

ANALYSIS OF THE EFFECT OF CONTRACTOR SAFETY MANAGEMENT SYSTEM (CSMS) ON HEALTH AND SAFETY CULTURE AT PT. INDOCEMENT TUNGGAL PRAKARSA TBK

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Abstract

It is known that there are several losses in the company's operating activities caused by the performance of contractors who have little understanding of occupational health and safety (OHS). Negligence by contractors can pose danger to the company's operations and cause accidents. therefore activities of contractors must be managed properly to ensure safety in every work activity on contractors, so it requires the management of contractor workers, namely the Contractor Safety Management System (CSMS). The method used in this research is a descriptive qualitative analysis method of in-depth interviews, distribution of questionnaires, and field observations. The data will then be analyzed. Result: From the analysis that has been carried out, the results of research by interviewing workers, the implementation of CSMS began in 2014. PT Indocement Tunggal Prakarsa, Tbk experienced a drastic reduction in lost time injury to zero accidents Where before the CSMS implementation, accidents were very frequent; 56 accidents in 2008 and 56 accidents in 2009. In conclusion, PT Indocement Tunggal Prakarsa, Tbk has implemented CSMS properly and adequately. PT. Indocement Tunggal Prakarsa, Tbk involving contractor workers in the most questionnaire results are Accident and Near Accident Investigations, Safety Monitoring, Safety Talks, Making Work Permits and Hazardous Work Permits, Equipment Certification, Emergency Response, Personal Protective Equipment The factors that affect the effectiveness of CSMS implementation the most are training factors, communication factors, and behavioral factors, this can be seen in fewer rejections from respondents regarding the contents of the questionnaire

Keywords: Analysis; Contractor Safety Management System; Health Safety and Environment Culture.

Introduction

In this era, the company in carrying out its operations requires a working partner to assist the success of its activity process, the intended worker partner is a contractor, an

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example of this contractor can be a service contractor, a construction contractor, or an operating contractor.

However, from the evaluation journey from time to time, it is known that there are several losses in the company's operating activities caused by the performance of contractors who have little understanding of occupational health and safety (OHS). Increased number of accidents in companies involving contractors. Negligence by contractors can pose danger to the company's operations and cause accidents that affect the company's occupational health and safety performance which has a negative impact on workers, facilities, and the environment of the organizers causing high costs due to accidents and loss of working hours also impacting the company's reputation due to government regulations regarding occupational health and safety in the company.

Some of the factors that cause contractors to be prone to accidents in carrying out their work operations are temporary work for contractors, contractors were often drawn from unskilled and poorly educated backgrounds, lack of discipline at work, and lack of understanding of occupational health and safety regulations in the workplace. Company and direct involvement in carrying out work that results in more exposure to hazards.

Therefore activities of contractors must be managed properly to ensure safety in every work activity on contractors. Every company expects the results of work on contractors, namely no defects, no rework, no harm to people, no damage to equipment, and no damage to the environment, therefore contractor management is carried out through the Contractor Safety Management System (CSMS). The aim of this research is to analyze the implementation of CSMS, analyze the company's Occupational Health and Safety Program involving contractor workers, and analyze the factors that affect the effectiveness of CSMS implementation.

CSMS is a management system to manage contractors working in a corporate environment. One of the CSMS goals to ensure that the sub/ contractor has a safe management system has been achieved according to (Amalina & Larasati, 2020). The involvement of workers in workplace safety can be realized in the form of participation and activity in occupational health and safety programs. This can be realized in the implementation of safety and health programs for workers and cultivated in the workplace environment contained in the corporate culture itself according to (Desti, 2017)

Research Methods

This method has been ethically reviewed with prove of ethical clearance certificate number 871/HRECC.FODM/XII/2022. The series of planning activities contained in the planning framework can be described as follows:

The company is currently carrying out its operations and requires a working partner to help the success of its activity process (an example contractor from this contractor). Every company expects the results of work from contractors, namely no defects, no rework, no harm to people, no damage to equipment, and no damage to the environment. Therefore, contractor management is carried out through the Contractor Safety Management System (CSMS).

The literature needed in this study is the benefit of CSMS, CSMS Objectives, CSMS Structure, and Occupational Safety and Health Program PT. Indocement Tunggal Prakarsa. Tbk, Factors Effectiveness in the Implementation of CSMS, and the factors that influence the research.

There are two examples of data collection in research: Primary data: In-depth interviews with workers, A questionnaire regarding the contractor's involvement and knowledge of the Occupational Health and Safety program in the company, with a Pre-survey questionnaire from grounded theory analysis regarding the Factors Relating to the effective implementation of CSMS in the company. Secondary data: Data on Occupational Health and Safety at PT. Indocement Tunggal Prakarsa, Tbk, CSMS management flow data at PT.

Indocement Tunggal Prakarsa, Tbk, Data on SIK (Work Permit) for contractors at PT. Indocement Tunggal Prakarsa, Tbk. Data processing includes An analysis of the results of interviews with informants was carried out regarding the process of running CSMS in the company, An analysis of the results of questionnaires and interviews with informants was conducted regarding the involvement of contractor workers in the company's occupational health and safety program, Analyzed the results of questionnaires and interviews regarding the Factors Relating to the effective implementation of CSMS in the company, Calculation of the total number of answers to the questionnaire obtained.

Results and Discussion

The scope of this research are the activities in PT Indocement Tunggal Prakarsa and the workers who work in PT Indocement Tunggal Prakarsa. In the results of interviews with HSE department workers, The safety workers of PT. Indocement Tunggal Prakarsa, Tbk acknowledges the presence of CSMS in PT. Indocement Tunggal Prakarsa, Tbk experienced a drastic decrease in lost time injury to zero (0) accidents, whereas before the existence of the CSMS system there were very frequent accidents.

CSMS Process

Risk Identification

In interviews, the employer division implemented the HIRA/JSA before assigning work to contractors. This HIRA/JSA is a hazard assessment on-site based on the employer's assessment. In the interview results, it was found that the employer made the JSA appropriate in the management of SIK. Where the contractor must have qualifications, such as JSA, analysis, work methods, job locations where the layout is, and other speakers found with work experience and Occupational Health and Safety (OHS) training on contractor workers that must be owned.

Pre-qualification

In interviews, there are several types of contractors, namely daily contractors, helpers, namely contractors for operating work and related to maintenance, and contractors for company projects. Indocement does not set a deadline for filling out the CSMS Prequalification Questionnaire for prospective partner vendors. Indocement only sets a deadline.

for completing the prequalification requirements that are lacking after the interview, which is 7 working days. In the process, the employer will find a contracting company that suits the needs of the work to be given, from the employer will inform the safety company from the safety department will provide a CSMS qualification form to the relevant contractor.

Selection

In the interview, at the selection stage, there are interviews and the provision of evidence, such as Occupational Health and Safety Advisor Committee from the contracting company. In the selection of contractors who enter the pt. Indocement Tunggal Prakarsa, Tbk has on average been declared to have passed the CSMS selection, but in some cases, there are local contractors who do not have CSMS management but in order to maintain relations between the company and the surrounding community, PT. Indocement Tunggal Prakarsa, Tbk provides special training for local contractors and obtains work permits but with the condition that they pass the work contract by following the company's Health, Safety, Work and Environment regulations.

From other sources, it was stated that several contractors did not seem to have an OHS organization. This is because, in the selection, the employer assesses how big the scope of work on the contractor is where if the work is included in the category of projects or large work, the HSE organization is seen in the selection of contractors. If the category of work is small, the HSE organization is not very much viewed in its selection, for example, an office boy/cleaning class contractor company, the contracting company is not seen by the HSE organization, but on the condition that workers are required to carry out a program to use personal protective equipment (PPE).

In the selection for contractor worker specifications, employers choose contractor workers on average judging from work experience, whether or not there have been previous work accidents, and the track record of other workers.

Contract Process

In the interview, the contracting company can get from the tender. To get the employment contract, you must get a contract with the PT Indocement Tunggal Prakarsa, Tbk. Whether the contract already uses the CSMS system, if the contractor does not have a CSMS or if the CSMS is inactive, then the contract will not be obtained by the contracting company.

Pre-job Activity

In interviews about work prefixes, the company's employer and HSE department held a kick-off meeting for non-routine work scopes, for projects and contractors during the shutdown. The discussion in the kick-off meeting contains Job description/method statement related to tools and equipment, JSA, Attendance sheet, that the one who registered followed the JSA, Statement letter following the briefing. From the discussion, namely the scope of work, the method of work from this matter is determined by the safety process/SOP and from this is formulated JSA (additional from the contractor's assessment). From that, it was found the type of work equipment, PPE, and OHS experts (SIO, related OHS certification) needed by the employer PT Indocement Tunggal Prakarsa, Tbk.

This is for the manufacture of SIK (Work Permit) for sub-contractors. In the management of SIK, the contractor must attach the JSA, analysis, work method, and

location of the work where the layout is, as in the example above. The contractor gets this information from the results of consultations with the employer. Therefore, before participating in the kick-off meeting, sub-contractors are asked to prepare approval materials for the manufacture of SIK.

SIK general requirements which have to be sent are, first, Job Description or Method Statement, This is a clear and complete picture of all the activities to be carried out. Second, occupational Safety Analysis, The JSA is an evaluation of the risks associated with the activity. This includes precautions to be taken to minimize risks and sub-contractors have highlighted the responsibility of managing safety risks. Third, attendance sheet, JSA training attendance sheet by the contractor to workers (including the list of workers and qualifications) signed by all of the workers and their ID (KTP) number. Fourth, breafing statement letter, Attached form - ITP of the Employer. The attendance sheet must be clear, complete, and by following per under with the list of workers for SIK /WSP. Fifth, work site plant (Layout/Map). Sixth, photocopy of job number (or contract, PO, SR), and Last, additional notes for WSP attachment (HTC Form in attachment – information from the employer).

Evaluation

According to the resource person of PT Indocement Tunggal Prakarsa, Tbk, CSMS is valid for 1 year, while there is or while there is no permanent work must be evaluated. Every CSMS will be expired, an evaluation will be carried out. The safety department will inform the employer to assess the contractor's performance during the contractor's validity. From the results of the evaluation, the results will be found, namely whether the contractor gets a recommendation for the extension of the work contract or not.

By the safety department, the OHS performance assessment of partner vendors is carried out during the contract period by the Employer Division on a regular basis, depending on the contract period. For routine partner vendors, it is assessed at the earliest 6 months 1 time using a format standardized by the Quality System Management Representative (QSMR) and Corporate SHE Division (CSHED). Assessment factors are Fulfillment of the requirements in the contract, Compliance with OHS, Security, and environmental requirements, Moral (in the process of work), Response (in the process of work), Quality of work, Punctuality of work and Cost suitability.

OHS Program

The purpose of the work culture is to change the attitudes and behaviors of existing human resources in order to increase work productivity to face various challenges in the future. Promoting Occupational Safety and Health among the workforce, employers, and the community is important for the company, in order to create harmonious, dynamic, and equitable industrial relations that ensure business tranquility, work tranquility, and productivity through the development of a culture of Occupational Safety and Health according to Rofiah (2009).

The respondents who were interviewed in this research were contractor, HSE staff and the employee of PT Indocement Tunggal Prakarsa. The management of the Safety Management System regularly and continuously functions to create a safety culture, especially in the industrial sector (Martadinata et al., 2021), therefore the company must have a good OHSMS so that it can provide the basic framework for the development of the contractor OHSMS (Rusba et al., 2022). In the results of interviews with workers from the occupational health and safety department, PT. Indocement Tunggal Prakarsa, Tbk

started the implementation of CSMS starting in 2014 and management for a year, namely until 2015, the safety workers of PT. Indocement Tunggal Prakarsa, Tbk acknowledges the presence of CSMS in PT. Indocement Tunggal Prakarsa, Tbk experienced a drastic decrease in lost time injury to zero (0) accidents, whereas before the existence of the CSMS system work accidents were very frequent. The following is a flow chart regarding the CSMS process at PT. Indocement Tunggal Prakarsa, Tbk.

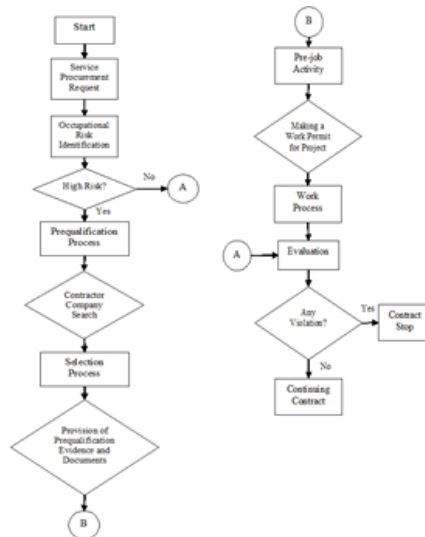


Figure 1 Flow chart regarding the CSMS process at PT. Indocement Tunggal Prakarsa, Tbk. In **Figure 1** we can see a process chart of how the contractor safety management system is implemented at PT. Indocement.

CSMS Process

Risk Identification

Risk identification needs to be done to be able to find risk factors for the process and nodes of production activities, raw materials used, materials or goods produced including by-products of the production process, as well as waste formed by the production process according to (Kunci et al., 2020). The results of interviews with the division of employers conducted by HIRA/JSA before giving work to contractors, this HIRA/JSA is a location hazard assessment based on the employer's assessment.

This is related to the Ministry of Manpower of the Republic of Indonesia, 2019 Project Planners/End Users/Contract Holders/etc conducting a risk assessment of the projects they have prepared. In the results of the interview, it was found that the employer made the appropriate JSA.

In SIK management where contractors must have qualifications such as JSA, analysis, work methods, work locations where layouts are located, and other sources found with work experience and OHS training for contractor workers, this is according to (Nugroho Et Al, 2020) The hazard identification, assessment and risk control processes are carried out in accordance with their respective levels. Aspects that have been considered in the hazard identification process are: (1) Routine and non-routine activities, (2) Activities of all personnel who have access to the workplace, (3) Human behavior, abilities, and other human factors, (4) Infrastructure, equipment and materials in the workplace, and (5) Dangers arising from and outside the workplace. Risk control are determined based on risk assessment. The risk control consists of elimination,

substitution, engineering & administrative controls, and Personal Protective Equipment (PPE).

Pre-qualification

In interviews, there are several types of contractors, namely daily contractors, helpers, namely contractors for operating work and related to maintenance, and contractors for company projects. Indocement does not set a deadline for filling out the CSMS Prequalification Questionnaire for prospective partner vendors. Indocement only sets a deadline for completing the prequalification requirements that are lacking after the interview, which is 7 working days. In the process, the employer will find a contracting company that suits the needs of the work to be given, from the employer will inform the safety company from the safety department will provide a CSMS qualification form to the relevant contractor.

Evaluate based on the list of fields submitted by the contractor about administrative requirements, experience in OHS, OHS organization, OHS personnel owned, OHS records in previous projects, OHS Manuals owned, and references that have been obtained. Attract contractors who have awareness, ability, and concern for K3LL/HSE aspects in order to participate in the tender process. All contractors in pre-qualification must be able to identify risks from the work, organize, and control all aspects of the K3LL/HSE in their work.

Usually this kind of contractor selection indeed will lead to a greater risk or danger, especially if the work is categorized as high risk. In this case, management commitment plays an important role and surely can affect the work to be carried out, especially in terms of OHS. In line with the statement by Madhona and Lala (2021) the management of HSE aspects is carried out by reducing as low as possible or even eliminating incidents through increased knowledge, understanding and awareness as well as concern for HSE aspects to all related parties, both directly and indirectly involved in operations including contractors.

Selection

To choose the Contractor basically it takes the commitment of contractor management to run the HSE Management System and time constraints in carrying out a project (Pradani et al., 2021). In the interviews at the selection stage, there are interviews and the provision of evidence, such as P2K3, from the contracting company. In the selection, contractors who enter the company PT. Indocement Tunggal Prakarsa, Tbk has on average been declared to have passed the CSMS selection.

In some cases, there are local contractors who do not have CSMS management. However, in order to maintain relations between the company and the surrounding community, PT. Indocement Tunggal Prakarsa, Tbk provides special training for local contractors and obtains work permits with the condition that they pass the work contract by following the company's K3LH regulations.

From other sources, it was stated that there were several contractors who did not seem to have a OHS organization. This is because, in the selection, the employer assesses how big the scope of work on the contractor is where if the work is included in the project category or large work, the HSE organization is seen in the selection of contractors selection if the category of work is small, the HSE organization is not too much viewed in the selection, for example, contractor companies such as office boy/cleaning service,

in the contractor company, a is not seen the HSE organization, but on the condition that workers are required to carry out a program to use personal protective equipment (PPE).

In the selection for contractor worker specifications, employers choose contractor workers on average judging from work experience, whether or not there have been previous work accidents and other workers' track records. Community service is the initial goal of CSMS introduction and training activities for companies so that from this activity the community who become contractors and employees will know and feel the dedication they really need according to (Indrajaya et al., 2019).

Contract Process

It is known at the Ministry of Manpower of the Republic of Indonesia in 2019, Based on the results of the evaluation, the winner or the executor of the work is determined. Documentation and contract terms. Implementing organization. The results of interviews, the contractor company can get it from the tender, to get the work contract, it must get a contract with the company PT. Indocement Tunggal Prakarsa, Tbk, the contract has used the CSMS system, so if the contractor does not have a CSMS or the CSMS is not active, the contract will not be obtained by the contractor company. the results of research by Puri, Erislan, Sugiarto (2022), can be drawn in outline that clients in providing tenders to companies still prioritize aspects, especially in work safety carried out by companies that are potential tender winners.

Pre-job Activity

In the results of the interview regarding the start of work, the company's employer and the HSE department held a kick-off meeting for non-routine work scopes, for projects and contractors during the shutdown Statement letter following the briefing. It is necessary to socialize, counsel and more in-depth training on the implementation of OHS Management System in the field to avoid work accidents due to negligence of indiscipline of workers and management according to (Yalina & Sugiri, 2021).

From the discussion, namely the scope of work, the method of work is determined by the safety/SOP process and from this, a JSA is formulated (additional to the contractor's assessment) from which it is found the types of work equipment, PPE, and OHS experts (SIO, related OHS certification) needed by the contractor. the employer of PT. Indocement Tunggal Prakarsa, Tbk. This is used for making SIK (Work Permit) for subcontractors. Here in the SIK management, the contractor must attach a JSA, analysis, work method, and work location where the layout is, as in the example above, the contractor gets this information from the results of consultation with the employer. Therefore, before participating in the kick-off meeting, the Sub Contractors are asked to prepare approval materials for making SIK, namely:

SIK - General Requirements that must be submitted are, first Job Description or Method Statement (including the list of tools and equipment), This is a completely clear picture of all the activities to be carried out. Second, Work Safety Analysis, JSA is an evaluation of the risks associated with the activity. This includes precautions to be taken to minimize risks and the Sub-Contractor has highlighted responsibilities in managing safety risks.

Third, Attendance sheet/list of attendance for JSA training by the Contractor to workers (including the list of workers and qualifications) – signed by all workers and added with ID number (if you already have one). Fourth, Briefing Statement Letter(attachment form – ITP from employer); The attendance sheet must be clear,

complete, and in accordance with the list of workers for SIK/WSP. Fifth, Work Location Plan (layout/location map).

Sixth, Copy of Job Order number (or contract, PO, or SR). And last, Additional notes for the WSP attachment, work execution and evaluation, its carried out initial activities as preparation before the work was carried out including, among others: A preliminary meeting to discuss work plans, determining work implementation strategies, determining the required licensing requirements, determining the required manpower requirements, Determine the monitoring system during the work in progress. after the approval is carried out, the giver of this approval consists of Employer, Location owner, and Safety area, After getting approval, the Sub Contractor gets a SIK (work permit) with the name of the job already entered in the link in the ID card so that there will be no unknown contractors entering the company area.

Work Execution,

The system implementation stage includes preoperative preparation, trial operation, revision and improvement, formal operation, and certification. Preoperative preparation includes two aspects: publicity and trainings. The purpose of system trial operation is to test whether the system is mature and appropriate. During the trial operation, the requirements and provisions of the system should be implemented with as much as possible effort, without mandatory implementation, which are not necessarily enforced. The revision and improvement of the system requires that the problems found during the trial operation be solved systematically instead of just temporarily.

After that, the safety management system will be officially operated. System certification is not a necessary step (Gou *et al.*, 2021). Enterprises can decide whether to conduct system certification based on their own needs. According to sources, a permit to work, or what is commonly referred to as a work permit is carried out every day by contractor workers, there is no special agenda for contractors by PT. Indocement Tunggal Prakarsa, Tbk. The contractor's safety/OHS department provides a safety report every month and will be checked by the safety department appointed by the employer, otherwise, a warning will be given. This can be likened to a statement by (Yiu *et al.*, 2019).

The relevant of Contractor Management attributes are well-scheduled and communicated project meetings; effective teamwork and communication between project staff and all stakeholders; well-planned construction works; clear safety organization; strategic control of subcontractors; effective accident investigation arrangement. The safety report will be updated regarding the number of workers, working hours, environmental activities, and other OHS. There are safety talks with contractors every month with contractors gathering, to discuss findings in the field, sometimes a safety plan (employer safety) that calls all contractors, who are currently working or the employer.

Every employer must also check safety issues, so not only workers from the safety department who have the authority to stop work if because the contractor workers do not do work according to applicable SOPs or safety, and if the contractor workers stop working from the safety department workers, the contractor workers can and will be immediately subject to fines or warning letters in accordance with the employment contract if the termination of work from non-safety department employees from PT. Indocement Tunggal Prakarsa, Tbk, the worker can be reprimanded and if the mistake is repeated or fatal, it can be reported to the safety department of PT. Indocement Tunggal Prakarsa, Tbk to be subject to a fine or a warning letter in accordance with the applicable

employment contract. So at PT. Indocement Tunggal Prakarsa, Tbk, every employee is very aware of the applicable safety regulations.

In its supervision, one of the aspects examined by the workers of PT. Indocement Tunggal Prakarsa, Tbk is in compliance with the HSE plan/method implementation by the contractor, but regarding the SOP there is no provision for the contractor to successfully implement the HSE plan or not. But in the process, the supervisor rarely sees aspects of the contractor's HSE plan having been implemented or not, but seeing whether or not contractor workers are safe at work and the SOPs for the work carried out is less related to the statement from the Ministry of Manpower of the Republic of Indonesia, 2019 which controls the consistency of HSE implementation during implementation work and ensure that the implementation of the work is in accordance with the previous HSE plan agreement, with one way to minimize the "Gap" of HSE implementation which is part of the HSE Plan implementation, from here the company can pay less attention to the HSE plan of the sub-contractor, but the company always supervises aspects safety in the work carried out by sub-contractors and make this a reference for sub-contractors in their work. Regarding emergency training at the company, it is carried out during the month of OHS by safety inducement involving contractors, namely training that is usually carried out, namely safety drills and first aid.

Evaluation,

The results of the CSMS should be evaluated periodically, especially after contract work is completed. The evaluation results are used to assess contractor performance. As input to improving the CSMS program within the company. An evaluation team was formed that involved all relevant elements within the company. With the main points, namely the HSE closing report as well as the final evaluation and feedback from the Indonesian Ministry of Manpower, 2019.

Every CSMS will run out, an evaluation will be carried out, from the safety department will inform the employer, to assess the performance of the contractor during the validity period of the contract, then the results of the evaluation will be obtained, namely whether the contractor has received a recommendation for a work contract extension or not. By the safety department, the partner vendor OHS performance assessment is carried out during the contract period by the Employer Division periodically, depending on the contract period, for routine partner vendors it is assessed at the earliest 6 months 1 time using the format standardized by the Quality System Management Representative (QSMR) and Corporate SHE Division (CSHED) according to (Okonkwo and Wium., 2022).

OHS Program

The purpose of work culture is to change the attitudes and behavior of existing human resources in order to increase work productivity to face various challenges in the future. In the implementation of safety and occupational health in the workplace there is a sense of responsibility among the owners business (manager) and workforce so all parties can feel safe and comfortable doing their job then we need a management system who can manage security and health in the workplace i.e. system safety and health management work according to (Kunci et al., 2020).

The absence of procedures regarding OHS performance can cause the company cannot record the accident rate, the number of accident claims, and target achievement regarding zero incidents cannot be monitored and recorded (Luqmantoro, 2018). The

basic policies on occupational safety and health at PT. Indocement Tunggal Prakarsa, Tbk generally complies with the Minister of Manpower Regulation No. 05/MEN/1996 concerning the implementation of the Occupational Health and Safety Management System. In the following picture are the results of filling out questionnaires and interviews with workers.

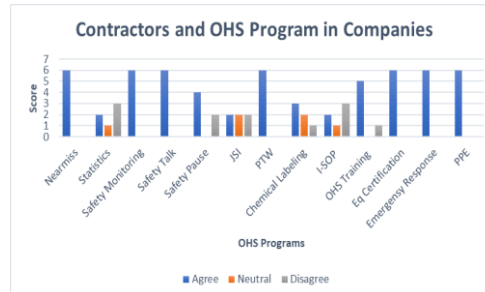


Figure 2. Graph of the Questionnaire Result of Contractor Engagement and Company OHS Program

The following is an explanation of the OHS program and the results of interviews with workers are:

Accident and Near Accident Investigations,

Investigation of accidents and near-miss aims to find out the facts or circumstances that are related to the accident that occurred and prevent similar incidents in the future. According to a survey by several informants, it was stated that the program is involving contractor workers only when an accident or near-miss occurs to contractor workers.

Distribution of Accident Statistics

Distribution of accident statistics is carried out so that each Plant/Division knows how the description of accidents that occurred at PT. Indocement Tunggal Prakarsa, Tbk. Data from the Health Department, Fire Brigade, line, and investigators are submitted to the Safety Department and then an investigation is carried out to find out the number of days lost, losses due to accidents, factors that cause accidents, types of work accidents and recommendations for improvements that should be made.

While the data on the factors causing the accident, the type of accident, and recommendations for improvement will then be made into an accident analysis report. After the statistical reports and analysis reports have been completed, they are distributed/sent to all existing Plants/Divisions in hard and soft copies.

According to interview data from interviewees regarding the OHS program, it was carried out during the Safety Committee meeting without involving the contractor, but the contractor safety supervisor was informed of the results of the OHS program for distributing accident statistics, this was aimed at learning about incidents that occurred. According to (Yiu et al., 2019). Companies that carry out OHS management as well, the company will get financial benefit, reduced lost time and compensation cost for workers.

Safety Monitoring,

Safety monitoring is an activity of monitoring and supervising the work area. According to (Nugroho & Handayani, 2020). This program necessary to have more routine supervision and must be carried out consistently by supervisors to the personnel to ensure the OHS program runs well because usually supervision is more focused on the technical operations of the unit rather than safety.

Safety Talk

Safety talk is a work accident prevention program, It is very necessary to always remind employees and subcontractors about safety. The workers in the field usually prioritize performance or progress over safety. In addition, subcontractor workers typically work long hours, it lead to high levels of stress and an increase in unsafe work practices (Unsafe Action) according to (Muliawati et al., 2020).

The results of the safety talk are reported and submitteit to the Safety Department. According to the results of interviews with resource persons, this OHS program was conducted in the morning before work, another resource person stated that the Indocement OHS program is not mandatory for contractor workers, but most supervisors do safety talks or in other words toolbox meetings every morning, and there are still inputs.

Safety Pause

Safety pause is an activity to stop for a moment to listen to information about OHS. The contents of this activity can be in the form of stories, pictures, videos, or also with writing that aims to remind how important safety is so that everyone has a safety-first thought. Safety pause is not only done to start the meeting but also in the form of installing banners and billboards. Banners and billboards have been placed in strategic places which include: entrances and exits and are easily legible and visible to the workforce.

The result by (Dewinda Et Al., 2019) research, report that the climate of safety and the perceptions of coworkers 'behavior on safety knowledge have a significant influence on safety behavior. The higher the safety climate, the influence of the safety knowledge is also stronger on safety behavior.

Joint Safety Inspection (JSI),

JSI is a work area monitoring and supervision activity carried out by a combination of safety, security, and health departments which is carried out periodically to identify sources, conditions, and hazardous actions so that any potential hazards and environmental aspects that are at risk of causing work accidents can be controlled. This joint safety inspection activity is carried out 3 times a year according to the schedule that has been made and agreed upon.

Making Work Permits and Hazardous Work Permits,

Various types of work in the area of PT. Indocement Tunggal Prakarsa, Tbk has a high potential for occupational safety and health hazards and risks. If these risks are not controlled properly, they can result in losses to people, equipment, processes, and the environment. employees and labor involved directly with equipment, materials as well surrounding work environment according to (Yalina & Sugiri, 2021). To control these risks, it is necessary to coordinate intensive supervision so that the hazardous work is carried out according to the OHS standards that have been applied. The purpose of making SIK and IKB is to minimize the possibility of accidents in hazardous or high-risk work, by conducting strict supervision and ensuring consistent implementation of OHS procedures and standards.

Chemical Labeling,

Chemical labeling at PT. Indocement Tunggal Prakarsa, Tbk refers to the GHS (Globally Harmonized System Classification and Labeling of Chemicals) labeling system, which is a coherent approach to accurately describing and classifying chemical

hazards and communicating information in the form of labels and LDK. This GHS system was agreed upon at the 4th In governmental Forum on Chemical Safety (IFCS) in Bangkok, Thailand in 2003 and the World Summit on Sustainable Development (WISSD) in Johannesburg in 2002 and was ratified by the Economic and Social Council of the United Nations in 2002. 2003 with a recommendation that all countries have implemented GHS no later than 2008.

Based on the results of interviews with resource persons, the OHS program must be carried out by contractors if the chemicals are brought by a contractor company. However, from several sources, it is quite rare, from the contractor side in bringing chemicals from their own company. According to (Kunci et al., 2020) in this activity, material safety data sheets need to be studied so that each chemical used can be grouped and identified.

Indocement Safety Observation Program,

I-SOP is a tool for observing OHS problems at PT. Indocement Tunggal Prakarsa, Tbk. In principle, the use of I-SOP aims to communicate the dangers and risks of accidents from one employee to another. After reminding they are recorded into the I-SOP card. The results of the interview with the OHS program resource persons are related to checking the condition of unsafe acts and unsafe conditions when work can be carried out between employees to carry out assessments in a job, but contractor workers cannot be involved because contractor workers are one of the objects in this OHS program. According to (Yiu et al., 2019) Excessive emphasis on one approach (reward and punishment) can lead to under-reporting of incidents for fear of being punished or for fear of losing the reward for the actions that led to the incident.

Occupational Safety and Health Training,

The purpose of the OHS training held at PT. Indocement Tunggal Prakarsa, Tbk by the OHS Management is to be given to all parties from Echelon I to Echelon VI in order to know, understand and apply OHS in the workplace. From the results of interviews with resource persons, the OHS program is available for contractor workers, but only during the OHS month event for repetition. And for other resource persons, this training was held for helper contractor workers for initial training by PT. Indocement Tunggal Prakarsa, Tbk. This program seriously to note as in the findings of research by (Yiu et al., 2019) that the deficiencies identified in these dimensions are, in part, attributable to the prevalence of precarious temporary duration employment contracts and subcontracting within the local construction environment. The low level of H&S competence and training is an industry-wide challenge and is not unique to the South African context as studies conducted in other African countries have reported similar findings.

Equipment Certification,

With the certification, it is hoped that occupational safety and health for workers, the production process, and the avoidance of accidents and environmental pollution can be guaranteed. According to (Yiu et al., 2019) the engagement and coordination among stakeholders, including government agencies, clients and developers, and contractors would be essential to the sustained improvement in operational and safety performance on sites.

Emergency Response

Analysis of the Effect of Contractor Safety Management System (CSMS) on Health and Safety Culture at PT. Indocement Tunggal Prakarsa Tbk

The results of interviews with resource persons, this OHS program exists for large project/work contractors and must be present and checked during CSMS pre-qualification. According (Indrajaya et al., 2019) a large emergency situation, an emergency that can spread beyond the limit of one work unit or even the company boundaries, and need the help of resources from authorities outside the company, such as the police, fire department, local government, and others.

Personal Protective Equipment,

The selection of personal protective equipment is adjusted to the potential hazards of the task and workplace as well as references from within or outside the country. From the results of interviews with informants, this is mandatory and for workers who are caught not wearing personal protective equipment (PPE) according to the applicable SNI standards, they will receive a penalty in the form of a fine of one million, work suspension for one month and if repeated up to three times serious mistakes the contractor company or its contractor workers will be blacklisted.

From the results of this interview, each interviewee agreed that the safety department at PT. Indocement Tunggal Prakarsa, Tbk has introduced every occupational safety and health program in the company during employee orientation for both companies and contractors. , According (Yiu et al., 2019) The CSMS framework consists of 14 functional elements, plus one audit and review protocol, and one of that is hazard control by the use of personal protective equipment (PPE) being one of the element that must be fulfilled.

OHS (Occupational Health and Safety) Culture Analysis

in this study, researchers only took a pre-survey on factors related to effective CSMS implementation in the company. The following is an example of a questionnaire from the pre-survey. And the following are the results of the pre-survey questionnaire that has been filled in by the resource persons and accumulated by the researcher.

Table 1. Questionnaire Pre-Survey of CSMS Effectiveness Implementation Factors

No	Code	Factors that affect the effectiveness of CSMS implementation	Yes	No	Do Not Know
CULTURE AND BEHAVIOR					
1	Q.1	The demands of the requirements of PT. Indocement Tunggal Prakarsa			
2	Q.2	Dependence on the contractor safety department/crew or PT. Indocement Tunggal Prakarsa			
3	Q.3	Commitment and participation of contractor management or PT. Indocement Tunggal Prakarsa			
4	Q.4	Employee involvement in the field			
5	Q.5	Employee behavior in the field			
WORKING CONDITIONS					
6	Q.6	Contractor knowledge on the job site			
7	Q.7	Tight schedule			
RESOURCE					
8	Q.8	Manpower limitations			
9	Q.9	Financial limitations			
COMMUNICATION					
10	Q.10	Safety campaign/promotion			
11	Q.11	Managers' attention to safety			
12	Q.12	safety meeting, audit and inspection			
TRAINING					
13	Q.13	Work location orientation			
14	Q.14	Safety training			
15	Q.15	Refresh safety training			

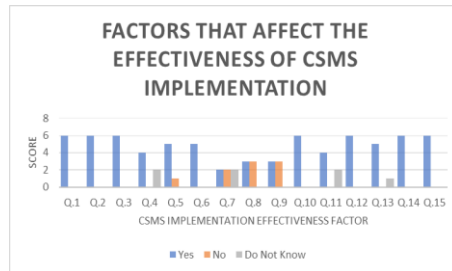


Figure 3. Graph of Pre-Survey Questionnaire Results of CSMS Effectiveness Implementation Factors

From the results of the pre-survey, data is obtained according to the table above, validation is obtained regarding the main factors that hinder or reduce the implementation of CSMS from the previous research above (Yiu et al., 2019).

First, Cultural and Behavioral Factors. Indocement Tunggal Prakarsa, Dependence of contractor workers (need to provide criticism, shortcomings / things needed in the work) to the contractor PT. Indocement Tunggal Prakarsa, Management commitment, and participation to contractors or PT. Indocement Tunggal Prakarsa, Employee involvement in the field (employees give directions/reprimands to contractor workers when making mistakes at work), Employee behavior in the field (give examples at work), Knowledge of contractors on work sites (hazards at work sites), in all The statement in the questionnaire is considered to be one of the factors that affect the effectiveness of CSMS implementation by most of the informants. Safety-based behavior is human-oriented and often based on individual or group employees performing routine work tasks, feedback on safety-related behavior, coaching, and teaching. According to (Yiu et al., 2019) The management of contractor companies needs to do a better selection process when recruiting prospective workers because if workers have good individual characteristics, at least they have a good safety motivation and level of compliance. The relevant attributes are well-scheduled and communicated project meetings, effective teamwork and communication between project staff and all stakeholders, well-planned construction works, clear safety organization; strategic control of subcontractors, effective accident investigation arrangement. In addition, Clients need to assess the risks associated with their work activities so that necessary preventive and protective measures can be identified and implemented.

Second, Working Condition Factor. The contractor's knowledge of the culture at the work site (the company's OHS program), is considered to be one of the factors that affect the effectiveness of CSMS implementation by most of the informants. According to (Yiu et al., 2019), More than three-quarters of the work accident cases that are the most common cases are slipping and falling at the same rate, lifting or carrying, falling from a height, and attacking moving or stationary objects. In addition, of the construction-related deaths, the majority are associated with falling from a height and being crushed by a moving vehicle.

Third, Resource Factor. Contract workers usually work long hours, usually up to 12 to 18 hours per day for three weeks or more. This turnaround time leads to high levels of stress and increases unsafe practices. According to (Kusuma Wardhani, 2022) Unsafe action is a human action that can allow accidents to happen to oneself and others, while an unsafe condition is a work environment that can allow accidents to occur.

Fourth, Communication Factor. Safety campaigns/promotions (at work), managers' attention to safety, safety meetings, audits, and inspections, are considered to be one of

the factors that affect the effectiveness of CSMS implementation by most of the informants.

Fifth, Training Factor. Work location orientation, safety training, and refresh/refreshing safety training (safety training again, for example safety drill, first aid kit, etc.) are considered to be one of the factors that affect the effectiveness of CSMS implementation by most of the resource persons. An organization needs to manage its CSMS as an ongoing project involving requirements and change management, user support, and maintenance and upgrades. As such, managing a CSMS project has been described as a “lifelong journey” (Radad & Hoseyni, 2022).

Conclusion

Based on the research that has been done, the following conclusion can be drawn that The CSMS program at PT Indocement Tunggal Prakarsa, Tbk has been implemented properly and adequately.

PT. Indocement Tunggal Prakarsa, Tbk involving contractor workers in the most questionnaire results are Accident and Near Accident Investigations, Safety Monitoring, Safety Talks, Making Work Permits and Hazardous Work Permits, Equipment Certification, Emergency Response, Personal Protective Equipment. The factors that most influence the effectiveness of CSMS implementation on contractor workers at PT Indocement Tunggal Prakarsa, Tbk are training factors, communication factors, and cultural and behavioral factors, this can be seen from fewer rejections from respondents regarding the contents of the questionnaire.

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