



EVALUATION OF IMPLEMENTATION OF HEALTH, SAFETY AND ENVIRONMENT (HSE) PROGRAM IN OIL AND GAS TRANSPORTATION COMPANY (IN THE HUMAN RESOURCE MANAGEMENT APPROACH)

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Abstract: *The focus of this research is to ensure that the implementation of the Health, Safety and Environment (HSE) program which runs as the goals and the objectives that have been set, the factors that lead to the success or failure of the program and the benefits derived from the implementation of the HSE program for employees and companies. This research is a qualitative research using the method of evaluation of the Context Input Process Product (CIPP) approach. Data taken using the guidelines interviews, questionnaires and observation studies and in the analysis of documents with descriptive methods through discussions and triangulation. All the activities of decision data is performed to all stakeholders components into aspects of evaluation in this study include: Context Evaluation (C): The importance of goals and objectives in the implementation of the program; Input Evaluation (I): Strategies, procedures and activities of the program; Process Evaluation (P): Implementation process of the program; Product Evaluation (P): Outcomes and benefits of the program. The results showed that the implementation of HSE program is generally in accordance with its performance indicators but the success of the program has not been fully fulfilled because the program strategy is not directed and incomplete so that the implementation process is not quite as it should be because of the absence of adequate standard operation procedure. The recommendation of this research is that if the company wishes to continue the HSE program successfully, the company should review the vision, mission, goals and objectives of the program (Context), then fix the program strategy completely and purposefully (Input), completing the operation procedures, so that the implementation process in accordance with the standard operation procedure (Process)) that will further ensure the success of this HSE program (Product).*

Keywords: *program, evaluation, HSE, CIPP*

INTRODUCTION

Industries engaged in oil and gas have a high risk in the upstream sector, namely in management and drilling activities. In addition, in the downstream sector, the processing and distribution activities also have risks similar to the upstream sector. These risks include

financial aspects, accidents, fires, explosions, occupational diseases, and environmental impacts.

The process of transporting Fuel Oil and Gas (FOG) especially loading FOG must receive more attention. This is because, if there is a failure in loading FOG, it can cause accidents in the form of fire and explosion.

The same thing happened overseas, a study conducted by researchers from Newcastle University, UK stated that accidents involving the transportation of petroleum products on highways have been associated with high frequency of occurrences and high security consequences in developing countries and 79% of accidents occurs due to human factors.

Occupational accidents in the work process at PT. Elnusa Petrofin is still happening so that the company's management views the OHSE program that has been implemented needs to be reviewed, especially now there are several work processes carried out by third parties (outsourcing) conducted by KOPEN (Elnusa Employee Cooperative) so that the program PT. Elnusa Petrofin must be thoroughly evaluated both in terms of planning, implementation and results.

PT. Elnusa Petrofin takes OSH very seriously. K3 Program at PT. Elnusa Petrofin is excluded by OHSE (Safety of Occupational Health and Environmental Protection). This is related to the core business of PT. Elnusa Petrofin which distributes oil and gas fuel (BBMG). BBMG distributed by PT. Elnusa Petrofin is very vulnerable and very dangerous if the parties do not pay attention to the K3 elements. PT. Elnusa Petrofin places the aspects of Safety, Occupational Health and Environmental Protection as important as achieving operational and quality targets.

The focus of research in evaluating the implementation of the HSE program PT. Elnusa Petrofin is in terms of the success or failure of the program, the factors that led to the success or failure of the program and the benefits obtained from the implementation of the K3LL program for employees and the company.

LITERATURE REVIEW

The evaluation model can be distinguished according to the type of question, the purpose, the approach, and the procedure adopted. Each model has advantages and disadvantages, there is no best model. The model used depends on what, where, and when the evaluation will be used. These models include Four Level Model (Donald L. Kirkpatrick), Goal Base Evaluation Model (Ralph W. Tyler), Goal Free Model (Michael Scriven), Formative Summative Evaluation Model (Michael Scriven), CIPP Model (Daniel L. Stufflebeam), Responsive Evaluation Model (Robert Stake), CSE-UCLA Evaluation Model (Marvin C. Akin), Discrepancy Model (Provus), Five Level ROI Model Robert Stake's Congruence – Contingency Model (Jack Phillips), etc.

Based on the characteristics of the HSE program at PT. Elnusa Petrofin, in this study the authors chose the CIPP model to be used as a research model because the CIPP model is in line with the focus of research where it is possible to make summative and formative evaluations at the same time. In addition, the CIPP evaluation model has the concept that the important goal of evaluation is not to prove but to improve. This is in line with the intention of PT Elnusa Petrofin who wants to evaluate the HSE program to improve the performance of the HSE program that has been carried out so far. In relation to the research that will be carried out on the implementation of this HSE program, by referring to the above reasons, the CIPP model

is to evaluate the program as an evaluation tool and formative-summative evaluation as its purpose.

In the CIPP evaluation model, program evaluation in the context of implementing the HSE program, evaluation is done by assessing, analyzing and analyzing the entire HSE program, which includes four aspects of evaluation of the CIPP model, namely: Context, Input, Process, Product that can be identified based on data, information and evidence other evidence relating to the overall components in the implementation of the HSE program.

Table 1. CIPP Evaluation Model

<i>Aspect Evaluation</i>	<i>Decision Type</i>	<i>Questions Answered</i>
Context Evaluation	Planning Decisions	What should we do ?
Input Evaluation	Structuring Decisions	How should we do it ?
Process Evaluation	Implementa-tion Decision	Do we do that as planned?
Product Evaluation	Recycling Decision	Does that work?

Source : Wirawan, 2014

Context Evaluation, the components evaluated are the vision, mission, goals and objectives of the program and program policies.

Input Evaluation, the components evaluated are those relating to strategies, procedures and activities in driver management, strategies, procedures and activities in travel risk management, strategies, procedures and activities in the management of vehicles and equipment, as well as strategies, procedures and activities in contractor management. Process Evaluation, the components evaluated are those related to driver management, travel risk management, vehicle management and safety equipment, and contractor management. Product Evaluation, the components evaluated are the results and impact of the HSE program both for employees and the community / environment.

Context Evaluation Criteria (program reference) and Input (program strategy) were analyzed based on Rumelt criteria, namely: 1). Consistency: Goals and policies are mutually consistent; 2). Conformity: Easy to adjust to changes in the environment; 3). Excellence: Providing a competitive advantage; and 4). Feasibility: Enabling existing resources. Consistency means that strategies cannot conflict with each other between goals and policies. Conformity means that the strategy must adapt and adapt the business to its environment (both the market environment and the broader non-market environment). Excellence means a good strategy must be able to create and sustain from an advantage competitive. A company with competitive advantage will always capture some of the economic value created. Feasibility (feasibility) means that the strategy must not weaken the existing resources in the business unit.

Process Evaluation Criteria were analyzed based on compliance with program guidelines (Manual QHSE and Management Guidelines for Fuel Tank Trucks and LPG Tank Skid). Product Evaluation Criteria were analyzed based on program achievements (Company Annual Report and Reality in the field).

RESEARCH METHODS

The approach used in this study is a qualitative approach and the method chosen in this study is a program / policy evaluation research method to avoid the CIPP Model (Context Input Process Product)

The research model was formed in a chart to illustrate the flow of the evaluation process of the HSE Program PT. Elnusa Petrofin is as follows:

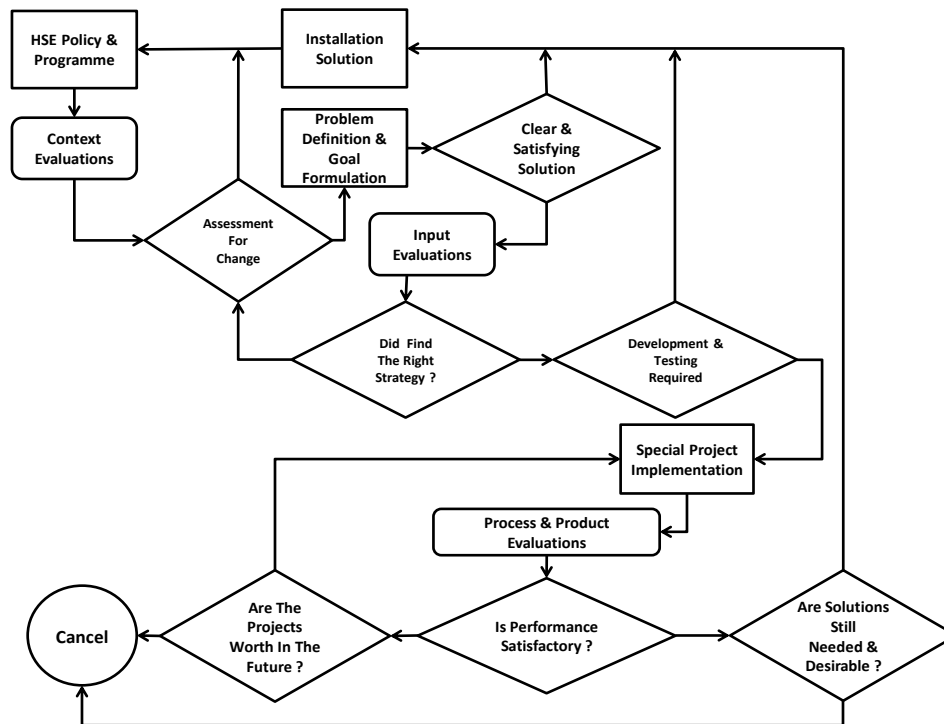


Figure 1. The flow of the K3 Program Implementation Evaluation Process, (modified from Stufflebeam, with adjustments)

Indicators of data in the CIPP model research were obtained by survey research methods, namely scientific research methods that use questionnaires, questionnaires, interviews with structured questions and observations used as primary data. Document studies are carried out as secondary data.

The use of evaluation model designs in research with the CIPP model was applied to the evaluation of the implementation of the HSE Program at PT. Elnusa Petrofin in order to guarantee the safety and health of tank car crew, in order to contribute to the productivity of the company and employees in particular

FINDINGS AND DISCUSSION

The results of the research in the Context evaluation aspect show that the company's vision is consistent, feasible and superior in relation to the company's HSE program because it shows a high commitment to providing excellent service quality and optimal benefits to stakeholders, reflecting that the company wants safe operational conditions and survived as one of the factors to support the creation of excellent service quality and optimal benefits for stakeholders. However, the company's vision is not harmonious because in its implementation excellent service has not been achieved properly. The company's policy regarding HSE is reflected in the company's mission derived from its vision. The company's mission is to engage

in inventory, marketing, storage and distribution, especially for products / services from Oil and Gas in Indonesia; provide the best and competitive services for customers by implementing the Quality of Environmental Safety Health Insurance and maximizing stakeholder value. The company's mission is consistent with its vision and feasible and superior because one of the company's missions is to provide the best and competitive services for customers by implementing the Quality of Environmental Safety Health Insurance, this mission is in line with the company's vision to become a leading company in the oil and gas products and services business Indonesia and this mission also show a high commitment to become a world-class oil and gas distributor in Indonesia by bringing excellent service quality and optimal benefits to stakeholders. However, the company's mission in its implementation has not been harmonious because in reality there are still incidents of accidents that harm the company, employees and society even though the indicator (SPI) has been fulfilled.

The results of the study in the evaluation aspects of the Input show that the strategy for implementing the K3LL program is less consistent, superior and feasible and even inconsistent in its implementation although there is a general strategy in implementing the K3 program contained in the ISO 9001 QMS but has not been consistent in its implementation. has not been approved (pending approval) by authorized officials, standards / procedures are still not made (manual tank car book has not been made, standard qualifications for vehicle maintenance technicians do not exist, risk ranking vendor procedures do not exist), and there are still activities according to procedures which has not been implemented (medical tests for prospective drivers have not been carried out, there has been no identification and planning of training, driver passport / permit has not been distributed to the driver, evaluation of driver performance is not comprehensive, no best driver award program, socialization of driver policy, re-checking specifications i the tank car is not done, the contractor audit is not carried out by a third party, the performance evaluation of the contractor is only done at the end of the contract).

The results of the research in the Process evaluation aspects show that the implementation of the HSE program is not in accordance with the program guidelines (Manual QHSE and Management Guidelines for BBM Tank and LPG Skid Tanks) both with regard to Driver management, travel risk management, vehicle management and safety equipment, and contractor management, this is because HSE program implementers are third party (outsourced) namely KOPEN (Elnusa Employee Cooperative). The incompatibility of the HSE program is proven by the implementation/ management carried out outside the provisions stated in the QHSE Manual Management Guidelines for Pertamina Fuel Tank and LPG Tank Skids because there is no complete SOP to regulate its implementation.

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The results of the research in the aspect of Product evaluation show that the HSE performance achievement indicators are in line with expectations due to the Safety Performance Indicator (SPI) according to the target where in the annual report of PT. The last Elnusa Tbk released in 2016, the target that was envisioned in 2016 was that there were no fatal fatalities. Lost Time Injury Frequency Rate (LTIFR / LTFR) is the amount of time lost due to injury or work accident per one million working hours of the target employee is maximum 0.13 and the achievement is 0.11. Total Recordable Injury Frequency Rate (TRIFR) is the frequency of total injuries that can be recorded or the total level of injury that can be recorded is the number of fatalities, time injuries lost, cases or substitute work and other injuries that require medical treatment by a medical professional per million target working hours are maximum 0.90 and the result is 0.53 and Environment Damage (Oil Spill) is a work accident that causes direct environmental damage such as the spill of oil to the target waters to a maximum of 2 barrels per accident and an achievement of 0.25. However, the reality in the field shows that there are things that are not listed in the company's annual report regarding the performance of the HSE program, including the occurrence of fuel truck accidents that are very detrimental to the company in terms of material (money) and non-material (tarnished company reputation) in the eyes of customers), the rampant protests and strikes of tank crews as a result of work accident incidents experienced by tank crew and indications of tank crew outsourcing and recruitment programs that were not in accordance with the procedures carried out by companies that had an impact on workplace accidents. Besides that the impact of the HSE program is not visible because there is no measure of employee productivity increasing or decreasing as a reference to the impact of implementing the HSE program (no tank crew productivity measurement before and after the HSE program is implemented), HSE culture has not grown well in the company because of its operational everyday many HSE rules that are violated by both employees and management, as well as negative impacts on the environment still occur especially in the corporate environment because HSE culture has not become part of the corporate culture.

Context evaluation findings on the HSE program of PT. Elnusa Petrofin reinforces the results of previous research conducted by Slate; Yakubu and Bakri; Prasetyo and Wahyuningsih; Tjakra, Langi and Walangitan and Meridian Research Inc. the point is that the success of the OSH program will depend on the commitment of the company's management reflected in the vision, mission, objectives and policies of the OSH program, but based on the findings of the HSE program research at PT. This Elnusa Petrofin is also strengthened that this alone is not enough, the success of the HSE program must also be supported by appropriate implementation both in terms of the implementation of the strategies and procedures for implementation and supervision. From the findings of the evaluation of the HSE context program PT. This hypothesis can be developed by Elnusa Petrofin that management's

commitment in planning and implementing a HSE program determines the success of a HSE program for a company.

Results of evaluation of Inputs to the HSE program of PT. Elnusa Petrofin reinforces the results of previous studies conducted by Luckyta and Partiwi, the point of which is that the cause of unsafe behavior of workers is the lack of management control functions due to the absence of strict rules (procedures), based on the findings of HSE program input evaluation findings at PT. Elnusa Petrofin deals with strategies, procedures and activities related to the HSE Program PT. Elnusa Petrofin in terms of the Fuel Shipping Transportation Safety Management System (Tank Car / Driver Crew Management; Travel Risk Management; Vehicle and Equipment Management; and Contractor Management) shows that the Safety Management System and procedures for fuel delivery transport are incomplete, there are systems but not formalized into the strategies and procedures contained in the QSHE Procedure Manual. The lack of complete procedures results in a strategy that cannot be implemented properly because there are still procedures that have not been prepared according to their needs. The absence of a formal Safety Management System strategy and procedure for fuel delivery transportation in the QHSE Procedure Manual of PT. Elnusa Petrofin caused the supervision function in the implementation of the HSE program to be low because the effectiveness of the program activities, the occurrence of work accidents experienced by AMT was partly due to the absence of strategies and procedures for the Safety Management System fuel delivery transportation formally in the QHSE Procedure Manual of PT. Elnusa Petrofin, thus based on the findings of input evaluation research on the HSE program of PT. Elnusa Petrofin means that unsafe conditions that cause workplace accidents are caused by the absence of formal program strategies and procedures so that the implementation of the program cannot be monitored because the absence of a reference in program implementation can be hypothesized that the existence of strategies and procedures for HSE program activities determines implementation success HSE program.

The results of the Process evaluation findings on the HSE program of PT. Elnusa Petrofin reinforces the results of previous studies conducted by Bowie, et al; Yakubu and Bakri; Redingera, et al; Eskandar, et al; Chinda; Muthuviknesh and Kumar; Prasetyo and Wahyuningsih; Tjakra, et al; Lucyta and Pratiwi; and Meridian Research Inc. the point is that the OSH program must be implemented and carried out in accordance with existing procedures and activities. The implementation of procedures and program activities must be carried out effectively and by using efficient resources, based on the research findings of the evaluation of the HSE program process at PT. Elnusa Petrofin shows that the process of implementing the HSE program has not been carried out as it should be because the implementation procedure is incomplete (only general) so that the implementation of the program still occurs unsafe working conditions that harm the company, employees and the general public. Thus, based on the results of the research evaluation process on the HSE program, PT. Elnusa Petrofin can be hypothesized that the implementation of programs that refer to procedures that are in line with the program's implementation needs and in line with applicable regulations that are closely monitored in their implementation determine the success of the HSE program. The absence or incompleteness of program procedures causes the implementation of the program to be less focused so that it cannot meet the objectives and targets of the program that have been determined even though the results are generally good but there are still risks that can cause accidents that can harm the company, employees and the general public.

From the results of previous research by the Occupational Safety and Health Administration, U.S. Department of Labor as well as findings on evaluating the HSE Product program at PT. Elnusa Petrofin can be hypothesized that the management of a good HSE

program starting from planning, structuring and implementing it will give positive results in the form of increasing employee productivity and impacting on the realization of a culture of safety in the company. The results of the HSE program cannot be measured solely on the basis of the nominal SPI but how the results and impacts that actually occur to employees, companies and the community.

CONCLUSION

From the findings of each evaluation aspect and associated with the formulation of existing problems, the final conclusion of the evaluation of the HSE program PT. This Elnusa Petrofin is as follows:

1. Efforts of PT. Elnusa Petrofin for the success of the HSE program is that the company has set the vision, mission, goals and objectives of the program in accordance with the company's vision and mission as stated in QMS ISO 9001 as a general strategy in implementing the program. complete, limited facilities, infrastructure and personnel as well as poor supervision of program implementation due to outsource to third parties (KOPEN) as the party implementing this HSE program.
2. In conducting the HSE program, the company should have a smart and complete strategy (while the strategy that is owned is only general), which is reflected in the availability of complete procedures as a reference for implementing the program, with the incomplete procedures of this activity the resources needed implementing the program cannot be clearly allocated, these procedures must be compiled by the company's HSE together with KOPEN as the third party implementing the program.
3. The implementation of the HSE program compared to the general program plan is appropriate, but because the program plan is not detailed, there is no clear comparison between the program and the plan, information about this cannot be identified with certainty, but when compared with the standard references issued by the company and Pertamina as the employer to the company, it can be concluded that some of the plans (standard references) are fulfilled, some are not fulfilled, especially in terms of implementation and supervision of the program due to incomplete program procedures.
4. The success of the HSE program carried out by the company if measured by HSE performance achievement indicators is in line with expectations due to the targeted Safety Performance Indicator (SPI), but the reality on the ground shows that there are no annual reports on the performance of the HSE program used as the company's main concern so that the success of the HSE program is in line with the company's expectations.

The Board of Directors must review the current Vision Mission and want to revise its contents, which are updated with the latest conditions and new achievements of the company, besides that the management of enterprise strategy needs to be reviewed again, especially in the strategy of implementing the K3LL program describe the extent to which the organization does something to achieve its vision and mission. For program goals and objectives, the evaluation is conformity with the vision, mission, objectives, and objectives, formulating the objectives of the K3LL program that are relevant to their mission and relevant to the demands and needs of stakeholders.

The company together with KOPEN as the third party implementing the program must arrange a complete procedure for implementing the program. The procedure cannot be arranged only by one party (Elnusa Petrofin or KOPEN only) because the procedure must be arranged jointly between policy makers in this case Elnusa Petrofin with the program implementer or

KOPEN by paying attention to the standard references and requirements from the parties Pertamina as the employer and applicable government regulations.

Regarding the management process run by KOPEN, Elnusa Petrofin must be willing to review its cooperation, and determine its attitude so that business continuity is not threatened. The Board of Directors must be firm, so as not to be a simple problem to be addressed in months but if it is not a priority, the problem becomes no longer simple. It can even threaten the overall existence of the business.

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