SUSTAINABLE ENVIRONMENTAL MANAGEMENT AND PRESERVATION IN OLD WELL OIL AND GAS TRADITIONAL MINING SITES INDONESIA: WHOSE RESPONSIBILITY?

a Subadi Subadi

ABSTRACT

Objective: Environmental pollution and destruction at traditional oil and gas mining sites with old wells in Indonesia is truly worrying, and poses a serious threat to present and future generation safety. Sustainable management and conservation is no longer an option, but must be an inevitability and cannot be postponed any longer.

Methods: This research uses a dogmatic legal research method (juridical normative) which was supported by field research, and in-depth interviews with parties who are directly involved, and understand the problems in the Pertamina EP Asset IV Field Cepu Working Area, Bojonegoro Regency, East Java, which is quite representative of all mining problems traditional old well oil and gas in Indonesia.

Results: Pertamina EP, Perum Perhutani, Bojonegoro Regency, and East Java Province, each as territory owner, feel that they have no authority and no responsibility (evade) to issue policies (beleid), carry out management (bestuursdaad), regulations (regelendaad), management (beheersdaad), supervision (toezichthoudensdaad), and enforcing the law, so that there is an impression of negligence which results in increasingly severe environmental pollution and destruction. Based on the facts, it turns out that each institution has obtained quite large benefits, and advantages, based on applicable laws, and regulations, each also has opportunity (rights, and obligations) to save the environment. However, due to the strong sectoral egoism in each institution, environmental pollution, and damage problem was neglected.

Conclusion: This research is to find a solution, namely a cooperation agreement (MoU) to carry out rescue work. The research results show that the best solution is that each institution must realize that they have the same obligations and responsibilities, join hands, close ranks and put aside sectoral egoism to overcome environmental damage at old wells oil and gas mining sites without getting worse.

Keywords: sustainable, environmental, management and preservation, old well oil and gas, Indonesia.

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a Doctor, Faculty of Law, Universitas Merdeka Madiun, East Java, Indonesia, E-mail: subadi@unmer-madiun.ac.id, Orcid: https://orcid.org/0000-0002-0556-3799
RESUMO

Objetivo: A poluição ambiental e a destruição em locais tradicionais de mineração de petróleo e gás com poços antigos na Indonésia é verdadeiramente preocupante e representa uma séria ameaça à segurança da geração atual e futura. A gestão e a conservação sustentáveis já não são uma opção, mas têm de ser uma inevitabilidade e não podem continuar a ser adiadas.

Métodos: Esta pesquisa usa um método de pesquisa jurídica dogmática (normativa jurídica) que foi apoiado por pesquisa de campo, e entrevistas aprofundadas com as partes que estão diretamente envolvidas, e entender os problemas no Pertamina EP Asset IV Campo Cepu Area de Trabalho, Regência Bojonegoro, Java Oriental, que é bastante representativo de todos os problemas de mineração de petróleo e gás antigos tradicionais na Indonésia.

Resultados: Pertamina EP, Perum Perhutani, Regência de Bojonegoro e Província de Java Oriental, cada um como proprietário do território, sentem que não têm autoridade e nenhuma responsabilidade (fugir) para emitir políticas (beleid), realizar a gestão (bestuursdaad), regulamentos (regelendaad), gestão (beheersdaad), supervisão (toezichthoudensdaad), e fazer cumprir a lei, de modo que há uma impressão de negligência que resulta em cada vez mais grave poluição ambiental e destruição. Com base nos fatos, verifica-se que cada instituição obteve benefícios e vantagens bastante grandes, com base em leis e regulamentos aplicáveis, cada um também tem oportunidade (direitos e obrigações) para salvar o ambiente. No entanto, devido ao forte egoísmo setorial em cada instituição, a poluição ambiental e o problema de danos foi negligenciado.

Conclusão: Esta pesquisa visa encontrar uma solução, nomeadamente um acordo de cooperação (MdA) para realizar trabalhos de resgate. Os resultados da pesquisa mostram que a melhor solução é que cada instituição perceba que tem obrigações e responsabilidades iguais, dê as mãos, feche fileiras e ponha de lado egoísmos setoriais para superar danos ambientais em poços antigos de poços de mineração de petróleo e gás sem piorar.

Palavras-chave: sustentabilidade, meio ambiente, gestão e preservação, petróleo e gás antigos, Indonésia.

1 INTRODUCTION

Indonesia is known as a country that has abundant natural resources, one is oil and gas which have been exploited since the Dutch Colonial era until now or what is usually called old wells oil and gas mining.

Data from the Energy and Mineral Resources Ministry (ESDM) shows that number old well oil and gas in Indonesia turns out to be very large, namely 13,079 (thirteen thousand seventy-nine) location points spread throughout Indonesia. Of this number, it is estimated that 7,450 (seven thousand four hundred and fifty) activity locations are still active (Energy and Mineral Resources Ministry, 2021).

One of the locations old well oil and gas mines, based on data collection conducted
by Pertamina EP Asset IV Field Cepu, there are 550 (five hundred and fifty) old well oil and gas activity locations, located in Bojonegoro Regency, East Java (History of Petroleum in Indonesia, 2022 March 19). Of this number, it was estimated that 295 (two hundred and ninety-five) activity locations have been controlled, and operated by the people, and believed to have no permits (illegal drilling), and no-cooperation agreements with Regional Owned Enterprises (BUMD) or with State-owned Enterprises is Pertamina EP (Seeing the Gray Oil and Gas Block in Bojonegoro 2021, Subadi, 2022).

Oil mines was managed traditionally, namely using appropriate technology with limited technological knowledge, especially in environmental management in the area around the mine, which has resulted in land, water, air pollution and environmental damage.

Environmental pollution and damage at oil and gas mining sites in the Pertamina EP Asset IV Field Cepu Working Area, Bojonegoro Regency, East Java, is very worrying, and worrying, this is because it has being on for a very long time, and there has never been a proper management effort on the competent part. Starting from this reality, ultimately neglect emerges an impression which becomes a serious threat to future generation safety.

On other hand, oil and gas mining control and exploitation by the people was considered illegal because they did not have permits, cooperation, and this what was called illegal drilling (Peter Salim, 1991). Illegal drilling definition, in laws and regulations, was not defined and is not strictly regulated. However, the Big Contemporary English-Indonesian Dictionary, "illegal" means against the law, prohibited or contrary to law. In Black's Law Dictionary; "illegal" means "prohibited by law, unlawful, prohibited by law or invalid (Bambang Tri Bawono and Anis Mashdurohatun, 2011).

The control and exploitation of oil and gas mining problem by the people is what makes the problem even more complicated, on the people's side they feel that their control is legal and according to the law and on the other hand, Pertamina considers it illegitimate and illegal. This difference in views is believed to be one of the factors inhibiting the resolution of the myriad problems of old well oil and gas mines.

Returning to the problem of pollution, it includes contamination of land, water, air and environmental damage as well as damage to forest areas which results in deforestation and soil degradation, flooding in the rainy season, and drought in the dry season.
This condition has been going on for a very long time, and continues until now, as if there has been no effort to improve it, giving the neglect impression which has resulted in the condition getting worse and to date there is still less/no firm policy regulating it and there is no institution responsible for providing guidance, supervision, and management.

Based on this description, research problems are formulated as follows: 1) Environmental pollution and damage, regulatory, and institutional developments related to old well oil and gas in Indonesia; 2) The protecting idea, managing, and the environment conserving at the old well oil and gas site.

2 LITERATURE REVIEW

The State firmly a good and healthy environment right guarantees which are guaranteed by Constitution Republic of Indonesia of 1945 (UUD NRI 1945), namely, Article 28 H, Paragraph (1), broadly explains, that; “Everyone has the same right to live in Indonesia, has the right to live in physical and spiritual prosperity, the right to get a good and healthy environment, the right to get good health services”.

Based on provisions stipulated in the basic norms, it is interpreted authentically in Law Number 32 of 2009 concerning Environmental, and Management Protection (Law No. 32 of 2009), namely, Article 3 which regulates the protecting and managing environment objectives in Indonesia, includes: “seriousness to Indonesia Republic Unitary State territory protect from all pollution and/or damage acts to the environment, the state must be able to guarantee the safety, health, human life beings without including exception it must the continuity life living things guarantee, and ecosystem sustainability”. Still, within these goals framework, the state must be responsible for environmental functions preserving and achieving harmony, and environmental balance.

Furthermore, the issuance of this law also aims to ensuring safety for current and future generations, who often experience annual storms and natural disasters, even though they have never been involved in establishing policies that are often not environmentally friendly.

As stated by Kristian Skagen Ekeli, in thinking about an environmentally friendly constitution, he reminds us of the importance the future generations safety. In his proposal he proposed and considered, and envisioned a new constitution that could play a role or function in protecting the needs and future generations interests. The proposal details the
posterity and procedural matters interests. To further explain the green constitutionalism objectives, namely; First; encourage the authorities (state) to make policies and decisions that are more future-oriented; second; to create more public awareness and the process of improving public patience regarding the influence of issues on future generations (Kristian Skagen Ekeli, 2007).

Concept essence or thought about green constitutionalism, as explained above, focuses on the desire to think about, regulate and/or protect the future generation interests regarding their rights to natural resources, and environment, which were guaranteed in the law, and constitution (Subadi, 2011).

In Indonesia, the future generations idea safety has been put forward by Emil Salim, namely about Indonesian people awareness to pass on to future generations natural resources that were managed in long-term sustainable development (Emil Salim, 1985).

Meanwhile, we can see the actualization of the idea of green constitutionalism in the 1945 Constitution (Fourth Amendment), specifically in Article 33, Paragraph (4), the Constitution of 1945, which states: "The national economy was organized based on economic democracy with the togetherness, and efficiency principles, fair, sustainable, environmentally friendly, independent, and maintaining a progress balance, and national economic unity".

Looking at this article, it is quite clear that in the amending process, the fourth Constitution of 1945, it has been considered and at least has led to the realization or has been oriented towards the Green Constitutionalism concept. However, unfortunately in this article and its explanation there is less or no further explanation regarding the desire to protect the interests of future generations (children and grandchildren) regarding natural resources.

Environmental management in regions in Asia, for example; Philippines, Indonesia, the decentralization process, law gives regional governments greater authority over environmental policy. This was intended be able to implement effectively policies, efficiently and it is important for regional heads (Regent, Mayor) can politically take initiative to overcome financial and technical obstacles, and encourage stakeholder participation effectively, and efficiently (Subadi, 2011).

Financial assistance from the private sector, communication with local governments, and close relationships with various stakeholders will have a positive correlation with environmental management performance. Meanwhile, strong financial
support from the central government is not necessarily positively correlated, and sometimes even has no effect on regional heads' policies (Subadi, 2011).

This goal is very important and primary, namely, in relation to human rights and global environmental preservation, the law aims to the fulfillment and the guaranteed right protection of the environment of human rights as part. Therefore, natural resource use control is an integral part and must be carried out wisely to achieve sustainable development, and environmental global issues anticipated.

This starting the Indonesian territory’s protection goal from pollution, and environmental destruction is significant main, herefore all activities that environmental pollution and damage potential cause must be anticipated early on through prevention efforts and law enforcement against cases that have occurred.

3 METHODS

This research uses a normative (dogmatic) method, namely research on legal principles (legislation, jurisprudence, customary law, and other unwritten laws) and legal principles (Bagir Manan, 19997, L.J. Moleong 2002). "So far legal researchers have only seen and are not familiar with data other than secondary data" (Agus Budianto, 2020), but in legal developments, it cannot only be seen from the point of view, so besides carrying out an inventory of relevant regulations to study, and discussing secondary data, namely the problem of pollution and environmental damage, research is also supported by field research, namely observation, and in-depth interviews with legal experts, related officials, oil and gas practitioners, Pertamina EP officials, Regional Owned Enterprises (BUMD), heads of related offices or work units, miners/groups of miners, and communities around oil and gas mining sites in the Work Area of Pertamina EP Asset IV Field Cepu, Bojonegoro Regency, East Java, Indonesia. The obtained legal data and materials were immediately classified, systematized, interpreted, and analyzed in a juridical manner, while the information data from in-depth interviews were analyzed qualitatively to produce qualitative juridical research conclusions (Soetandyo Wignjosoebroto, 2002).

4 RESULTS AND DISCUSSION
4.1 ENVIRONMENTAL POLLUTION AND DESTRUCTION, DEVELOPMENT OF REGULATIONS AND INSTITUTIONAL AUTHORITY

Environmental pollution and damage in the Pertamina EP Asset IV Field Cepu
Work Area, Bojonegoro Regency, East Java, only occurs at the location of illegal drilling activities carried out by miners or groups of miners which is very worrying and cannot be tolerated. Because it is only a bigger problem, namely a threat to the safety of future generations.

Those who never participate in planning, make mistakes that have caused pollution and damage but have the potential to reap storms and disasters in the future. The description of environmental damage and pollution at illegal drilling locations is explained in the following, Figure and table, as follows:

Figure 1-2: Soil Pollution

Figure 3-4: River Water Pollution
Still in relation to environmental pollution and damage, data from field research shows the real picture as shown in the table, as follows:

Table 1: Environmental Pollution and Damage in the Old Well Oil and Gas Location
(Subadi, Heri Sumanto, and Ananda P.Y., 2021, 2022)

<table>
<thead>
<tr>
<th>No.</th>
<th>Location of Old Well Oil and Gas</th>
<th>Managing Institution</th>
<th>Environmental Pollution and Damage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Wonocolo Village, Kadewan District, Bojonegoro Regency</td>
<td>Traditionally managed by people</td>
<td>1) Does not pay attention to aspects of environmental management and preservation. 2) Deforestation and land degradation. 3) Soil pollution, water, air, and forest damage is quite severe. 4) Less/no coaching from the authorities. 5) Not used Work Procedure Guidelines No. 023/PTK/III/2009 concerning Petroleum Exploitation in Old Well.</td>
</tr>
<tr>
<td>2.</td>
<td>Hargomulyo Village, Kadewan District, Bojonegoro Regency</td>
<td>Traditionally managed by the people and partly in collaboration with BUMD</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Beji Village, Kadewan District, Bojonegoro Regency</td>
<td>Traditionally managed by the people.</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Kawengan Village, Kadewan District, Bojonegoro Regency</td>
<td>Managed by Pertamina EP Asset IV Field Cepu.</td>
<td>It is enough to pay attention to environmental management and preservation aspects.</td>
</tr>
<tr>
<td>5.</td>
<td>Kadewan Village, Kadewan District, Bojonegoro Regency</td>
<td>It does not have oil wells, but the people most work in the mines in the villages of Wonocolo and Hargomulyo.</td>
<td>1) Has not paid attention to environmental management aspects, and preservation. 2) Deforestation and land degradation. 3) Some are located very close to residential areas. 4) Soil Pollution, water, air, and forest damage is quite severe. 5) Less/no coaching from the authorities. 6) There is no specific regional regulation that regulates it. 7) Not used Work Procedure</td>
</tr>
<tr>
<td>6.</td>
<td>Kedungrejo Village, Malo District, Bojonegoro Regency</td>
<td>Traditionally managed by the people and Pertamina.</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Tinawun Village, Malo District, Bojonegoro Regency</td>
<td>The oil mine is located on private land and is traditionally managed by the people.</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Trembes Village, Malo District, Bojonegoro Regency</td>
<td>Managed by the people and have no objection to joining BUMD.</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Tanggir Village, Malo District, Bojonegoro Regency</td>
<td>Traditionally managed by the people</td>
<td></td>
</tr>
</tbody>
</table>
District, Bojonegoro Regency people, and some have collaborated with BUMD Guidelines No. 023/PTK/III/2009 concerning Petroleum Exploitation in Old Well.

10. Banyu Urip Village, Senori District, Tuban Regency Oil and gas mine location was included in the Tuban Regency area but was managed by the people in cooperation with the BUMD belonging to the Bojonegoro Regency. Oil and gas mine location in forest area owned by Perum Perhutani, and is not the responsibility Tuban, and Bojonegoro the district governments.

11. Ledok Village, Sambong District, Blora Regency, Central Java. Traditionally managed by the people, some have collaborated with Pertamina EP. 1) The miners already have fairly high awareness, and responsibility environmental sustainability. 2) The environment and forest areas are well maintained, and soil, water, and air pollution are quite controlled.


The environment management and preservation in the old well oil, and gas location has been regulated in several regulations, including:

4.1.1 law number 22 of 2001 concerning oil and gas (law number 22 of 2001)

Oil, and gas drilling activities that the potential cause environmental pollution, and damage. Therefore, state legislator has anticipated by preventive regulations formulating various forms, as regulated in Article 40, Law Number 22 of 2001, explaining, among other things, that: 1) “Business entity or establishment guarantees occupational permanent safety, health, and environmental management, and complies with the laws prevailing, and oil and gas business activities regulations; 2) Environmental management, as in paragraph referred (2), is in the obligation form to prevent, pollution control, and environmental damage recover, including obligations post-mining operations; 3) Business Entities or Permanent Establishments that carry out Oil and Gas activities, as referred in Article 5, are also responsible for developing the environment and local communities; 4) “Provisions regarding occupational safety, health, and environmental management, as referred to in paragraphs (1) and (2) shall be further regulated by a Government Regulation” (Rintayati Peduk, 2017).

Furthermore, in General Elucidation of Article 40 (6) letter b. in, environmental management includes prevention, environmental pollution control, and recovery of environmental damage during, and after the Cooperation Contract.
4.1.2 Energy, and Mineral Resources Minister Regulation, Number 01 of 2008 concerning Guidelines for Petroleum Mining in Old Well

Still within the same framework, technically operational, Article 14 (3) Energy and Mineral Resources Minister Regulation, No. 01 of 2008, also explains, and confirms, that "The local Provincial/Regency/City Government shall conduct guidance and supervision of the Cooperative Village Unit (KUD) or the Regional Owned Enterprises (BUMD) that produce petroleum" (Regulation of the ESDM Minister, No. 01 of 2008).

Based on two regulations, it is clear that in the exploitation of old well oil and gas, activities must be able to provide guarantees for environmental management, obey the law, prevent, and control pollution, and restore ecological damage after the operation contract. Moreover, business entities or permanent establishments must be able to ensure that they are responsible for maintaining and developing the local community environment. On the other hand, the provincial, and regency/city governments are also given tasks and authority to provide guidance and supervision, although they are limited to Village Unit Cooperatives (KUD) and Regional Owned Enterprises (BUMD).

The question that comes up is what about illegal drilling activities carried out by miners/groups of miners at the location of old oil and gas wells, which are not licensed and have no cooperation with contractors. This means that they carry out oil and gas exploitation activities without any guidance and supervision from any institution, which causes pollution and destruction to become more severe.

Pertamina EP, as the owner of the Work Area, feels that they are not authorized to carry out guidance and supervision because it is carried out without permission, and there is no cooperation with Pertamina EP. On the other hand, the local Government of Bojonegoro (including in other regions), as the owner of the Autonomous Regional Working Area, also feels that it does not have conduct guidance authority, and old well oil and gas supervision activities in the Pertamina EP Working Area.

Likewise, Perhutani, as the management rights granted holder by the State over the forest area of KPH Parengan, Unit II East Java, cannot do much, because the site has been controlled by Pertamina EP with a Borrow-to-Use Agreement.

4.1.3 Law Number 32 of 2009 concerning Environment and Management Protection

Article 1, Number 14, states: “Environmental pollution is the entry or living things inclusion, substances, energy, and/or other components into the environment by human
activities so that it exceeds established environmental quality standards”. Environmental pollution prevention due to industrial activities and human activities needs to be controlled and environmental quality standards established. Environmental quality standard measures “the limit or living things level, substances, energy, or existing components and/or pollutant elements whose existence was tolerated in a specific resource as the environment an element” (Regulation of the ESDM Minister, No. 01 of 2008).

Furthermore, according to Article 1, Point 16, “What is meant by environmental destruction, in essence, all human actions that cause direct or indirect changes to the physical, chemical and/or the environment biological characteristics so that they exceed the standard criteria for environmental damage” (ESDM Minister Regulation No. 01 of 2008).

Theoretically, environmental pollution consists of; air pollution, water pollution, and soil pollution. Air pollution, namely; “The entry or inclusion of one or more physical, "chemical", "biological" substances in the atmosphere in quantities that can endanger the health of humans, animals and plants, disturb aesthetics and comfort, and damage property. Air pollution can be caused by natural sources as well as human actions. In another view, physical disturbances such as noise pollution, heat, radiation, light pollution can also be considered air pollution which by its nature can cause air pollution, and can directly have an impact on the local, regional or global environment (Jainal Abidin, and Ferawati Artauli Hasibuan, 2019).

Water pollution, namely: “Entry or living things inclusion, substances, energy, and/or the other components into water by human activities, resulting in reduced water quality to a certain level, which causes water to not function according to its designation”. Government Regulation No. 82 of 2001 concerning Water Pollution Quality, and Control, Management, the water quality management purpose is to ensure the desired water quality is in accordance with its designation, while the water control purpose is to ensure that water quality conforms to water quality standards through efforts to prevent, and control water pollution, and water quality restoration (Government Regulation No. 82 of 2001).

Furthermore, the soil pollution problem is entry condition of man-made chemicals that can change the soil natural environment. Pollution can occur for several reasons, for example, liquid waste leakage or industrial chemicals, commercial facilities, uncontrolled use of pesticides, and polluted surface entry water into the subsoil. Soil contamination
can occur due to accidents involving vehicles transporting oil, chemicals, or waste, and industrial wastewater that is disposed on land in an unfair manner (illegal dumping). Oxidizing chemicals that enter the soil then settle, and have a direct impact on humans or contaminate ground water, and air above it (Nurul Isna Ramadhan, 2018).

Based on these criteria, references and facts obtained from the field and taking into account the duration of the pollution, illegal drilling activities at old oil and gas well locations in Indonesia in general and in the Pertamina EP Asset IV Field Cepu Work Area, Bojonegoro Regency, East Java in particular, has resulted in pollution and environmental damage as illustrated in the table.

Preventive law in Indonesia has regulated pollution control issues in Article 13, Law Number 32 of 2009, namely: 1) Pollution, and environmental damage control was carried out in carrying out the preserving environment function; 2) Controlling environmental pollution or damage includes; prevention efforts, mitigation efforts, and recovery actions; 3) Environmental pollution or damage control was carried out by the central government, regional governments, and those responsible for businesses or activities, in accordance with their respective authorities, duties and responsibilities. (Article 13, Law No. 32 of 2009).

Furthermore, Article 70, Paragraph (1), provisions have mandated everyone has the same rights in protecting the environment. Then Sabardi argued that every community has the same rights, obligations, and roles in environmental management, including people in villages, remote areas, and cities. In such a context, illegal miners/groups of miners also the same obligation to protect, and environment preserve (Lalu Sabardi, 2014).

4.1.4 Ideas for Solutions and Recommendations for Environmental Management and Conservation

Managing and preserving the environment at the illegal drilling activities location in old well oil and gas is undoubtedly not as easy as turning palms. Syahrul Machmud, in the environmental law book, Broadly, speaking; it can be explained that environmental management is an integrated effort to preserve ecological functions which include policies for structuring, utilization, development, maintenance, restoration, monitoring, and environmental damage control. Environmental management must be carried out based on the state responsibility principle which prioritizes sustainability and the benefits
principle to realize environmentally sustainable development. Management and implementation in the developing context a complete Indonesian human being who has harmonious relationships with fellow human beings, other living creatures, the natural surroundings, and their environment and is devoted to God Almighty (Syahrul Machmud, 2012).

Juridically, it has been entirely regulated in Law No. 32 of 2009, whose scope includes several kinds, "including:

1. Planning must be done carefully through several stages, namely:
   (1) Environmental inventory was carried out to obtain information, and data on natural resources such as types used, potential, and availability, management knowledge, forms of control, conflict damage forms, and conflicts arising from management causes.
   (2) The ecoregion area was determined by considering the criteria for landscapes, areas around river flow, weather, animals and plants, social culture, economic, and community institutions.
   (3) Making arrangements Environmental Protection, and Management Plan (RPPLH), compiled by government following its authority to utilize, and create natural resource reserves, maintain, and maintain the quality or the environment function, carried out in a controlled, monitored, and also utilized to conserve natural resources, Natural power.

2. Utilization is the natural resources utilization based on the sustainable environment scope capacity, and activities in the environmental realm.

3. Control here means pollution, and environmental damage controlling with the preserving aim the environment function itself, which includes; prevention, mitigation, and recovery actions.

4. Maintenance means natural resources conservation, natural resources reserve, and atmospheric preservation functions.

5. Supervision here means that the Minister, Governor, or Regent/Mayor is the authority given supervise environmental permit activities.

6. Law enforcement, those in charge of business and/or those in charge of activities are found to have violated environmental permits, the Minister, Governor, or Regent/Mayor was obliged to impose administrative sanctions (Law No. 32 of 2009).
The Government as the legislator has clearly regulated duties and authorities issues, which are given to the government, provincial, and regency/city, each of which is regulated as follows:

4.1.5 National Policy

According to Law No. 32 of 2009, Article 63, Paragraph (1), explained; “The environmental protection and management, the government duty, and authority to: a) establish, and implement national policies which include norms, standards, procedures, criteria, national environmental protection and management plans, environmental impact analysis (Amdal); b) coordinate, and carry out environmental pollution and/or damage control over; c) stipulate, and implement policies regarding hazardous, and toxic materials (B.3), waste, and B.3 waste; d) conduct, and implementation supervision guidance of national policies, regional and head regulations; e) fostering, and supervising those compliance in businesses charge, and/or activities with environmental licensing provisions; f) coordinating, and facilitating cooperation and inter-regional dispute resolution, and dispute resolution; g) developing, and implementing public complaint management policies; h) establishing service standards minimum; i) enforce environmental law” (Law No. 32 of 2009).

4.1.6 Provincial Government Policy

According to Article 63, Paragraph (2), Law No. 32 of 2009, in environmental protection, and management, in general, the provincial government has the duty, and authority to establish and implement provincial-level policies, among others; Procedures for Organizing Strategic Life Study (KLHS), Environmental Protection and Management Plan (RPPLH), and environmental impact analysis. Still, within the same framework, it also carries out cooperation, partnerships, coordinates, controls pollution or environmental damage across districts/cities, fostering, and supervising the implementation policies, regional regulations, and the Regent/Mayor regulations.

Besides that, the provincial government also carries out the compliance guidance and supervision of those in the business charge, develops, implements, and environmental education, cooperation facilitates, resolves disputes between regency/inter cities, environmental manages, information, and provides education, training, coaching, and awards. More than that, the province also environmental permits issue at the provincial,
and enforce environmental laws at the provincial (Law No. 32 of 2009).

4.1.7 Local Government Policy

Furthermore, Article 63, Paragraph (3), Law No. 32 of 2009, in essence, can be explained that district/city governments in environmental protection, and management field have the same duties, and authorities as provincial governments, but only limited to district/city areas. In relation to law enforcement issues regarding old well oil and gas activities, among others: the district government must stipulate and implement district/city level policies, namely regarding; KLHS, PPLH, environmental impact analysis (Amdal), and environmental management, and businesses monitoring and/or activities that do not have a significant impact on the environment which is necessary for the decision-making process regarding the businesses implementation and/or activities (UKL-UPL).

Still, within the same framework, regency/city governments also develop environmental instruments to implement, dispute resolution, and facilitate, more importantly, implement policies regarding procedures for recognizing the indigenous people existence, paying attention to local wisdom, and the indigenous peoples rights related to the environment protection, and management. Regency/city governments manage environmental information and information systems, education and training, coaching and mentoring, and rewards, facilitate environmental permits and carry out prevention and enforcement of environmental laws (Law No. 32 of 2009).

However, what is regulated in the article is an activity under normal circumstances, while in this research it is an illegal drilling activity, all of which are outside the normal context. The law does not/do not regulate the situation and conditions that are completely abnormal or illegal drilling activity. In this regard, managing and preserving idea the environment at the illegal drilling old well oil and gas location must be completed using breakthroughs outside the law context.

Management and conservation idea needs to be carried out through several stages, namely;

a) Through deliberation, namely deliberations between miners or miner groups with the regional Government (BUMD), Pertamina EP as owner of the work area and Perum Perhutani as the holder of management rights over KPH. Parengan forest area Unit II East Java. This is intended so that the miners are willing to join
the Regional Owned Enterprises (BUMD) so that further guidance, and supervision can be carried out on the old wells' oil and gas exploitation. So that environmental pollution, and damage can be addressed immediately, it can be suppressed.

b) This stage can be carried out through law enforcement if the deliberations or legal breakthroughs are unsuccessful or fail to reach a common ground or agreement.

Law enforcement primarily through criminal law is only "ultimum remedium" meaning that it can only be implemented if efforts are unsuccessful (Kukuh Subyakto, 2015, Muhammad Amin Hamid, 2016). In reality, the practice in the field of law enforcement has also experienced many obstacles and difficulties [Januari Siregar & Muaz Zul, 2015, Sukanda Husin, 2014).

In addition to legal breakthroughs, and law enforcement efforts, Government also needs to consider strategic steps to provide convenience for the people or the miners. Those who are already dependent on old oil and gas wells as a livelihood or do not allow the transfer of professions to other fields and have skills in oil and gas exploitation can be given incentives in the form of legalization or legalizing illegal drilling activities.

Legalize by providing convenience in managing permits or simplifying requirements, and licensing mechanisms for old well oil and gas for the people. This was intended so that the miners can work and work calmly, free from negative stigma, blessing, and not haunted by guilt, and others. Should be able to learn from granting permits experience such as those that have been applied to mining business permits (IUP). Permits for the old wells oil and gas exploitation should be decentralized to the Regency/City Government or the Provincial Government, and not all centralized, issued, and become the center's authority.

5 CONCLUSIONS

The research conclusions are as follows: (a) Environmental pollution, and damage at the old well oil and gas location in the Pertamina EP Asset IV Work Area in the Cepu Field continues to occur and will continue to get worse. Based on oil and gas regulations, environmental management laws, regional government regulations, and their derivatives, they do not regulate explicitly or there has been environmental pollution and destruction overlapping regulation problems due to illegal or quasi-legal drilling activities. From an
Institutional perspective, there is no other institution that has the task and authority to carry out illegal drilling supervision activities, except Pertamina as the owner of the working area; (b) Management and preservation of the environment at old well drilling sites must prioritize the principle of deliberation between miners or groups of miners with Pertamina EP, the Regional Government and Perum Perhutani, as well as prioritizing development without prioritizing the egoism of each sector and eliminating Pertamina's ambiguous nature. Juridically, criminal law enforcement can be carried out by the Policies if administrative efforts fail because it concerns the livelihoods of thousands of people. Regional Governments must increase their role in continuing to try to recruit miners/mining groups to collaborate with Regional Owned Enterprises (BUMD) or Village Apparatus Cooperatives. KUD so that they can benefit from people's exploitation of old oil and gas mines. The Regional Government must facilitate this by issuing regional policies, which can be in the form of Regent's Regulations which can be used as guidelines in developing old oil and gas mining businesses and production. Meanwhile, Perhutani, as the holder of Management Rights over the forest area where the oil mine is located, is suing Pertamina for its forest conservation rights.

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