

The Analysis of the ISO 45001: 2018 Implementation Towards the Performance of Occupational Health and Safety Management System (OHSMS) at ABC Inc.

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ABSTRACT

ABC Inc. is a company in field of total services for the palm oil mill industry, as a supplier of various instruments and equipment for factories and receives repair services for various palm oil mill instrumentations, such as boilers, hydraulic systems, heavy equipment, and generator sets. The company itself has been implemented and has been certified for ISO 45001: 2018. The purpose of this research was to identify how the impact of ISO 45001: 2018 implementation on the employees of ABC Inc. in the technical operations division. Then, the fishbone diagram analysis method was used in this research to determine whether the process had been within the limits of statistical control and had been within the limits of specification or tolerance. In conclusion, there were obstacles to fulfilling the Occupational Health and Safety Management System (OHSMS) Process clause such as workers who did not fully have an awareness of the importance of running the company's OHSMS, lack of manpower in the HSQ/ISO department, and had not fully identified incidents, non-conformity and corrective actions for several company environments.

Keywords: ISO 45001: 2018, OHSMS, Performance Analysis, Company, Employee

INTRODUCTION

Today the issue of Occupational Health and Safety (OHS) has become a problem that deserves more attention in employment. Data from the Indonesian Social Security

Administration states that there are numerous of work accidents reported was 123,041 cases in 2020, while in 2021 it reached 173,105 cases. This increase in the number of work accident cases shows that the problems and implementation of Occupational Health and Safety (OHS) in Indonesia are still far from what is expected with existing standards.



Figure 1 Number of Work Accident Reports in Indonesia

ISO is an international standard-setting body consisting of representatives from the national standardization bodies of each country (ISO, 2018). The standard issued by ISO which covers the Occupational Health and Safety Management System (OHSMS) is ISO 45001:2018. Companies that have implemented the Occupational Health and Safety Management System will be able to identify the effectiveness and efficiency of the performance of the workforce that

implements the Occupational Health and Safety Management System.

ISO 45001:2018 is the standard for implementing the Occupational Health and Safety Management System pattern, in addition to supporting the business aspect, ISO 45001:2018 also explains the status of Occupational Health and Safety (OHS) from the company to the workforce (Aditya, 2019). With companies that have implemented and have ISO 45001:2018 standards, hence the study discover how is the performance of ABC Inc. with standards that have been determined from ISO 45001:2018.

MATERIALS & METHODS

In this study, the analysis used to determine whether the process has been within the limits of statistical control and is within the limits of specifications or tolerances (Agus, 2016).

The variables contained in this study are:

- a. The independent variable in this study is ISO 45001:2018.
- b. The dependent variable in this study is the implementation of ISO 45001:2018 ABC Inc.

RESULT

From the recapitulation of the questionnaire, information can be seen that there are several clauses that have been well planned and implemented by the company and there are also several other clauses that have been planned but have not been implemented properly. The following is a list and the results of the questionnaire recapitulation of each clause.

1. Clause 4 (Understanding the company)

ABC Inc. has planned and implemented clause 4 well, it can be seen from the high awareness of employees about the scope of the company's business. The management has identified various internal and external problems (4.1) that the company will face in its business.

For internal problems, ABC Inc. has awareness and has compiled various

documents related to internal issues such as the Company's Organizational Structure, roles and responsibilities of each management or process floor, identification of hazards or risks that can occur in the company and the provision of a work environment and its control as contained in the Management Procedure document. Cleanliness of the Work Environment (Nabil, 2014).

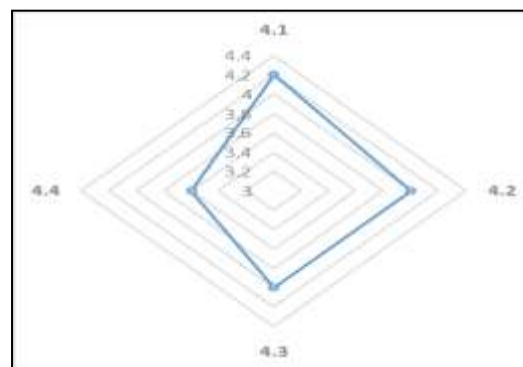


Figure 2 Spider Chart Application of Clause 4

2. Clause 5 (Leadership)

Clause 5 has been fulfilled and implemented well at ABC Inc. This is related to the high awareness of top management in paying attention to and continuous improvement of OHSMS. The importance of an effective OHSMS and compliance with OHS has been communicated to all technicians and technicians already have the awareness to maintain, implement and participate in developing OHSMS by recording the Job Safety Analysis form each technician finishes with their respective jobs (Suyadi, 2009). ABC Inc. can maintain and continue to develop OHSMS with various findings in the Job Safety Analysis.

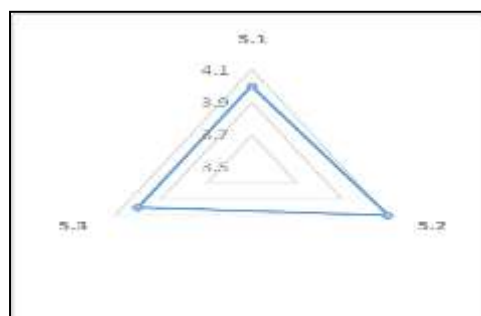


Figure 3 Spider Chart Application of Clause 5

3. Clause 6 (Planning)

The ABC Inc. has planned the OHSMS based on the problems specified in clause 4.1, the requirements in accordance with clause 4.2 and the scope of the OSHMS itself from clause 4.3. ABC Inc has considered the prevention of hazards, risks and opportunities for OSHMS (clause 6.1) such as identification of waste in the Hazardous Waste List (clause 6.1.2) or other common problems and their handling on the Non-conformance List and Corrective Actions to various legal requirements for work that has risks and hazards. hazards (clause 6.1.3) such as Hot Work Permit, Confined Space Entry Permit, Excavation Permit or Work Permit at Altitude (ISO, 2018).

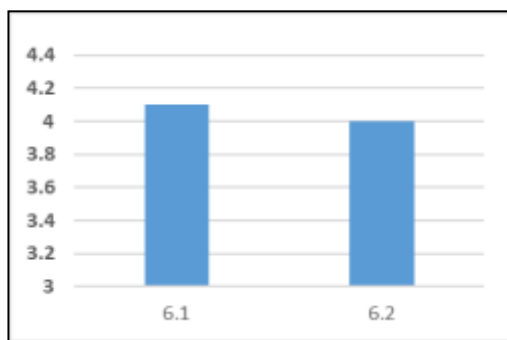


Figure 4 Column Chart Application of Clause 6

The company has determined the plan to achieve the OSHMS target (clause 6.2) well. ABC INC.has maintained and retained documented information about its OHS objectives and plans to achieve them.

4. Clause 7 (Supporting)

ABC Inc. has been consistent in fulfilling and implementing clause 7. The company has determined and provided various key resources needed for the company's operational activities in accordance with OHSMS. The company has determined the requirements and provided qualified manpower to support OHSMS (clause 7.1.2), various supporting infrastructure needed for operational processes (clause 7.1.3) and a good working environment.

In terms of competence (clause 7.2), the company has determined the competencies needed for prospective employees and employees in carrying out related work and ensures that these personnel are indeed competent from educational, training and experience backgrounds and maintains information on related documents as evidence of employee competence (clause 7.2. d) (Rifa'i, 2013). ABC Inc. has also conducted various trainings to raise awareness of the workforce about the importance for organizations to support, maintain and improve OHSMS such as identification of incidents and results of investigations related to the employees themselves in the Procedures for Investigation of Occupational Incidents and Accidents and Procedures for Handling Accidents and Health Examinations (Fathoni, 2014).

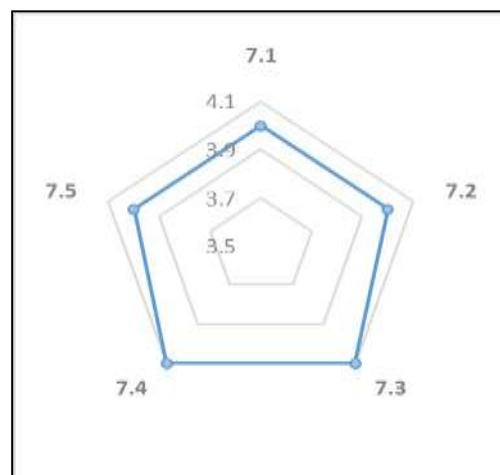


Figure 5 Spider Chart Application of Clause 7

Management of ABC Inc. has ensured that the OSHMS documents required for ISO 45001:2018 have the appropriate identification and description (clause 7.5.2) and the documents have been previewed and approved for conformance. Documentation of information needed for OSHMS has also been ensured that it is controlled and ready to be used in the Master Document List

5. Clause 8 (Operational)

ABC Inc. has planned, implemented and maintained the processes needed to meet

the requirements of the OHSMS and carried out the actions specified in clause 6 with a control structure in accordance with ISO 45001:2018 (ISO, 2018). The company has also developed communication for various processes with contractors in order to identify OHS hazards and risks from contractor operations and their effects on the company or company operations and their effects on contractors (clause 8.4.1.2) (Score, 2013). The company has ensured that the contractor has complied with the requirements of the company's OHSMS and regulated in the Contractor's Statement Letter and Contractor's OHS Induction.

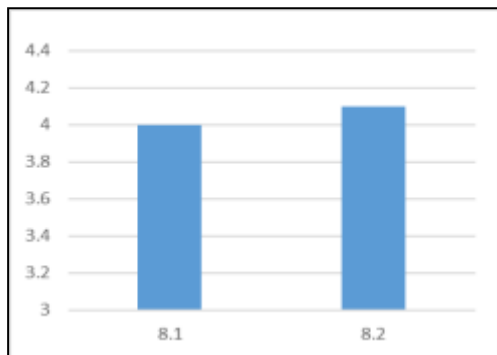


Figure 6 Column Chart Application of Clause 8

6. Clause 9 (Performance Evaluation)

ABC Inc. has defined what needs to be monitored and measured for analysis and evaluation (Samuel, 2011). However, ABC Inc. has not fully implemented this clause with the finding that the training activities that have been carried out by HRD have a deficiency in the absence of recordings of various evaluations of the training carried out such as Personal Effectiveness Development on April 8, 2020 and Practical Negotiation Skills on July 10, 2020 (clause 9.1). Customer satisfaction cannot be fully measured by not fulfilling the number of feedbacks from the Customer Satisfaction Survey, so the company cannot fully evaluate for the improvement of OHSMS.

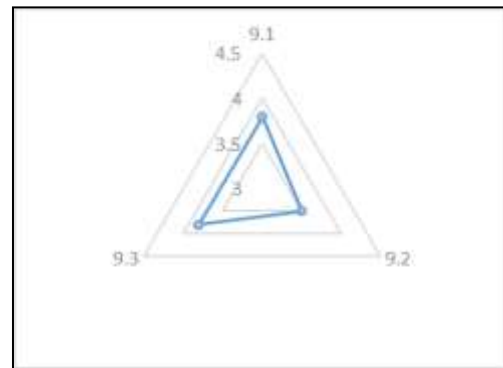


Figure 7 Spider Chart Application of Clause 9

7. Clause 10 (Improvement)

In this clause the company must have determined the opportunities that can be used to improve performance evaluation (clause 9) and the actions needed to achieve the OHSMS quality objectives (Simanjuntak, 2011). The ABC Inc. has not fully made improvements both in corrections, improvement improvements, continuous improvements and re-organizations (clause 10.1).

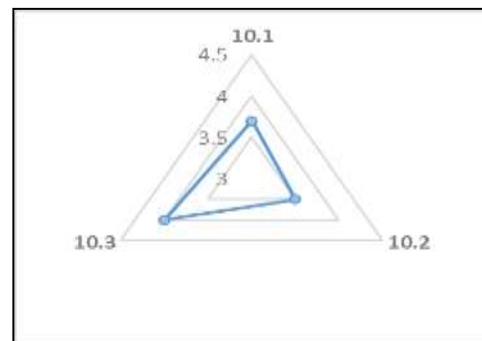


Figure 8 Spider Chart Application of Clause 10

The ABC Inc. has developed and implemented various processes to determine and manage work inconveniences or potential incidents. However, the company has not fully maintained the predetermined OHSMS (clause 10.2), the management has not fully evaluated the participation of employees (clause 5.4) and the involvement of relevant interested parties such as investigation activities, determining the causes and determining solutions for inconvenience at work. However, in addition to the lack of proper implementation of clauses 10.1 and 10.2, management has implemented steps to support the sustainability and effectiveness

of OHSMS by improving the performance of OHSMS, enhancing a culture that supports OHSMS based on an evaluation of the OHS Annual Report (clause 10.3) (Hermawan, 2014).

DISCUSSION

The following is a discussion of several clauses that have not been fully implemented by ABC Inc.:

1. Clause 4.4 (OHSMS Process)

In this clause, the company must establish, implement, maintain and continuously improve the OHSMS including the various processes required and their interactions. ABC Inc has not fully implemented clause 4 properly. The year 2020 is the 8th year in which the company has been certified and implemented the international OHSMS standard from OHSAS 18001 to the transition to ISO 45001:2018, but the company has not yet carried out change management for the evaluation of the already running OHSMS. The absence of change management by the company is caused by the absence of activities to discuss the review and evaluation of OHSMS by the HSQ/ISO (9.2).

In terms of documentation, the company does not yet have complete documentation to maintain the sustainability of OHSMS. There is no complete record for various training activities that have been carried out by the company with 3rd party Proactive Management Services on Personal Effectiveness Development training on April 8, 2020 and Practical Negotiation Skill on July 10, 2020 and records related to the results of monitoring and review the company's OHSMS process. Recorded documents are needed as input in the management process for reviewing and evaluating the company's OHSMS (9.3) but the company has not yet fully implemented the mandatory OHSMS recording document.

The ABC Inc also has not compiled various documents for corporate

OHSMS communication such as Toolbox Meeting. This Toolbox Meeting is an OHS counselling activity related to the work to be carried out before the work is carried out. This Toolbox Meeting provides information regarding the introduction and reminder of all types of procedures from K3 so that a job can run in accordance with applicable regulations. With the ongoing recording of documents such as Toolbox Meetings, it will help employees to always maintain and evaluate unexpected risks in any related work.

In terms of manpower, employees of ABC Inc have not yet fully realized the importance of running a company's OHSMS. Company employees still have the mindset that ISO 45001:2018 and OHSMS are only limited to documentation needs by the company and do not affect the work environment of these employees. While the main purpose of ISO 45001:2018 and OHSMS is to protect the occurrence of work accidents, occupational diseases, and damage to company assets, where these three points are those who directly interact with employees. Lack of awareness by employees of the company. This is caused by a lack of counselling or training on the importance of awareness of ISO 45001:2018 and OHSMS by the company's HSQ/ISO department. This also affects the lack of involvement by employees in the evaluation of the company's OHSMS. Employees as parties who are directly affected by the company's OHSMS are expected to provide constructive critical responses and can be taken into consideration for OHSMS evaluation.

The status of new employees in the company also holds back the level of awareness of OHSMS from employees. In 2019 alone ABC Inc has recruited 9 new employees for the Management Trainee program in 2 batches (Management Trainee Batch III and

Management Trainee Batch IV). Employees who take part in the Management Trainee program are candidates who have basically just completed their studies and do not have work experience so that all Management Trainee members do not yet have awareness of the importance of ISO 45001:2018 and OHSMS for companies. The status of new employees in the company also holds back the level of awareness of OHSMS from employees. In 2019 alone ABC Inc has recruited 9 new employees for the Management Trainee program in 2 batches (Management Trainee Batch III and Management Trainee Batch IV). Employees who take part in the Management Trainee program are candidates who have basically just completed their studies and do not have work experience so that all Management Trainee members do not yet have awareness of the importance of ISO 45001:2018 and OHSMS for companies. Materially, the company has not provided complete OHS facilities for employees working in the technical field. There has been no procurement from management for the completeness of Personal Protective Equipment (PPE) for welding work such as aprons and welding face masks or for warehouse operational work such as body harnesses or various gloves for various jobs. According to OSHA, PPE is equipment used to protect workers from accidents or illnesses caused by contact or exposure to potential hazards in the work environment. Completeness of PPE will be able to help companies to help minimize risks and potential hazards in the work environment. The warning signs at the company's OHS (Warning Sign) are also not completely complete, such as at the location of the outer warehouse. The companies outside warehouse does not have a complete warning sign such as a warning for heavy objects or objects that fall from a

height or there are several points in the warehouse location that have puddles of water that do not have a slippery work area warning.

From the aspect of the work environment, this company has not fully met the criteria for a good and healthy work environment. In terms of lighting, dust levels, room height and lack of air ventilation in workshop rooms for repair work activities by technicians, to warehouse rooms that do not have air ventilation with dust conditions that accumulate in stock goods. The health of the work environment is one of the main concerns of OHSMS, with the current condition of the company causing the risk of various diseases such as URTI (Upper Respiratory Tract Infection) from dusty working conditions.

2. Clause 9.1 (Monitoring, Measurement, Analysis and Evaluation)

Monitoring, measurement, analysis and evaluation activities are very important for management so that the company can review the extent of implementation and consistency of the company in maintaining and improving the performance of the implemented management system. ABC Inc. itself has not fully implemented the monitoring, measurement, analysis and evaluation actions on the company's OHSMS with minor findings.

In terms of manpower, in terms of recruitment of workers, the company has not carried out supervision on the health of the candidate for the company's workforce, one example of supervising the health of candidate workers is the medical check-up activity. ABC Inc currently has not compiled and carried out supervision on the company's employee candidates with medical check-ups. The company requires medical check-up activities for labour candidates so that the company can

supervise labour candidates who will work at ABC Inc does have a history of certain diseases that can interfere with the performance of the workforce on its operational floor. For example, for workers in the warehouse department, the HRD department is expected to choose candidates who do not have a history of ARI disease because the warehouse building is a relatively dusty work environment compared to other work environments.

The health level of the workforce has a major influence on performance on the operational floor itself. To maintain health, it is necessary to anticipate and prevent the health conditions of the company's workforce. One of the preventive measures against the risk of occupational disease is the provision of periodic health checks for workers

3. Clause 9.2 (Internal Audit)

Auditing is a systematic activity, an independent and documented process that aims to obtain audit evidence and evaluate it objectively to measure the extent to which the audit criteria have been met (ISO 45001:2018, p. 7). Until this research was carried out, ABC Inc. has not been able to carry out internal audit activities by the company's HSQ/ISO. The company has decided to make budget cuts by disabling the company's Internal Audit department in 2020 due to the impact of the Covid-19 pandemic.

Management has prepared a contingency plan to anticipate delays in internal audit activities due to vacancies in the internal audit department by changing the internal audit organizer to the HSQ/ISO department. However, another obstacle comes back to the lack of manpower in the HSQ/ISO department, there is no representative from the HSQ/ISO department in the company's head office to be able to carry out internal audit activities.

Audit activities have also not been carried out properly because the company has not received complete documents such as the Customer Satisfaction Survey. Companies can develop various plans for evaluation with sufficient Customer Satisfaction Survey data. The root of the problem of the lack of Customer Satisfaction Survey data is the lack of approach by the Marketing department with the company's customers. This lack of awareness by members of the Marketing department is also caused by the incomplete and in-depth training on OHSMS needs for companies by management.

4. Clause 9.3 (Management Review)

Management review is a step from top management to review the extent to which the performance of the management system is being implemented by the company. The company has not been able to carry out the OHSMS review activities by management effectively with incomplete data input that will be considered for evaluating the company's OHSMS performance. The problem with incomplete data that will be processed by management for review is to return to the lack of counselling or training on the implementation needs of ISO 45001:2018 and OHSMS that apply to the company.

Management has not been able to review the performance of OHSMS with the 2020 internal audit activity not yet running. Another supporting thing that the company has not provided for management review is the recording of training results from several trainings that the company has conducted by inviting 3rd parties. Information on the performance of OHSMS is also not yet available for management review with the monitoring, measurement, analysis and evaluation of OHSMS (9.1) activities not yet implemented. The

results of the management review in 2019 also have no evidence of recorded management review activities and recorded evidence of the results of the review evaluation that management plans for 2020.

5. Clause 10.2 (Incident, Non-conformance and Corrective Action)

ABC Inc. has not fully identified incidents, non-conformances and corrective actions for several corporate environments. One example of an incident that occurred in the company was found in the finding of an error in the manufacture of concrete tiers in the company's environment which caused a puddle of water in the work area in the warehouse. This can pose a risk of work accidents for workers who work in the company's warehouse area and the lack of a warning sign to warn of a puddle of water in the area.

Another example is the lack of personal protective equipment for container unloading activities by the warehouse, such as safety glasses and masks to protect the eyes and keep out dust that interferes with employee breathing during unloading. Examples of these findings are not recorded in the incident and non-conformance identification documentation. In the absence of incident and non-conformance identification data, the management has not been able to determine the procurement of repairs or corrective actions to deal with these incidents and non-conformities. In terms of workers who operate directly in the field, technical experts have not fully explored the identification of risks and proper handling of the various jobs that will be carried out by technicians. Job Safety Analysis carried out by technicians contains basic identification matters and requires a more in-depth analysis to be able to identify what treatment is appropriate for various risks that have the potential to cause occupational

diseases. This is also caused by the lack of OHSMS training by the HSQ/ISO and the absence of Toolbox Meeting (4.4) activities for each field work.

CONCLUSION

Some of the things that hinder the fulfilment of the clause in the OHSMS Process are workers who do not fully realize the importance of running a company's OHSMS, the company has not provided complete OHS facilities for employees working in the technical field, the operational office has not fully met the criteria for a good and healthy work environment, and have not compiled various documents for OHSMS communication.

ABC Inc. currently has not compiled and carried out supervision on candidate company employees with medical check-ups, has not been able to fully carry out monitoring, measurement, analysis and evaluation activities of OHSMS with the condition of a lack of manpower in the HSQ/ISO department. ABC Inc. has not fully identified incidents, non-conformances and corrective actions for several corporate environments. Workers who operate directly in the field and technical experts have not fully explored the identification of risks and the proper handling of the various jobs that will be carried out by technicians.

Conflict of Interest: None

REFERENCES

1. (ISO), I. S. (2018). *ISO 45001 Occupational Health and Safety*.
2. Aditya, Y. (2019). Penerapan Sistem Manajemen Keselamatan dan Kesehatan Kerja (SMK3) Pada Perusahaan Konstruksi di Pontianak Berdasarkan OHSAS 18001. *JeLAST : Jurnal PWK, Laut, Sipil, Tambang*, 6(3), 1-4.
3. Agus. (2016). *Manajemen Organisasi*. Mataram: IAIN Mataram.
4. Fathoni, A. (2014). *Organisasi dan Manajemen Sumber Daya Manusia*. Jakarta: Rineka Cipta.
5. Hermawan, L. (2014). *Manajemen Resiko Kecelakaan Kerja Berdasarkan OHSAS*

- 18001:2007 di Subdep Perkakas PT Pindad Persero. *Jurnal Ilmu Manajemen*, 11(3), 61-82.
6. Nabil, F. (2014). *Pengaruh Implementasi Sistem Manajemen Kesehatan dan keselamatan Kerja (SMK3) Terhadap Kinerja Karyawan PT Komatsu Indonesia*. Jakarta: Universitas Indonesia.
 7. Nasional, B. S. (2020). *Mengupas Buku Sistem Manajemen Keselamatan dan Kesehatan Kerja Berbasis SNI ISO 45001:2018*. Tangerang Selatan: Badan Standarisasi Nasional.
 8. Rifa'i, M. F. (2013). *Manajemen Organisasi*. Bandung: Citapustaka Media Perintis.
 9. Samuel, H. (2011). Pengaruh Sistem Manajemen Mutu ISO Terhadap kinerja Karyawan Melalui Budaya Kualitas Perusahaan PT Otsuka Indonesia. *Jurnal Manajemen dan Kewirausahaan*, 1(2), 162-176.
 10. Score, I. (2013). *Keselamatan dan Kesehatan Kerja Sarana untuk Produktivitas*. Jakarta: International Labour Organization.
 11. Simanjuntak, P. (2011). *Manajemen dan Evaluasi Kinerja*. Jakarta: Universitas Indonesia.
 12. Suyadi, P. (2009). *Kebijakan Kinerja Karyawan*. Yogyakarta: BPFE.
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