

Evaluation of Implementation of Occupational Health Safety Management System (OHSMS) in PT. X, Magetan, East Java

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Abstract: The implementation of health and safety management system (OHSMS) in Indonesia is mandatory as stated in Government Regulation No. 50 of 2012 on the implementation of OHSMS as a form of occupational health and safety (OHS). PT X as a company engaged in the field of sugar industry is required to apply OHSMS because it meets the criteria as a company with the number of employees of more than 100 people and having a high risk. This study aims to determine the value of implementation of OHSMS in PT X. This research was conducted at PT X on Jl. Bhayangkara No.1, Kawedanan District, Magetan Regency, East Java Province. This research used the qualitative method, while the data collection was done by interview and OHSMS assessment form to the management representative and company employees. The analysis used was descriptive analysis on the application of OHSMS with 12 elements described in 166 criteria. The evaluation results for the value of the success rate of OHSMS application in PT X with the details of development and assurance of the implementation of commitment (81%), development and documentation of occupational health and safety plan (93%), design control and review (100%), document control (86%), product purchasing and control (67%), security work based on OHSMS (83%), monitoring standard (76%), reporting and repair deficiencies (100%), Material management and displacement (100%), data collection and usage (100%), OHSMS audit (67%), and skill and ability development (93%). Thus, in total the application of OHSMS belong to the satisfactory level of achievement with 86% of 85-100% needed to achieve the level, which as per the definition deserves to be certified and to obtain the golden flag.

1 INTRODUCTION

Indonesia categorized as a rich country in term of natural resources with a significant number of industries. From a variety of industries in Indonesia, there are industries that use complex technologies and processes, such as the sugar industry. In line with the complexity of the industry, there are complete hazards and high risks attached, and occupational health (OHS) for workers has always existed.

From the data of the Social Security Administering Agency (BPJS) of Employment, until the end of 2015, there had been 105,182 cases of occupational accidents which 2,375 cases resulted death. Then from the beginning of January 2016 to November 2016, there were 101,367 cases resulting in 2,382 death cases (www.bpjsketenagakerjaan.go.id). Based on the

data, it can be said that the number of occupational accidents in Indonesia is still quite high.

To reduce the number of work accidents, the company is required to be able to establish and implement a health and safety management system (OHSMS) in accordance with article 87 of Law No. 13 of 2003 on Employment. Meanwhile, the implementation guide is contained in Government Regulation No. 50 of 2012 on the implementation of occupational safety and health management system (Efendi, 2005). The purpose of the implementation of OHSMS is to create an OHS system in the workplace by involving the elements of management, labor, conditions, and an integrated work environment in order to prevent and reduce occupational accidents and occupational diseases, as well as the creation of safe, efficient, and effective workplaces (Ramli, 2013).

PT X is a company engaged in the sugar industry, which was established in 1890. In 2016, PT

X ground sugar cane on an area of 2,957,937 ha (sugar cane itself comprised of 211,506 hectares and community sugar cane comprised of 2,746,431 ha) Meanwhile, for the year 2017 PT X grounded sugar cane with an area of 3,500,000 Ha (500,000 Ha of self-owned sugar cane, and 3,000,000 ha of community sugar cane) with an average total production of 365,668.2 tons annually. The PT X sugar industry involves a total of 2000 workers in every process of milling. The main process in the production activity is a mechanical process using automatic machining, while the side process is the improvement process.

Government Regulation No. 50 of 2012 Article 4, paragraph 2, points a and b state that companies are required to OHSMS government regulation where the company is "a. employing a worker of at least 100 (one hundred) persons; or b. has a high potential hazard level". PT X is a company that is required to implement OHSMS with a workforce of more than 100 people and has a high risk of work activities that are potentially causing fatal accidents in the form of fire and explosion. PT X has established and implemented OHSMS in all of its activities. Therefore, the implementation government regulation on OHSMS in PT X needs to be evaluated as per the provisions of OHSMS assessment in Government Regulation No. 50 of 2012, attachment 2, which is divided into 12 elements and 166 criteria. The percentage of fulfillment of these criteria will describe the level of achievement of OHSMS implementation in PT X.

Based on the description above, the problem of this research is how high is the level of assessment of the government regulation of OHSMS in PT X? This research was conducted to evaluate the implementation of OHSMS in PT X in reducing work accidents in its operational activities, so the level of government regulation of OHSMS implementation based on Government Regulation No. 50 of 2012 can be determined. The benefits obtained in this research are:

1. Acting as an input for company management in taking the results to improve the OHS program
2. Acting as a research material for further researchers in the field of OHSMS
3. Acting as an input in the development of Occupational Health and Safety (OHS) studies, especially in the field of OHSMS.

2 METHOD

The research was conducted using the qualitative method to understand the phenomenon by focusing more on the complete picture of the phenomenon studied in the hope of getting a deep understanding about the phenomenon. The analysis of the research was conducted descriptively.

The data was collected using observation and interview to the management and OHS experts based on OHSMS Government Regulation No. 50 of 2012 assessment form containing 166 questions. The data processing from the OHSMS assessment form used the calculation of the percentage of compliance of criteria and achievement levels, which is divided into 3 categories, namely poor, good, and satisfactory. The calculation was done using the formula of Hendri (2012) :

Table 1: Level of OHSMS implementation achievement

Company Category	Level of Implementation Achievement			
	0 – 59%	60% – 84%	85% – 100%	
Early Level (64 criteria)	Less	Good	Satisfy	
Transition Level (122 criteria)	Less	Good	Satisfy	
Advanced Level (166 criteria)	Less	Good	Satisfy	

This research was conducted at PT X, which is located at Jl. Bhayangkara No.1, Kawedanan District, Magetan Regency, East Java Province. Data retrieval was conducted for 2 days on March 15 - March 16, 2017.

3 RESULTS

Based on the results of document review, observation, and interview, the results of comparison of the comparison with total criteria on each of the OHSMS assessment elements are as follows:

Table 2: Comparison of OHSMS Criteria Compliance.

OHSMS Element	Total Criteria Per of OHSMS Element	Non Confor mity	Confor mity	Percent age of Confor mity
1	26	5	21	0,81
2	14	1	13	0,93
3	8	0	8	1,00
4	7	1	6	0,86
5	9	3	6	0,67
6	41	7	34	0,83
7	17	4	13	0,76
8	9	0	9	1,00
9	12	0	12	1,00
10	6	0	6	1,00
11	3	1	2	0,67
12	14	1	13	0,93
TOTAL	166	23	143	0,86

Table 1 summarizes the overall OHSMS audit results covering 166 criteria. From the table, it can be seen that there is a percentage for each compliance criteria.

Based on table 1 above, the following findings can be described:

1. The development and guarantee of commitment implementation were 81% accomplished with 5 non-conforming criteria and 21 conforming criteria from a total of 26 criteria.
2. The making and documenting of the OHS plan was 93% accomplished with 1 non-conforming criterion and 13 conforming criteria from a total of 14 criteria.
3. Contract design and review was 100% accomplished with 0 non-conforming criteria and 8 conforming criteria from a total of 8 criteria.
4. Document control was 86% accomplished with 1 non-conforming criterion and 6 conforming criteria from a total of 7 criteria.
5. Product purchasing and control was 67% accomplished with 3 non-conforming criteria and 6 suitabilities from a total of 9 criteria.
6. OHSMS-based working security was 83% accomplished with 7 non-conforming criteria and 34 conforming criteria from a total of 41 criteria.
7. Monitoring standard was 76% accomplished with 4 non-conforming criteria and 13 suitability from a total of 17 criteria.

8. Deficiency reporting and repair was 100% accomplished with 0 non-conforming criteria and 9 conforming criteria from a total of 9 criteria.
9. The management and displacement of materials was 100% accomplished with 0 non-conforming criteria and 12 conforming criteria from a total of 12 criteria.
10. The collection and use of data was 100% accomplished with 0 non-conforming criteria and 6 conforming criteria from a total of 6 criteria.
11. OHS examination was 67% accomplished with 1 non-conforming criterion and 2 conforming criteria from a total of 3 criteria.
12. The development of skills and abilities was 93% accomplished with 1 non-conforming criterion and 13 conforming criteria from a total of 14 criteria.

The overall percentage of OHSMS assessment in PT X can be seen in Figure 2 below:

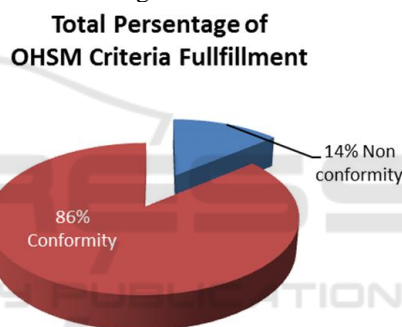


Figure 1: Total Percentage of OHSMS Criteria Fulfillment

From Figure 1 above it can be seen that PT X has fulfilled 143 criteria from a total of 166 criteria for advanced level specified in OHSMS assessment standards in Government Regulation Number 50 year 2012 with 86%, which amounts to a satisfactory level of achievement.

4 DISCUSSION

Based on the research conducted, there were 23 non-conforming criteria, namely:

1. Criteria 1.1.2

In the RDS/PK3/024 Procedure on Occupational Health and Safety Policy, it is stated that the establishment of OH&S policy is prepared through consultation process with the representative of the workforce. However, in the document search, the process of establishing the OHS policy as intended

has not been found. This is not in accordance with the procedures for establishing OHS policies, which must present the elements of the OHS Committee (P2K3) in accordance with the Minister of Manpower Regulation no. Per. 04/MEN/1987. There should be a discussion on the preparation of OH&S policy.

2. Criteria 1.2.3

In the document review of the existing job description, not all heads of work units within the company are responsible for the performance of OHS on the work unit. This criteria request that every position from the highest to the lowest has a responsibility for OHS performance on the unit it leads. OHS in the workplace is the responsibility of all people, so the duties and responsibilities of OHS in the company must be comprehensive from the highest position to the lowest (Ramli, 2013).

3. Criteria 1.2.5

In the RDS/PK3/036 Procedure on Emergency Preparedness and Response, a responsible officer has been assigned, but the officer has not received the training and get the certificate. Every officer in OHS field should have sufficient competence as evidenced by certificate of competence.

4. Criteria 1.4.5

The government regulation of Occupational Safety Expert as Secretary of P2K3 has been fulfilled as intended. However, the relevant OHS Expert has not reported its activities as regulated in Ministerial Regulation No. 02/MEN/1992 (Tarigan, 2008). According to the regulation, OHS Expert should make a report every 3 months to the Ministry of Manpower.

5. Criteria 1.4.8

In the field review, no meetings of P2K3 have been disseminated in the workplace. As per the criteria 1.4.7 of Government Regulation No. 50 of 2012, the structure of the P2K3 board must documented and informed to the workforce through the company's information boards provided in each area work or other information media.

6. Criteria 2.3.1

In the RDS/PK3/026 Procedure on Access Procedure, Identification, and Evaluation of Compliance Regulation, procedures to obtain the regulation have been established as intended. However, in document search, no document has been found. This was regarded as a mismatch because what should be done according to the procedure was not executed properly.

7. Criteria 4.1.1

In the Document Search, there are several procedures written, or the title is not the same as

written in the Document List. This indicates that the company has not been consistently in accordance with the procedures they have agreed upon. Therefore, this company must do re-checking of each document created.

8. Criteria 5.1.1

Procedure RDS/PK3/014 on Procurement of Urgent Local Goods has set out the technical specifications, and the required OH & S requirements are listed at the time of purchase request. However, from the observation, the document of purchase as intended has not been found. In this case, there are inconsistencies in the implementation of OHS, which are in the process of purchasing goods.

9. Criteria 5.1.3

The RDS/PK3/014 Procedure on the Procurement of Local Goods PG Urgent has not set out the mechanism on the OH & S requirements specified in the purchase specification to be notified to the employees who are using it. This criteria stresses that what is done in criteria 5.1.1 should be informed to the workforce.

10. Criteria 5.3.1

During the time of document review, it has not been found the record of goods and services government regulation by the customer which identified as potential hazards and assess the risks. As stipulated in OHSMS, any materials, equipment, or work performed must be analyzed at risk to ensure OHS at work.

11. Criteria 6.1.7

The RDS/PK3/032 Procedure on Government Regulation has not yet set out the proper procedures, selection, and use of Government Regulation regarding the standards stated as eligible for use, as in the Ministerial Regulation No. 08 of 2010 (using SNI standards) (Ramli, 2013). This procedure needs to be revised whereby PT X should set firmly in the form of a document on the standards used in determining the Personal Protective Equipment (PPE) used in the workplace.

12. Criteria 6.4.4

At the time of field review, signs were found of signing for fire extinguisher marking not in accordance with standard and technical guidelines. PT X should refer to the standard installation and maintenance of fire extinguishers as described in Ministerial Regulation No. 4 of 1980.

13. Criteria 6.5.1

In the document search, the Company does not have document in the form of checklist/schedule of maintenance/inspection of each production facilities used in the workplace. This is an important note to

measure the company's consistency in maintaining the safety of production equipment.

14. Criteria 6.5.7

In the RDS/PK3/035 Procedure on Lock Out & Tag Out, the Locking and Laminating procedure for energy isolation has been set up. However, in the aforementioned procedures, procedures on marking for equipment that is no longer safe for use or that has not been used has not been set.

15. Criteria 6.7.4

In the RDS/PK3/036 Procedure on Emergency Preparedness and Response, the Emergency of Organization has been established. However, the procedure regarding the procedure of informing the emergency handling officer to all people in the workplace has not been set.

16. Criteria 6.8.1

The company has evaluated the first aid tool, but from the field review the condition of the contents of the first aid box is not guided by the Minister of Manpower Regulation no. 15 of 2008 on First Aid in an Accident at Work.

17. Criteria 6.9.1

In the RDS/PK3/037 Procedure on Recovery the condition has not yet been set up for recovery procedures, especially for traumatized workers after accidents and occupational diseases.

18. Criteria 7.1.1

In the RDS/PK3/038 Procedure on Occupational Safety and Health Inspection the regular work procedure has been established. However, in the document search, the procedure was not working as intended.

19. Criteria 7.2.2

In the RDS/PK3/039 Procedure on OHS Monitoring and Examination, its implementation is conducted once in 3 years, not guided by Ministerial Decree No.187/MEN/1999, which stipulates that the measurement of Work Environment of Chemical Factor should be done once a year.

20. Criteria 7.4.3

Employee Health Check that has been done has not been reported per period as in the Ministerial Regulation no. 02 of 1980.

21. Criteria 7.4.5

In the review of documents on employee health checks in the government regulation, the results of the health examination have not been subjected analysis and evaluation as monitoring materials in accordance with the provisions.

22. Criteria 11.1.3

In the document search, there was no publication of the results of internal audits that have been done to

employers or other officers and officials concerned and monitored to ensure corrective action.

23. Criteria 12.1.1

The company has not set up a Training Need Analysis (TNA) covering the needs of OHS training (the relationship between OHS competence and OHS training that needs to be planned).

All the 23 non-conforming as discussed above are classified as minor findings. The findings were obtained because the company was inconsistent in meeting the requirements of legislation and other requirements. Thus, it can be concluded that the implementation of OHSMS in PT X met 143 criteria from 166 criteria, amounting to 86% compliance, which is within to the satisfactory level of achievement of 85-100%, which by definition deserves certification and the golden flag.

5 CONCLUSIONS

From the results of research and discussion above, it can be concluded that PT X has implemented OHSMS based on Government Regulation No. 50 of 2012, which were assessed based on advanced criteria containing 166 items. Of the 166 criteria, there are 23 non-conforming findings classified as minor findings, so in this case PT X has met 143 criteria with the percentage of OHSMS assessment being 86%, which belongs to the satisfactory level of achievement of 85-100%, which by definition deserves to be certified and obtain the golden flag.

REFERENCES

- BPJS. The number of work accidents in Indonesia is still high. <http://www.bpjsketenagakerjaan.go.id/berita/5769/Jumlah-kecepatan-kerja-di-Indonesiamasih-tinggi.html>. Assessed October 14, 2017.
- Efendi, Y. The regulatory framework of occupational health and safety version 01. Jakarta: Portal OHS; 2005.
- Hendri. Analytical Level of Management System of Occupational Safety and Health Management of GOKPL Company in sugovernment regulationressing accident rate in oil and gas exploration activity. Thesis. Depok. Faculty of Public Health University of Indonesia; 2012.p 2-8.

- Ramli, S. Effective OHSMS Agovernment regulationlication Guide. Jakarta: PT Dian Rakyat; 2013. p 39-335.
- Tarigan Z. Analysis of Occupational Safety and Health Management System at Oil Palm Plant (PKS) Tanjung Medan PTPN V Riau Province. Thesis. Riau. Graduate School of Universitas Sumatera Utara; 2008. P 47-48.

