

# Violation of law Number 32 of 2009 on the Environment from Activities of Wasteoperatingon Petrochina Gas Production in Tanjung Jabung Barat Jambi Indonesia

Mohd. Yasin<sup>1\*</sup> Robi'atul Adawiyah<sup>2</sup> Ismanto<sup>3</sup>

1. Doctoral Student of Law at Law Faculty of The Jambi University. Indonesia
2. Doctoral Student of Law at Law Faculty of The Jambi University. Indonesia
3. Doctoral Student of Law at Law Faculty of The Jambi University. Indonesia

## Abstract

Law of the Republic of Indonesia Number 32 of 2009 on Environmental Management, has set a cumulative imprisonment and criminal fines as the principal punishment against perpetrators of Environmental Criminal which can be coupled with measures Rules sanctions (maatregel). Objectives Theory and Benefits Punishment (utilitarian theory) is deemed appropriate to be applied in the protection of the environment.

**Keywords :** Environment, waste of petro china oil and gas production

## 1. Introduction

To realize the goal of environmental management through prevention and control of pollution, we need an appropriate legal approach strategy in the case of Completion environment by making optimal use of the existence of Law Number 32 of 2009 regarding the Environment. Being an integral part of these efforts is the presence of government officials who understand the correct implementation and enforcement of environmental law as a functional law.

In the explanation of Law No. 32 of 2009 regarding the Environment stated that the Penal Code should be utilized, if the administrative sanctions and civil sanctions, and alternative environmental dispute resolution are not effective, and or: The perpetrator error rate is relatively heavy, As a result of his actions is a relatively large, His deed causing public unrest. (Assembling punishment sanction in law no. 32 of 2009 RI. Jakarta, 2012)

Thus, the formulation of the "*principle of ultimum remedium*" in the norms and sanctions in the legislation governing environmental aspects must be based on an appropriate and sound understanding especially for the law enforcement agencies (including government officials) as well as experts and observers of the law environment.

Law is based on principles of law, in which includes the principles of fundamental judgments in a legal system. Paul Scholten gives the understanding that the principle of the law is the thoughts contained in and behind the legal system, each defined in the rules of law and the decisions of the judge, who is pleased with the provisions and individual decisions can be seen as an elaboration. (Arief Sidharta, 1999). According to Karl Larenz that legal principle is the idea that guides the rule of law (which may exist or have existed), which itself is not a rule that may be applicable, but that can be changed.

Law on oil and natural gas based on economical populist, integration, benefits, justice, equity, equality, prosperity and welfare of the people, security, safety, and legal certainty as well as environmentally sound. The purpose of the application of this principle is in order to ensure effective implementation and control of business activities of exploration and exploitation which are highly competitive and sustainable.

The emphasis tasks of executing agency supervision for environmental management is on the measurable of business activity performance in the form of monitoring activities (monitoring), reporting (inadequate data reporting), and the evaluation of the results of the Environmental Management Plan (EMaP) and Environmental Monitoring Plan (EMoP) as implementation requirements in KKS or business activity permits. This report can be a feedback for improvement of environmental management systems, and refinement agency for refinement of agency policies both in good environmental implementing perspective, as well as a social perspective to prevent or detract public pressure as one of the monitors for a good and healthy environment.

Since global environmental awareness in the 1970s become great concern to the petroleum activities, the completion of environmental and waste problems in the company immediately surfaced. By the shifting of polluter pays principle towards the preventive pays principle, environmental management system continuously make improvement of technology through EMaP and EMoP along with the development of human resources in the environmental management system, in accordance with the development of science and technology of petroleum. Therefore, the legal system of adherence monitoring is an oversight mechanism that must be fixed continuously (based on the evaluation of the results of obedience monitoring reports EMaP and EMoP in the PROPER system, KLH). (J.J.H. Bruggiul translation: Arief Sidharta, 1999)

## **2. The Environmental Impact in The Control System of Oil and Natural Gas Waste in Law Number 32 Year 2009**

### **2.1 EIA (Environmental Impact Assessment) In view of Theoretical and Legislation Regulation**

Viewed from the perspective of environmental protection, EIA characteristics ideally conceived as the scope of legal regulation that serves as an instrument guard balance in life of the state, especially in dimension to maintain the community balance toward a good and healthy environment.

### **2.2 Meaning and Criteria of Big and Important Impact In EIA**

There are several criteria used as references for understanding the major and significant impacts that result in fundamental changes in the environment. Criteria of large and important impact in the Elucidation of Article 1 (1) UUPLH and Article 5, paragraph (1) Regulation No. 27 of 1999: "the number of people who will be affected; area of spread the impact, the intensity and duration of the impact; many other environmental components that will be affected; the cumulative nature of the effects; turning or irreversibility of the impact".

Efforts to prevent the major and significant impacts, that the human factor that will be affected either in bulk or small quantities, placed as a leading problem dimension because objectively human as one element of the environment that more quickly pressed and feel the accumulated negative impacts, such as pollution of industrial waste as a result of activities. This does not mean a big impact criteria and other important not receive priority attention in the prevention of environmental impacts.

### **2.3 EIA Characteristically Mandatory**

EIA is mandatory (obligations) is charged to businesses or industrialists that in view of Muhammad Zaidun, employers should prepare themselves and anticipate the possibility of an environmental impact (including pollution) that will be generated by its business activities. (Zaidun, Muhammad 2014)

### **2.4 Socialization of Environmental Impact Management**

There are several arguments underlying the importance of thinking of intensive socialization and continuous efforts undertaken by the government, among others:

*First*, any business or activity that is likely to cause major and significant impact on the environment even required to have EIA, government should be more proactive on the operational level in disseminating important values in the control of environmental impacts, such as the understanding of the value of preservation of the environment, adherence to the rule of law, awareness of the right to a better and healthier environment owned by citizens, and other values with regard to the interests of the government in maintaining the existence of environmental sustainability for present and future generations to come.

*Second*, management plan and environmental monitoring is an instrument which plays a role in controlling environmental impacts to prevent possible pollution of industrial waste, theoretically in practical socialized the scope of management as well as understanding the management approach in terms of technology, socio-economic, and institutional; Other impact sources, whereas socialization of environmental monitoring can be a fundamental understanding of some aspects such as the impact of sources, methods of monitoring, environmental monitoring institutions and environmental parameters which are monitored, and others.

*Third*, the rule of law and the arguments of preservation advocates of the environment at the operational level of environmental impact control, should remain socialized to strengthen the insight and commitment of businesses to be more aggressive and impressive undertake concrete efforts and systematically, thus enables to prevent and eliminate the negative impact of industrial waste pollution just as often coloring a business or activity. Legal instruments for environmental management though already well, at the level of implementation should be supported also by intensive socialization and continuous efforts for preservation of the environment.

## **3. Waste Management of PetroChina International Jabung, Ltd.**

Exploitation and production of oil and natural gas in Block Jabung, Jambi Province conducted by Petro China International Jabung, Ltd., can not be separated from some of the impacts that may be caused. It is necessary for the management and monitoring so that these impacts can be controlled and prevented.

Locations of activities are within the administrative area of Betara district, Mendahara, Dendang, and Muara Sabak, located in Tanjabbar regency, Jambi Province. Overall the activity area is in the coordinates 103° 01' 103° 03' 103° 03' 103° 03' BT and 1045' - 2000' LS.

PetroChina International Jabung, Ltd. is a production sharing contractor that conduct exploration and production activity of oil and natural gas in Block Jabung, Jambi Province. The activities carried out is the exploitation of petroleum in the Field of North Geragai, Makmur, Gemah, North East Betara, Ripah, West Betara, and South West Betara. (Petro China International Jabung, Ltd 2013)

### **3.1 Air Quality and Noise**

The Impact source of air quality in Block Jabung can be affected by gas burning in flares, exhaust

equipment and production processes. Such activities cause emissions of styrene, and opacity. While the noise sources include the operation of the compressor equipment, generators, and turbines.

Management benchmarks is the increase of the tested parameters, both in odor quality standards, as well as the quality standard of noise such as O<sub>3</sub>, NO<sub>x</sub>, HC, SO<sub>2</sub>, CO<sub>2</sub>, H<sub>2</sub>S, CO, NH<sub>3</sub>, dust Pb, methyl mercaptan, methyl sulfide, methyl styrene and noise.

Some of the activities carried out mainly in the optimalization of process and production, among others: Periodically maintenance of equipment toward the noise-caused equipment. Increased discipline in the use of ear protection (safety) for employees and operators who working in locations that cause noise. Greening the area around the plant in order to reduce the levels of air pollutants and noise (boundary line to reduce noise). The use of some of the gas in Block Jabung to fuel power plants, generators, kompersor, and turbines. While the rest remains burned in a flare. Watering projects road on a regular basis. Restrictions speed vehicles across the project road.

### 3.2 Water Quality

Impacts source that can cause deterioration of water quality in the block Jabung river comes from separation process of condensate unit, oil and produced water in the processing area. The water is a produced water of fluid separation results from the production wells. Fluid from production wells flowed into the separator to be separated between gas, crude oil and produced water. Produced water will come out of the separator which will then be accommodated in Waste Water Installations. Produced water that comes out of the WWTP (Waste Water Treatment Plant) subsequent reinjection into the formation for pressure maintenance and/or dumped into the disposal well. Disposal of waste from North Geragai area performed disposal well in CPS area and injection wells Makmur# 10 and Makmur# 23.

Management benchmark is the presence of oil in the production of water agency, as well as the increase in the parameters tested in the Quality Standard of Water Quality, both for the quality of surface water, sea water or well water.

Management actions in Block Jabung has been done to maintain the water quality of waste-waterreceiving agencies at all locations so as not to affect the aquatic biota as well as the flora and fauna along the river and its surroundings. Things to do is injected produced water in the wells after the injection and disposal through WWTP in the disposal well.

### 3.3 Air quality and noise

Impact source is combustion gases in a flare, exhaust equipment, and production processes. Such activities cause emissions of combustion exhaust gases such as O<sub>3</sub>, NO<sub>x</sub>, HC, SO<sub>2</sub>, CO<sub>2</sub>, H<sub>2</sub>S, CO, NH<sub>3</sub>, dust Pb, methyl mercaptan, methyl sulfide, methyl styrene and opacity. While the noise sources include the operation of the compressor equipment, generators and turbines. ( Petro China International Jabung, Ltd 2014)

## 4. System of Overcoming the Oil and Natural Gas Waste Management in Law No. 22 of 2001 and Law No. 32 of 2009.

To give you an idea of the environmental discussion, especially oil and natural gas in terms of waste, it should be noted some of the following:

The problem of environmental/ waste in oil and natural gas activities. Gas waste problems, must pay attention to law system of Management of Quality Standards in general, adopted by the Environment Law 2009. The legal system in oil and natural gas activities in general Issues that need attention more closely related to the number of laws in other sectors (forests, soil, water, fish, other biological, spatial, construction, etc.) has also set environmental aspects, which according to general explanations of Environment Law 2009 is the Indonesian Environmental Law System nationally. Linkage of oil and natural gas law with the environmental issues of waste Law No. 22 of 2001 on Oil and Natural Gas only regulates in general about environmental aspects. Linkages of Oil and Natural Gas law with another law In addition to the laws governing the sector of environmental aspects, in accordance with UULH, other legal aspects. Linkage of mining techniques with quality standards of environment.

Determination of standards of environment that based on the designation of the area will affect the technical standards adopted in mining engineering.

As for the legal regulation of waste discharges and management B3 B3 as follows:

The legislation of waste disposal in general, provided for in Article 60 of the Environment Act 2009. Any person or business activity is prohibited to dispose of waste into the environment without permission. The legal system B3 waste management Regulations implementing Article 17 of the Environment Act 2009 regulate waste management system B3 (PP No. 18 of 1999 and the B3 waste management system of Government Regulation No. 74 of 2001).The legal instrument of waste management technology. Internally legal instruments (regulations

and technical guidelines) the management is integrated with the technology. Economic instruments in the waste management system / B3 waste. The role of environmental audit as its efforts to improve environmental management system (continuously improved) the legal system of environmental management based UULH of 2009 recognize the environmental audit certification approach with two approaches.

As for the setting of monitoring systems and environmental regulation are as follows:

The system of adherence monitoring (compliance monitoring system). The reporting system of environmental monitoring results as an evaluation improvement of environmental management systems. Monitoring by key stakeholders. Corporate social responsibility as a new development The environmental law as an instrument of environmental preservation.

As for administrative sanctions and environmental audits are as follows:

The responsibility of the state as the environmental manager Instruments of strengthening the government's role as bearers of rights of control over the state of natural resources (Article 33 of the 1945 Constitution). The role of environmental fines. In relation to the principle of subsidiarity in environmental law in 2009, also developed a mechanism Alternative Dispute Resolution (ADR) and the civil liability system, including the cost of recovery. Audit the environment as an instrument of environmental management and regulation of environmental regulation.

## 6. Implementation of Principle of Subsidiarity In Environmental Law Based on Law No. 32 of 2009

Alternative Criminal has universally grown in line with the development of fourth generation modern criminal, which emphasizes modern criminal fines and probation replace imprisonment based on humanitarian considerations (social defense) and economy. Criminal penalties can be replaced by a criminal social work, criminal surveillance, and imprisonment if convicted person could not pay the fine.

In accordance with the principle of subsidiarity in criminal law, the criminal law should be selective in determining criminal act, selective in processing the case, and selective in choosing a criminal threat. If it can be solved by other means, should not need to use the criminal law (*ultimum remedium*) and if the criminal trial or fines is deemed sufficient, imprisonment should be avoided. If it were forced to use imprisonment, must have been a long criminal lightest and benefit to the defendant. For choosing resolve cases through the criminal justice whereas it can be solved by other means as well as the declared "war".

According Muladi, the principle of subsidiarity is as *ultimum remedium*, is before using the criminal law measures could be used other legal means. There are three categories of environmental crime, namely: *Independent Crimen* namely the crime of polluting the environment with severe consequences occur. *Illegal Emissions* namely the crime of blatantly undermine the values of the environment. *Abstract Endagement* where environmental crime depends on the existence of environmental violations in advance.

## 7. Effective Prevention Against Oil Drilling Waste Pollution of Petro China International Jabung, Ltd.

To be able to cope with pollution in operational area of PetroChina International Jabung Ltd., the company's management make a statement (Testimonial) by General Manager / Head of Mining Engineering, represented by Zhang Xuewen, as the person in charge of the implementation of document management and environmental monitoring in order to work together with BP Migas signed in August 2010 with some of the following conditions:

We are willing to implement Document of Management and Environmental Monitoring (DMEM) Eksistising activities of Oil and Natural Gas Betara-Gemah Complex in Block Jabung, Regency of West Tanjung Jabung and East Tanjung Jabung, Jambi Province.

If we neglect this DMEM as it is not executed properly, we will be responsible and willing to be penalized in accordance with the statutory provisions in force.

The above agreement was made to provide protection to the environment in which the operations of the company take place. The parties agreed that to make more effective prevention of environmental pollution caused by oil drilling, then what should be noted is the increase of integrated environmental management systems that include the following:

Reduction at source and reuse is an effort to reduce or minimize the use of fuel, water, and energy and avoid the use of raw materials that are poisonous and dangerous, accompanied by processing raw materials and good house keeping so as not to increase the burden of pollution;

Waste treatment performed after the waste can not be utilized, subsequent disposal of residual waste treatment tailored to the requirements specified by the government;

The system of integrated environmental management must be accompanied by a change of mindset, attitudes and behavior of all parties in the industry. This system leads to its own regulation and awareness to change attitudes and behavior;

Industries that implement integrated environmental management systems can be categorized as an industry which has implemented the principles of eco-efficiency which is part of the concept of industrial ecology, which knows no waste.

Here is a study of some important things to support efforts in optimising the management of the environment by the oil management industry as following:

Control of an integrated industrial waste pollution. The concept of industrial waste pollution control in an integrated manner is reflecting the integration of some of the fundamental things that are thought to be able to prevent pollution of industrial waste, among others: the application of technology and clean production, industrial waste processing, waste minimization and even restoration of the environment (remediation).

The use of the concept of industrial ecology in environmental management. The concept of industrial ecology implies that an industrial system should not be viewed separately from the existing system in the vicinity, but instead should be integrated with the surrounding systems, with the aim of finding ways to optimize the recycling of material (material cycle) of pure material, final products, waste components production up to the last sale. (Djajadidnigrat, et. al)

## 7 Waste Management Efforts By Local Governments

The presence of Law Number 32 of 2009 on environmental management as stipulated in Article 22 and Article 23 to be included in the management of company that will invest in the region.

According to the Ministry of Environment Indonesia, that over the last decade the number and use of hazardous materials and toxic (B3) in Indonesia is increasing. If B3 is widely spread in all sectors are not managed properly, it can cause harm to the environment, human health and other living creatures. (Report of the Ministry of Environment Indonesia. 2003)

Strategic and practical steps essentially are attempts to actualize one Fundamental aspects of the legal principle of environment conservation, the management of hazardous materials and toxic and other industrial waste. (Governmental regulation Number 74 of 2001)

Therefore, there are some policy management of hazardous and toxic materials are set is expected to prevent and / or reduce the risk of impact B3 include:

Any person who conducting the management of hazardous and toxic materials shall prevent pollution or environmental damage;

In order to manage hazardous and toxic materials, commission B3 has been formed which tasked to provide advice and or judgment to the government;

Any person conducting the management of hazardous and toxic materials required to maintain health and safety;

Any person conducting the management of hazardous and toxic materials shall overcome accident and emergency or due to B3;

Privileges of monitoring toward management activities hazardous and toxic materials carried by the agency and the competent authority that responsible for the field of each task;

Governor/ Regent/ Mayor/ head of the responsible agency and the leader of the competent agency can improve the public awareness to the potential impacts that will arise on the environment and health as a result of the management of hazardous and toxic substances;

People have the right to obtain information about the effort to control the environmental impacts of the activities of the management of hazardous and toxic substances;

Everyone has the right to play a role in the management of hazardous and toxic materials in accordance legislation in force;

Undertaking of business and/ or the business that activities and operations large and significantly impact that use hazardous and toxic materials, has the absolute responsibility for losses incurred by the obligation to pay compensation directly and immediately in the event of pollution or environmental destruction. (Environment Status, 2003)

Strategic measures recommended in the management of hazardous and toxic chemicals are well include management activities at national and international levels. Management activities at the national level appropriate legal instruments guiding (Regulation No. 74 of 2001), in principle is to prevent and/ or reduce the risk of hazardous materials and toxic impact on the environment, human health and other living creatures. Concentration of activities on management was still refer to things that are agreed upon, namely the transport, distribution, storage, use and disposal.

Efforts to ensure, for example, the use of hazardous and toxic chemicals that do not damage the ecosystem and have a high degree of safety for human health and the environment, is required to integrated effort of international conventions to support management activities.



## 8 Conclusion

Based on the discussion, it can be concluded as follows:

There is a weakness of norms and sanctions in environmental legislation as in UUPPLH No. 32 of 2009 because it does not describe clearly regarding: (1) Punishment Philosophy which is the essence of criminal punishment in which dwells the basic idea of sanctions. (2) The theory of punishment as a framework that is more comprehensive and law enforcement toward environmental crime scientifically accountable. (3) The purpose of punishment which can be used as a benchmark in setting sanctions (criminal) which is based on the basic ideas. Besides The third addition above, the criminal penalties stipulated in the Environmental Law No. 32 of 2009 only one type that is imprisonment accumulated with fines to be applied to all types of environmental crime, and may be subject to disciplinary action if the offenses are committed by or on behalf of a legal entity, company, association, foundation or other organization. The setting of criminal sanctions in environmental legislation with the form of cumulation only imprisonment and a fine, without setting the criminal sanctions alternatively, impacting in the practice of punishment which is in the guidance criminal (requisitoir) by the public prosecutor in cases of environmental crime and the criminal punishment by the trial judge, appellate and cassation, looks the same as criminal prosecution and criminal punishment in criminal cases in general as criminal offenses set out in the Criminal Code, by imposing imprisonment and heavy and bulky fines, even the otherwise relatively small, but has not touched the essence of environmental law purposes, and also very difficult to see coherence between objective of sentencing and environment conservation purposes. This is as a result of lack of understanding due to the vagueness in the legislation regarding the philosophy of punishment, punishment theory, the purpose of punishment, and sentencing guidelines.

Along with the development of the modern criminal, protection of the environment through policies of criminal law enforcement are confronted with an alternative that gives more protection to the environment or environmental preservation. Alternative Criminal is one or two of the three of penal sanctions that exist in the form of imprisonment, a fine or action (maatregel). Function or uses an alternative punishment in environment penal policy is closely related to the type and characteristics of the environment that is protected by law, in order to overcome the limitations of the effectiveness of criminal sanctions itself and besides simultaneously distinguish general crime. The effectiveness of the handling of pollution caused by oil drilling carried out well if there is a good coordination between the relevant parties such as BP Migas and the management of PT Petro China International Jabung, Ltd.

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