

eISSN: 2581-9615 CODEN (USA): WJARAI Cross Ref DOI: 10.30574/wjarr Journal homepage: https://wjarr.com/



(REVIEW ARTICLE)



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World Journal of Advanced Research and Reviews, 2023, 18(02), 356-360

Publication history: Received on 29 March 2023; revised on 07 May 2023; accepted on 09 May 2023

Article DOI: https://doi.org/10.30574/wjarr.2023.18.2.823

Abstract

Safety assurance is an effort that needs to be considered by the company. This activity needs attention because all of the company's operational activities carry safety and health risks to workers, the community, and the environment. With safety assurance, companies can guarantee that a product, program, organization, or system achieves acceptable or tolerable safety. Therefore, the purpose of writing this article is to find out the implementation of safety assurance as a guarantor for the application of safety programs at PT. X. The method used is descriptive by describing the implementation of safety assurance at PT. X. Data collection was carried out using observation, and review of related documents. The results show that PT. X has carried out safety assurance efforts by establishing, maintaining, and implementing safety assurance through several activities and programs. Safety Assurance PT. X is stated in the safety manual document as well as several other derivative documents.

Keywords: Safety Assurance; Safety Management System; Occupational Health and Safety; Oil and Gas

1. Introduction

Occupational Health safety can be interpreted as efforts aimed at protecting the safety and health of workers by controlling potential hazards in the workplace environment (1). With OHS, the safety of workers, other people in the workplace, surrounding communities, equipment, production materials, environmental sustainability, and production processes can be maintained. Meanwhile, occupational health efforts are efforts to obtain the highest degree of health by preventing disease in workers and creating a healthy environment.

Entering the development of the era of global industrialization as it is today, industrial competition to win over markets at the regional, national and international market levels, is carried out by every company in a competitive manner. Industrialization is inseparable from human resources, in which every human being is expected to become a ready-to-use resource and be able to help achieve company goals in the fields needed (2).

Recognizing the importance of Occupational Health and Safety aspects, the government issued Law Number 1 of 1970 concerning Work Safety which aims to protect workers and other people in the workplace (3). Based on Law No. 1 of 1970 concerning Occupational Health, the purpose of implementing OHS in the workplace is to protect and guarantee the safety of workers and other people in the workplace, ensure production resources can be used safely, and increase productivity.

Occupational Health dan Safety issues must be handled properly and seriously by the company, starting from the top management level to the workers. Discussion of Occupational Health dan Safety is not only the matter of the HSE Officer but is the business of everyone in the company. OHS affairs are important because OHS is a culture that must be instilled in all workers to always behave healthily and safely at work.

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Safety Assurance activities are the core of the Safety Management System which functions to monitor compliance and performance and manage change (4). Safety Assurance includes systematic and continuous monitoring and recording of safety performance, as well as evaluating safety management processes and practices (5). Safety Assurance is all planned and systematic actions necessary to provide reasonable assurance that a product, program, organization, or functional system achieves acceptable or tolerable safety (6).

Safety Assurance is a way for the company to show that it has implemented an SMS in the form of a safety program. In general, safety assurance in a safety management system includes several activities such as safety surveys, safety monitoring, and safety records (7).

Various business processes carried out by the company can have an impact on the safety of its workforce. Therefore, safety assurance is needed for the sustainability of employee activities in a company. This is intended so that all activities within the company can run smoothly without any work accidents that may occur at any time to workers.

Companies need to understand the importance of safety assurance because its implementation can ensure that the safety program is running as it should and that there are no irregularities. It's not just planning or concepts that are mature, but can benefit all parties from every managerial level.

PT. X is one of the companies engaged in oil and gas exploration and production in East Java, Indonesia. As one of the oil and gas companies, PT. X has risks related to safety, health, and the environment that can endanger workers and the community. As a form of commitment to protecting health and safety, PT. X implements safety assurance in the implementation of its operational activities. The purpose of writing this article is to find out the implementation of safety assurance as a guarantor for the application of safety programs at PT. X.

2. Method

This article is a descriptive article regarding the implementation of safety assurance at PT. X. The steps taken in writing this article are: identifying the form of safety guarantee and then identifying how it is implemented at PT. X. The data collection method in this article was carried out through field observations and review of documents related to safety assurance at PT. X. This data collection was carried out in November-December 2022.

3. Result

Implementation of Safety Assurance at PT. X

To implement a safety management system, PT. X stipulates safety assurance contained in the safety manual and several other derivative documents. The following is the implementation of safety assurance at PT. X.

Element	Implementation of Safety Assurance
Element 1: Organization, Leadership, Roles, and Responsibilities	There is a commitment and company policy by placing HSE as the basis for determining company decisions
	There is a procurement budget and work program
	There are health and safety aspects in each Key Performance Indicator for all workers in all departments
	There is a performance appraisal and follow-up of OHS implementation in the form of an OHS management review
	There is a company OHS committee
	There is an OHS coordinator in each department
Element 2: Process Safety Information	There is a Process Safety Information procedure along with other related documents
	There is alignment and control of process safety information documentation in each department

Table 1 Implementation of Safety Assurance at PT. X

	There are approval procedures of procedures and implementation of procedural socialization
Element 3: Hazard Identification and Risk Assessment	Existence of Hazard Identification and Risk Assessment Procedures and other documents
	There is an updated risk register
	There is a team tasked with identifying hazards
Element 4: Management of Change and Documentation	Availability of Management of Changes Procedures
	There is a management review regarding changes to the company's OHS
Element 5: Operating Procedures and Working Safety Procedures	There are working safety procedures, work operating procedures, PPE procedures, OHS sign procedures, and other procedures related to production
	Pre-job meeting and safety meeting
	Placing Operating procedures and Working Safety Procedures in the workspace of each department
	Periodic reviews are carried out on Operational Procedures and Working Safety Procedures
Element 6: Training, Personal Competence, and Communication	There is a training need program to meet the needs of competent workers
	There are monthly safety meetings held to discuss information about the latest issues regarding HSE
Element 7: Quality Assurance, Mechanical Integration, Regulatory Compliance, and Environmental Aspects	There is a quality assurance program to ensure that the fabrication and construction processes meet requirements and standards
	There is a mechanical integration procedure to ensure that system integration is maintained from the start of operation until the end of the equipment's economic life
	There is certification from a 3rd party that the fabrication and construction processes meet the requirements and standards
	Perform management, monitoring, and reporting of environmental impacts
Element 8: Pre-	There is a Pre-Commissioning review procedure
Commissioning Safety	Formation of a team for pre-commissioning and commissioning
Review	Conduct a review of the construction before the operation
Element 9: Emergencies and Concern for Society	There are emergency procedures, and first aid procedures.
	First aider team and fire team were formed and training was given
	There are emergency drill simulations, fire drills, and other simulations
	Equipment inspection and maintenance of emergency response equipment
	Implementation of CSR activities
Element 10: Work Accident/ Incident Investigation	There is a procedure for reporting and investigating work accidents
	There is a green card filling
	Conduct stand-down meetings to communicate the results of accident investigations as lessons learned
Element 11: Safety Management System Audit	There are of work environment monitoring procedures, and health supervision procedures
	There is an internal auditor team to conduct an audit of the Safety Management System
	There is reporting of audit results
	There is an inspection of the sources of hazard
Element 12: Contractor Work Safety Management	There is a contractor safety management procedure through the Contractor Safety Management System
	There is training for contractors to achieve OHS performance

4. Discussion

The Occupational Health and Safety Program is a system designed to ensure good safety for all personnel in the workplace so as not to suffer injuries or cause illness in the workplace by complying with/obeying occupational health and safety laws and regulations, which is reflected in changes in attitudes towards safety at work (8). PT. X has designed and created Occupational Health and Safety programs to protect his workforce against possible hazards that may arise in the work environment.

To guarantee that the safety program that has been made by the company is running as it should and there are no deviations, the company needs to establish safety assurance measures. With this safety guarantee, the quality of the Occupational Health and Safety program can be maintained and can protect workers from accidents or occupational diseases. Safety assurance can benefit the company because accidents can be minimized so that the company does not need to spend to overcome the impact of the accident (9). PT. X has made efforts to guarantee safety as outlined in the corporate governance system.

Based on the results of observations, and document review, PT. X. has created and implemented safety assurance efforts to ensure that safety risk is controlled which can be seen in table 1 above. The company has created and maintained a safety assurance process as a guide to ensure the company's operational activities run smoothly. In addition, the company has also created and maintained change management as part of safety assurance.

The company has conducted monitoring and measurement of safety implementation in the form of safety audits, safety inspections, safety reviews, and internal safety investigations. In addition, the company ensures that all personnel involved in each of the company's operational activities are experts in their fields, this is evidenced by the sharing of knowledge and certification related to work safety competencies.

In safety assurance activities, PT. X creates maturity levels. The maturity level contains standards that will later be met and achieved according to their implementation. Maturity level is a qualitative model that describes the current progress of implementation to assess the adequacy and compliance of the program that has been announced. However, in this article, the discussion on maturity level is not carried out further.

In addition to conformity findings, the authors found several discrepancies. on the implementation of safety assurance at PT. X. In 2021 there is a change in the organizational structure at PT. X. However, until now, several company documents have not been updated according to the latest structure. Therefore, it is necessary to review procedures, forms, work instructions, and checklists by the commitment to element 4 (Management of Change). In addition, it was also found that inspections and management reviews related to OSH were not carried out routinely. Therefore, it is necessary to schedule management review meetings regularly to evaluate the performance and achievements of the OSH program and detect any irregularities or changes.

5. Conclusion

PT. X as one of the oil and gas exploration and production companies has committed to creating, maintaining, and carrying out safety assurance efforts as a guarantor for the implementation of safety programs. Safety Assurance PT. X is stated in the safety manual document as well as several other derivative documents. Application of safety assurance at PT. X corresponds to 12 audit elements for a total of 41 forms of safety assurance.

Compliance with ethical standards

Acknowledgments

Praise the author goes to God Almighty who has bestowed His grace and guidance, so that the writer can carry out research at PT X. This research was conducted as a final assignment to fulfill the author's responsibilities as a Public Health student. In carrying out this activity, the author received a lot of support and guidance from various parties. Therefore, the author's thanks go to Dr. Noeroel Widajati, S.KM, M.Sc, the entire PT X HSE team, the author's parents, fellow students, and other parties that the author cannot mention one by one.

Disclosure of conflict of interest

There is no conflict of interest as agreed to the content of this research.

Statement of ethical approval

This study did not involve the use of animal/human subjects

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