of respondents adopt a neutral stance, possibly due to limited involvement in tasks requiring permits or perceptions of minimal impact on their roles, the overall consensus reflects a proactive organizational commitment to risk management and safety.

B. Respondents' Perceptions and Attitudes Towards Health, Safety and Environment (HSE) Assessment Prior to a Task, with a Particular Focus on Reviewing Critical Steps

Table 11
During pre-task HSE evaluations, critical steps are reviewed

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	5.71	5.71	5.71
	Disagree	0	0.00	0.00	5.71
	Neutral	9	25.71	25.71	31.43
	Agree	16	45.71	45.71	77.14
	Strongly Agree	8	22.86	22.86	100.0
	Total	35	100	100	

Table 11 provides insights into the overall perception of pre-task Health, Safety, and Environment (HSE) evaluations, mainly focusing on critical step reviews. The data indicates strong support for this practice, with 68.57% of respondents agreeing or strongly agreeing. However, a significant portion, comprising 25.71% of respondents, remains neutral, likely due to limited involvement in tasks requiring detailed HSE assessments. Additionally, 5.71% strongly disagree, suggesting areas for potential improvement or clarification in implementing pre-task HSE evaluations, particularly regarding critical step reviews. In summary, while the majority endorses pre-task HSE evaluations and essential steps reviews, addressing concerns among neutral and dissenting perspectives is crucial for ensuring comprehensive implementation and promoting safety within the organization.

C. The Perceptions and Attitudes of Respondents Regarding Addressing Faults and Possible Conditions During Pre-Task Health, Safety, and Environment (HSE) Reviews

Table 12
Pre-task HSE reviews address identified faults and potential conditions

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	5.71	5.71	5.71
	Disagree	3	8.57	8.57	14.29
	Neutral	9	25.71	25.71	40.00
	Agree	14	40.00	40.00	80.00
	Strongly Agree	7	20.00	20.00	100.0
	Total	35	100	100	

Table 12 sheds light on addressing faults and possible conditions during pre-task HSE reviews. A substantial 60% of respondents agree or strongly agree with this practice, indicating a robust commitment to proactively identifying and rectifying potential issues before tasks commence, thereby prioritizing safety. However, approximately 25.71% of respondents adopt a neutral stance, which could stem from limited exposure to tasks involving identifiable faults or conditions or a lack of clarity on the relevance of this process. Moreover, 5.71% strongly disagree, suggesting areas for potential improvement or clarification in implementing pre-task HSE reviews. While a majority consensus supports the practice, addressing concerns raised by those who remain neutral or express dissent is crucial to ensure comprehensive and effective implementation throughout the organization.

D. The Worst-Case Scenarios are Discussed During Pre-Task HSE Evaluations. Safety and Environment (HSE) Evaluations

Table 13
Pre-task HSE reviews include discussions on potential worst-case scenarios

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	5.71	5.71	5.71
	Disagree	5	14.29	14.29	20.00
	Neutral	9	25.71	25.71	45.71
	Agree	10	28.57	28.57	74.29
	Strongly Agree	9	25.71	25.71	100.0
	Total	35	100	100	

Table 13 provides insights into discussing worst-case scenarios during pre-task HSE evaluations. A significant majority, 80% of respondents, agree or strongly agree with this practice. This emphasizes the workforce's strong focus on safety and risk mitigation through thorough discussions on worst-case scenarios. Approximately 8.57% of respondents remain neutral, possibly indicating limited exposure or perceived irrelevance to their roles. Overall, this consensus underscores the critical importance of these discussions in promoting workplace safety and ensuring preparedness for potential hazards. In summary, while the majority recognizes

the significance of worst-case scenario discussions, addressing concerns among neutral and dissenting perspectives is essential for comprehensive risk management and preparedness across the organization.

E. Personal Protective Equipment (PPE) and Safe Work Procedures During Pre-Task Health, Safety, and Environment (HSE) Reviews

Table 14
Pre-task HSE checks include discussing personal protective equipment (PPE) and safe working practices

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	5.71	5.71	5.71
	Disagree	2	5.71	5.71	11.43
	Neutral	3	8.57	8.57	20.00
	Agree	14	40.00	40.00	60.00
	Strongly Agree	14	40.00	40.00	100.0
	Total	35	100	100	

Table 14 provides insights into the integration of discussions about Personal Protective Equipment (PPE) and safe work procedures during pre-task Health, Safety, and Environment (HSE) reviews. The data reveals a strong consensus, with 80% of respondents agreeing or strongly agreeing on the importance of these discussions. This high level of agreement underscores the workforce's commitment to safety practices and the recognition of PPE and safe work procedures as integral components of HSE protocols. The approximately 8.57% of respondents who remained neutral may suggest varying levels of familiarity or relevance to their specific roles. Overall, the data highlights a shared understanding among the workforce regarding the significance of incorporating PPE and safe work procedure discussions into HSE reviews, contributing to a culture of safety within the organization.

F. The Workforce's Perceptions and Attitudes Regarding Various Aspects of Health, Safety, and Environment (HSE) Practices within the Organization

Table 15
During pre-task HSE reviews, concerned staff address and identify electric power sources requiring isolation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	5.71	5.71	5.71
	Disagree	0	0.00	0.00	5.71
	Neutral	10	28.57	28.57	34.29
	Agree	12	34.29	34.29	68.57
	Strongly Agree	11	31.43	31.43	100.0
	Total	35	100	100	

Table 15 provides insights into the involvement of affected employees in dealing with power sources requiring isolation as part of Health, Safety, and Environment (HSE) pre-task checks. While there is unanimous recognition of the safety requirement, with no respondents disagreeing, the data reveals a range of employee perceptions. The 5.71% who strongly disagree suggest potential safety gaps that warrant attention.

Additionally, the 28.57% who remain neutral may indicate uncertainty or a lack of awareness about the importance of staff involvement in power isolation procedures. On the positive side, 65.72% of respondents either agree or strongly agree, highlighting a significant portion of the workforce with positive perceptions of staff involvement in safety measures. Overall, the data underscores opportunities for improving safety protocols and enhancing staff engagement to mitigate risks effectively and ensure a safer work environment.

11. Summary

In summary, Tables 8 to 15 offer insights into the organization's Health, Safety, and Environment (HSE) practices. Overall, there's a positive attitude towards crucial safety measures like HSE observations, accident management, and pre-task evaluations (Tables 8-11). Most respondents recognize the importance of addressing faults and worst-case scenarios and discussing safety equipment and procedures (Tables 12-14).

However, some practices, like addressing power source isolation, show varied agreement levels (Table 15). The presence of neutral and dissenting views suggests areas for improvement and highlights the importance of ongoing communication to enhance safety practices. While the data indicates a generally positive safety culture, targeted efforts may be needed in specific areas to ensure comprehensive understanding and acceptance across the workforce.

A. STOP Work Criteria During Pre-Task Health, Safety, and Environment (HSE) Reviews

Table 16
Pre-task HSE reviews include discussions on STOP work criteria

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	5.71	5.71	5.71
	Disagree	2	5.71	5.71	11.43
	Neutral	10	28.57	28.57	40.00
	Agree	16	45.71	45.71	85.71
	Strongly Agree	5	14.29	14.29	100.0
	Total	35	100	100	

Table 16 portrays the positive reception among the workforce regarding the discussion of STOP work criteria during pre-task Health, Safety, and Environment (HSE) reviews. With 60% of respondents expressing or strongly agreeing with this practice, there is a clear majority in support, highlighting its perceived importance in promoting safety. The neutral stance of 28.57% may indicate a lack of exposure to relevant situations or uncertainty about the direct impact of STOP work criteria on their roles. Nonetheless, the positive response underscores the workforce's commitment to safety protocols and emphasizes the significance of integrating STOP work criteria into pre-task HSE evaluations. Further efforts to communicate and raise awareness about the importance and benefits of this practice could enhance understanding and acceptance among employees, ultimately contributing to a safer work environment.

B. After Completing a Task, Employees Review the Finished Work's Health, Safety, and Environment (HSE) Aspects

Table 17
After tasks are completed, employees review the HSE aspects of the work

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	5.71	5.71	5.71
	Disagree	7	20.00	20.00	25.71
	Neutral	7	20.00	20.00	45.71
	Agree	15	42.86	42.86	88.57
	Strongly Agree	4	11.43	11.43	100.0
	Total	35	100	100	

Table 17 provides insights into the practice of employees reviewing Health, Safety, and Environment (HSE) aspects after completing tasks. The majority of respondents (54.29%) strongly agree with this practice, indicating a recognition of its importance in promoting safety and environmental awareness. However, a significant portion (25.71%) disagree or strongly disagree, suggesting potential reservations or challenges with implementing post-task HSE reviews. Additionally, approximately 20% of respondents remain neutral, indicating a lack of strong endorsement or objection to this practice. These findings underscore the need for further engagement and communication to address concerns, clarify the benefits of post-task HSE reviews, and promote a culture of continuous improvement in safety practices within the organization.

12. Safe work Procedures

A. The Implementation of Routine Tasks to Ensure Safe Working Practices

Table 18
Standard procedures are implemented to confirm the development of safe work practices

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	0	0.00	0.00	0.00
	Disagree	2	5.71	5.71	5.71
	Neutral	7	20.00	20.00	25.71
	Agree	21	60.00	60.00	85.71
	Strongly Agree	5	14.29	14.29	100.0
	Total	35	100	100	

Table 18 presents the outcomes of a survey regarding the execution of routine tasks to uphold safe working practices. The majority of respondents (74.29%) agree on the importance of routine tasks for maintaining safety, while 20% remain neutral, and a minority (4.2%) express disagreement. Addressing concerns from the neutral and dissenting respondents is crucial to reinforce the significance of routine tasks and enhance safety culture. Engaging with this minority could lead to broader adoption of safety practices and heightened safety awareness within the organization.

B. Conducting Risk Assessments Before Engaging in High-Risk Activities is Rated Differently but Generally Positively

Table 19

Hazard analyses are conducted and completed before high-risk work is scheduled for execution

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	5.71	5.71	5.71
	Disagree	2	5.71	5.71	11.43
	Neutral	7	20.00	20.00	31.43
	Agree	13	37.14	37.14	68.57
	Strongly Agree	11	31.43	31.43	100.0
	Total	35	100	100	

Table 19 presents survey results on implementing hazard analyses before high-risk tasks, with 68.57% of respondents endorsing this practice. However, 20.00% remain neutral or uncertain, and 11.42% either disagree or strongly disagree, indicating potential gaps in safety protocols. This mixed perception highlights the need for improved communication and training to enhance safety awareness and compliance within the organization. Addressing these differing opinions and uncertainties is crucial to strengthen safety practices effectively. In conclusion, while there is a consensus on the importance of hazard analyses, addressing differing opinions and uncertainties through improved communication and training is vital to bolster safety practices within the organization.

C. Hazard Analyses Previously Performed are Thorough and Robust

Table 20
Previous risk assessments are comprehensive and rigorous

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	5.71	5.71	5.71
	Disagree	2	5.71	5.71	11.43
	Neutral	15	42.86	42.86	54.29
	Agree	14	40.00	40.00	94.29
	Strongly Agree	2	5.71	5.71	100.0
	Total	35	100	100	

The survey results reveal varied perspectives on the quality of past hazard analyses. While 45.71% of respondents believe that past hazard analyses have been thorough and sound, 42.86% remain neutral, indicating uncertainty or lack of a clear opinion. However, a smaller portion (11.43%) disagree with the comprehensiveness of past hazard analyses. These findings underscore the importance of ongoing evaluation and improvement of risk assessment practices to meet stringent safety standards. Addressing the concerns of those who express neutrality or disagreement is crucial for enhancing the effectiveness and reliability of risk assessment processes within the studied environment.

D. Safe Work Procedures are Regularly Reviewed and Updated as Necessary

Table 21
Safe work procedures are regularly reviewed and updated as necessary

	Frequency	Percent	Valid Percent	Cumulative Percent

Valid	Strongly Disagree	0	0.00	0.00	0.00
	Disagree	2	5.71	5.71	5.71
	Neutral	3	8.57	8.57	14.29
	Agree	23	65.71	65.71	80.00
	Strongly Agree	7	20.00	20.00	100.0
	Total	35	100	100	

The data highlights a predominantly positive outlook on reviewing and updating safe working practices, with a significant majority (85.71% - combined 'agree' and 'strongly agree') acknowledging their importance as necessary. While a minority (8.57%) express neutrality, indicating some uncertainty or lack of a clear opinion, only a small percentage (5.71% - combined 'disagree' and 'strongly disagree') voice reservations or disagreement regarding the adequacy of reviewing and updating safe working practices. Overall, the data suggests a proactive stance towards safety management, with most respondents recognizing the importance of continually assessing and improving safe working practices to meet evolving risks and safety standards. Insights from those expressing neutrality or disagreement could provide valuable guidance for identifying areas of improvement or addressing deficiencies in the review and update process of safe working practices within the surveyed environment.

E. Lessons Learned from HSE Activities are Considered when Reviewing and Updating Safe Work Procedures

Table 22
Lessons learned from HSE activities are considered when reviewing and updating safe work procedures

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	5.71	5.71	5.71
	Disagree	2	5.71	5.71	11.43
	Neutral	7	20.00	20.00	31.43
	Agree	19	54.29	54.29	85.71
	Strongly Agree	5	14.29	14.29	100.0
	Total	35	100	100	

The data indicates a positive inclination towards utilizing HSE knowledge to enhance safe working practices, with a significant majority (68.57% - combined 'agree' and 'strongly agree' responses) affirming the importance of leveraging HSE insights when reviewing and updating safe working procedures. While a notable portion (20.00%) remains neutral, the overall trend of positive responses suggests a widespread recognition of the value of HSE experience in improving safety protocols. A minority (11.43% - combined 'disagree' and 'strongly disagree' responses) hold reservations regarding the essential role of HSE expertise in enhancing safe working practices. These results underscore the continual learning process from HSE experiences to bolster safety measures. Insights from respondents, especially those expressing neutrality or disagreement, could guide efforts to integrate lessons learned into the refinement of safe work practices, thereby enhancing safety performance and risk management within the surveyed environment.

F. Safe Work Procedures Include Warnings About the Possible Consequences of Deviations

Table 23
Safe work procedures include warnings about the possible consequences of deviations

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	5.71	5.71	5.71
	Disagree	0	0.00	0.00	5.71
	Neutral	7	20.00	20.00	25.71
	Agree	21	60.00	60.00	85.71
	Strongly Agree	5	14.29	14.29	100.0
	Total	35	100	100	

The data suggests a generally positive perception regarding including warnings about the consequences of deviating from safe working practices, with a significant majority (74.29% - combined 'agree' and 'strongly agree' responses) recognizing the importance of incorporating such warnings into safe working procedures. While a notable proportion (20.00%) remained neutral, indicating potential ambiguity or lack of emphasis on this aspect, there were no explicit disagreements, including deviation warnings. These findings underscore the critical role of clearly communicating potential consequences of deviating from safe work practices to foster compliance and heighten safety awareness. Feedback from respondents, especially those expressing neutrality, offers valuable insights for enhancing the clarity and effectiveness of warnings in safe working procedures, ultimately contributing to a safer work environment and reduced risk of incidents.

13. Cooperation Facilitation

A. Employees are Encouraged to Collaborate in Addressing HSE Challenges

Table 24
Employees are encouraged to collaborate in addressing HSE challenges

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	5.71	5.71	5.71
	Disagree	3	8.57	8.57	14.29
	Neutral	11	31.43	31.43	45.71
	Agree	15	42.86	42.86	88.57
	Strongly Agree	4	11.43	11.43	100.0
	Total	35	100	100	

The results underscore the importance of fostering a collaborative work environment to address health, safety, and environmental (HSE) issues, with a significant majority (54.29% - sum of agree and strongly agree) recognizing the value of encouraging employees to work together in solving HSE problems. While a notable portion (31.43%) remains neutral, the collective agreement suggests a general acknowledgment of the importance of teamwork in HSE issue resolution. However, a minority (14.29% - sum of 'disagree' and 'strongly disagree') express reservations or disagreement regarding actively encouraging teamwork to resolve HSE issues. These findings highlight the need for a supportive

culture that promotes collaboration in resolving HSE challenges. Feedback from respondents, especially those with neutral or dissenting views, offers insights to enhance and promote employee engagement in addressing HSE issues. Ultimately, fostering a culture of teamwork contributes to proactive risk management and a safer work environment.

B. Table 25- Robust Communication Channels Between Colleagues are Promoted to Enable the Thorough Sharing of Relevant HSE Information

Table 25
Robust communication channels between colleagues are promoted to enable the thorough sharing of relevant HSE information

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	5.71	5.71	5.71
	Disagree	2	5.71	5.71	11.43
	Neutral	6	17.14	17.14	28.57
	Agree	18	51.43	51.43	80.00
	Strongly Agree	7	20.00	20.00	100.0
	Total	35	100	100	

The results indicate a positive trend in fostering robust employee communication for sharing HSE information, with a clear majority (71.43%) recognizing and supporting this approach. While a portion (17.14%) express neutrality, the overall importance of effective HSE communication is acknowledged. However, a minority (11.43%) express reservations or disagreement regarding the encouragement of robust communication for HSE information sharing. These findings underscore the necessity of fostering open and effective communication channels among colleagues for prompt and comprehensive sharing of vital HSE information. Feedback, particularly from neutral or negative respondents, can inform efforts to further strengthen and promote robust communication practices, enhancing safety awareness and proactive risk management within the surveyed environment.

C. Formal Communication Methods are Recommended at Shift Changes to Ensure the Effective Sharing of Critical HSE Information

Table 26
Formal communication methods are recommended at shift changes to ensure the effective sharing of critical HSE information

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	1	2.86	2.86	2.86
	Disagree	3	8.57	8.57	11.43
	Neutral	9	25.71	25.71	37.14
	Agree	10	28.57	28.57	65.71
	Strongly Agree	6	17.14	17.14	82.9
	Not Applicable	6	17.14	17.14	100.0
	Total	35	100	100.00	

The table reveals varying perceptions regarding using formal mechanisms for HSE communication across different levels. While a combined majority (45.71%) acknowledges the importance and effectiveness of formal mechanisms in

maintaining continuity of HSE information between shifts, a significant portion (25.71%) expresses a neutral stance, suggesting the need for further clarification or enhancement of formal communication processes. Additionally, a minority (11.43%) voices reservations or disagreement concerning the effective utilization of formal mechanisms for sharing HSE information between shifts. These findings underscore opportunities to strengthen and optimize formal communication channels for HSE information exchange between shifts, ensuring consistent and comprehensive sharing of critical safety information. Incorporating feedback, particularly from neutral or dissenting respondents, can facilitate improvements in communication practices and foster a safer work environment within the surveyed facility.

14. HSE Training

A. Employees Receive Formal HSE Training that is Tailored to Their Tasks

The results indicate varied perceptions regarding formal HSE training for employees. While a significant majority (57.14%) recognize the importance and availability of tailored formal HSE training for employees' tasks, a notable proportion (25.71%) remain undecided or have no clear opinion on the adequacy of formal HSE training provided. Additionally, a minority (17.14%) express reservations or disagreement regarding the sufficiency of formal HSE training relevant to employees' work. These findings underscore the importance of comprehensive and effective formal training programs tailored to employees' specific roles in HSE aspects. Incorporating feedback, particularly from neutral or dissenting respondents, can guide efforts to enhance training initiatives, ensuring employees are well-equipped to address health, safety, and environmental challenges in their work environment. Practical training is crucial in fostering a culture of safety and risk awareness within organizations.

Table 27
Employees receive formal HSE training that is tailored to their tasks

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	3	8.57	8.57	8.57
	Disagree	3	8.57	8.57	17.14
	Neutral	9	25.71	25.71	42.86
	Agree	13	37.14	37.14	80.00
	Strongly Agree	7	20.00	20.00	100.0
	Total	35	100	100	

B. All Employees Receive Formal HSE Training.

Table 28
All employees receive formal HSE training

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	5.71	5.71	5.71
	Disagree	7	20.00	20.00	25.71
	Neutral	6	17.14	17.14	42.86
	Agree	15	42.86	42.86	85.71

		Frequency	Percent	Valid Percent	Cumulative Percent
	Strongly Agree	5	14.29	14.29	100.0
	Total	35	100	100	

Table 28 reveals varying perspectives on implementing formal HSE training for all employees. While a majority (57.14%) recognize the importance and existence of such training, a significant proportion (17.14%) remain undecided or unsure about its coverage. Additionally, a minority (25.71%) express reservations or disagreement regarding the assertion that all employees undergo formal training on HSE aspects. These results underscore the importance of ensuring comprehensive and inclusive formal HSE training programs that reach every employee within a company. Considering feedback, particularly from those expressing dissatisfaction or uncertainty, can guide efforts to enhance training initiatives and foster a culture of safety and awareness across all workforce levels. Practical HSE training equips employees with the knowledge and skills to mitigate risks and establish a safe working environment.

C. HSE Training for Employees Covers the Key Principles of Hazard Identification and Prevention

The findings from Table 29 indicate a positive trend towards incorporating the basics of hazard identification and prevention in employee HSE training. A significant majority (77.14%) recognize the importance and inclusion of these fundamentals, while a notable proportion (11.43%) remain undecided or unsure about their coverage in training. A minority (11.43%) express reservations or disagreement regarding the assertion that employee HSE training encompasses these basics. These findings underscore the importance of integrating essential hazard recognition and prevention skills into employee HSE training programs. Considering feedback, especially from those who are neutral or opposed, can inform efforts to enhance and optimize HSE training initiatives, ensuring that employees are adequately equipped to identify and mitigate workplace hazards effectively. Practical HSE training is crucial in promoting a safe and healthy work environment and proactive risk management.

Table 29
HSE training for employees covers the key principles of hazard identification and prevention

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	5.71	5.71	5.71
	Disagree	2	5.71	5.71	11.43
	Neutral	4	11.43	11.43	22.86
	Agree	25	71.43	71.43	94.29
	Strongly Agree	2	5.71	5.71	100.0
	Total	35	100	100	

15. Communication and Information Sharing

A. Information on New or Revised HSE Work Instructions is Formally Communicated to Employees

Table 30

Information on new or revised HSE work instructions is formally communicated to employees

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	5.71	5.71	5.71
	Disagree	0	0.00	0.00	5.71
	Neutral	6	17.14	17.14	22.86
	Agree	19	54.29	54.29	77.14
	Strongly Agree	8	22.86	22.86	100.0
	Total	35	100	100	

The data from Table 30 indicates a positive trend regarding formally communicating information on new or revised HSE work instructions to workers. A significant majority (77.14%) recognizes the formal dissemination of such information, while a notable proportion (17.14%) remains undecided or unsure about the formal communication practices concerning these instructions. Notably, none of the respondents indicated disagreement, suggesting a consensus that information about new or revised HSE work instructions is communicated formally. These findings underscore the importance of effective communication practices in ensuring employees are well-informed about changes to HSE work instructions. Considering respondent feedback, particularly neutral responses, can inform efforts to enhance and optimize communication processes, fostering transparency and clarity in conveying crucial HSE information to employees. Effective communication plays a vital role in nurturing a culture of safety and compliance within organizations.

B. Information on Potential Hazards in the Workplace is Communicated to Employees Through Risk Assessments..

Table 31
Information on potential hazards in the workplace is communicated to employees through risk assessments

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	1	2.86	2.86	2.86
	Disagree	3	8.57	8.57	11.43
	Neutral	9	25.71	25.71	37.14
	Agree	15	42.86	42.86	80.00
	Strongly Agree	7	20.00	20.00	100.0
	Total	35	100	100	

The findings from Table 31 reveal varying perspectives on how risk assessments inform employees about potential hazards or tasks in the workplace. While a majority (62.86%) acknowledge the effectiveness of risk assessments in communicating information about potential hazards to employees, a significant proportion (25.71%) remain undecided or uncertain about their effectiveness in conveying such information. Additionally, a minority (11.43%) express reservations or disagreement regarding the assertion that risk assessments effectively communicate information about potential hazards. These findings underscore opportunities to enhance the effectiveness of risk assessment processes in communicating information about potential workplace hazards to employees. Considering feedback, particularly from those

who are neutral or disagree, can guide efforts to improve risk assessment practices, promote transparency in hazard communication, and ultimately contribute to a safer work environment. Practical risk assessments play a crucial role in identifying, evaluating, and mitigating workplace hazards and supporting comprehensive health, safety, and environmental management practices.

C. Employees are Informed of the Details of a Safe Working Environment

Table 32
Employees are informed of the details of a safe working environment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	5.71	5.71	5.71
	Disagree	0	0.00	0.00	5.71
	Neutral	3	8.57	8.57	14.29
	Agree	21	60.00	60.00	74.29
	Strongly Agree	9	25.71	25.71	100.0
	Total	35	100	100	

The data from Table 32 illustrates a positive trend regarding providing workers with information about a safe working environment. A clear majority (85.71%) acknowledges the effectiveness of this practice, indicating a widespread recognition of its importance. None of the respondents disagreed, suggesting a consensus on communication effectiveness regarding a safe working environment. However, a significant proportion (8.57%) remained neutral, indicating uncertainty or lack of a definitive opinion on the adequacy of communicating details about a safe working environment. These findings underscore the significance of transparent and effective communication practices to ensure employees are informed about the details of a safe working environment. Incorporating feedback, particularly from those expressing neutrality, can facilitate improvements in communication strategies, foster a safety culture, and proactively maintain a safe and healthy work environment. Effective communication of safety information is crucial for promoting employee awareness, engagement, and compliance with safety protocols and standards.

D. HSE Incidents and/or Near Misses Experienced by Other Employees are Published to All Employees

Table 33
HSE incidents and/or near misses experienced by other employees are communicated to all employees

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	3	8.57	8.57	8.57
	Disagree	5	14.29	14.29	22.86
	Neutral	13	37.14	37.14	60.00
	Agree	9	25.71	25.71	85.71
	Strongly Agree	5	14.29	14.29	100.0
	Total	35	100	100	

The findings from Table 33 reveal varied perceptions among employees regarding the communication of HSE incidents and

near misses. A significant portion (37.14%) remains undecided or unsure about the adequacy of communication, while a combined majority (40.00%) recognizes the importance and effectiveness of communicating such incidents to all employees. However, a minority (22.86%) express reservations or disagreement with the assertion that HSE incidents and near misses are effectively communicated to everyone. These findings underscore the need for transparent and proactive communication practices in sharing information about HSE incidents and near misses with all employees. Incorporating feedback, particularly from those who were neutral or negative, can aid in improving communication strategies, fostering a culture of incident reporting and learning, and strengthening overall HSE management practices within the organization. Effective communication of HSE information is crucial for promoting awareness, enhancing safety practices, and preventing future incidents in the workplace.

E. HSE Incidents and/or Near Misses Experienced by Other Employees are Communicated to All Employees

Table 34
HSE incidents and/or near misses experienced by other employees are communicated to all employees

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	4	11.43	11.43	11.43
	Disagree	3	8.57	8.57	20.00
	Neutral	16	45.71	45.71	65.71
	Agree	9	25.71	25.71	91.43
	Strongly Agree	3	8.57	8.57	100.0
	Total	35	100	100	

The data presented in Table 34 reveals differing perceptions among employees regarding the communication of HSE incident investigation results. A significant proportion (45.71%) are neutral, indicating uncertainty or lack of a definitive opinion on whether the results of HSE incident investigations are shared appropriately. However, a combined majority (34.28%) acknowledges the importance and effectiveness of communicating these findings to employees. Conversely, a minority (20.00%) disagree with the assertion that the results of HSE incident investigations are effectively communicated. These findings underscore the significance of transparent and timely communication following HSE incidents within the company. Addressing concerns raised by respondents, particularly those who are neutral or disagree, can inform efforts to improve communication strategies, promote accountability, and foster a culture of learning and continuous improvement in HSE management. Effective communication of investigation results is critical for enhancing transparency, building trust, and supporting the organization's efforts to prevent future incidents, ensuring a safe working environment for all employees.

F. The Following are XYZ HSE Published Documents on the XYZ Family

1) HSE Targets and Objectives & Management Programs. Employees are Required to Familiarize Themselves with these Policies if Their Jobs are Affected by these Procedures

Table 35
HSE Targets and Objectives & Management programs

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	1	2.86	2.86	2.86
	Disagree	3	8.57	8.57	11.43
	Neutral	6	17.14	17.14	28.57
	Agree	16	45.71	45.71	74.29
	Strongly Agree	9	25.71	25.71	100.0
	Total	35	100	100	

The data from Table 35 presents a mixed perception regarding HSE goals, objectives, and management programs. While a clear majority (71.42%) acknowledge the effectiveness or alignment of these initiatives, a significant proportion (17.14%) remain neutral, indicating uncertainty or lack of a definitive opinion. Conversely, a minority (11.43%) disagree with the existing HSE objectives, targets, and management programs. These findings underscore the importance of continually evaluating and improving HSE strategies based on employee feedback and company needs. Addressing concerns raised by respondents, particularly those who are neutral or opposed, can guide efforts to refine and optimize HSE initiatives, enhance goal alignment, and strengthen overall HSE performance within the organization. Practical and effective HSE goals, objectives, and management programs are essential for driving performance, promoting compliance, and fostering a safety and environmental responsibility culture.

2) Chemical Storage Guidelines

Table 36
Chemical storage guidelines

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	5.71	5.71	5.71
	Disagree	2	5.71	5.71	11.43
	Neutral	14	40.00	40.00	51.43
	Agree	11	31.43	31.43	82.86
	Strongly Agree	6	17.14	17.14	100.0
	Total	35	100	100	

The data from Table 36 presents a mixed perception regarding the guidelines for storing chemicals. While a significant majority (48.57%) acknowledge the effectiveness or appropriateness of these guidelines, a substantial proportion (40.00%) remain neutral, indicating uncertainty or lack of a definitive opinion. Conversely, a minority (11.43%) disagree with the guidelines. These findings highlight the importance of continuously evaluating and improving chemical storage practices based on employee feedback and safety requirements. Addressing concerns raised by respondents, particularly those who are neutral or disagree, can guide efforts to enhance chemical storage policies, promote compliance with safety standards, and strengthen overall safety practices within the company. Effective chemical storage policies are crucial for preventing accidents, minimizing risks, and ensuring the safety and health of employees in the workplace.

3) Safety Handbook for Contractors

Table 37
Safety handbook for contractors

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	5.71	5.71	5.71
	Disagree	2	5.71	5.71	11.43
	Neutral	10	28.57	28.57	40.00
	Agree	15	42.86	42.86	82.86
	Strongly Agree	6	17.14	17.14	100.0
	Total	35	100	100	

The analysis of Table 37 reveals varying opinions regarding the Contractor Safety Handbook. While 42.86% of respondents recognize its benefits in improving contractors' safety practices and awareness, 5.71% express dissatisfaction or skepticism, and 5.71% do not find it helpful or comprehensive. Additionally, 28.57% show uncertainty or lack of conviction, and 17.14% strongly believe in its importance for contractor compliance with safety regulations and best practices. These findings suggest potential opportunities for improvement in the content, accessibility, or implementation of the handbook to better meet stakeholders' needs and expectations. Effective communication and engagement strategies may be necessary to increase contractors' acceptance and use of the safety manual, thereby enhancing safety outcomes.

4) Hazard-Aspect and Risk-Impact Assessment

The analysis of Table 38 indicates varying perceptions regarding hazard assessment and risk impact assessment in safety management. While 48.57% of respondents recognize the value of these assessments, 25.71% strongly believe in their efficiency, and 5.71% express strong skepticism or dissatisfaction. Interestingly, none explicitly disagree with using these assessments. Additionally, 20.00% remain neutral, indicating uncertainty or a lack of firm opinion. Overall, while there is a significant level of agreement and strong agreement regarding the value of these assessments, there are also individuals who are neutral or express skepticism, suggesting the need for continued communication and education to ensure understanding and acceptance across all stakeholders.

Table 38
Hazard-Aspect and Risk-Impact assessment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	5.71	5.71	5.71
	Disagree	0	0.00	0.00	5.71
	Neutral	7	20.00	20.00	25.71
	Agree	17	48.57	48.57	74.29
	Strongly Agree	9	25.71	25.71	100.0

	Total	35	100	100	

5) Table 39, Heat Stress Guidelines (60% Agree or Strongly Agree. 25.71% Stated a Neutral Opinion)

Table 39
Heat stress guidelines

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	3	8.57	8.57	8.57
	Disagree	2	5.71	5.71	14.29
	Neutral	9	25.71	25.71	40.00
	Agree	15	42.86	42.86	82.86
	Strongly Agree	6	17.14	17.14	100.0
	Total	35	100	100	

Table 39 presents survey data on attitudes toward heat stress interventions, focusing on the effectiveness and relevance of heat stress guidelines within a specific context or organization. The analysis reveals varied perspectives among respondents: Three individuals (8.57%) express dissatisfaction or disagreement with the guidelines, while two respondents (5.71%) are skeptical or have reservations about their appropriateness. Additionally, a significant proportion (25.71%) express uncertainty or lack a strong opinion, whereas the majority (42.86%) agree with the guidelines. Furthermore, a notable percentage (17.14%) fully support the guidelines, advocating for their implementation and adherence. Overall, while there is general acceptance of the guidelines, a significant portion of respondents express reservations or uncertainty, suggesting areas for improvement in communication, training, or implementation. Nonetheless, a supportive minority strongly advocate for the guidelines, potentially enhancing compliance and fostering a safer and healthier work environment for all affected by heat-related conditions.

6) Incident Management Report Form

Table 40
Incident management report form

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	3	8.57	8.57	8.57
	Disagree	0	0.00	0.00	8.57
	Neutral	9	25.71	25.71	34.29
	Agree	17	48.57	48.57	82.86
	Strongly Agree	6	17.14	17.14	100.0
	Total	35	100	100	

In Table 40, survey data on attitudes toward heat stress interventions are presented, focusing on perceptions of the incident management reporting form within the organization. The analysis reveals varied perspectives among respondents: Three individuals (8.57%) strongly expressed dissatisfaction or concern about the form's effectiveness or ease of use, while none disagreed. A significant proportion (25.71%) took a neutral stance, suggesting no strong opinion, whereas most respondents (48.57%) agreed. Additionally, a notable

percentage (17.14%) strongly endorsed the form, showing strong support for its effectiveness and importance in incident management. Overall, the data reflects acceptance of the incident management form, with 65.71% expressing positive views. However, 25.71% remain neutral, suggesting room for improvement to enhance engagement. Addressing neutral views and dissatisfaction can improve overall effectiveness, fostering a safer and more proactive incident reporting and response culture within the organization.

7) Site Emergency Procedures

Table 41
Site emergency procedures

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	3	8.57	8.57	8.57
	Disagree	0	0.00	0.00	8.57
	Neutral	3	8.57	8.57	17.14
	Agree	22	62.86	62.86	80.00
	Strongly Agree	7	20.00	20.00	100.0
	Total	35	100	100	

Table 41 presents survey data on attitudes toward heat stress measures, revealing a generally positive outlook. Three respondents (8.57%) expressed significant dissatisfaction with emergency response measures, while none disagreed, indicating strong concerns expressed elsewhere. A minority (8.57%) remain neutral, lacking a strong opinion, while the majority (62.86%) agree with emergency procedures, recognizing their importance. Additionally, a notable portion (20.00%) strongly support these procedures, endorsing their effectiveness. Overall, the data indicates strong positivity towards the site's emergency procedures, with 82.86% of respondents expressing optimism about their effectiveness. However, the concerns of the 8.57% who strongly disagree warrant attention for potential improvements, while leveraging the support of the majority can drive compliance and continuous improvement in onsite emergency practices. Addressing neutrality (8.57%) can enhance understanding and commitment to these procedures, ultimately ensuring a safer working environment for all site employees.

8) Work Permits Procedure

Table 42
Work permits procedure

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	5.71	5.71	5.71
	Disagree	0	0.00	0.00	5.71
	Neutral	9	25.71	25.71	31.43
	Agree	14	40.00	40.00	71.43
	Strongly Agree	10	28.57	28.57	100.0
	Total	35	100	100	

Table 42 presents survey data on attitudes toward heat stress measures, revealing diverse perspectives. Two respondents (5.71%) strongly disagreed with the work permit process,

signifying significant dissatisfaction or concerns, while none disagreed, indicating expressed concerns. A notable proportion (25.71%) remain neutral, lacking a strong opinion, and the majority (40.00%) agree with the work permit process, recognizing its importance. Additionally, a significant portion (28.57%) strongly support it, endorsing its value in ensuring safe and compliant work practices. Overall, the data indicates a positive endorsement of the work permit process, with 68.57% of respondents expressing optimism about its effectiveness. However, addressing the concerns of the 5.71% who strongly disagree is essential for potential process improvements, while leveraging the support of the majority can drive compliance and continuous improvement. Addressing neutrality (25.71%) through communication and training can enhance understanding and commitment. Thus, while generally well received, opportunities exist to address concerns and improve engagement, ultimately strengthening work permit processes for safer and more compliant work practices within the organization.

16. Accident Investigation

A. The Incident Investigation Task is to Uncover Why Human Error Might have Caused the Incident

Table 43
The incident investigation task is to uncover why human error might have caused the incident

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	1	2.86	2.86	2.86
	Disagree	5	14.29	14.29	17.14
	Neutral	10	28.57	28.57	45.71
	Agree	14	40.00	40.00	85.71
	Strongly Agree	5	14.29	14.29	100.0
	Total	35	100	100	

Table 43 provides insights into attitudes toward investigating human error's role in incidents. The data shows a spectrum of opinions, ranging from strong disagreement to strong support. While a majority (54.29%) agree or strongly support focusing on human error in investigations, indicating recognition of its significance, a notable portion (16.15%) express disagreement or neutrality. This diversity underscores the need for further dialogue and education to address concerns and enhance understanding. Engaging with dissenting and neutral perspectives can enrich accident investigation procedures, fostering more comprehensive prevention strategies aligned with diverse viewpoints.

B. Accidents are Investigated within the Shortest Possible Time (Immediately or within a Few Hours of the Incident)

Table 44
Accidents are investigated within the shortest possible time (immediately or within a few hours of the incident)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	1	2.86	2.86	2.86
	Disagree	3	8.57	8.57	11.43
	Neutral	15	42.86	42.86	54.29
	Agree	12	34.29	34.29	88.57
	Strongly Agree	4	11.43	11.43	100.0
	Total	35	100	100	

Table 44 presents respondents' perspectives on the timeliness of accident investigations, with 35 participants contributing their views. While the majority (76.72%) believe that accidents are promptly investigated, agreeing or strongly agreeing with this statement, a smaller proportion (11.43%) express scepticism or disagreement. Approximately 42.86% remain neutral, indicating uncertainty about the investigation's promptness. Overall, these findings highlight a mixed perception regarding the timeliness of accident investigations, with a notable portion expressing confidence in prompt investigations. In contrast, others remain uncertain or critical about potential delays.

C. The Investigation of Accidents is Carried Out by a Team Consisting of One or More Employee Representatives, a Representative of HSE and the Direct Supervisor of the Injured Employee

Table 45
The investigation of accidents is carried out by a team consisting of one or more employee representatives, a representative of HSE and the direct supervisor of the injured employee

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	5.71	5.71	5.71
	Disagree	0	0.00	0.00	5.71
	Neutral	13	37.14	37.14	42.86
	Agree	18	51.43	51.43	94.29
	Strongly Agree	2	5.71	5.71	100.0
	Total	35	100	100	

The survey responses regarding the composition of accident investigation teams reflect varied perspectives among respondents. While a minority (5.71%) strongly disagree with the current team composition, none of the respondents express outright disagreement. However, a significant portion (37.14%) remains neutral, indicating uncertainty or a lack of firm opinion on including specified team members. On the positive side, a majority (51.43%) agree that the teams include essential members, indicating satisfaction with their structured involvement. Additionally, a small yet notable proportion (5.71%) strongly agree that the teams are well-composed for effective investigation and representation, emphasizing the importance of the specified members. Overall, while the majority perceive the team composition positively, addressing concerns among the neutral group could enhance understanding and confidence in accident investigation processes.

17. Detection and Monitoring

A. The HSE checklists were Developed to Address Potentially Hazardous Conditions in the Workplace

Table 46
The HSE checklists were developed to address potentially hazardous conditions in the workplace

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	3	8.57	8.57	8.57
	Disagree	0	0.00	0.00	8.57
	Neutral	4	11.43	11.43	20.00
	Agree	21	60.00	60.00	80.00
	Strongly Agree	7	20.00	20.00	100.0
	Total	35	100	100	

The survey results on developing HSE checklists tailored for potentially hazardous workplace conditions reveal diverse perspectives among respondents. While a minority (8.57%) strongly disagree with the adequacy of current HSE checklists in addressing workplace hazards, none of the respondents disagree with their existence or effectiveness. However, a notable portion (11.43%) remains neutral, suggesting uncertainty or lack of a clear opinion on developing these checklists. On the positive side, a majority (60.00%) agree that HSE checklists effectively address potential workplace hazards, indicating satisfaction with their adequacy. Additionally, a smaller yet significant proportion (20.00%) strongly agree that these checklists are well-developed and closely aligned with hazardous workplace conditions, expressing high confidence in their effectiveness. Overall, while most respondents perceive the HSE checklists positively, addressing concerns among the neutral group could enhance their understanding and utilization within the workplace.

B. HSE Checklists are Designed to Identify Potentially Hazardous Behaviours in the Workplace

Table 47
HSE checklists are designed to identify potentially hazardous behaviours in the workplace

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	3	8.57	8.57	8.57
	Disagree	0	0.00	0.00	8.57
	Neutral	9	25.71	25.71	34.29
	Agree	18	51.43	51.43	85.71
	Strongly Agree	5	14.29	14.29	100.0
	Total	35	100	100	

The survey results on developing HSE checklists aimed at identifying potential risk behaviors in the workplace showcase varied perspectives among respondents. While a minority (8.57%) strongly disagree with the adequacy of current HSE checklists, indicating a perception of inadequacy in identifying risk behaviors, none of the respondents disagrees with their existence or effectiveness. However, a notable portion (25.71%) remains neutral, suggesting uncertainty or lack of a clear opinion on the effectiveness of these checklists. On the positive side, a majority (51.43%) agree that HSE checklists effectively highlight potential risk behaviors, indicating satisfaction with their current functionality. Additionally, a smaller yet significant proportion (14.29%) strongly agree that these checklists are well-developed and successfully identify potential risk behaviors, expressing high confidence in their

effectiveness. While most respondents perceive the HSE checklists positively, addressing concerns among the neutral group could enhance their understanding and utilization within the workplace.

C. HSE Observations Target Behaviours that Deviate from Safe Work Instructions

Table 48
HSE observations target behaviours that deviate from safe work instructions

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	0	0.00	0.00	0.00
	Disagree	3	8.57	8.57	8.57
	Neutral	9	25.71	25.71	34.29
	Agree	20	57.14	57.14	91.43
	Strongly Agree	3	8.57	8.57	100.0
	Total	35	100	100	

The interpretation of responses regarding the effectiveness of HSE observations in identifying behaviors deviating from safe work instructions reveals varied perceptions among respondents. Firstly, none of the respondents strongly disagreed, indicating no unanimous disagreement regarding the practicality of HSE observations in this context. However, a minority (8.57%) disagreed, suggesting some perceive shortcomings in HSE observations' ability to detect non-compliant behaviors. Conversely, a significant majority (82.86%) either agree or strongly agree that HSE observations effectively identify deviations from safe work instructions, indicating a prevailing belief in their efficacy. Nonetheless, a notable portion (25.71%) remains neutral, indicating uncertainty or lack of a firm opinion on the effectiveness of HSE observations. Overall, while a majority perceive HSE observations as effective, addressing concerns and uncertainties among the neutral group may be beneficial to enhance the understanding and application of these observations within the organization.

D. Deviations from Safe Work Instructions Lead to Adverse Consequences for Employees

The analysis of responses regarding the impact of deviations from safety instructions on employee outcomes reveals diverse viewpoints. A combined majority of respondents (45.71% - combining Agree and Strongly Agree categories) believe that deviations lead to negative consequences for employees. Conversely, a smaller proportion (11.43%) disagree with this view. The remainder (42.86%) are neutral, indicating uncertainty or lack of a firm opinion on the direct impact of deviations on employee outcomes. These findings underscore the need for further investigation and communication to address uncertainties and promote understanding of safety protocols within the organization.

Table 49
Deviations from safe work instructions lead to adverse consequences for employees

		Frequency	Percent	Valid Percent	Cumulative Percent

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	0	0.00	0.00	0.00
	Disagree	4	11.43	11.43	11.43
	Neutral	15	42.86	42.86	54.29
	Agree	13	37.14	37.14	91.43
	Strongly Agree	3	8.57	8.57	100.0
	Total	35	100	100	

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	5.71	5.71	5.71
	Disagree	0	0.00	0.00	5.71
	Neutral	4	11.43	11.43	17.14
	Agree	26	74.29	74.29	91.43
	Strongly Agree	3	8.57	8.57	100.0
	Total	35	100	100	

E. Deviations from Safe Work Instructions are Tracked and Monitored

Table 50
Deviations from safe work instructions are tracked and monitored

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	0	0.00	0.00	0.00
	Disagree	2	5.71	5.71	5.71
	Neutral	13	37.14	37.14	42.86
	Agree	18	51.43	51.43	94.29
	Strongly Agree	2	5.71	5.71	100.0
	Total	35	100	100	

B. When Flexibility is Allowed, Experience with the Job is Considered

Table 52
Employee past experience is considered when a job is considered

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	5.71	5.71	5.71
	Disagree	0	0.00	0.00	5.71
	Neutral	5	14.29	14.29	20.00
	Agree	21	60.00	60.00	80.00
	Strongly Agree	7	20.00	20.00	100.0
	Total	35	100	100	

Analyzing responses concerning tracking and monitoring deviations from safe work instructions reveals diverse perspectives. A notable majority (57.14% - combining Agree and Strongly Agree categories) perceive active tracking and monitoring of deviations in the workplace. Conversely, a minority (5.71%) express doubts about the effectiveness of these measures. A significant portion (37.14%) remains neutral, indicating uncertainty or lack of a clear opinion on the adequacy of tracking and monitoring procedures for safety compliance. These findings underscore the importance of ensuring clarity and effectiveness in safety protocols to address concerns and promote a safety culture within the organization.

18. Safe Task Assignment (Task-Employee Matching)

A. Supervisors are Provided with the Flexibility to Assign the Right Employee to the Job

The analysis of responses regarding managers' flexibility in task assignments reveals varied viewpoints among respondents. While a significant majority (82.86% - a combination of the "agree" and "strongly agree" categories) believe that supervisors possess the necessary flexibility to assign tasks effectively, a smaller proportion (5.71%) express a negative opinion or remain neutral. Specifically, two respondents (5.71%) strongly disagree with managers' flexibility, indicating a minority view, while four respondents (11.43%) remain neutral, suggesting uncertainty. The majority sentiment (74.29%) agrees, indicating a belief that supervisors have the autonomy to assign tasks to the right employees. Similarly, three respondents (8.57%) strongly agree, expressing high confidence in the extent of flexibility granted to supervisors.

Table 51
Supervisors are given flexibility to assign a job to the right employee

		Frequency	Percent	Valid Percent	Cumulative Percent

The analysis of responses regarding considering employees' prior experience in job assignments highlights diverse perspectives among respondents. While the vast majority (80.00% - a combination of the "agree" and "strongly agree" categories) believe that employee experience is taken into account when assigning tasks, only a small proportion (5.71%) hold the view that it is not recognized. Specifically, two respondents (5.71%) strongly disagree that prior experience influences job assignments, representing a minority perspective, while five respondents (14.29%) remain neutral, indicating uncertainty. Conversely, twenty-one respondents (60.00%) agree that employers consider employees' experience and seven (20.00%) strongly agree, expressing high confidence in the importance of prior experience in task delegation. This underscores the significance of leveraging employees' skills and knowledge acquired through previous experiences in the workplace.

C. When Flexibility is Allowed, the Job's Physical Demands are Considered.

The analysis of responses regarding the perception of physical demands in job assignments reveals varied viewpoints. Notably, no respondents (0%) disagreed with considering physical needs, and 28.57% remained neutral, showing uncertainty or ambivalence. A majority (57.14%) agreed that physical demands should be regarded, with 14.29% strongly supporting this view. Overall, the data suggests a general acceptance of the relevance of job physical demands, with no disagreement and a majority leaning towards agreement (71.43%) and neutrality (28.57%). This underscores the importance of considering physical demands in task assignments. The variations in responses point to potential areas for further investigation or improvements in job design and employee well-being.

Table 53
Jobs physical demands are considered when assigned to employees

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	0	0	0	0
	Disagree	0	0	0	0
	Neutral	10	28.57	28.57	28.57
	Agree	20	57.14	57.14	85.71
	Strongly Agree	5	14.29	14.29	100.0
	Total	35	100	100	

D. When Flexibility is Allowed, the Risk of Exhaustion or Extended Work Hours is Considered

Table 54
Risk of exhaustion or extended work hours is considered

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	5.71	5.71	5.71
	Disagree	0	0.00	0.00	5.71
	Neutral	7	20.00	20.00	25.71
	Agree	22	62.86	62.86	88.57
	Strongly Agree	4	11.43	11.43	100.0
	Total	35	100	100	

The survey responses on the risk associated with stress or distraction encompass diverse viewpoints. While a notable majority (74.29% - combining Agree and Strongly Agree categories) acknowledge the importance of addressing fatigue and managing work hours for employee health, safety, and productivity, a smaller portion (25.71% - combining Neutral, Disagree, and Strongly Disagree categories) either remain uncertain or hold contrary opinions. This indicates a need for ongoing efforts to raise awareness and implement effective measures to address these risks comprehensively, ensuring a conducive environment for employee well-being and organizational success.

E. Risks Associated with Stress or Distraction are Considered

Table 55
Risks associated with stress or distraction are considered

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	5.71	5.71	5.71
	Disagree	1	2.86	2.86	8.57
	Neutral	7	20.00	20.00	28.57
	Agree	21	60.00	60.00	88.57
	Strongly Agree	4	11.43	11.43	100.0
	Total	35	100	100	

The survey analysis on the risk associated with stress or distraction highlights diverse perceptions among respondents. A minority (5.71%) strongly disagree with the notion of low risk, while an additional 2.86% express a slightly stronger disagreement against significant risk. The most considerable portion (20.00%) remains neutral, indicating uncertainty or ambivalence, while 60.00% acknowledge stress or distraction as notable risks. Furthermore, 11.43% strongly affirm the high risk associated with stress or distraction. Overall, these responses reflect a spectrum of viewpoints, with agreement being the most prevalent (60.00%), suggesting a widespread recognition of the significance of these risks. Neutral responses (20.00%) indicate a need for further investigation or communication about these risks. Given respondents' level of concern, addressing stress and minimizing distractions should be focal points for interventions or policy development. Based on these findings, further exploration into specific concerns and mitigation strategies is warranted.

19. Hiring for HSE

A. XYZ's HSE Values and Beliefs are Discussed with Potential Employees

Table 56
XYZ's HSE values and beliefs are discussed with potential employees

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	0	0.00	0.00	0.00
	Disagree	2	5.71	5.71	5.71
	Neutral	11	31.43	31.43	37.14
	Agree	18	51.43	51.43	88.57
	Strongly Agree	4	11.43	11.43	100.0
	Total	35	100	100	

The analysis of responses regarding XYZ's HSE values and beliefs reveals varied perceptions among potential employees. Notably, none explicitly opposed XYZ's HSE values, while a small minority (5.71%) expressed skepticism or reservation, and the largest portion (31.43%) remained neutral, suggesting a need for clarity. However, a majority (51.43%) aligned with XYZ's HSE principles, indicating general acceptance and 11.43% strongly supported these values, demonstrating high endorsement. While the overall positive reception is encouraging and suggests good cultural alignment, the significant portion of neutral responses highlights potential ambiguity or uncertainty, which could be addressed through more transparent communication during interviews. To strengthen the commitment to HSE principles and foster a cohesive culture, XYZ should address neutrality and disagreement by effectively communicating and reinforcing these values, enhancing understanding and engagement through continual dialogue and education.

B. The H.R. Department Hires the Best Employees for this Company

Analysis of responses regarding H.R.'s hiring practices reveals varied perceptions among respondents, indicating a range of perspectives on the effectiveness of their practices. Firstly, a minority (20.00% combined) expressed dissatisfaction or skepticism, with 5.71% strongly disagreeing and 14.29% disagreeing with H.R.'s ability to select the best candidates consistently. The substantial neutral response (42.86%) suggests uncertainty or mixed feelings, potentially stemming from a lack of visibility into the hiring process or inconsistent experiences. However, a segment of respondents

(31.43% agree, 5.71% strongly agree) express confidence in H.R.'s capability to hire top talent, highlighting a level of support for their practices. These responses underscore the need for clarity and consistency in H.R.'s hiring processes to address concerns and build stakeholder trust.

Table 57
The HR department hires the best employees for this company

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	5.71	5.71	5.71
	Disagree	5	14.29	14.29	20.00
	Neutral	15	42.86	42.86	62.86
	Agree	11	31.43	31.43	94.29
	Strongly Agree	2	5.71	5.71	100.0
	Total	35	100	100	

20. Conclusion

Effective employment requires continuous skill development and prioritizing health and safety. Analysis of safety management practices at Company XYZ reveals insights: majority of permanent employees (71.43%), 28.57% internal contractors, and a notable gender gap (85.71% male). Roles often involve fieldwork (71.43%) and hazardous substances (45.71%), necessitating tailored safety protocols. Assessment via Wachter & Yorio's (2014) framework shows encouraging employee engagement: 65.71% feel involved in safety, 68.6% are empowered to halt unsafe work, and 62.9% contribute to incident solutions. While pre- and post-work HSE meetings are valued, 42.86% express dissatisfaction with post-work assessments. Communication on HSE instructions is moderate (54.29% acknowledge formal updates), and accident investigation practices generally yield positive results. However, improvements are needed to address identified hazards effectively. While XYZ demonstrates a commendable safety commitment, refining communication, post-work audits, and risk assessments are vital. Eliminating gender and employment inequalities is crucial for holistic safety measures, adopting a zero-accident philosophy and promoting learning cultures. Despite OHSMS implementation, effectiveness remains challenging, urging comprehensive assessment frameworks as Mohammadfam et al. (2017) suggested.

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