

Fraud Detection of LPG 3 Kg at SPPBE PSO PT XYZ in Indonesia



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ABSTRACT: Determent the potential of fraud, early detection of fraud it's important things. Fraud detection can help management to evaluate the control system, showing of internal control weaknesses and prevent losses that will be happened at the company. The purpose of this study is to determine the fraud detection of 3 kg LPG at SPPBE PSO PT XYZ, which was conducted in the period of October 2019 until June 2020. Using the Critical Point Auditing method and Job Sensitivity Analysis. Data collection techniques are carried out by documentation, interviews and observations. The objects studied were Rubberseal, Capseal, Plastic Warp, and Scales. The result and conclusion of this study, determine a fraud indication of 3 kg LPG at SPPBE PSO PT XYZ, with the analysis of increasing usage trends. The special test results have a difference each day that indicates fraud. Job sensitivity analysis technique indicates that several positions are proneness to fraud.

KEYWORDS: Fraud Detection, Critical Point Auditing, Job Sensitivity Analysis

1. INTRODUCTION

The need for LPG in Indonesia has increased, according to data from the Central Statistics Agency (BPS) from 2012 the use of LPG reached 90,457 million people with a sales volume of 300,556 million tons and increased until 2017 amounting to 138,850 million people and sales volume of 138,850 million people. The highest demand for LPG was found in households using 3 kg of LPG, namely 135,138 million people in 2017. According to Gumelar [1], the need for 3 kg of LPG in 2016 increased by 6,602 million tons or 14.5% from the previous year. The increasing demand for LPG in Indonesia has encouraged PT. Pertamina (Persero) to develop an LPG management company starting from LPG procurement to marketing to consumers. LPG management consists of managing the Public Service Obligation (PSO), namely 3 kg LPG cylinders which receive subsidies from the government which will be distributed to Elpiji Bulk Filling and Transportation Stations (SPPBE) which will be distributed to agents and LPG bases.

Problems that occur with LPG products can be caused by fraud on the part of agents (whole sellers), retail, and internal LPG cylinder filling companies that have established partners. The first problem that is often encountered is LPG rubber, households often have difficulty installing LPG gas at home because the LPG rubber is often not in good condition so they have to replace the LPG rubber with spare rubber. This makes people have to buy new LPG rubber. Second, the weight of subsidized LPG which is loaded with 3 kg does not have a weight that is per the established standards. This problem causes losses in terms of Indonesian society.

The problems that are felt by the community regarding LPG arise from the company's activities and operations, one of which is the lack of maintenance or (maintenance) of the company's operational tools such as scales which results in the difficulty of ascertaining whether the amount or quantity of product carried is appropriate or not. This problem is fairly mild but has a major impact on the continuity of business processes which can result in losses for several parties involved if it is not immediately addressed and solutions are sought to minimize the triggers for problems that will become seeds of fraud so as not to become a place for employees to commit fraud at work.

Fraud that appears in the company is a sign that the functions within the company are not implemented strictly and consistently. Fraud is one of the various kinds of problems that occur within the scope of the company. Fraud can occur even in companies that have good internal controls. Fraud detection can be analyzed in depth. Perpetrators of fraud come from all levels of management in a company. The company is expected to improve supervision to minimize fraud.

According to Tuanakotta [2], fraud is any illegal act characterized by deception, concealment, or threat of trust. These actions are not dependent on the application of threats of violence or physical force. Fraud is perpetrated by individuals and organizations to obtain money, property, or services to avoid payment or loss of services or to secure a personal business

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advantage. According to Fahmi [3], fraud includes embezzlement, manipulation, breach of position, theft, dishonesty, bad behavior, negligence, tax evasion, bribery, extortion, expropriation, and misstatement.

Possible forms of fraud that may arise include management fraud and employee fraud. Management fraud occurs in the form of embezzlement of company assets such as embezzlement of company money supported by manipulating financial reports, where the accounting data and information to be presented in the financial statements are intentionally changed. While employee fraud that occurs includes falsification of payroll by creating fictitious employees, then pouring the salary.

According to Bologne [4], some factors cause fraud to occur including greed or greed, related to potential greedy behavior in a person; opportunity or opportunity, related to the state of the organization or society so that there is an opportunity for someone to commit fraud; need or need, related to the factors that a person needs to support life; exposure or disclosure, related to the consequences faced by perpetrators of fraud if found to have committed fraud. In overcoming the potential for fraud, early detection of fraud is very necessary. Fraud detection can help management to evaluate control systems, pinpoint internal control weaknesses, and prevent losses that will be experienced by the company.

This study aims to determine the detection of 3 kg LPG gas fraud at SPPBE PSO PT XYZ. The results of this study are useful as a means of developing knowledge and applying the theory obtained. In addition, the results of this study can be used as input and consideration for decision-making for companies in detecting fraud and tightening company internal controls.

2. LITERATURE AND THEORETIC REVIEW

Fraud

Fraud can be interpreted as intentional deception including lying, stealing, engineering, and embezzling an activity in the company unreasonably for one's interests. According to Tuanakotta [2], fraud is an illegal act characterized by deception, concealment, or threats of trust. According to Amin [5], cheating is a general understanding and includes a variety of ways that can be used for human ingenuity, which is done by someone to get an advantage over another person through actions that are not right. According to Yessiriani [6] quoting from the Association of Certified Fraud Examiners (AFCE) explains:

"Fraud is a scheme of unrighteousness or intentional dishonesty that is used to take intentional and unfair advantage of another person or a group of people, including using any means, any fraud."

Fraud itself in general is an unlawful act committed by people from within or outside the organization to obtain personal or group benefits that directly harm other parties. Fraud in the company can occur due to factors that trigger fraud. Based on Bologne [5] explains:

"There are factors that cause fraud to occur including greed or greed, related to potential greedy behavior in a person; opportunity or opportunity, related to the state of the organization or society so that there is an opportunity for someone to commit fraud; need or needs related to the factors that a person needs to support life; exposure or disclosure, related to the consequences faced by perpetrators of fraud if found to have committed fraud."

Fraud Detection and Prevention

Internal Audit is an assessment mechanism carried out by internal auditors who are trained regarding accuracy, reliability, and efficiency, and can control the internal controls contained within the company. The aim is to assist company leaders in carrying out their responsibilities by detecting and preventing fraud within a company. To achieve this goal, fraud can be prevented in ways such as building a good internal control structure, streamlining control activities, improving organizational culture, and streamlining the internal audit function [7].

From the statement above it can be concluded that management must make decisions or policies to prevent fraud in the company. One of them is important for the company to have a policy to control the risk of fraud. Elements of internal control according to Mulyadi [8] in auditing standards mention 5 main elements namely control environment, risk assessment, information and communication, control activities, and monitoring. The roles and responsibilities of fraud detection and prevention are described as a cycle called the Fraud Deterrence Cycle or fraud prevention cycle, consisting of corporate governance, transaction level control process, and retrospective examination, investigation, and remediation.

It can be concluded from the activities carried out that the role of the auditor is very important in a company by carrying out fraud detection, fraud prevention, and fraud investigation. An important step taken by the auditor to find out whether there is fraud by detecting it can be used several techniques including Critical Point Auditing (CPA), a technique for detecting through an audit of accounting records that leads to symptoms or the possibility of fraud. Critical Point Auditing is carried out utilizing trend analysis and special testing. In addition, there is a sensitivity analysis technique, in principle, it is recommended for an analysis that looks at potential actors, such as an employee who works in a certain position who will be reviewed for opportunities for

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fraud that he can do. Detection techniques with job sensitivity analysis by looking at potential actors are carried out using approach methods, routine surveillance, and symptom identification.

3. RESEARCH METHOD

The research method used is descriptive qualitative. This study uses a descriptive approach to describe the research object or research results. The data used in this study are primary and secondary. Primary data is obtained directly from the main source, namely from the head of internal auditors through interviews. Secondary data is a source of data obtained by other parties indirectly obtained from the SPPBE Pertamina website <http://apps.pertamina.com/sppbe/useradmin/user/login.aspx> and reports on LPG filling activities.

The data analysis technique used is to find discrepancies from reports on 3 kg LPG filling activities with production data recap from the SPPBE Pertamina website, indicating fraud committed at SPPBE PSO PT XYZ, analyzing fraud detection using the Critical Point Auditing method. analyze fraud detection using the Sensitivity Analysis Technique method, draw conclusions on all the data obtained, and provide suggestions for the good and progress of the company.

4. RESULT & DISCUSSIONS

Fraud Detection

In the fraud detection stage, the researchers found discrepancies in the report on the filling of 3 kg LPG with the recap of production data from the SPPBE Pertamina website with the results:

Table 1. Fraud Detection Results

No	Period	Hasil Laporan Audit Internal		
		Rubberseal	Capseal	Warp Plastic
1	12 October - 18 October 2019	Match	Indicated	Match
2	16 November - 22 November 2019	Indicated	Match	Match
3	30 November - 06 December 2019	Indicated	Match	Match
4	07 December - 13 December 2019	Indicated	Match	Match
5	09 May - 15 May 2020	Indicated	Match	Match

Source: Processed by researchers

Table 2. Details of Fraud Detection Results

No	Period	Rubberseal	Capseal	Information	
		Stock Card	Internal Auditing		Stock Card
1	12 October - 18 October 2019		266.206	266.766	Number Difference
2	16 November - 22 November 2019	219.024			Figure Bold
3	30 November - 06 Desember 2019	154.774			Figure Bold
4	07 December - 13 December 2019	5.750			Number Replacement
5	09 May - 15 May 2020	464.374			Number Replacement

Source: Processed by researchers

The results from tables 1 and 2 for the period 12 October-18 October 2019 indicated fraud, namely the final balance on the capseal stock card of 266,766 pcs did not match the results of the internal audit report of 266,206 pcs. The period November 16-22 2019 indicated fraud, namely on November 21 2019 there was a thickening of the numbers on the rubberseal stock card, namely 219,024 pcs. The period November 30-December 6 2019 indicated fraud, namely the thickening of the numbers on the rubberseal stock card on December 4 2019 of 154,774 pcs. The period December 7-December 13 2019 indicated fraud, namely the replacement of the outgoing numbers on the rubberseal stock card, which amounted to 5,750 pcs. The period May 9 – May 15 2020 indicated fraud, namely the replacement of numbers on the remaining rubberseal stock cards on May 12 2019 of 464,374 pcs. According to Putri [9], irregularities are intentional misstatements or omissions, in which case decision-makers change their decisions. This deviation is usually misleading to the user. The term commonly used is management fraud. The criteria included deviance such as manipulation, deletion, and falsification.

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Critical Point Auditing

In the critical point auditing stage, the researchers analyzed trends in the use of rubberseal, capseal and plastic warp with the results:

Table 3. Usage Trend Analysis Results

No	Period	Unit			Usage Trend(%)
		Rubberseal	Capseal	Warp Plastic	
1	28 December 2019 – 03 Januari 2020	28.750	64.400	64.400	45
2	04 January – 10 January 2020	43.800	81.760	81.760	54

Source: Processed by researchers

The results from Table 3 show an increase in the use of rubberseal, capseal, and plastic warp from the period 28 December 2019 to 3 January 2020, which was originally 45% in the period 04 January - 10 January 2020, increasing to 54%. Special tests are carried out on activities that have a high risk of fraud, with indications of weighing fraud, it is necessary to carry out special tests on weighing transaction reports. Special tests were carried out on scales based on the SPPBE PSO PT XYZ Company Operational Standards. The total net report of scales and total LPG in theory should have the same number from distribution delivery and the results show that there is a difference every day from the weight of the transaction report, the scales and trucks that come only on the date February 25, 2020 which is 0 increments from custom testing. December 28, 2019, January 9 2020-February 14 2020, March 30 2020-June 4 2020, and June 8 2020-June 16 2020 the researchers did not obtain data on the scales because the weighbridge was damaged so the scales were unstable.

Sensitivity Analysis Techniques

According to Marunung and Apriani [10], management is responsible for implementing control procedures to reduce the risk of fraud, which is an effort to prevent and detect it. Routine monitoring of indications of fraud that has been resolved, namely the wrong path used by the skidtank in retrieving LPG to the Pertamina depot which has been improved through internal control, namely recording and documenting the kilometers traveled by the skidtank when recharging LPG. In approaching work positions where there were indications of committing acts of fraud, the results were the SPPBE manager, head of the production, checker, operator, loading and unloading operator, and production administration.

Table 4. Recapitulation of Symptom Identification

Job Position	Sex	Age	Wage	Education	Lifestyle Desire	Appearance
SPPBE Manager	P	32	> Rp. 4.000.000	Bachelor's Degree	Demonstrates a desire for a luxurious lifestyle to be seen by those around you.	Tends to show a striking appearance.
Head of Production	L	39	< Rp. 4.000.000	High School	Not showing but a growing economic need to demand.	Does not show any conspicuous appearance
Checker	L	35	< Rp. 3.500.000	High School	Does not show any conspicuous appearance	Not showing but a growing economic need to demand.
Operator	L	34	< Rp. 3.500.000	High School	Not showing but a growing economic need to demand.	Does not show any conspicuous appearance.
Unloading and loading	L	29	< Rp. 3.000.000	High School	Not showing but a growing economic need to demand.	Does not show any conspicuous appearance
Production Administration	P	23	< Rp. 3.000.000	Vocational High School	Shows the desire for a lifestyle that follows the trend to be seen by people around.	There is a desire to show the appearance of following the trend.

Source: Results of interviews by researchers

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A summary of the identification of symptoms (symptoms) shows that indications of fraud are also driven by age, income, and position within a company. Fraud in the company can occur due to factors that trigger fraud. According to Bologne [2] explains: "There are factors that cause fraud to occur including greed or greed, related to potential greedy behavior in a person; opportunity or opportunity, related to the state of the organization or society so that there is an opportunity for someone to commit fraud; need or need, related to the factors that a person needs to support life; exposure or disclosure, related to the consequences faced by perpetrators of fraud if they are found to have committed fraud."

Greed, opportunity and need are factors that trigger acts of fraud such as the desire for a luxurious lifestyle indicated by the position of manager and production administration. The manager's position shows the desire for a luxurious lifestyle to be seen by the people around him, including his subordinates, but in terms of appearance, there tends to be a striking appearance. The position of head of production, checker, operator, and loading and unloading has no desire for a luxurious lifestyle considering that many needs are still not fulfilled and appearance according to sources is not important when working. Administrative positions for appearance production and communication tools tend to keep up with the times (trends) showing the desire for the same lifestyle as most people do on social media.

Exposure relates to the possibility of disclosure of fraud. Disclosure (exposure) of fraud does not guarantee that the fraud will not be repeated either by the same actor or other perpetrators. Therefore, every perpetrator of fraud should be penalized if his actions are revealed. The results of fraud detection were carried out using the critical point auditing method and sensitivity analysis techniques. The actions taken by the company are in the form of sanctions, namely the dismissal or release of employees who are indicated to have committed acts of fraud.

5. CONCLUSIONS

Through data analysis, it can be concluded that there is a discrepancy in reports on 3 kg LPG filling activities at SPPBE PSO PT XYZ for the period October 2019 to June 2020 which indicates fraud. From the results of fraud detection using the Critical Point Auditing method, the results of trend analysis for rubberseal, capseal, and plastic warp experienced different increases and decreases because of the number of official LPG agents who came every day changed, but in trend analysis, usage increased from 45% to 54% in the period January 4-10 January 2020. The results of a special test on the weighing transaction report found that the weight did not correspond to the theory that the number of official LPG dealer trucks had a difference every day, which should have a difference of 0. The results of fraud detection using the Analysis Technique method the sensitivity of positions that indicated fraud were the SPPBE manager, the production department, and production administration. Based on the results of this study, it is expected that internal auditors can improve the company's internal control of indications of fraud committed by employees of SPPBE PSO PT XYZ. In addition, it is expected that there will be a routine change of positions to minimize indications of fraud committed by one of these positions and it is expected that there will be updates to internal audit reports that are carried out every week and add objects to be audited over time to minimize any acts of fraud.

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