

IMPACT OF ILLEGAL OIL MINING: WHAT SHOULD GOVERNMENT DO?

DAMPAK PENAMBANGAN MINYAK ILEGAL: APA YANG HARUS DILAKUKAN PEMERINTAH?

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ABSTRACT

The rampant practice of illegal oil well mining by the community in Musi Banyuasin district has caused various impacts, namely environmental impacts in the form of pollution, the impact of causing fatalities due to oil well exploration accidents, the impact of social conflict, and the impact of vulnerability and order. The purpose of this research is to formulate a policy from the government to regulate Community Oil Well Management. Research Methods using Qualitative Analysis. The results obtained are that the government must create comprehensive governance that includes institutional governance and mapping of oil well clusters, governance of safety, occupational health and environmental management, governance of community group capacity building, governance of community oil well management and production. upstream downstream. So as to produce governance benefits in the form of absorption of labor, calm for the community in carrying out their activities, reduced crime rates and crime rates, and profits obtained by local governments from tax revenues which can ultimately be used to realize community welfare programs

Keywords: *Illegal drilling, impact, governance*

ABSTRAK

Maraknya praktek penambangan sumur minyak secara ilegal yang dilakukan masyarakat di kabupaten Musi Banyuasin telah menyebabkan berbagai macam dampak yaitu dampak lingkungan berupa pencemaran, dampak timbulnya korban jiwa akibat kecelakaan eksplorasi sumur minyak, dampak berupa konflik sosial, serta dampak kerawanan dan ketertiban. Dikarenakan saat ini belum jelasnya kebijakan dari pemerintah untuk mengatur Pengelolaan Sumur Minyak Masyarakat maka Diperlukan tata kelola yang komprehensif yang mencakup Tata Kelola Kelembagaan Dan Pemetaan Klaster Sumur Minyak, Tata Kelola Aspek Keselamatan, Kesehatan Kerja Dan Pengelolaan Lingkungan Hidup, Tata Kelola Penguatan Kapasitas Kelompok Masyarakat, Tata Kelola Pengelolaan Dan Pemroduksian Sumur Minyak Masyarakat dari hulu kehilir. Sehingga menghasilkan Keuntungan tata yang berupa Penyerapan tenaga kerja, Ketenangan bagi masyarakat dalam melakukan aktifitasnya, Menurunnya tingkat kriminalitas dan angka kejahatan, dan Keuntungan yang didapat oleh pemerintah daerah dari pendapatan pajak yang akhirnya dapat digunakan untuk merealisasikan program program kesejahteraan masyarakat.

Kata Kunci: *Illegal drilling, dampak, tata kelola pemerintah*

INTRODUCTION

Crude oil (crude oil) is one of the most important and strategic natural resources for human life in the world to date, including in Indonesia (Haryati and Kuswan n.d.). Oil and gas are also included in one type of non-renewable fossil energy. Indonesia is a country rich in natural resources, both renewable and non-renewable (Haryati & Kuswan, n.d.). Natural wealth owned by an area is an important point and can be a place to collect income coffers if managed properly and correctly (Zakiyah & Idrus, 2017). Oil and gas are non-renewable strategic natural resources and are vital commodities that affect the lives of many people. Oil and gas business activities have an important role in realizing national energy sovereignty, independence, and security to support

sustainable national development. (Sanni et al., 2015) Musi Banyuasin Regency is one of the regencies located in South Sumatra Province which has the potential for relatively large areas, namely in the mining and energy sectors. These two sectors are the biggest contributors to the GRDP of Musi Banyuasin Regency, namely 66.86%, currently there is still a lot of oil and gas potential that has not been explored, there are recorded 2,374,508 MSTB (Million Stock Tank Barrels) oil that is not yet in production. (Rumesten et al., 2018) The population of Musi Banyuasin Regency based on data from the Central Statistics Agency for South Sumatra in 2019 recorded 649,095 people and a population density of 44.08 people/km². (BPS, 2021) As a petroleum-producing area, placing Musi Banyuasin Regency is the sixth richest

district in Indonesia after Kab. Kutai Kartanegara (East Kalimantan), Kab. Bengkalis (Riau), Kab. East Kutai (East Kalimantan), Kab. Siak (Riau), Rokan Hilir Regency (Riau). The last few months of illegal mining and oil processing activities that have taken place in Musi Banyuasin Regency have caused a lot of losses, both from an economic standpoint where there is no addition to state and regional revenues, endangering people's safety, and causing environmental damage.(Susilo, 2003). The following is data on the location and number of illegal oil wells in Musi Banyuasin.

With the indirect involvement of the community in mining activities, which numbered more than 231 thousand, of course, the district government could not immediately close this activity. The following is data on direct community involvement in mining (including interpreterdrilling, and contract laborers) totaling 5 people per well, and indirect community involvement (covering transportation, transport workers, security, services, traders, etc. totaling 10 people) from mining activities. In addition, there is indirect involvement from each worker, namely the families of the workers who are the dependents of the workers involved in mining the community's oil wells. On average, every 1 worker involved in the community's oil well mining activities bears 3 family members consisting of a wife and 2 children.

Based on the background explanation above, several problems were found which became the subject of discussion in the illegal mining of oil wells in Musi Banyuasin Regency, namely First Illegal oil well mining activities that took place in Musi Banyuasin Regency caused many losses and impacts on the environment, social vulnerability, and the impact on casualties.Second There are no clear and firm regulations regarding illegal oil mining that are precise in terms of mapping, licensing, including regulations.Third Indirect community involvement in mining activities, which numbered more than 231 thousand, of course, made the district government unable to immediately close this activity. However, if allowed to drag on, it will become a serious problem in the future.

METHOD

This study uses an interpretive qualitative method that aims to examine in depth an event and how the informant responds to the incident. Research data were collected in three ways, namely in-depth interviews, observation, and secondary data documentation. Interviews were conducted with purposively selected key informants, such as environmental service officials and people who

own illegal oil wells. Data were analyzed using an interactive model consisting of three stages: (1) Data condensation (data condensation); (2) data presentation (display data); and (3) drawing conclusions (Miles-Huberman-Saldana-Designing-Matrix-and Network-Displays.Pdf, n.d.)

In conducting data analysis, researchers used ATLAS.ti 9 software which can simplify the process of analyzing qualitative data. Before the data is processed, the interview results are transcribed and stored in PDF format. Interview transcripts and photos were simultaneously entered into ATLAS.ti 9 to facilitate data processing, including the data triangulation process. There are three stages carried out in the process of data analysis using ATLAS.ti 9, namely open coding, axial coding, and selective coding (Sharp, 2003). Open coding is coding that is done by determining the relevant keywords and determining the categories that contain these keywords. Axial coding is coding that is done by determining the relationship between the categories that have been determined at the time of open coding. While selective coding is coding that is done by formulating a statement that is more abstract, more general, and able to accommodate all the core concepts that have been collected from the linking stage between several categories of in axial coding (Courrieu et al., 2019).

After the data analysis was carried out, the researcher validated the data using source triangulation and method triangulation techniques (Myers, 2002). Triangulation of sources, namely conducting comparisons and re-examining the level of confidence in data obtained through different instruments and time settings in qualitative research. In carrying out this triangulation technique, the researcher compared the results of the interviews of each key informant to check the correctness of the information obtained. (Sharp, 2003) While the method triangulation technique is a data validation technique that has two ways, namely checking the level of trust in research findings from data collection techniques carried out and checking the level of trust in data sources using the same method. In carrying out this triangulation technique, the researcher checked the research results through different data collection techniques, namely observation (Rahman et al., 2022) in-depth interviews, and documentation. (Basuki, 2016).

RESULT AND DISCUSSION

The following are the results of the research findings that have been carried out which will be presented in this discussion chapter:

The Impact of Community Illegal Oil Well Mining Activities Impact

Environmental Impact is the influence of changes to the environment caused by a business and/or activity (Li et al., 2014). The illegal mining of community oil wells in Musi Banyuasin Regency has caused pollution to the Dawas River located in TanjungDalam Village, Keluang District, which has affected the people of Hamlet 5, TalangBaru Hamlet, and Sungai Lilin Village, Sungai Lilin District, Musi Banyuasin Regency.



Figure 1. River Pollution (Muba Environmental Service 2022)

Based on the results of the field inspection several things happened. Crude oil contamination in the Dawas River occurred from November 13 2022 to the present due to crude oil mining activities located in TanjungDalam Village, Keluang District, Musi Banyuasin Regency. Operational activities include extracting crude oil from crude oil wells that are stored in holding ponds and efforts to drill wells in surrounding locations (Teguh et al., 2017) It can be seen that the natural channel/basin containing crude oil in the crude oil mining area continues to flow into the environmental media which leads to the Selontok River, continues to flow into the Temiyan River, and finally flows into the Dawas River. The flow of crude oil in natural channels/basins is caused by the crude oil produced in the oil storage ponds overflowing/unaccommodated. The distribution of crude oil on the Dawas River has an impact on the people of Hamlet 5 (Parung). Talang Baru Hamlet to Sungai Lilin Village, Sungai Lilin District, which is estimated to spread along the Dawas River to about 25 kilometers.

Communities around the Dawas River have lost their livelihoods and some people cannot carry out activities to bathe and wash in the Dawas River. The distribution of pollution from the crude oil spill on the Dawas River appears to cover part of the water body to the entire Dawas River water body with an estimated average thickness of 3 cm. Crude oil spills in the Dawas River flow can cause a greater spread of impacts that can be detrimental to

the community and other living things, if not immediately taken control of the crude oil spill pollution. (Wardhna, n.d.)

Impact of the Cases of the Souls

Illegal oil well mining activities have caused many victims, both dead and injured. The large number of fatalities caused by illegal oil well mining accidents indicates that conventional mining activities carried out by the community are still very far from the aspects of occupational safety, health, and safety (Thaldiri et al., 2017). This then encourages the local government to find solutions to the problem of illegal oil well mining which always causes casualties. Some of the incidents that occurred included in September 2021 a community oil well in Keban I Village, Sanga Desa District, Musi Banyuasin, South Sumatra exploded. One miner died and four others suffered serious burns as a result of the incident. then the most recent in October 2022 A total of 12 points of illegal oil wells in Musi Banyuasin (Muba), South Sumatra (Sumsel) exploded and gave off fire. As a result, a worker at that location caught fire and had to undergo treatment at the hospital.



Figure 2. An explosion of Oil Well

Impact in the Form of Social Conflict

Conflict is a social process when several people or groups of people try to fulfill their goals by opposing parties accompanied by threats and or violence (Wieviorka, 2013). Social conflict due to labor competition can occur in all illegal oil well mining locations, social unrest is an event that often occurs both between the local community and miners and between fellow illegal oil well miners to defend or protect their respective interests. . This is inseparable from grassroots groups, who are generally mining workers who often become victims of funders or financiers, resulting in community life being very vulnerable to the emergence of social upheavals that have the potential to trigger conflict over mine management (Apriyanto& Harini, n.d.).

Impact of Soil Damage and Air Pollution

Soil contamination by illegal oil well mining activities is an important problem that is still being faced today. the presence of harmful compounds in the soil viz Total Petroleum Hydrocarbon which has changed the quality of the soil at the location of petroleum mining (Reza et al., 2021). Other impacts also affect air quality caused by burning and cooking activities (refinery) of the oil. The oil that seeps into the soil can cause the oxygen supply to be closed and poison soil microorganisms, resulting in the death of these microorganisms. Oil spills in the environment can contaminate soil and water down to the sub-surface and groundwater aquifer layers. When an oil spill has polluted the soil surface, the spill can evaporate, be washed away by rainwater, and or enter the soil. (Syaichurrozi et al., 2022) Pollution that enters the soil then precipitates as toxic chemicals in the soil, which can directly impact humans when in contact with or can contaminate surface water or groundwater. In addition, oil spills can reduce soil stability and degrade soil functions which can cause critical land. Petroleum that contaminates the ground can reach groundwater locations, lakes, or water sources that provide water for domestic and industrial needs, so it becomes a serious problem for areas that rely on groundwater as their main source of clean water or drinking water. Petroleum pollution, even at very low concentrations of hydrocarbons, greatly affects the smell and taste of groundwater. Remnants of oil spills can persist for decades in coastal sediments which can affect local flora and fauna. In addition, several studies have examined the long-term impact of oil spill residues that also affect coastal ecosystems (Susilo, 2003).



Picture 3. Air and Land Pollution

Impact of Community Security and Order Vulnerability

Social turmoil that occurs in a society, of course, is closely related to the phenomenon of injustice that occurs. Any event that later causes turmoil, is almost certainly due to the uprooting of the values of justice in a society, whether it's the result of its rulers or pressures from each party that

dominates too much (Klandermans, 2012). The main requirement for economic development is that the growth process must rely on the capacity of the regional economy. The desire to improve their destiny and the initiative to create material progress must emerge from the citizens themselves (Santika et al., 2018).



Figure 4. Transportation Struggling to Obtain Well Oil Products

If social turmoil that has the potential to trigger conflict over mine management occurs, it can create vulnerability and order in society which, if not resolved immediately, will lead to greater turmoil that can spread to become a regional issue and even impossible to turn into a national issue. So far, law enforcement has not been maximized due to community resistance. A bigger impact could arise, such as when there is a conflict, then the crime rate will increase. Besides that, if this is allowed to go on without any community regulation, it will be increasingly sporadic in carrying out mining activities without paying attention to safety and environmental aspects. Of course, this will also be a time bomb that will explode at any time if there are no clear regulatory rules to regulate the course of illegal oil mining activities.

Non Physical Impact

First, The state loses revenue from the mining sector. With its unlicensed status, illegal oil well mining activities are not subject to the obligation to pay taxes and other levies to the state. (Hardika et al., 2021) This causes state revenue, which comes from the mining sector, to be very limited, given the high potential for tax revenue that is not collected from the illegal mining of oil wells. Apart from the tax that cannot be obtained, the existence of sales transactions on the black market means that the state cannot absorb this oil, even though the production potential can reach 5,000 barrels per day, of course, it can increase revenue. lifting national level and the impact will also be of positive benefit to regional development. (Wicaksono, 2019) Second The investment climate is not con-

ductive. Whether or not investors are interested in investing in the mining sector is not solely seen from the geological perspective of a given mining area, but is also influenced by the political and economic stability of a country to provide legal certainty for business actors. These two factors are considered by investors to invest in the mining sector, bearing in mind that until now the practice of illegal mining of oil wells is still very widespread in Indonesia, especially in the Musi Banyuasin Regency area. The rampant practice of illegal oil well mining has resulted in an unfavorable investment climate because illegal oil well mining activities are not only detrimental to the state but can also be detrimental to mining companies that have official permits from the government given that there is no guarantee of legal certainty (District et al., 2021).

What Government Should Do?

Formulate Institutional Governance and Illegal Oil Well Cluster Mapping

As a first step the government needs to formulate governance of illegal oil well mining then the government needs to form a Community Oil Well Cluster which includes within the scope of the sub-district determined by the Regent, which within the Cluster contains community groups that own oil wells which can be associations, cooperatives and the like. Then these community groups were registered by the government and regional companies while the registration requirements included having an Identity Card for the Musi Banyuasin Regency and explaining in full the area of their oil well area. Then the Regent together with Forkopimda formed a Task Force for Handling Community Oil Well Clusters. The Community Oil Well Cluster Handling Task Force is chaired by the Regent. And consists of work units of related regional work units as well as BUMD. Duties and authorities of the Task Force for Handling Community Oil Well Clusters are to collect data on the number of Community oil wells, Map Community Oil Well Clusters, Conduct guidance and supervision of BUMDs or BUMD subsidiaries appointed to coordinate the production of Crude Oil in Community Oil Well Clusters, Prevent the spread of Clusters Community oil wells, Preventing the sale of Crude Oil production in Community Oil Wells Clusters other than BUMD or BUMD subsidiaries and Handling the impact on environmental pollution caused by Petroleum production in Community Oil Wells Clusters.

Formulate Governance of Occupational Safety, Health and Environmental Management Aspects

Oil production and transportation activities from community wells must also pay attention to aspects of safety, occupational health and environmental management in accordance with applicable regulations. This will be the full responsibility of the government through BUMD to implement it in clusters of community oil wells. In accordance with the statutory provisions in Article 40 of the Oil and Gas Law No. 22 of 2001, Business Entities/Permanent Establishments (BU/BUT) are required to guarantee occupational safety and health, the environment, and technical principles in running their business. For this reason, every company engaged in oil and gas activities is required to place aspects of oil and gas safety which include Occupational Safety and Health (K3), Installation Safety, Environmental Safety and Security (K3LK) as an integral part of its operational activities on a par with other functions, such as production, engineering, financial and human resources. In accordance with PP No. 50, 2012 concerning Implementation of Management Systems, it states that every company is required to implement SMK3 in its company. This obligation applies to companies: which employ at least 100 (one hundred) workers/laborers; or have a high level of potential hazard. Based on this, the Directorate General of Oil and Gas also requires every company engaged in the oil and gas sector to implement an Oil and Gas Safety Management System (SMKM).

Formulate Governance for Capacity Strengthening of Community Groups

Improving people's welfare is not only the duty of the government but the obligation of all parties, including regional companies. Regional companies, especially BUMDs engaged in the petroleum sector, have an obligation to help the community around the company through empowerment programs. The empowerment program carried out by the company is of course inseparable from empowering the surrounding community. However, each company has a unique model that is developed in accordance with the vision and mission of the company. The implementation of community empowerment through this CSR program can basically be seen from four aspects, namely aspectsinput, process, output and outcome. The implementation of community empowerment through the empowerment program carried out by BUMD has covered all existing aspects. The human resources that take care of the

implementation of community empowerment in BUMD are quite qualified both in quantity and quality. BUMD can do a number of things related to community oil well mining which of course in its implementation will cooperate with Pertamina EP and SKK Migas in terms of increasing the capacity of oil mining communities. These include, among others, education and outreach regarding mining safety and production of community oil wells, conducting training for community owners of community oil wells regarding business plans, work safety and others, carrying out education to the community regarding environmentally sound waste management. Carry out education to the community regarding natural rehabilitation after community oil well mining. Carry out training related to human resource development in communities managing community oil wells in villages.

Formulate Upstream and Downstream Activity Governance

In general, upstream and downstream activities of community oil wells can be said to start with lifting oil from the well and then putting it into a holding pond (BakCellar)(Council et al., 2020) which will then be carried out by the Sifone method for separating water and crude oil. Crude oil is then put into containers where it is ready for sale. This oil will then be transported by a pick-up car that uses a steel plate tank with a maximum capacity of 1200 L with a maximum distance of 5 km to the nearest tanker. Tanker cars that are full of oil will carry the oil to the BUMD's crude oil collection station. Furthermore, BUMD will bring this crude oil to Pertamina. The oil will then be processed by Pertamina and redistributed by Pertamina. Of course, all of these activities must pay attention to safety and environmental aspects. Which is described in the following activity.

CONCLUSION

The rampant practice of illegal oil well mining in Musi Banyuasin district has caused various impacts, namely environmental impacts in the form of pollution, the impact of causing fatalities due to oil well exploration accidents, the impact of social conflict, and the impact of vulnerability and public order. Assuming that there are more than 70,000 people indirectly involved in mining activities, of course the district government cannot immediately close this activity. The existence of community oil wells raises many problems. Local government should involve the local community for management. However, the crude oil will later be

returned to SKK Migas and Pertamina. for the safety of the people who carry out mining of oil wells, it is necessary to legalize it first in collaboration between Pertamina, BUMD by empowering the surrounding community. but to legalize this there is a permit from the central government which has authority regarding oil and gas mining. BUMD can do several things related to community oil well mining. These include, among others, education and socialization related to mining safety and production of community oil wells, carrying out training for community owners of community oil wells regarding business plans, work safety, carrying out education to the community regarding environmentally sound waste management., Carry out education to the community regarding natural rehabilitation after community oil well mining, Carry out training related to human resource development in communities managing community oil wells in villages (Instructor & Banka, n.d.).

The Musi Banyuasin Regency Government strongly encourages related parties to immediately revise the Ministry of Energy and Mineral Resources (ESDM) Regulation No. 1 of 2008 concerning Guidelines for Oil Mining Business in old wells, because they are no longer in accordance with current conditions and seek the best solution regarding well mining activities community oil in Musi Banyuasin Regency and the best for the welfare of the people of Musi Banyuasin. Because at this time there is no clarity on the new ESDM RI Regulations to regulate the Management of Community Wells and the Regulations/Regulations to be made by the Indonesian Ministry of Environment and Forestry. Communities that occur in Protected Forest/Tahura/Productive Forest (KKKS Non-Active Work Area). Clear and strict regulations are needed in the management of community oil well mining that are appropriate in terms of mapping, permits including regulations so that people can earn income from their natural resource wealth in their area so that a comprehensive governance is needed that includes institutional governance and mapping of well clusters Community Oil, Governance of Safety, Occupational Health and Environmental Management, Governance of Strengthening the Capacity of Community Groups by BUMD, Governance of Management and Production of Community Oil Wells from Upstream to Downstream. The advantages of managing community oil wells are Absorption of labor, Calm for the community in carrying out their activities, Reducing crime rates and crime rates, Profits obtained by local go-

vernments can be used to realize community welfare programs, Taxes obtained from BUMD will be reused by the government districts to carry out programs to improve community welfare, Villages and sub-districts can work together with community oil well managers so that they can improve the welfare of village communities, Bring in new investors.

Some of the hopes desired by the Government and the Community of Banyuasin Regency are the existence of arrangements/regulations regarding the mining of community oil wells; Cessation of oil mining and cooking; There is additional income for the state and the Government of Musi Banyuasin Regency and there are benefits enjoyed by the community from an economic standpoint; Preventing environmental damage from getting worse along with efforts to restore polluted environments. Then encourage related parties to immediately revise the Ministry of Energy and Mineral Resources (ESDM) Regulation Number 1 of 2008 concerning Guidelines for Oil Mining Concession in old wells, because they are no longer in accordance with current conditions and find the best solution related to community oil well mining activities in the Regency. Musi Banyuasin and the best for the welfare of the people of Musi Banyuasin.

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