

# Workers Involvement in Improving the Effectiveness OSH in PT. Wijaya Karya (Wika) Beton Makassar (Case Study the Pettarani Elevated Toll Contruction Project)

Suharni A. Fachrin<sup>1</sup>, Alfina Baharuddin<sup>2</sup>

<sup>1</sup>Assistant Professor in Departement Public Health (OSH), <sup>2</sup>Research Scholar in Departement Environmetal Health, Muslim of University Indonesia, Makassar

## Abstract

Work accidents that occur in the world of construction in 2017-2018 have increased, so the government requires all company management to improve the OSH Management System (OSH). All work accidents are seen and felt by workers. The implementation of the Occupational Safety and Health Management System based on ISO 45001: 2018 . The purpose of this study is to obtain in-depth information about the processes and factors that influence worker involvement in improving OSH effectiveness. This research uses descriptive qualitative method. Qualitative data collection is done through observation, interviews and document review. There are three informants in this research, they are the SHE Manager, Safety Officer and WikaBetonLayang Toll Project Worker. The results of the study were obtained that the work engagement process starts from safety induction, safety talk and toolbox meetings, the next process is implementation, where the implementation starts from the prevention of work accidents, environmental pollution, work-related diseases, reporting of hazardous situations and delivery of information. After the implementation phase, the next stage is consultation with workers both in terms of OSH program planning and changes in OSH implications. And the final process is the granting of authority, roles and responsibilities to workers. For the factors that influence the involvement of workers is first the organization, the vision and culture of the organization. Second is management and leadership, meaning communication techniques and techniques to provide feedback to workers.

**Keywords:** *Work Accidents, Construction, OSHMS, ISO 45001, Work Involvement and OSH Effectiveness.*

## Introduction

Infrastructure development is one of the priorities of the Government of Indonesia, seeing its very strategic role in driving the pace of economic growth.<sup>1,2,3</sup> To carry out the construction of the infrastructure required reliable construction services sector<sup>1</sup>, while the reliable construction services sector itself is highly influenced

by various aspects, one of which is the safety aspect in the implementation of construction projects<sup>4,5,9,10</sup>. The construction industry is one of the industries most at risk for worker safety. The International Labor Organization (ILO) states that one in six fatal injuries in the workplace occur at construction sites. Furthermore, no less than 60,000 fatal accidents occur at construction sites around the world each years<sup>6,7,9</sup>. This counts as one fatal accident in ten minutes. In 2015, 2,375 people died in work accidents. According to Juan Somavia, ILO Director General, the construction industry was among the most vulnerable to accidents<sup>(6)</sup>.

The construction sector shows 3.8 times higher rates of severe accident incidents and 12 times higher rates of fatal accident incidents than all industry levels.

---

### Corresponden Author:

**Alfina Baharuddin**

Research Scholar in Departement Environmetal Health,  
Muslim of University Indonesia, Makassar  
e-mail: alfina.baharuddin@umi.ac.id

According to the annual report the labor inspectorate stated that in the construction sector in Serbia contributed a lot of fatal work accidents in 2016. The main cause of fatal accidents is falling from a height. Other causes are electric shock, falling objects, moving machinery parts, buried in the ground, sinking, explosion, choking and others<sup>(4)</sup>.

In the records of the Ministry of Public Workers and Public Housing, the Directorate General of Construction of Indonesia there have been 15 work accident incidents between 2017-2018. The work accident caused casualties from falling from a height to falling down. This is a warning to relevant parties regarding safety and work accident aspects<sup>(8)</sup>.

The high number of accidents requires all management of a company to pay serious attention to the program and implementation of Occupational Safety and Health (OSH) in the company's environment through the existing Occupational Safety and Health Management System (SMOSH) by always monitoring and evaluating its performance<sup>(1)</sup>.

In the previous research, where a construction company had a commitment that was implemented by the leadership of the company in an effort to prevent occupational accidents namely the OSH Policy in writing but the application was not carried out optimally because not all were involved in its formation<sup>(12)</sup>. Yet according to Minister of Public Works Regulation Number 05 of 2014<sup>(12)</sup> and Republic of Indonesia Government Regulation Number 50 of 2012<sup>(14)</sup> that before the OSH policy is prepared it must first involve and consult with workers.

The involvement of workers in OSH effectiveness is very much needed and is one of the company's obligations in increasing OSH effectiveness. This is in accordance with research RahmiYuningsih (2014)<sup>(15)</sup> one of which influences the formulation of a policy is human resources (HR). Actors and/or human resources in the process of policy formation can be divided into two groups, namely the cast and official and the cast as well as unofficial. Included in the cast as well as the official are those who have powers that are legally recognized by the constitution and are binding. Meanwhile, those included in the cast group as well as unofficial, are parties who do not have legal authority.

This is also in line with the most recent ISO 45001: 2018, where in this ISO adds one thing that can affect

SMK3 running well so that the effectiveness of OSH is increased namely leadership and worker participation. ISO 45001: 2018 emphasizes the obligation to implement labor participation and consultation. The obligation to carry out participation and consultation is not only at the managerial level, but is also required at the lowest level (workers). For the participation of Non-Managerial Workers<sup>(7)</sup>.

## **Method**

This type of research used in this research is a qualitative descriptive design. According to Burhan Bungin qualitative descriptive design can also be called quasi qualitative or pseudo qualitative design. That is, this design is not yet truly qualitative because its shape is still influenced by quantitative tradition, especially in placing theory on the data obtained. This research is an in-depth study of certain social units, the results of which provide broad and in-depth overview of certain social units<sup>(5)</sup>. With data collection techniques with in-depth interviews, observation and documentation. As for this study, researchers used 3 types of informants. research informants included three types namely key informants (Manager SHE), key informants (18 Field Workers) and supporting informants (4 Safety Officers)

## **Result**

The process of employee involvement means that here is a systematic step or a clear stage in involving workers at all levels of the organization. Based on the results of in-depth interviews about the involvement of workers, obtained information about the initial process of employee involvement is safety induction. In this case before workers are involved in construction, it is necessary to provide safety guidance that must be known and OSH policies owned by the company.

Then followed by a safety talk and toolbox meeting. Where workers must follow this activity in order to inform more deeply about the work to be done today, the occurrence of unsafety at the work site and remind workers to always pay attention to safety and health at work. The next stage of employee involvement is implementation. In this case the implementation is related to work accident prevention problems, prevention of environmental pollution, prevention of occupational diseases, reporting of hazard situations and delivery of information. Where workers apply OSH rules and policies.

After the implementation phase, the next process of employee involvement is the consultation stage with the worker, for example the planning of the OSH program and changes to the implications of the OSH. Where workers are involved in finding solutions to OSH problems, in this case the company asks the workers what to do in improving construction OSH. The final

process in the involvement of workers is the granting of authority, roles and responsibilities to workers who in the sense that management gives the role of authority to admonish, remind and terminate work temporarily if the worker and someone whose position is above him (top management) violates OSH rules or takes action unsafely.

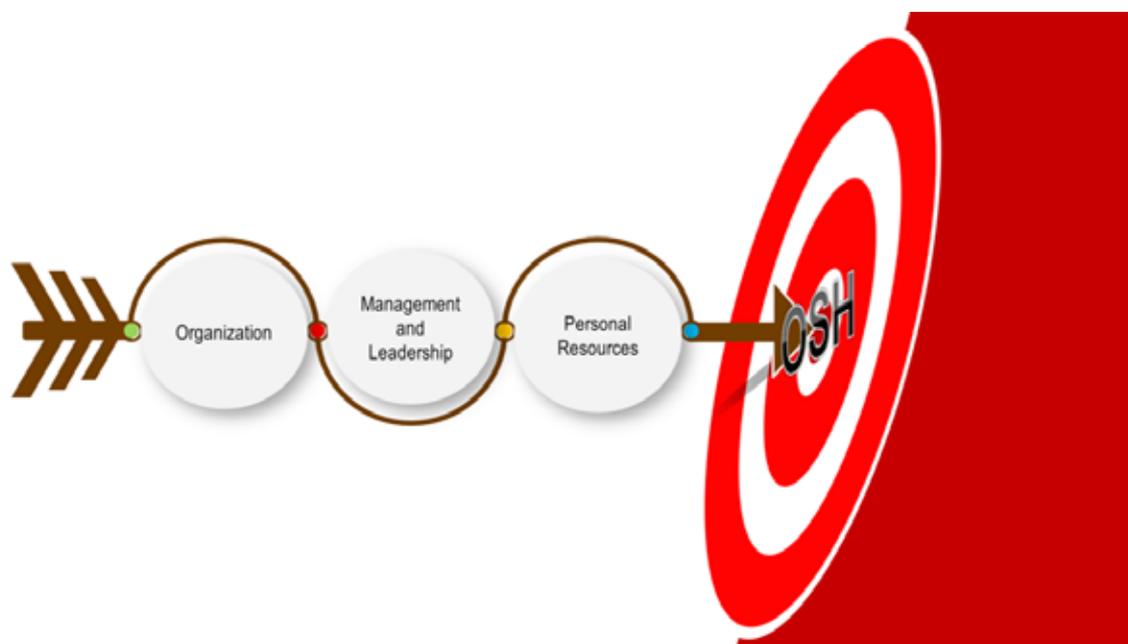


**Picture 1: Process of Worker Involvement**

**Factors That Influence Worker Involvement:**

Based on in-depth interviews and field observations obtained results that can be an influence in the involvement of workers first is the Organization. An organization can bring about involvement in workers because of the organizational culture, vision and values adopted by the organization. Then the second is Management and Leadership. The consistency of leaders in guiding workers can create employee involvement,

organizational leaders are expected to have some skills such as communication techniques, techniques to provide feedback and good job appraisal techniques for their employees. Next to the third and the last is Personal Resources. In terms of worker characteristics, what the researchers found was that there were two characteristics that influenced the involvement of workers, namely experience and knowledge and caring attitudes.



**Picture 2: Factors That Influence Worker Involvement**

## Discussion

Based on the results of in-depth interviews, document review and observations found that the process of employee involvement starts from safety induction. Where this is done at the beginning of the worker after being hired on this project. In safety induction, things related to OSH are conveyed. After safety induction is done, then the process also takes place in the field, where WikaBeton organizes a program called TBM (Toolbox meeting) and Safety talk. TBM or commonly called toolbox meetings are held every day in the morning before starting work, this is done in the work area. According to information obtained from all informants<sup>5</sup>, TBM was run every morning. However, there was some information and field observations found that there were times when TBM was not implemented because workers arrived late and workers were lazy to follow TBM. It was also found that those who attended TBM were only unskilled workers<sup>2</sup>, implementers and foremen did not participate in this TBM, even though their opinions as workers' representatives were needed, where as workers expressed their appreciation to the foreman or executor. Furthermore, there is the name of safety talk, disafety talk containing OSH evaluation submissions about what happened in the previous field and a prohibition against repeating the same thing. The safety talk is held every Monday morning and the SHE coordinator is the direct manager<sup>11</sup>.

For the prevention of work accidents, wika concrete workers in the Pettarani elevated toll road project are good enough to participate in its implementation, although sometimes there are still workers who do not use PPE, especially working at the high. For the prevention of environmental pollution, it was found that all informants stated that the prevention of environmental pollution has been categorized as being implemented well.

According to all informants that the delivery of information usually focuses on safety talk and toilet meeting. Whereas in the implementation of hazard reporting, according to informants both the main informants, supporting informants and key informants they stated that workers were included in hazard reporting. It is also known that the management has attached a hazard reporting procedure at each gathering point and there is a safety officer number that can be contacted. As for the investigation itself, the management included workers in the work accident investigation<sup>9</sup>.

These perceptions complement the more objective,

job-oriented characteristics and worker differences as it is focused at the level of the operatives and supervisors in relation to their work environment<sup>(9)</sup>. Where if it is related in this research, safety induction, safety talk and toolbox meetings are in the stages of knowing, implementation both in the OHS policy, delivery of information and reporting of hazards are included in the stage of conducting, while for consultation entering in the stage of making decisions, as well as granting authority, the roles and responsibilities are in the influencing stage.

According to Mc Brain, organization is one of the factors that influence worker involvement. In this case the culture, vision and values adopted by an organization influence the involvement of workers<sup>(11)</sup>. The organization has an important role in facilitating the involvement of workers to be involved in increasing the effectiveness of OSH. Based on ISO 45001 that consultation and participation of workers, and, if any, worker representatives, can be a key success factor for the OSH management system and about that must be encouraged through the process established by the organization. In WikaBeton the Pettarani overpass toll project does not yet have values and visions that prioritize the involvement of workers in each line. This can be seen from the fact that ISO certification has not yet shifted. WikaBeton has not yet switched to 45001: 2018 certification. Where this ISO is an ISO that is centered on consultation and participation of workers.

Based on ISO 45001 states that leadership and commitment from top management of the organization, including awareness, responsiveness, active support and feedback, is very important for the success of the OSH management system and achieving desired results<sup>(7)</sup>; therefore, top management has specific responsibilities that they need to be personally involved or that they need to direct. The top management of the Wika Concrete Layang Pettarani Toll Road project lacks communication techniques and the technique of providing feedback to workers. This can be seen from the courage of workers giving input to top management related to OSH, workers are only pressured to obey the rules even though it is their indirect emphasis. For example, a worker who used to work in oil and gas or in the sense of experience related to OSH problems has a lot, where OSH in oil and gas and OSH in the construction world are very different. In oil and gas (Oil and Gas) pay more attention to the issue of OSH than in the construction world<sup>(11)</sup>. At WikaBeton the organization's leaders do not reward workers if they succeed in implementing good OSH. The

management only gives punishment to workers if they break the rules. Though it should be noted that reward and punishment are a form of positive reinforcement in changing behavior.

Personal Resources or personal resources is a positive evaluation related to excitement and leads to individual feelings of their ability to control and positively impact their environment<sup>(2)</sup>. Based on observations and in-depth interviews, researchers found that Personal Resources also influences their involvement in everything. Personal Resources here, means knowledge and caring attitude. Worker involvement can increase organizational effectiveness depending on the degree to which employees have the knowledge needed to make good decisions and a caring attitude to take immediate action as possible. In the world of construction, including this project has a different Personal Resources.

### Conclusion

The employee involvement process is divided into several sections namely

1. Safety induction: is carried out by PT WikaBeton to inform the OSH rules and jobdesks of each worker.
2. Safety talk and Toolbox meeting:
3. Implementation: The implementation here is divided into five namely implementation of work accident prevention, implementation of prevention of environmental pollution, implementation of prevention of occupational diseases, implementation of reporting of hazard situations, implementation of information delivery.
4. Consultation is divided into two, namely OSH program planning and OSH implications. In this project workers are not involved in the planning of the OSH program because the OSH program was in place before the project started.
5. Granting Authority, Roles and Responsibilities..

**The factors that influence the involvement of workers in improving the effectiveness of OSH are:**

1. Organization: The organization here sees the culture and vision that exists in the company.
2. Management and Leadership: Management and leadership here are seen from work assessment, communication and feedback techniques.
3. Personal Resource: Personal Resource in this case is

knowledge and attitudes of caring workers.

**Ethical Clearance:** Taken from Comitee ethical Universitas Muslim of Indonesia Makassar.

**Source of Funding:** Self-funding

**Conflict of Interest:** The author declares no conflict interest regard.

### References

1. Alamsyah, FA, 'Studi Pengaruh Penerapan Kebijakan Sistem Manajemen Keselamatan Dan Kesehatan Kerja (SMK3) Terhadapkepuasan Kerja Tenaga Kerja Konstruksi', Jurnal Tugas Akhir. 2018
2. Bulat, P, Kenichi H & Jovan P. Occupational Safety and Healht in the Contruction Sector in Serbia, International Labour Organization (ILO), 2019
3. Bunging, B, Penelitian Kualitatif: Komunikasi, Ekonomi, Kebijakan Publik, dan Ilmu Sosial Lainnya, Jakarta, Kencana Prenada Media Group. 2007.
4. Indah, A, Evaluasi Penerapan Keselamatandan Kesehatan Kerja (K3) Pada Proyek Bangunan Gedung di Kabupaten Cirebon', Jurnal Teknik Sipil dan Perencanaan, Vol 19, no. 1, 2017
5. ISO 45001, Occupational heath and safety management system-Requirements with guidance for use.2018
6. Lawani, K, Billy H & Iain 'Empowerment As A Construct of Worker Engagement And Wellbeing'. Proceedings of the Joint CIB W099 and TG59 Conference, Brazil, 1-3.2018.
7. Lukman, F & Rosmariyani, Pembinaan Konstruksi Melalui Peningkatan Kapasitas Aparatur Sipil Negara, KONTRUKSI (Media Informasi & Komunikasi Direktorat Jendral Bina Kontruksi Kementerian Pekerjaan Umum dan Perumahan Rakyat) 2018
8. Kementerian PUPR, 'Kebijakan K3 Konstruksi Kementerian PUPR', Workshop Pengembangan Keprofesian Berkelanjutan (PKB) Bidang K3 Konstruksi, Bali, 8. 2018
9. Anggraini, L, Endang SA & Arik, 'Faktor-Faktor Yang Mempengaruhi Employee Engagement Generasi Y (Studi Pada Karyawan PT Unilever Indonesia Tbk-Surabaya)', Jurnal Administrasi Bisnis, Vol.37, no. 2.2016

10. Bugong, S, *Metode Penelitian Sosial*, Jakarta, Kencana Prenanda Media Group. 2005.
11. Noviasuti, TK, Ekawati & Bina, K, 'Analisis Upaya Penerapan Manajemen K3 dalam Mencegah Kecelakaan Kerja di Proyek Pembangunan Fasilitas Penunjang Bandara Oleh PT.X (Studi Kasus di Proyek Pembangunan Bandara di Jawa Tengah)'. *Jurnal Kesehatan Masyarakat*, 2018, vol. 6, no. 5.
12. Pemerintah Indonesia, *Peraturan Pemerintah Republik Indonesia No. 50 tentang Penerapan Sistem Manajemen Kesehatan dan Keselamatan Kerja*, Lembaran Negara Republik Indonesia No.100, Jakarta, 2012
13. Yuningsih, R, *Analisis Segitiga Kebijakan Kesehatan Dalam Pembentukan Undang-Undang Tenaga Kesehatan*, Pusat Pengkajian, Pengolahan Data dan Informasi (P3DI) Sekretariat Jenderal DPR.2014.
14. Maslikhah, E, 'Pengaruh Kepuasan Kerja Dan Keterlibatan Karyawan Terhadap Kinerja Karyawan PT Pegadaian (Persero) Cabang Pegadaian Syariah Blauran Surabaya', *Program Study Ekonomi Syariah*. 2018.
15. Menteri Pekerja Umum RI, *Peraturan Menteri Pekerjaan Umum No: 05/PRT/M/2014 tentang Pedoman Sistem Manajemen Kesehatan dan Keselamatan Kerja (SMK3) Konstruksi Bidang Pekerjaan Umum*, *Berita Negara Republik Indonesia Tahun 2014 No. 628*, Jakarta 2014.